

The Geography of Inequality:
How Land Use Regulation Produces Segregation and Polarization

Jessica Trounstein
University of California, Merced

*****July 2018*****

High levels of racial segregation persist in the United States. We argue that land use control is an important tool for maintaining this pattern. Cities have the capacity to make housing and public goods available or not, thereby affecting the demographics of the community. Since the early 20th century white communities have invested significant effort into protecting their homogeneity. We draw on precinct level initiative elections from several California cities to show that, even today, whiter neighborhoods are more supportive of restricting development. We draw on ballot statements to offer evidence that voters were likely to have understood the consequences of their vote for density, housing prices, and housing availability – which in turn, affect segregation. Then, we show that these results are also reflected in the aggregate. Cities that were whiter than their metropolitan area in 1970 are more likely to have restrictive land use patterns in 2006. We use distance from slave ports as an instrument for the city's racial makeup. Finally, relying on Federal Fair Housing Act lawsuits to generate changes in land use policy, we show that restrictive land use helps to explain metropolitan area segregation patterns over time. In sum, we build a compelling case for the important power of land use in maintaining racial segregation.

Research has made clear that the city in which one lives determines access to employment, to networks, to political power, and to a range of public goods like effective police protection, strong public schools, clean parks, and reliable sewer and water systems (Sampson 2012; Sharkey 2013). High levels of racial residential segregation persist, and scholars have provided powerful evidence of the economic and sociological underpinnings of these patterns, but we lack evidence of local political contributors. In this paper, we argue that land use control is an important tool for maintaining racial residential segregation across city lines

Cities have the capacity to make housing and public goods available or not, thereby affecting the demographics of the community. Since the early 20th century white communities have invested significant effort into protecting their homogeneity. We draw on precinct level initiative elections from several California cities to show that, even today, whiter neighborhoods are more supportive of restricting development. We draw on ballot statements to offer evidence that voters were likely to have understood the consequences of their vote for density, housing prices, and housing availability – which in turn, affect segregation. Then, we show that these results are also reflected in the aggregate. Cities that were whiter than their metropolitan area in 1970 are more likely to have restrictive land use patterns in 2006. We use distance from slave ports as an instrument for the city's racial makeup. Finally, relying on Federal Fair Housing Act lawsuits to generate changes in land use policy, we show that restrictive land use helps to explain metropolitan area segregation patterns over time. In sum, we build a compelling case for the important power of land use in maintaining racial segregation.

Understanding Segregation in the United States

The continued high level of residential segregation in America has been tremendously well-documented (Boustan 2012; Charles 2003; Ross 2008; Bischoff and Reardon 2013;

Jargowsky 1996). The debate over the fundamental causes of segregation is extensive and nuanced. Scholars have focused on two primary explanations: individual preferences for same race/income neighbors (particularly among whites and the wealthy) and market explanations (e.g. differences in the socioeconomic status of different racial groups and the ability to pay for quality housing/transportation among the poor).

The root of most explanations are classic models of individual choice. Thomas Schelling (1971) argued that extreme racial segregation could result from individual decisions about where to live, given even mild preferences for having neighbors of the same race. A small number of racially intolerant white residents can cause a neighborhood to rapidly transition because as each intolerant white resident is replaced with a black neighbor, whites with lower and lower levels of intolerance choose to leave, creating segregation across neighborhoods. Scholars have found support for Schelling's theory. Research on racial segregation largely concludes that *white* preferences for same race neighbors are the driving force (Cutler, Glaeser, and Vigdor 1999; Bayer, Ferreira, and McMillan 2007; Charles 2006).¹ Denton and Massey (1991), Krysan et al.(2008), and Emerson, Chai, and Yancey (2001) find that whites avoid black neighbors *because* they are black. Boustan (2010) shows that in northern metropolitan areas, between 1940 and 1970, every black arrival from the South was associated with 2.7 white departures to the suburbs. Mummolo and Nall (2017) find that whites continue to prefer to avoid racially mixed neighborhoods. Although not the focus of their study, conjoint experimental results included in their on-line appendix reveal that white Republicans have a strong preference for whiter communities. The whiter the community, the more it was favored by white Republican

¹ A small amount of scholarship shows that black preferences for same race neighbors contributes to segregation (Fossett 2011; Bayer, Ferreira, and McMillan 2007)

respondents. White Democrats were indifferent between communities that were between 75% and 96% white, but both were preferred to communities that were only 50% white.²

Another individual choice scholar, Charles Tiebout (1956), proposed that residents with similar preferences for taxation and public goods provision should sort themselves into cities with like-minded neighbors. To the extent that heterogeneous preferences for tax and spending levels (or ability to pay) overlap with demographics, they will also generate segregation. Empirical support for Tiebout's thesis has been mixed. Alesina et al. (2004) show that people are willing to give up economies of scale to avoid being in a jurisdiction with significant income heterogeneity and Bayer, Ferreira, and McMillan (2007) reveal that households self-segregate on the basis of education. However, many scholars have shown that racial segregation patterns cannot be convincingly accounted for by black-white differences in socioeconomic characteristics such as education, income, wealth, or family structure (Bayer, McMillan, and Rueben 2004; Massey and Denton 1988; 1993; Erbe 1975; Iceland and Wilkes 2006; Emerson, Chai, and Yancey 2001).³ Logan (2011) summarizes by explaining that racial segregation for blacks is due to the inability to "translate higher income...into residential mobility". Ellen (2000), Yinger (1997), Taub et al (1984), and Harris (1999) argue that whites use black neighbors as a proxy for neighborhood quality. That is, whites choose what they perceive to be better neighborhood amenities or neighbor characteristics and use blackness as a heuristic for these qualities. Banzhaf and Walsh (2013) combine Schelling and Tiebout's insights into a single model that establishes that preferences over public goods and demographics are mutually reinforcing in the generation of segregation.

² Respondents of color displayed a strong preference for communities that were at least 25% people of color.

³ Socioeconomic differences do explain a fair amount of the segregation of Latinos and Asians

With only a handful of exceptions (Rothwell 2011; Pendall 2000), research on the causes of segregation ignores the context in which it occurs. Local policies and political battles are crucial for understanding *how and when* individual preferences for race and income homogeneity can be translated into residential patterns.⁴ The backdrop to individual choice is the type and value of housing that is available – factors that are shaped by local governments.

More deeply, theories reliant on individual choices are subject to instability in the absence of collective enforcement mechanisms, because the goals sought by segregators are collective goods (Oates 1969; 1981; Fischel 1992). We propose that segregators are driven by two goals: stable property values and access to high quality public services.⁵ Bayer, Ferreira, and McMillan (2007), show that higher income and higher education households are willing to pay a house price premium to live in neighborhoods that are of higher quality, and that households prefer to segregate on the basis of race. Similarly, Cutler, Glaeser, and Vigdor (1999) provide indirect evidence that whites are willing to pay more than people of color to live in predominantly white areas.

In the United States, property owners have always been disproportionately white; and property value has been tied to the race of occupants and neighbors (Du Bois, W E B 1935; Hayward 2013; Freund 2007; Merritt 2017). Many whites believe that the presence of people of color negatively impacts property values (Krysan, Farley, and Couper 2008; Connolly 2014). Additionally, as Bradford, Malt, and Oates (1969) argued, the quality of many public goods, like education and public safety, is predominantly affected by the characteristics of the residents

⁴ To be sure, scholars have extensively documented the *private* mechanisms that affect segregation (e.g. racial steering and mortgage discrimination). But even private mechanisms are shaped by local policies and political concerns and nearly always require at least tacit support from the government.

⁵ Politicians also stand to benefit from segregation (aside from appeasing constituents). When segregation increases property values, city tax rolls increase. Segregation can also be useful to politicians who benefit from a concentration of voters in a particular geographic location (Trounstine and Valdini 2008).

themselves rather than inputs from the government. Unsurprisingly, schools are the single most important public good that residents seek to protect and enhance. As recently as 1996, the General Social Survey asked white respondents if they would be willing to send their children to a school that was more than half black. Forty-six percent of respondents said no, and a full 66% of respondents said that they opposed the busing of black and white children to different districts. Even homeowners without children in public school are attentive to school quality and composition because they perceive it to affect their home's value. Although cities do not (for the most part) handle the funding of schools, they play a key role in maintenance of this public good by using land-use regulation to shape who has access to which local public schools. School districts control school finances and catchment areas, but they cannot zone. Together these circumstances give voters a powerful incentive to regulate who lives where. Historically, residents of predominantly white places have sought to limit the entry of people of color to their communities.

But, for any individual to ensure that her neighborhood remains white and has access to good schools and low crime rates, she needs the cooperation of her neighbors. From the owner across the street who chooses to let weeds overtake his yard, to the landlord around the corner who rents to a tenant engaged in dealing drugs, what others do affects individuals' home prices and experience of local public goods. Yet, neighbors have individual incentives that can undermine the achievement of other residents' collective goals. For instance, it can be lucrative for a white homeowner to sell her home to a black buyer in a neighborhood that has been historically white; especially when black housing options are restricted and when the black population is expanding. As Hamilton (1975) explained, individual incentives can also undermine the Tiebout model. It makes fiscal sense for a resident who prefers high quality

public goods, but is unable to afford high tax rates, to locate the smallest, least expensive home in a wealthy city. The taxes this resident will pay do not support the share of the public goods she utilizes, but she benefits from them nonetheless. In Hamilton's tale, this behavior could lead to wealthy residents chasing each other around to try and maintain exclusivity. In the first instance, the collective goal of maintaining the white neighborhood is undermined by sellers seeking the highest sale price. In the second instance, the provision of public goods is undermined by residents who do not pay the full cost.

Governments promote collective action by generating enforcement of collective goals; and here it is *local* governments that play the starring role, because they alone regulate land-use. Because tax levels, service quality, and neighborhood demographics are capitalized in property values (see Hilber 2011 for a review), property owners invest considerable energy into dictating local policy (Fischel 2001; Stone 1989; J. R. Logan and Molotch 1987). By invoking their powers of control over land and making choices about service provision, local governments affect the aggregate demographic makeup of communities and the spatial distribution of residents and services, thereby generating and enforcing segregation. Richard Rothstein (2017) explains "without our government's purposeful imposition of racial segregation, the other causes – private prejudice, white flight, real estate steering, bank redlining, income differences, and self-segregation - still would have existed but with far less opportunity for expression" (p. viii). Most research on segregation is focused on racial divisions at the neighborhood level –the degree to which whites and people of color live in different neighborhoods. In this paper, we concentrate on a different form of segregation – the degree to which whites and people of color live in different cities. We most commonly think of segregation across city lines as a process of suburbanization, but racial divisions between suburbs is another version of the same pattern.

Trounstine (2018) documents that while neighborhood level segregation within cities dropped dramatically after 1970, segregation across city lines rose sharply after World War II and has remained stubbornly persistent.

The rapid increase in the population of the suburbs during the post-war period was mostly not the result of white flight. Rather, rising incomes, low-cost federally-backed mortgages, the lucrative federal mortgage deduction, new housing construction in suburban tracts, and an extensive highway system all worked to bring residents to the periphery (Gotham 2000; Nall 2018). Yet, in the early decades of the post-war period, suburban living was nearly exclusively accessible to whites who overwhelmingly intended to maintain this demographic pattern (Kruse and Sugrue 2006; Jackson 1987). In 1973, 66% of white respondents said that they would support a law allowing a homeowner to discriminate against buyers on the basis of race (GSS 1948-2008). Suburban populations eventually changed and many racial minorities live in suburban communities today (Frasure-Yokley 2015). However, as Briffault (1990) explains, “the increased heterogeneity of suburbia as a whole is usually not matched by a greater diversification *within* particular suburbs. There are now more poor and working-class people, more minorities and more industrial and commercial sites in suburbia. But poorer, working-class or black suburbanites are likely to live in different jurisdictions separate from those inhabited by affluent or white suburbanites” (p353). These trends have converged to generate stable racial divisions across city lines even as segregation within cities has declined (C. S. Fischer et al. 2004; M. J. Fischer 2008). We analyze how cities within metropolitan areas differ from each other with respect to their racial makeup; and how these patterns are affected by land use regulation.

Research on land use regulation has largely been conducted in the field of economics – where many scholars have investigated the effect of land use policies on outcomes like housing supply and land values (e.g. Gyourko, Saiz, and Summers 2008; Saiz 2010). There are comparatively few analyses of the *political* drivers and consequences of land use regulation. Fischel (1987) argues that “zoning and other local land use controls are most usefully viewed as collective property rights controlled and exchanged by rational economic agents,” (xiii). As such, he finds that homeowners are the most important supporters of development restrictions (Fischel 2001). Marble and Nall (2018) reveal that this is the case even among survey respondents committed to redistribution in national politics and those who believe that housing costs are too high. Similarly, Hankinson (2018) shows that political ideology is uncorrelated with attitudes toward housing development. We build on these findings to reveal that racial exclusion plays an additional role in the process of development restriction. First, we provide electoral evidence that white neighborhoods are more likely to favor land use restriction. Then, we reveal that whiter cities have more restrictive land use. Finally, we show that these policies contribute to segregation.

Preferences for Land Use Regulation

To provide evidence for one of our core assumptions: that Americans continue to view people of color as undesirable neighbors, we conducted a conjoint survey experiment on Amazon’s Mechanical Turk platform in the spring of 2018.⁶ We offered respondents two developments with randomly assigned attributes including racial makeup, reservation of units for low income residents, monthly cost, parking, and development type.⁷ Even among this relatively

⁶ We restricted the survey to respondents who live in Census defined metropolitan areas to ensure that we were capturing the views of people who contend with development in their communities. We have a total of 234 respondents who made 1,872 choices.

⁷ Complete results and additional discussion are included in the on-line appendix.

liberal convenience sample we find powerful evidence that respondents prefer developments with fewer people of color and those with fewer units reserved for low-income residents.⁸

Respondents reported that developments with more people of color and more poor residents would have lower property values, worse schools, and higher crime rates. In short, they saw these developments as making their neighborhood less desirable.

Given that people of color are viewed as less desirable neighbors, we expect that people who live in whiter neighborhoods will seek to maintain their community homogeneity through land use policy. To study this we draw on precinct level election returns on local initiatives from several California cities. First, we gathered information on all local initiatives dealing with land use that were on the ballot in the general election in 2016. Then, we limited the set to initiatives clearly affecting residential development. This produced a list of 14 initiatives from six counties (described in Appendix Table A1). Some initiatives propose to build new housing. For example, in Pacifica, voters were asked to authorize “up to 206 multi-family units.” In other cases, the measure made residential development more difficult or prohibited it directly. Morgan Hill voters had the opportunity to voice their preference for establishing “a population ceiling of 58,200, with a slower rate of growth than currently exists, and improv[ing] policies to maintain neighborhood character, encourage more efficient land use, conserve water, and preserve open space.” In the 2016 election, California voters overwhelmingly supported development restriction. Pro-growth initiatives garnered an average of 42% of the vote, while anti-growth initiatives garnered better than 60%. However, support for development restriction was not uniform.

To determine which neighborhoods were most likely to favor restrictive land use, we gathered precinct level election returns on every measure from the registrar of voters for each

⁸ Interestingly, respondents did not prefer all white developments or developments with no units reserved for the poor. They wanted a modest amount of diversity – not too much, and not too little.

county, and data on the partisan and racial makeup of the voters from each precinct from the California Statewide Database (California's data repository for redistricting).⁹ Then, we consolidated precincts to the Census tract level and merged data on homeownership and wealth from the 2011 American Community Survey. After dropping tracts with fewer than 10 voters (and thus offering unreliable demographic proportions), we have data on 456 tracts across the 14 measures.

Our dependent variable in this analysis is *Percent Restrict*: the share of ballots cast in the initiative election that supported restricting development. The main independent variable is the share of voters that are *White*. We control for the proportion of voters that are *Democrats*, the share of households that are *Homeowners*, and the share of the population in *Poverty*. To ensure that these results were not an artifact of the consolidation to the Census tract level, we gathered additional precinct data from two residential development initiatives that were presented to voters in 2002 in San Francisco where we were able to get data on both ownership and racial demographics (but not partisanship or poverty) at the block level.¹⁰ A description of the initiatives, their ballot placement source, votes needed to pass, and total vote received is included

⁹ The Statewide Database provides precinct-level data on the racial/ethnic makeup of registered voters and voters who cast ballots for each election for each county in the state. Data on the racial/ethnic composition of registered voters and the electorate are generated through surname matches. This process utilizes surname dictionaries to assign registered voters to Latino or one of six Asian ethnicities (which we combine). Individuals from each ethnic category are then aggregated to generate a total count of Latino and Asian registrants and voters within a precinct. We calculated the share of white voters by subtracting Latino and Asian voters from the total number of voters. The demographic data are estimated from the 2010 Census of Population and Housing. The results are extremely similar if I use the share of non-Hispanic white residents from the Census for each tract.

¹⁰ Available at

<http://www.sfgov2.org/ftp/uploadedfiles/elections/ElectionsArchives/2000/november/SOV001107.xls>

in table Appendix A2.¹¹ We used GIS to match vote precincts¹² and Census block boundaries¹³, generating total populations of *Homeowners* and non-Hispanic *Whites* in each voting precinct.¹⁴ Because these data are for residents, not voters, in the San Francisco analyses, we also control for *Total Turnout*. This resulted in complete data for 631 precincts.

Scholars debate the best way to generate inferences from these kinds of data (Box-Steffensmeier, Brady, and Collier 2010; King, Rosen, and Tanner 2004; Gelman et al. 2001; King 1997). Because we are interested in estimating the behavior of neighborhoods not individuals, we use a straightforward ecological regression, with fixed-effects for each measure, to determine the relationship between the racial composition of neighborhoods and support for restricting development. Table 1 presents the results.

Table 1: Correlates of Support for Restricting Residential Development

	2016 Elections in 6 California Counties						2002 Elections in San Francisco					
	Model 1			Model 2			Model 3			Model 4		
	β	SE	P> t	β	SE	P> t	β	SE	P> t	β	SE	P> t
% White	0.303	0.025	0.000	0.114	0.021	0.000	0.161	0.016	0.000	0.184	0.018	0.000
% Democrat				-0.529	0.036	0.000						
% Poverty				-0.011	0.033	0.731						
% Homeowners				0.055	0.012	0.000				0.300	0.014	0.000
Turnout										0.076	0.001	0.000
Constant	0.193			0.598	0.025	0.000	0.354	0.010	0.000	0.412	0.025	0.000
N	456			456			1262			1262		
R ² (within)	0.256			0.622			0.134			0.692		

Note: Fixed effects for measure included but not presented

¹¹ Local propositions can be placed on the ballot in a number of ways in San Francisco; by majority vote of the 11 member Board of Supervisors; by signature of at least four Supervisors or the mayor (for ordinances only); or by petition of the public (signatures totaling 5% of the total number of people who voted in the last mayoral election). Most propositions need a simple majority to pass, but general obligation bonds require a 2/3rds vote.

¹² Available at <http://statewidedatabase.org/geography.html>

¹³ Available at <https://data.sfgov.org/Geography/Census-2000-Blocks-no-water-Zipped-Shapefile-Forma/ffb3-h5vz> and <http://www.bayareacensus.ca.gov/small/small.htm>

¹⁴ The populations from census blocks that crossed precinct boundaries were allocated to each precinct by weighting the population by the share of the block's population residing in each precinct. This procedure assumes that the racial makeup of both portions of the block are the same.

The analyses from both sets of data reveal that white neighborhoods are major supporters of residential restriction, even after controlling for partisanship, poverty, and homeowner status (which are, of course, all related to the race of residents). For example, Model 4 predicts that in San Francisco about 28% of voters supported restricting development in precincts that were comprised of 10% white residents, compared to 68% support in precincts that were 90% white. The data also reveal that tracts with more homeowners and Republicans also support restriction at higher rates.

To determine what voters might have understood about the implications of voting in favor of or against each initiative, we analyzed ballot statements and news reports covering the measures. Appendix Table A3 presents a selection of statements that were printed in the 2016 California voter guide in support or opposition to the initiatives. We find that concerns about affordability, density, traffic, open space, and community character featured prominently in the debates over these land use initiatives. Coverage in local newspapers also made the trade-offs clear. Writing about Santa Monica's Measure LV, the Los Angeles Times reported that "critics of the ballot measure worried that it would grind development to a halt, hurting the local economy. They argued that some new housing is necessary and could reduce prices."¹⁵ On the other side were supporters who "said Measure LV would protect the beachside city's character by stopping high-rise development....[and] prevent traffic on increasingly congested roads from getting worse."¹⁶ In Encinitas, the Affordable Housing Coalition of San Diego County threatened to sue the city over its persistent refusal to "accommodate its future housing needs, particularly those of low-income people" while opponents argued that the "proposed zoning changes would allow the construction of extra-dense, extra tall buildings that would destroy the

¹⁵ <http://www.latimes.com/local/lanow/la-me-ln-measure-lv-20161109-story.html>

¹⁶ <https://la.curbed.com/2016/11/9/13573588/measure-lv-santa-monica-development-results-defeated>

city's small town character.”¹⁷ On Pacifica’s Measure W, the Peninsula Press explained, “The heart of the debate is whether adding more homes to Pacifica’s coastline is good for the city. Measure W comes at a time when communities throughout the Bay Area are struggling to keep up with surging populations that have resulted in housing shortages and heated debates over building more homes versus preserving open space.”

Thus, either through information contained in the voter guide, or local news reports, it is likely that California voters understood what was at stake when they cast their ballots. New development was purported to lower housing costs and increase access to the housing market, while increasing density, traffic, and a loss of open space. However, as the tract level analysis in Table 2 showed, support for land use restriction was not uniform across neighborhoods. Places with greater concentrations of white residents were more likely to support development restriction. Next, we show that white communities are successful in this endeavor. Whiter cities also have more restrictive land use in the aggregate.

Predictors and Consequences of Land Use Restriction in the Aggregate

Land use regulation is a quintessentially local policy arena. Cities use a variety of regulatory tools to manage space – including, among others, zoning, planning, growth boundaries, development fees, and growth caps. Generally, cities began managing the use of space at the turn of the 20th Century as industrialization took hold and populations exploded (Toll 1969). From the outset, land use control was used to generate neighborhoods that were homogenous along racial lines in an effort to protect and advance the wealth and well-being of white residents. A real-estate guide published by the National Association of Real Estate Boards in 1923 explained “property values have been sadly depreciated by having a single

¹⁷ <https://www.voiceofsandiego.org/topics/land-use/lawyers-threaten-sue-del-mar-encinitas-housing-plans/>;
<http://www.sandiegouniontribune.com/communities/north-county/sd-no-encinitas-what-now-20161110-story.html>

colored family settle down on a street occupied exclusively by white residents”. The guide goes on to prescribe “segregation of the Negro population,” as the only “reasonable solution of the problem, no matter how unpleasant or objectionable the thought may be to colored residents” (McMichael and Bingham 1923, p181).

Since 1917, land use policies mandating racial segregation have been unconstitutional. But, policies that generate economic homogeneity (such as forbidding multifamily developments in specific neighborhoods) have always been lawful. Given socio-economic disparities between racial groups, economic zoning affects racial residential patterns. But, Rothstein (2017) explains that city planning commissions also frequently used their discretionary power to turn economic zoning into racial zoning. For instance, they selectively denied and approved variances for developers depending on their target demographic market or altered the zoning designations from residential to industrial depending on the race of the neighborhood’s residents. Rothstein summarizes:

Hundreds, if not thousands of smaller acts of government contributed [to segregation]. They included petty actions like denial of access to public utilities; determining, once African Americans wanted to build, that their property was, after all, needed for parkland; or discovering that a road leading to African American homes was ‘private.’ They included routing interstate highways to create racial boundaries or to shift the residential placement of African American families. And they included choosing school sites to force families to move to segregated neighborhoods if they wanted education for their children.

These practices were routine throughout the post-World War II period and occurred in cities and suburbs alike. Einstein et al (2017) reveal that today too, additional land use regulations, *regardless of their intent*, restrict development of higher density housing by allowing motivated groups and individuals to delay the development process. Thus, we propose that residents of white communities seek more restrictive land use regimes because it allows for more

control over the demographic makeup of the city population. Specifically, we expect that white communities will increase administrative discretion and veto power in the process of development approval. In the last several decades, suburbs have become more diverse, but remain a bastion of white segregation (Trounstein 2018). We propose that land use regulation is an important contributor to this pattern and expect that that higher levels of land use restriction will increase city homogeneity.

Every incorporated city in the United States has a distinct set of policies governing land use, making studying the topic a difficult task. Four broad-scale scholarly attempts have been made to collect data on land use policy (Linneman et al 1990, Glickfield and Levine 1992, Pendall et al 2006 and Gyourko et al 2008) and we rely on the most recent survey for this analysis: the Wharton Residential Land Use Regulatory Index (WRLURI) developed by Gyourko, Saiz, and Summers (2008). The index is built from a 2006 survey of local governments and measures characteristics of the regulatory process, rules of local residential land use regulation, and regulatory outcomes. These data were combined to measure the, “stringency of the local regulatory environment in each community” (Gyourko et al. 2008, p3). The survey contains data for more than 2,700 municipalities. We merged these data with city level demographic information from the 1970 Census of Population and Housing and the 2011 American Community Survey. We selected 1970 for theoretical and empirical reasons. The current state of land use regulation in any city represents a layering of policy over time. In the post-World War II period, the population rapidly suburbanized, but suburban homes were overwhelmingly, purposefully, restricted to white residents (Rothstein 2017). With the implementation of the 1968 Fair Housing Act, 1970 represents the end of the period of suburbanization that was fueled by the federal government’s racially restrictive housing

programs. Thus, we expect that communities that were very white as of 1970 to be those most invested in protecting their demographic advantages through *local policy*. Secondly, 1970 is long enough ago that it is plausibly prior to the 2006 level of land use restriction. The 2011 American Community Survey was selected as a point in the future when we could reasonably expect land use regulations from 2006 to be consequential without having changed dramatically.

Our first dependent variable is the *WRLURI* for each city. The *WRLURI* is comprised of 11 sub-indices, all designed so that low scores represent less restrictive land use policy. The *WRLURI* is centered at zero and has a standard deviation of 1. It ranges from about -2 to +5. Because cities compete for residents and businesses within metropolitan regions, land use stringency levels are metro area specific (Pendall et al 2006). To account for this, our dependent variable is measured as each city's difference from the minimum regulatory score in the metropolitan area. This variable ranges from 0 to 4.2 with a mean of 0.93 and a standard deviation of 0.77.

Our primary independent variable is the city's *White Population Share in 1970* gathered from the Census. Our theory suggests that white residents seek to keep out people of color. However, the threat of diversity is obviously greater in some metropolitan areas than in others. We capture this dynamic by measuring the relative whiteness of the city – the difference between the city's white share and the metropolitan area white share.¹⁸ This variable ranges from a low of -0.61 to a high of 0.33 and has a mean just above zero at 0.05.

The data include 232 metro areas with between 1 and 90 cities. In a second specification, we add controls for the city/metro area difference in the share of the city that is in *Poverty*, and the share of households that are *Homeowners*. We also an indicator, *Central City*, denoting

¹⁸ The results are nearly identical if we used fixed effects instead of these difference measures.

whether the city is the largest city in the metro area by population. We cluster the errors by metro area. All controls are measured in 1970. The dependent variable is left censored at zero, so we estimate Tobit models with robust standard errors. Table 2 presents the results.

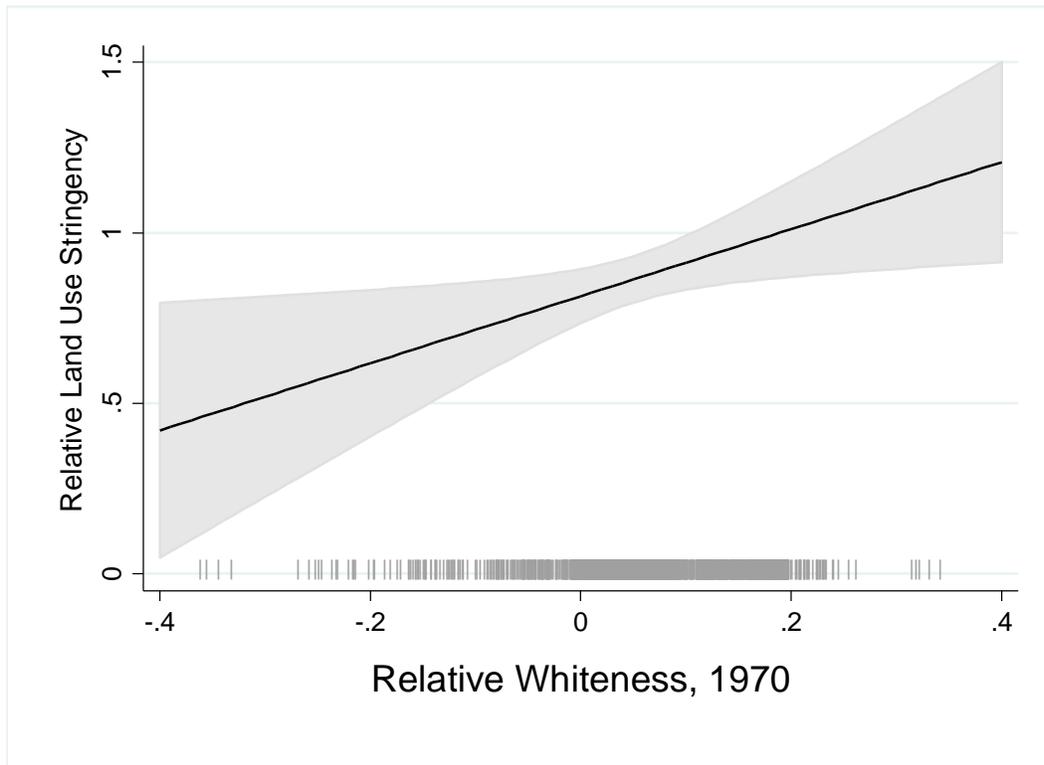
Table 2: Correlates of Restrictive Land Use

	<i>Model 1</i>			<i>Model 2</i>		
	β	SE	P> t	β	SE	P> t
Diff % White 1970	1.943	0.410	0.000	0.982	0.416	0.018
Diff % Poverty 1970				0.827	0.652	0.205
Diff % Homeowner 1970				1.238	0.238	0.000
Central City 1970				-0.230	0.100	0.021
Constant	0.763	0.043	0.000	0.781	0.044	0.000
N	1321			1321		
R ²	0.017			0.031		

Note: Tobit regression; Robust standard errors clustered by 232 metropolitan area

The table reveals that cities that were whiter in 1970 had significantly more restrictive land use regimes in 2006. In addition to whiteness, homeownership also positively predicts land use restriction. Central cities are negatively correlated, suggesting that land use restriction is not driven by a shortage of developable land. Figure 1 plots the effect of cities' relative whiteness on land use stringency, controlling for poverty, homeownership, and central city status.

Figure 1: Effect of 1970 Whiteness on 2006 Land Use Stringency



A key piece of our story is that white communities enact land use regulations to allow them to maintain their homogeneity. But, race is highly correlated with other demographic features such as homeownership and poverty. Although we controlled for these demographics in the regression, it is possible that land use regulation is designed to protect these (or other unobservable) features of community character. Racial exclusivity may be merely an unintended consequence.

To try to provide causal leverage, we instrument the whiteness of the city using the distance from the nearest slave port drawing on data from the Trans-Atlantic Slave Trade Database, an open-access website that provides data on slave expeditions between 1514 and 1866. The data include 1,762 voyages that landed in the United States. We matched these

destinations to names of ports and waterways using data from the United States Department of Transportation.¹⁹ Then, using GIS, we determined the latitude and longitude of each slave port. Finally, we generated a near table using one slave port match for the centroid of each place in the United States. This process produced a measure of the distance from the nearest slave port. A plot of the data revealed a strong right skew, so we use the natural log of distance as our instrument.²⁰ Given that cities within metro-areas have extremely similar distances to slave ports, we do not use the difference measures described for Table 3. Instead, we regress each city's *WRULRI* score on the share of the city that was *White* in 1970, instrumented with the logged *Distance* to the nearest slave port, controlling for *Homeownership*, *Poverty*, and *Central City* status. The Cragg-Donald Wald F statistic for the model is 72.709. Table 3 presents the first and second stages of the estimation.

Table 3: The Effect of Whiteness on Restrictive Land Use: Instrumental Approach

Main Equation			
	β	SE	P> t
% White 1970	3.258	1.315	0.013
% Poverty 1970	0.551	0.675	0.414
% Homeowner 1970	-0.761	0.286	0.008
Central City 1970	0.024	0.123	0.844
Constant	-3.344	1.366	0.014
<i>First Stage Regression of % White 1970</i>			
Distance to Slave Port (logged)	0.013	0.001	0.000
% Poverty 1970	-0.443	0.032	0.000
% Homeowner 1970	0.128	0.018	0.000
Central City 1970	-0.069	0.007	0.000
Constant	0.864	0.020	0.000
N	1313		

Note: 2SLS Regression with % white in 1970 instrumented with logged distance from nearest slave port

¹⁹ <http://osav.usdot.opendata.arcgis.com/datasets?keyword=Water>

²⁰ Adding an additional instrument for the city's distance from the US Mexico border (logged) produces nearly identical results, but with a lower F statistic.

The instrumental results offer the same conclusion as the OLS regressions presented above. Cities that were whiter in 1970 were significantly more likely to have restrictive land-use regimes in 2006.

In additional tests, we ask specifically which components of the index city whiteness predicts. We use the same estimation as shown in Table 3 but replace the dependent variable with each sub-index component of the WRLURI. We find that whiter cities have significantly higher values on some, but not all, of the components of land use regulation. They are more likely to require developers to pay their share of costs of infrastructure improvement (Exactions Index), more likely to require developers to dedicate open space or pay a fee in lieu of such dedications (Open Space Index), and *much* more likely to have a long review process for zoning changes and building permits (Approval Delay Index). City whiteness was not significantly related to the other sub-indexes (Political Pressure Index, Local Project Approval Index, Density Restrictions Index, Local Zoning Approval, Local Assembly, or Supply Restrictions indices). So, it appears that white communities seek to manage space predominantly by affecting the cost and pace of new development, giving their governments more discretion in the process.

The Effect of Land Use Restriction

Do these more restrictive land use regimes work to maintain homogeneity over time? In this section, we show that the answer is yes. We begin with a descriptive analysis using the *WRLURI* as an independent variable, predicting change in the *Percent White*, *Percent Homeowners*, and *Percent in Poverty* between 1970 and 2011. All models include fixed effects for metro area to determine the effect of restrictive land use on demographic changes relative to changes in neighboring communities. Although the United States has become more diverse

since the 1970s – we expect that cities with more stringent land use laws will witness a slower pace of change. The results in Table 4 offer support for this contention.

Table 4: Association between Land Use Restriction and City Demographics

	<i>Δ Percent White 1970-2011</i>			<i>Δ Percent Homeowners 1970-2011</i>			<i>Δ Percent in Poverty 1970-2011</i>		
	β	SE	P> t	β	SE	P> t	β	SE	P> t
WRLURI	0.026	0.006	0.000	0.015	0.004	0.000	-0.014	0.002	0.000
Constant	-0.248	0.004	0.000	0.024	0.003	0.000	0.022	0.001	0.000
N	1312			1311			1311		
ρ	0.608			0.265			0.525		

Note: Fixed effects for metro areas included but not presented

Table 4 reveals that land use restriction is significantly associated with the growth of the white population and the share of homeowners relative to other cities in the metropolitan area. More stringent land use regimes are also related to a decrease in the share of the population in poverty. It is notable that the relationship is strongest for race. In additional tests, we find that cities with more stringent land use than their neighbors have a greater share of white residents than their neighbors in 2011. In short, making development a more controlled process results in whiter cities.

Yet, our measure of land use stringency, the *WRLURI*, is endogenous to the preferences we laid out in the first half of the paper. To understand how changing land use policy affects demographics we turn to a final piece of evidence. As explained above, in 1968 Congress enacted the Fair Housing Act and both the justice department and private parties began to bring charges against local governments that were perceived to have violated the law. Technically Title VIII of the Civil Rights Act of 1968, the Fair Housing Act prohibits discrimination in the sale, rental, or financing of housing based on race, color, national origin, religion, sex, familial status, and disability. Importantly, for us, the Act also makes it unlawful for municipalities to make housing unavailable to persons from the protected classes. For instance, if a city’s land use

regulations (or application of the regulations) prevent the building of multi-family housing, and this is shown to disproportionately affect people of color, the city could be sued for violation of the Act. Plaintiffs can establish a violation by showing that the city failed to make reasonable accommodations in rules, policies, or practices that would afford people from protected classes an equal opportunity to live in a dwelling. Once a violation is established, the Act entitles plaintiffs to injunctive relief – meaning that the city is ordered by the court to change its land use policy.²¹

To locate cases that meet these conditions, we searched Lexis Uni for all Federal and State cases containing the terms “Fair Housing Act” and “injunct*” between 1968 and 2010. This search returned 2281 records – including many cases where private individuals are the only parties to the suit (e.g. a prospective renter suing an apartment complex for discrimination). We further focused the list by searching case names and case summaries for the terms “city,” “village”, “town*”, “twp”, and “auth” which resulted in a list of 513 cases. We recorded the date of each decision, and for a subset of the cases, we read the case and recorded the outcome.²² This resulted in a timeseries dataset of Fair Housing Act cases involving municipal governments.

We then combined these Fair Housing Act data with demographic data from the Census of Population and Housing for all incorporated cities in metropolitan areas from 1960-2011. We have a total of 19,618 cities and 199, 284 observations. In total, 199 cities were engaged in a Fair Housing Act lawsuit during the timespan. If our argument is correct, cities that were sued under the Fair Housing Act should be enjoined to have less restrictive land use policies. So, we

²¹ It may be obvious to assert, but cities do not always comply with these orders and multiple rounds of lawsuits can take place. The court can make it extremely expensive for failure to comply over time. For a readable account of such a pattern we recommend Lisa Belkin’s book *Show Me a Hero*.

²² The subset is comprised of 269 cases in which one of the search terms was included in the summary provided by Lexis.

would expect their white population share to be smaller than it would have been without the lawsuit. Obviously, the cities that face lawsuits differ in important ways from cities that do not face lawsuits. So, our analysis includes fixed effects for cities, enabling us to compare the white population share before and after the court's intervention in the same place.

We estimate the following equation

$$w_{ct} = \alpha_c + \beta_1 F_{ct} + \varepsilon_{ct}$$

Where c indexes city and t indexes time. F_{ct} is a binary indicator for the court having decided the city's first *Fair Housing Act Lawsuit* as of time t and w_{ct} is the city's *White Population Share*. In a second analysis we include controls for the city's *Percent in Poverty* and *Percent Homeowners*. Finally, we replace the independent variable with an indicator denoting the outcome of the suit for the subset of cases for which we gathered this information. This variable is coded one in years following an injunction to liberalize land use laws and zero otherwise.²³ In all models, identification of β_1 requires that the timing of the decision in the Fair Housing Act lawsuit be uncorrelated with the time-varying factors that affect the white population share of the city.

²³ There are a handful of cases in the dataset in which the outcome of the lawsuit prevented a city from engaging in land use that would promote integration. For instance, sometimes neighborhood associations or individual homeowners sue a city to prevent it from zoning to allow for a drug treatment facility in their neighborhood. These outcomes are coded as zeroes.

Table 5: Effect of Land Use Change on City Whiteness, 1960-2011

	<i>Model 1</i>			<i>Model 2</i>			<i>Model 3</i>		
	β	SE	P> t	β	SE	P> t	β	SE	P> t
Fair Housing Act Lawsuit	-0.172	0.002	0.000	-0.127	0.002	0.000			
Injunction to Liberalize							-0.170	0.005	0.000
% Homeowners				0.176	0.006	0.000			
% Poor				-1.262	0.009	0.000			
Constant	0.832	0.000	0.000	1.014	0.002	0.000	0.772	0.002	0.000
N	199,284			197,621			5,475		
# Cities	19,618			19,618			123		
R2 (overall)	0.014			0.356			0.042		

Note: Fixed effects for cities included but not presented

Table 5 offers clear evidence that when cities are threatened or forced by the court to liberalize their land use laws they see growth in their population of people of color. Using only the cases for which we have case outcomes determined (Model 3), liberalizing land use policies reduces the city’s white population share from 77% to 60%. Land use regulations have the power to shape the demographics of communities.

Conclusion

Many metropolitan areas in the United States are facing a crisis of housing affordability. Homelessness is on the rise as rents and housing prices skyrocket. The problem is largely the result of limited growth and development. This modern reality offers a stark contrast to the America of the 1950s and 60s when a housing boom, federal mortgage programs, and new highways brought hundreds of thousands of people to rapidly developing suburban communities. The cities pulled people from the rural hinterlands, from central cities, and from foreign nations. But, during this period, the residents who had access to suburbs were nearly exclusively white.

We have shown that places that were whiter in 1970 have locked in that demographic profile using land use restriction. We provided evidence that white voters are more likely to support restricting development in initiative elections and that whiter cities have more stringent land use regimes. Finally, we showed that within metropolitan areas, those cities with more stringent land use are whiter than their neighbors and grow whiter at a faster pace than their neighbors. It is this maintenance of homogeneity that generates segregation across city lines. Given Americans' overwhelming commitment to local control – it is likely to be a pattern that persists.

Works Cited

- Alesina, Alberto, Reza Baqir, and Caroline Hoxby. "Political Jurisdictions in Heterogeneous Communities." *Journal of Political Economy* 112.2 (2004): 348-96. Web.
- Banzhaf, H. Spencer, and Randall P. Walsh. "Segregation and Tiebout Sorting: The Link between Place-Based Investments and Neighborhood Tipping." *Journal of Urban Economics* 74 (2013): 83-98. *EconLit*. Web.
- Bayer, Patrick, Fernando Ferreira, and Robert McMillan. "A Unified Framework for Measuring Preferences for Schools and Neighborhoods." *Journal of Political Economy* 115.4 (2007): 588-638. Web.
- Bayer, Patrick, Robert McMillan, and Kim S. Rueben. "What Drives Racial Segregation? New Evidence using Census Microdata." *Journal of Urban Economics* 56.3 (2004): 514-35. Web.
- Bischoff, Kendra, and Sean F. Reardon. "Residential Segregation by Income, 1970-2009." Russell Sage Foundation, 2013. 1-44. Web.
- Boustan, Leah Platt. "Racial Residential Segregation in American Cities." *The Oxford Handbook of Urban Economics and Planning*. Eds. Nancy Brooks, Kieran Donaghy, and Gerrit Knaap. New York: Oxford University Press, 2012. /z-wcorg/. Web.
- Boustan, Leah P. "Was Postwar Suburbanization "White Flight"? Evidence from the Black Migration." *The Quarterly Journal of Economics* 125.1 (2010): 417-43. Web.
- Box-Steffensmeier, Janet, Henry Brady, and David Collier, eds. *The Oxford Handbook of Political Methodology*. Oxford: Oxford University Press, 2010. Print.
- Bradford, David F., R. A. Malt, and Wallace E. Oates. "The Rising Cost of Local Public Services: Some Evidence and Reflections." *National Tax Journal* 22.2 (1969): 185-202. *EconLit*. Web.
- Briffault, Richard. "Our Localism: Part II--Localism and Legal Theory." *Columbia law review* 90.2 (1990): 346-454. Web.
- Charles, Camille Z. "The Dynamics of Racial Residential Segregation." *Annual Review of Sociology* 29.1 (2003): 167-207. Web.
- Charles, Camille Zubrinsky. *Won'T You be My Neighbor? : Race, Class, and Residence in Los Angeles*. New York: Russell Sage Foundation, 2006. /z-wcorg/. Web.
- Connolly, N. D. B. "A world more concrete : real estate and the remaking of Jim Crow South Florida." 2014. Web. /z-wcorg/.
<<http://public.eblib.com/choice/publicfullrecord.aspx?p=1742625>>.

- Cutler, David M., Edward L. Glaeser, and Jacob L. Vigdor. "The Rise and Decline of the American Ghetto." *Journal of Political Economy* 107.3 (1999): 455-506. Web.
- Denton, Nancy A., and Douglas S. Massey. "Patterns of Neighborhood Transition in a Multiethnic World: U.S. Metropolitan Areas, 1970-1980." *Demography* 28.1 (1991): 41-63. *JSTOR*. Web.
- Du Bois, W E B. *Black Reconstruction: An Essay Toward a History of the Part which Black Folk Played in the Attempt to Reconstruct Democracy in America, 1860-1880*. Harcourt, Brace and Company, 1935. *PAIS Index*. Web.
- Ellen, Ingrid Gould. *Sharing America, A's Neighborhoods: The Prospects for Stable Racial Integration*. Cambridge: Harvard University Press, 2000. Web.
- Emerson, Michael O., Karen J. Chai, and George Yancey. "Does Race Matter in Residential Segregation? Exploring the Preferences of White Americans." *American Sociological Review* 66.6 (2001): 922-35. Web.
- Erbe, Brigitte Mach. "Race and Socioeconomic Segregation." *American Sociological Review* 40.6 (1975): 801-12. Web.
- Fischel, William A. *An Economic History of Zoning and a Cure for its Exclusionary Effects.*, 2001. Web.
- . "The Economics of Land use Exactions: A Property Rights Analysis." *Law and contemporary problems* 50.1 (1987): 101-13. *EconLit*. Web.
- . "Property Taxation and the Tiebout Model: Evidence for the Benefit View from Zoning and Voting." *Journal of Economic Literature* 30.1 (1992): 171-7. *EconLit*. Web.
- Fischer, Claude S., et al. "Distinguishing the Geographic Levels and Social Dimensions of U.S. Metropolitan Segregation, 1960-2000." *Demography* 41.1 (2004): 37-59. Web.
- Fischer, Mary J. "Shifting Geographies: Examining the Role of Suburbanization in Blacks' Declining Segregation." *Urban Affairs Review* 43.4 (2008): 475-96. Web.
- Fossett, Mark. "Generative Models of Segregation: Investigating Model-Generated Patterns of Residential Segregation by Ethnicity and Socioeconomic Status." *The Journal of Mathematical Sociology* 35.1-3 (2011): 114-45. *Sociological Abstracts*. Web.
- Frasure-Yokley, Lorrie. *Racial and Ethnic Politics in American Suburbs.*, 2015. /z-wcorg/. Web.
- Freund, David M. P. "Colored property : state policy and white racial politics in suburban America." 2007. Web. /z-wcorg/. <<http://hdl.handle.net/2027/heb.07802>>.

- Gelman, Andrew, et al. "Models, Assumptions and Model Checking in Ecological Regressions." *Journal of the Royal Statistical Society. Series A (Statistics in Society)* 164.1 (2001): 101-18. Web.
- Gotham, Kevin F. "Racialization and the State: The Housing Act of 1934 and the Creation of the Federal Housing Administration." *Sociological Perspectives* 43.2 (2000): 291-317. Web.
- Gyourko, Joseph, Albert Saiz, and Anita Summers. "A New Measure of the Local Regulatory Environment for Housing Markets: The Wharton Residential Land use Regulatory Index." *Urban Studies* 45.3 (2008): 693-729. Print.
- Hamilton, Bruce W. "Zoning and Property Taxation in a System of Local Governments." *Urban Studies* 12.2 (1975): 205-11. *Sociological Abstracts*. Web.
- Harris, David R. "'Property Values Drop when Blacks Move in, because...': Racial and Socioeconomic Determinants of Neighborhood Desirability." *Source American Sociological Review* 64.3 (1999): 461-79. Web.
- Hayward, Clarissa. *Americans make Race: Stories, Institutions, Spaces*. New York: Cambridge University Press, 2013. Web.
- Iceland, John, and Rima Wilkes. "Does Socioeconomic Status Matter? Race, Class, and Residential Segregation." *Social problems* 53.2 (2006): 248-73. Web.
- Jackson, Kenneth T. *Crabgrass Frontier: The Suburbanization of the United States*. Oxford University Press, 1987. Web.
- Jargowsky, Paul A. "Take the Money and Run: Economic Segregation in U.S. Metropolitan Areas." *American Sociological Review* 61.6 (1996): 984-98. Web.
- King, Gary. *A Solution to the Ecological Inference Problem: Reconstructing Individual Behavior from Aggregate Data*. Princeton: Princeton University Press, 1997. *EconLit*. Web.
- King, Gary, Ori Rosen, and Martin Tanner, eds. *Ecological Inference : New Methodological Strategies*. Cambridge, UK; New York: Cambridge University Press, 2004. Print.
- Kruse, Kevin Michael,, Sugrue, Thomas J.,,. "The New Suburban History" [/z-wcorg/](#). Web.
- Krysan, Maria, Reynolds Farley, and Mick P. Couper. "In the Eye of the Beholder: Racial Beliefs and Residential Segregation." *Du Bois Review* 5.1 (2008): 5-26. Web.
- Logan, J. R., and H. L. Molotch. *Urban Fortunes: The Political Economy of Place.*, 1987. *Worldwide Political Science Abstracts*. Web.
- Logan, John. *Separate and Unequal: The Neighborhood Gap for Blacks, Hispanics and Asians in Metropolitan America*. US2010 Project, 2011. Print.

- Massey, Douglas S., and Nancy A. Denton. *American Apartheid: Segregation and the Making of the Underclass*. Cambridge: Harvard University Press, 1993. Web.
- . "The Dimensions of Residential Segregation." *Social Forces* 67.2 (1988): 281-315. *JSTOR*. Web.
- McMichael, Stanley, and Robert Bingham. *City Growth and Values*. Cleveland, OH: The Stanley McMichael Publishing Organization, 1923. Print.
- Merritt, Keri Leigh. "Masterless men : poor whites and slavery in the antebellum South." 2017. Web. /z-wcorg/. <<http://public.eblib.com/choice/publicfullrecord.aspx?p=4913388>>.
- Mummolo, Jonathan, and Clayton Nall. "Why Partisans do Not Sort: The Constraints on Political Segregation." *The Journal of Politics* 79.1 (2017): 45. *Worldwide Political Science Abstracts*. Web.
- Nall, Clayton. *The Road to Inequality: How the Federal Highway Program Created Suburbs, Undermined Cities, and Polarized America*. New York: Cambridge University Press, 2018. Print.
- Nicholson, Stephen P. *Voting the Agenda : Candidates, Elections, and Ballot Propositions*. Princeton, N.J.: Princeton University Press, 2005. /z-wcorg/. Web.
- Oates, Wallace E. "The Effects of Property Taxes and Local Public Spending on Property Values: An Empirical Study of Tax Capitalization and the Tiebout Hypothesis." *The Journal of Political Economy* 77.6 (1969): 957. *Periodicals Index Online*. Web.
- . "On Local Finance and the Tiebout Model." *The American Economic Review* 71.2 (1981): 93-8. Web.
- Pendall, Rolf. "Local Land use Regulations and the Chain of Exclusion." *Journal of the American Planning Association* 66.2 (2000): 125-42. Print.
- Ross, Stephen L. *Understanding Racial Segregation: What is Known about the Effect of Housing Discrimination.*, 2008. Web.
- Rothstein, Richard. *The Color of Law : A Forgotten History of how our Government Segregated America.*, 2017. /z-wcorg/. Web.
- Rothwell, Jonathan T. "Racial Enclaves and Density Zoning: The Institutionalized Segregation of Racial Minorities in the United States." *American Law and Economics Review* 13.1 (2011): 290-358. Web.
- Saiz, Albert. "The Geographic Determinants of Housing Supply." *Quarterly Journal of Economics* 125.3 (2010): 1253-96. *EconLit*. Web.

- Sampson, Robert J. *Great American City: Chicago and the Enduring Neighborhood Effect*. Chicago: University of Chicago Press, 2012. Web.
- Schelling, Thomas C. "Dynamic Models of Segregation†." *The Journal of Mathematical Sociology* *The Journal of Mathematical Sociology* 1.2 (1971): 143-86. /z-wcorg/. Web.
- Sharkey, Patrick. *Stuck in Place: Urban Neighborhoods and the End of Progress Toward Racial Equality*. Chicago: University of Chicago Press, 2013. Web.
- Stone, Clarence N. *Regime Politics : Governing Atlanta, 1946-1988*. Lawrence, Kan.: University Press of Kansas, 1989. Studies in Government and Public Policy Web.
- Taub, Richard P., D. G. Taylor, and Jan D. Dunham. *Paths of Neighborhood Change: Race and Crime in Urban America*. Chicago: University of Chicago Press, 1984. Web.
- Tiebout, Charles M. "A Pure Theory of Local Expenditures." *The Journal of Political Economy* 64.5 (1956): 416-24. Web.
- Toll, Seymour I. *Zoned American*. New York: Grossman Publishers, 1969. /z-wcorg/. Web.
- Yinger, John. *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination*. New York: Russell Sage Foundation, 1997. Web.

Appendix Table A1

CNTYNAME	PLACE	LTR	BALQUEST	Restrict Residential	PASSFAIL
SAN DIEGO	San Diego	B	(INITIATIVE) Shall this Initiative be adopted for the purpose of amending the County General Plan, Zoning Ordinance and Code of Regulatory Ordinances and approving the Lilac Hills Ranch Specific Plan (“Plan”)? The Plan provides for the development of a 608-acre master-planned community including 1,746 dwelling units, three commercial centers, a public park, 10 private parks and 16 miles of trails. The project site is generally located north of Escondido and east of I-15 in the unincorporated area of North San Diego County.	0	Fail
LOS ANGELES	Beverly Hills	HH	(INITIATIVE) Shall an ordinance be adopted allowing a 26 story (345 feet) residential building instead of two residential buildings of 8 and 18 stories (101 and 218 feet); increasing open space from 3.28 to 3.89 acres and identifying 1.7 acres of open space as private garden generally open to the public subject to property owner's reasonable restrictions; removing conference center and relocating its uses; prohibiting discretionary architectural review; reducing graywater use requirements?	1	Fail
LOS ANGELES	Calabasas	F	Shall the Ordinance No. 2016-333 approving changing the existing Zoning from Planned Development - Residential Multifamily (20) - Open Space Development Restricted - Scenic Corridor to Commercial Retail - Residential Multifamily (20) - Open Space Development Restricted - Scenic Corridor - Development Plan to accommodate: 67 Single-Family Detached Homes and two Affordable Duplexes; a 72,872 square-foot, three-story hotel; and preservation of approximately 61.0 acres as Permanent Open Space on a 77-acre property at 4790 Las Virgenes Road, Calabasas be approved?	0	Fail
LOS ANGELES	Santa Monica	LV	Shall the City's General Plan and Municipal Code be amended to require: a new permit process for major development projects exceeding base sizes or heights of 32-36 feet, with exceptions such as single unit dwellings and some affordable housing projects; voter approval of major development projects and development agreements, excluding affordable housing and moderate income and senior housing projects, among others; and voter approval of changes to City land use and planning policy documents.	1	Fail
ORANGE	Costa Mesa	Y	(INITIATIVE) Shall the ordinance to require voter approval of development projects that require adoption, amendment, change or replacement of the General Plan, the Zoning Code, a specific plan, or an overlay plan, and that generates over 200 additional trips, increases intersection volume/capacity, changes the intersection utilization/level of service, adds 40 or more dwelling units, adds 10,000 sq.' of non-residential use, or changes a public use to a private use under specified conditions, be adopted?	1	Pass

ORANGE	Cypress	GG	Shall an ordinance that approves the "Cypress Town Center and Commons Specific Plan" to allow for development of a town center, single-family and multi-family housing, commercial/senior housing and a public park on portions of Los Alamitos Race Course, the former Cypress Golf Club and adjacent properties, together with related general plan and specific plan amendments and zone changes, be adopted?	0	Fail
SAN DIEGO	Del Mar	R	Shall the ordinance which proposes to amend the Del Mar Community Plan, Housing Element, and Municipal Code to require voter approval for certain development projects be adopted?	1	Fail
SAN DIEGO	Encinitas	T	Shall City Council Resolution No. 2016-52 and Ordinance No. 2016-04, which collectively update the City's General Plan Housing Element, amend related General Plan provisions, and amend Specific Plans, Zoning Code, Zoning Map, Municipal Code, and Local Coastal Program, in an effort to comply with State law, incentivize greater housing affordability, implement rules to protect the character of existing neighborhoods, maintain local control of Encinitas zoning, and resolve existing lawsuits, be adopted?	1	Pass
SAN MATEO	Pacifica	W	(INITIATIVE) Shall the Initiative which amends Ordinance Number 391-C.S. to authorize up to 206 multi-family units of residential development at the Rockaway Quarry only under certain conditions specified in the Initiative measure entitled "Pacifica Initiative Amending Ordinance No. 391-C.S. To Authorize a Future Rezone of the Quarry Which Could Include Residential Development, Under Certain Conditions", be adopted?	0	Fail
SANTA CLARA	Cupertino	C	(INITIATIVE) Shall an initiative ordinance be adopted amending Cupertino's General Plan to limit redevelopment of the Vallco Shopping District, limit building heights along major mixed-use corridors, increase to 45 feet the maximum building height in the Neighborhoods, limit lot coverages for large projects, establish new setbacks and building planes on major thoroughfares, and require voter approval for any changes to these provisions?	1	Fail
SANTA CLARA	Cupertino	D	(INITIATIVE) Shall an initiative be adopted enacting the Vallco Town Center Specific Plan for the 58-acre Vallco Shopping District Special Area requiring residential (approximately 389-800 units, including approximately 20% senior housing), office (2,000,000 sf), commercial (640,000 sf), hotel, park, civic/educational uses; requiring funding/community benefits for transportation (approximately \$30,000,000), schools (approximately \$40,000,000), green roof (approximately 30 acres), recycled water; granting initial entitlements; establishing development standards and limited future approval process; and making related Cupertino General Plan and Municipal Code amendments?	0	Fail

SANTA CLARA	Milpitas	K	Shall an ordinance amending the City of Milpitas General Plan be adopted to mandate that any attempt to rezone parks, parklands or open space to residential, commercial or industrial, or any proposal for residential, commercial or industrial development in parks, parkland or open space, must be placed before Milpitas voters and secure two-thirds support in the City's next general election?	1	Pass
SANTA CLARA	Morgan Hill	S	Shall a measure be adopted to amend the Morgan Hill General Plan and Municipal Code to update the City's voter-approved Residential Development Control System (RDCS) to extend it to 2035, establish a population ceiling of 58,200, with a slower rate of growth than currently exists, and improve policies to maintain neighborhood character, encourage more efficient land use, conserve water, and preserve open space?	1	Pass
SONOMA	Healdsburg	R	Shall Healdsburg voters amend the existing Growth Management Ordinance to increase inclusionary housing requirements on new development to 30%, remove existing restrictions on the number of new residential units allowed per year, adopt and periodically amend new growth management measures in conjunction with the Housing Element update, and adopt and periodically update a Housing Action Plan to provide a greater variety of housing?	0	Fail

Table A2: San Francisco Propositions, 2002

Title	Purpose	Ballot Placement Source	Vote Needed	Vote Received
Prop B: Affordable Housing Bonds	General obligation bond authorizing city to borrow \$250,000,000 to make grants or loans to buy, build, or renovate housing for low income households	Supervisory Vote 9 – Yea 2 – No	66 2/3%	56%
Prop O: Conditions for Providing Services and Payments to Homeless Individuals	Ordinance requiring development of 1000 housing units for homeless individuals and drug and alcohol treatment services for at least 700 individuals.	4 – Supervisor Signatories	50% +1	52%

Table A3: Ballot Statements: Local California Development Initiatives, 2016

		Anti-Development Arguments	Pro-Development Arguments
San Diego	B	Measure B is a developer attempt to build 1,746 houses and 90,000 square feet of retail space in a critical agricultural area where only 110 homes and no retail uses are allowed by law (a 1,487% density increase).	Measure B authorizes development of Lilac Hills Ranch, a pedestrian-oriented village in North County that includes housing priced to start at \$300,000 – within reach of most working families and first-time home buyers – to address the County’s housing crisis and reduce development pressures near your neighborhood.
Beverly Hills	HH	Using a legal loophole that circumvents the process used by every other project in Beverly Hills, Measure HH will allow a tower 345-foot high with an additional 30 foot rooftop canopy. Do you want a 345-foot skyscraper, taller than the Statue of Liberty; twice the height of any building in Beverly Hills, extending the Wilshire Corridor into Beverly Hills?	Measure HH creates a beautiful western gateway to Beverly Hills with more green space by combining two condo buildings into one, removing the 8-story building and replacing it with a beautiful 1.7-acre garden for Beverly Hills residents to enjoy year-round
Calabasas	F	The project is too big for this sensitive canyon. Invaluable scenic vistas would be obstructed.	The proposed hotel is expected to provide over \$500,000 per year in revenue to the City which can be used for additional Sheriff’s patrols, youth and senior programs, and enhanced beautification, environmental and community services.
Santa Monica	LV	Vote YES on LV to protect Santa Monica from overdevelopment and increased traffic congestion. Measure LV is the Land Use Voter Empowerment (LUVE) Initiative.	Why do most responsible community leaders and organizations say Measure LV is too extreme? Because a one-size-fits-all height limit of two stories citywide goes too far, and Measure LV is full of unintended consequences. While it claims to reduce traffic, Measure LV may make our unbearable traffic problems worse by reducing housing for workers, forcing them to commute and clog our streets.
Costa Mesa	Y	Measure Y is a citizens’ initiative to give the people of Costa Mesa control of their future. A vote FOR Measure Y is a vote about the future of our neighborhoods and our community, ensuring that residents determine the future character of Costa Mesa.	Measure Y, will force a vote of certain projects, is so restrictive in nature that if it were in place years ago, Costa Mesa as we know it today wouldn’t exist. The suppression of new housing would essentially lock out middle class families from entering the market.
Del Mar	R	Protect Our Community Plan and Small Town Character - Vote “YES” on “R” - Ensure Your Right to Vote. If a developer wants to change the zoning to create a Specific Plan where the allowed density, height of buildings, floor area ratio and lot coverage are changed, the development must be submitted to the voters for their approval.	Measure R is a barrier to providing affordable housing in Del Mar; It eliminates Community Plan goals for mixed use residential housing

Encinitas	T	<p>Passage of this measure will result in 12,000 to 24,000 more cars on the road each day causing more congestion, strain on infrastructure, gridlock, and air pollution. Developers have an incentive to increase the number of units by 35% over zoning. Preserve our small town character.</p>	<p>A Yes vote will enable more housing choices for seniors, millennials, first time home buyers, and young families. This could be your parents, adult children, or even you as your needs change. This housing plan allows for smaller, more accessible and affordable homes, and brings the city into compliance with California law.</p>
Pacifica	W	<p>Measure W authorizes the City to approve 206 multi-family units but doesn't commit the developer to build anything. We are voting without any review of environmental or traffic impacts. Haven't we learned what coastal erosion, flooding, and storms do to coastal developments?</p>	<p>You will see that Measure W is a thoughtful approach; ensuring our community will benefit from permanent open space; limited development, significant tax revenue; and needed traffic mitigation.</p>
Cupertino	C	<p>Measure C empowers the electorate to reject uncontrolled growth in Cupertino. Uncontrolled growth will damage the quality of life we enjoy today</p>	<p>Measure C will block mixed-use revitalization of Vallco, resulting in an empty 'ghost mall' for years to come. Measure C will block the construction of much deserved housing for seniors.</p>
Cupertino	D	<p>Too Dense! Too Tall! The site would be turned into a concrete jungle with insignificant ground level green space.</p>	<p>Measure D will revitalize Vallco as an innovative, sustainable mixed-use town center as called for in Cupertino's community-created General Plan.</p>
Milpitas	K	<p>The people will have the right to decide what is best for the city. Measure K will ensure that any attempt to change Milpitas Parks or Open space into residential, commercial, or industrial uses first must be approved by the people of Milpitas with a two-thirds (66.7%) vote before a change in use can take place.</p>	<p>But what this ordinance does is drive the cost of modification up substantially and takes the outcome out of the hands of the professionals.</p>
Healdsburg	R	<p>Now a few people want to take away your right to stop unlimited growth. We negotiated in good faith with the City to find creative solutions to house more workers and families, but the City rejected our ideas. Instead, they want to remove voters' right to limit large projects altogether</p>	<p>Housing prices have skyrocketed, young families can no longer afford to live in Healdsburg, and our middle-income workforce has been priced out of the market. By voting yes on Measure R we can correct these inequities and provide greater housing opportunities for all Healdsburg residents.</p>

