Title
Correction

Journal
Journal of Urban Affairs, 42(1)

ISSN
0735-2166

Authors
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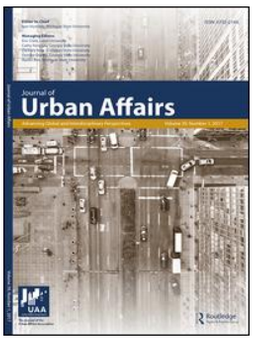
Manville, Michael

Publication Date
2020-01-02

DOI
10.1080/07352166.2020.1712940

Peer reviewed



Journal of Urban Affairs

ISSN: 0735-2166 (Print) 1467-9906 (Online) Journal homepage: https://www.tandfonline.com/loi/ujua20

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To cite this article: Paavo Monkkonen & Michael Manville (2019): Opposition to development or opposition to developers? Experimental evidence on attitudes toward new housing, Journal of Urban Affairs, DOI: 10.1080/07352166.2019.1623684

To link to this article: https://doi.org/10.1080/07352166.2019.1623684

JOURNAL OF URBAN AFFAIRS
https://doi.org/10.1080/07352166.2019.1623684

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Opposition to development or opposition to developers? Experimental evidence on attitudes toward new housing

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ABSTRACT

Opposition to new housing at higher densities is a pervasive and understudied problem, and an obstacle to both urban sustainability and housing affordability. Most existing research on housing opposition focuses on subsidized affordable housing, rather than new market-rate development. Scholars also tend to examine opponents' stated concerns, which often overlap and may obscure their underlying motivations. This article uses a survey-framing experiment, administered to over 1,300 people in Los Angeles County, to isolate different arguments against new market-rate housing and measure their relative persuasive power. We test the impact of common anti-housing arguments, such as traffic congestion, but also introduce the idea that residents might dislike development because they dislike *developers*. We find strong evidence for this idea: opposition to new development increases by 20 percentage points when respondents learn that a developer is likely to earn a large profit. This effect is similar in magnitude to arguments that new housing will harm neighborhood character. Our findings show that some opposition to housing is motivated not by residents' fears of their own losses, but resentment of others' gains.

Introduction

Housing in a number of American metropolitan areas is scarce and therefore expensive. Attempts to build more housing, however, are often slowed or halted by people who live nearby. In these cities, opposition to new market-rate housing is a consequential problem. A wide range of quantitative research now establishes that the slow rates of housing production in America's most expensive cities owe largely to politics (Glaeser & Gyourko, 2003; Saiz, 2010; Whittemore & BenDor, 2018a), and a quick review of journalism about urban development vividly illustrates the suspicion with which existing residents often view new housing proposals. In Los Angeles, for example, neighbors turned out to oppose the conversion of a gas station into an apartment building, citing traffic and aesthetic concerns (Alpert-Reyes, 2018). Single-family homeowners in Berkeley, California, bitterly fought a housing proposal, arguing—among other things—that it would cast shade over their gardens (Dougherty, 2017). Neighborhood groups in expensive coastal cities regularly sue developers to stop new housing from being built, and use political pressure and money to block development and protect their views (Lewis & Baldassare, 2010; Scally, 2013; Tighe, 2010). In many American cities, when planners ask for community input about proposed residential developments, the community more often than not expresses concern about, or even hostility toward, those proposals.

Opposition to housing isn't new, of course; the NIMBY (not-in-my-backyard) problem is longstanding. Research into NIMBYism has tended to focus on animosity to subsidized

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Supplemental data for this article can be accessed here.

affordable housing (Nguyen, Basolo, & Tiwari, 2013; Schively, 2007; Tighe, 2010), but the same pattern of abstract support and specific opposition often underlies reactions to housing development generally (Pendall, 1999). Many people agree in principle that new market-rate housing is necessary in cities, but fight in practice to prevent it from being built near them.

What motivates this opposition? When neighbors fight new market-rate housing, they are contesting the production of a good they themselves consume, and often one that they own. Homeowning opponents sometimes argue that new housing will depress their property values, while renting opponents sometimes argue (in something of a contradiction) that it will increase their rents (Hankinson, 2018). More frequently, opponents cite concerns about congested roads and parking, or changes to community character (Pendall, 1999). Lurking beneath some of these complaints is also a fear or resentment of new people, who might be of a different income level or racial or ethnic group—though opponents rarely state this motivation explicitly (Fennell, 2006). Finally, there is evidence that some opposition is rooted in political ideology and moral intuition (Lewis, 2015).

For scholars, the multiple motives behind housing opposition can be troublesome, because arguments against housing are often inter-related, and people often deploy different arguments simultaneously (Clingermayer, 2004; Monkkonen, 2016). It is not uncommon, for example, for local opponents to cycle through a catalog of objections to a new building—they object because of congestion, then aesthetics, then the impact on schools or home prices (e.g., Brown, 2015; Zahniser, 2017). Such tactics might be purely obstructionist, but people may also see these objections as consequences of each other. Current residents might think, for example, that more traffic will result not just in transportation delays but also lower property values. Alternatively, they might believe that poorer neighbors will depress prices either through nonconforming behavior or because their mere presence will trigger the race- and class-based biases that still pervade much of society (Fennell, 2006).

Whatever the reason, the simultaneity of objections makes it difficult to determine which of them carry the most weight. Which arguments against new housing are most likely to convince nearby residents?

In this article, we use a survey-framing experiment to isolate distinct arguments against new housing, and measure their relative persuasive power. We examine common anti-housing concerns, such as those about traffic, neighborhood character, and strained local services. But we also examine an additional idea: that people oppose housing development because they don't like *developers*. In principle, the attributes of a producer should have little bearing on the merits of a product, especially a long-lived product like housing. The housing, after all, will be in the neighborhood long after the developer is gone. At the same time, however, anyone familiar with local debates can attest that developers themselves are frequently the source of ire, and that housing opponents often question developers' motives. Popular culture often portrays developers as enemies of the public interest, and the word *developer* is frequently preceded by adjectives like *greedy* or *rapacious* (e.g., Ratcliffe & Stubbs, 1996; Wainwright, 2017). In planning education and practice, developers are often framed as adversaries rather than partners (Lester, 2016).

Our results suggest that anti-developer animus is a powerful source of opposition to housing development. Survey respondents "treated" with a narrative about developers earning large profits from a hypothetical housing development were 20 percentage points more likely to oppose that project than were respondents in a control group. They were also more hostile than respondents treated with other anti-development arguments, which focused on neighborhood character, congestion, or strained services (these latter frames were 15, 10, 10 percentage points more likely than to oppose the development than were control groups).

Our contributions are twofold. First, we contribute to the growing body of work on development conflict, and, in particular on how the framing of new development influences attitudes toward it (e.g., Doberstein, Hickey, & Li, 2016; Manuel & Kendall-Taylor, 2016; Whittemore & BenDor,

2018a). We complement this work, and help extend it beyond its traditional focus on subsidized housing.

Second, our findings complicate simple stories of NIMBYism. The conventional model of housing NIMBYism presents it as a collective action problem stemming from the real or perceived negative externalities of new housing (Fennell, 2006; Fischel, 2002). Individual residents pursue an outcome that is rational for them (by blocking new development they worry about) but in doing so generate an outcome that is irrational for the region (a diminished housing supply). Central to this model is the risk aversion of neighbors (Kahneman, Knetsch, & Thaler, 1991). When residents oppose new housing because they believe it will congest their streets, they are acting in their own self-interest: working to prevent their own loss. When residents oppose new development because a developer might earn a large profit, however, they are working to stop someone else's gain. This action suggests a separate dimension of NIMBYism, centered less on risk aversion and more on enforcing community norms of fairness. In the conclusion, we discuss what incorporating such norms into models of NIMBYism might imply.

What motivates opposition to housing?

In places where the demand for housing is high, the costs of failing to build it are large and well-documented. Preventing new housing in coveted neighborhoods makes housing prices higher, exacerbates segregation by income or race, generates more carbon emissions, and increases gentrification pressures in other parts of the city (e.g. Glaeser & Kahn, 2001; Glaeser & Ward, 2009; Kok, Monkkonen, & Quigley, 2014; Lens & Monkkonen, 2016; Rothwell & Massey, 2009). These consequences are increasingly evident in America's coastal metropolitan areas, where the economy grows much faster than the housing stock.

Cities' failure to build housing is a political more than a practical problem. Physical constraints in some parts of some regions can make housing construction difficult, but the biggest obstacle to new housing is localized opposition, which manifests itself as strict zoning, cumbersome approval processes, and/or local activism against new development.

What causes this resistance? To some extent, resistance to market-rate housing has fallen into unclaimed research territory. The topic sits between research on housing policies (whose questions lend themselves more readily to existing data) and traditional NIMBY research, whose early focus was on so-called "noxious" land uses, such as incinerators, landfills, and homeless shelters (e.g., Dear, 1991; Lake, 1996; Takahashi, 1998). Noxious land uses, of course, are much less common than proposals for new market-rate housing, and objections to them are easier to discern. Little mystery surrounds the motives of people who oppose incinerators or methadone clinics near their home.

More recent work on NIMBYism has tackled the question of why residents oppose deed-restricted affordable housing (Goetz, 2008; Scally & Tighe, 2015; Schively, 2007; Tighe, 2010). This work, especially the study by Pendall (1999), highlights the methodological challenges in disentangling underlying motivations from stated concerns. Nevertheless, some clear evidence suggests that classism, racial animus, and stigma—which are often bound up or concealed in fears about safety and property values—can help explain the persistent fear that often surrounds means-tested housing.

Our concern, however, is with opposition to market-rate development. Market-rate proposals are more common than affordable housing proposals, and market-rate units house far more people (including more low-income people)[1] than do subsidized units, but opposition to market-rate housing has garnered relatively little scholarly attention. To some extent, the same factors that fuel opposition to affordable housing also fuel opposition to market-rate housing—subsidized or not, new development could bring congestion, strain services, or change a neighborhood's appearance.

Residents who are attached to the places they live might oppose new development simply because it is a harbinger of such change (Manzo & Devine-Wright, 2013).

But differences between the two types of development could also change the nature of opposition to them. New market-rate development tends to be expensive, for example, so it should incite fewer class-based fears than subsidized affordable housing. Market-rate housing also differs from subsidized housing in two ways that we will focus on here: it produces housing that directly competes with the housing owned by existing residents, and it generates a profit for its producer.

New housing as competition

The best-known explanations of opposition to market-rate housing focus on new development's role as competition for existing units. Fischel (2002) and Fennell (2006) theorize market-rate housing NIMBYism as a process that begins with homeowner risk aversion and ends in homeowner rent-seeking. Both authors extend Tiebout (1956) and note that homeowners do not just consume but also produce "housing services." Housing services, in turn, are composed of not just housing units themselves but also the bundle of amenities—such as schools, crime levels, neighborhood quality, and open space—that are traded as subparts of the housing market. All residents in a given area—renters and owners alike—consume these services by paying property taxes in exchange for them, and produce them by behaving in ways that help determine their quality. Homeowners differ from renters, however, in that they literally own stock in local housing services, so when the value of those services falls so too does their wealth. Where renters are both consumers and producers, homeowners are both consumers and *capitalists*. In their role as capitalists, they have incentives to behave like producers in any other market, and protect the value of their assets by restricting new entrants.

This exclusionary motivation is arguably stronger for homeowners than owners of other capital, because housing is a uniquely risky investment, partly as a result of spatial externalities but also because it tends to make up the vast majority of household investments (Benjamin, Chinloy, & Jud, 2004). Houses are similar to stocks or bonds in that their value lies largely beyond the control of any individual owner, resting instead on the behavior of many consumers and producers. Unlike stocks or bonds, however, houses are indivisible, immobile, and largely illiquid assets, making downturns hard to recover from or hedge against. In these circumstances, NIMBYism can start as rational risk aversion and become tacit collusion. Often without formal agreements to do so, homeowners behave like a cartel, blocking new supply and stifling competition, and enabling monopoly returns on their investments (Fischel, 2002).

This conception of NIMBYism is almost certainly valid, but also incomplete. Most obviously, it cannot explain housing opposition from *renters*. Renters own no housing capital, and pay more when that capital is scarce, so they should benefit from more housing supply. Yet it appears that many renters do oppose new housing, and are especially likely to oppose it in expensive markets. Hankinson (2018) uses a national survey to show that opposition to new housing is lower among renters than owners, but then uses a survey of San Francisco to show that in a high-priced market, these tenure-based differences disappear. Renters in San Francisco are as likely as owners to oppose new market-rate development near them. This is of course just one study, but renter opposition to development has been documented elsewhere, particularly in media reports (Alpert-Reyes, 2018; Dougherty, 2017; Zahniser, 2017).

Why might renters oppose new housing? Fischel (2002) calls zoning a "collective property right"—a tool of exclusion shared by an entire neighborhood. Homeowners have a stronger *financial* incentive to exercise this right, but this does not mean renters have *no* reason to use it. Renters might value a community's aesthetic character, or worry about traffic congestion or competition for street parking.[2] Pendall's (1999) survey of opposition to Bay Area development proposals showed that both owners and renters worried about character and congestion. Almost 2 decades later, Monkkonen's (2016) examination of housing opposition in Los Angeles showed similar patterns. If renters believe new development will diminish the quality of the common goods attached to rental units, they might

see new housing as a tax; development may not increase the monetary price they pay, but it could diminish the set of services they receive while leaving their rent unchanged.

Of course, in opposing new development, renters also promote *higher* rents, which makes their behavior at least apparently contradictory: renter activism to keep rents high. One explanation for this seeming contradiction, however, is the temporal and spatial mismatch between the scale at which new development helps renters and the scale at which renters experience new development. Building new housing can reduce prices, but it does so primarily at the city-level, and by slowing or reversing price increases in the existing stock. The new housing itself is often expensive, and depending on where it is built, could quickly make average *neighborhood* rents rise, while only slowly stemming increases in rents citywide. As a result, renters could view new housing as a source of rising rather than falling rents (Angotti, 2016).[3]

Animosity toward developers

If residents see new housing as a sign of rising rents, falling values, or other negative changes, they might naturally dislike developers, who would be the most visible agents of that unwanted change and who seem to directly benefit from it. The accuracy of this perception is debatable: in cities with growth pressure, at least some evidence suggests that processes like gentrification are more likely to occur in areas *without* development (Zuk & Chapple, 2016), which would make blaming developers at least somewhat misguided. For our purposes, however, the accuracy of the perception matters less than its presence. Unwanted changes that occur without development, moreover, are often also less visible, and less easily tied to particular actors. A neighborhood that gentrifies without new development sees its population change while its physical character does not. This change can be noticeable, of course, but it is less noticeable than the cranes, excavations, and new building types that accompany development. This change might also lack the easy focal point for anger that a developer provides.

We see some evidence consistent with this idea in the rhetoric surrounding housing in San Francisco. The San Francisco Bay Area has badly lagged in housing development for decades. The city's extremely high prices are found not just where new development has occurred, but also in neighborhoods largely untouched by construction (39% of San Francisco's rental units sell for over $2,000 per month; only 3% of the region's rental units have been built since 2010).[4] Yet when the *San Jose Mercury News* surveyed residents in 2018 about the cause of the Bay Area's housing crisis, the most common answer (at 57%) was "Developers who are trying to maximize profits rather than build what people want or need" (Kendall, 2018).

How common is anti-developer animosity? The sentiment is hard to systematically document, but it seems both prevalent and longstanding. Baer (2012) documents a dislike of property developers going back hundreds of years, and Cuff (2000) examines the engrained suspicion, among America's founders, of people who prospered by urbanizing land. In their 1996 text on development, Ratcliffe and Stubbs observe, "it is sad but true that the image of the property development industry is generally poor" (Ratcliffe & Stubbs, 1996, p. 537). And Brown (2015, p. 7), in his comprehensive book on real estate development, writes:

> Each year, on the first day of the real estate development class that I teach, I ask my students, "What words come to mind when I say 'real estate developer'?" Their answers include "rip-off artists," "greedy," "bloodsuckers," "bulldozers," "used-car salesmen," "devils," "rich white men," "opportunists," and so on. They pile it on and I have difficulty writing everything on the board fast enough.

Perhaps the least-scientific but most damning piece of evidence is the sheer proportion of time that developers are portrayed negatively in popular culture. Developers are used so commonly as movie villains that the internet now has an "evil developer" film database, which tracks movies that feature developers as the antagonists.[5]

Hostility to developers has also long been common among urban planners, both academics and practitioners. Academic planners often write about developers as though they are adversaries. The cover of the first edition[6] of Fainstein's influential book *The City Builders* (1993) was Davringhausen's *Der Schieber* ("The Profiteer"): an image of a businessman in a spare but elegant office, sitting at a desk with drafting instruments, port and cigars, and new buildings visible out all the windows (Gordon, 2002). The book itself takes an (empirically-backed) dim view of developers and development. As far back as 1990, Peiser (1990, p. 500) observed that developers think "all too often with some justification, that planners loathe developer 'profits'" and that planners "are deeply suspicious of developers. They believe that developers' profit motive is in conflict with society's welfare." Little evidence suggests that this disconnect between planners and developers has narrowed since; the American Planning Association (APA) has even sponsored panels and programming to try to close it (American Planning Association, 2016).

What accounts for this dislike? It is possible that animosity toward developers stems from a broader mistrust of business or the wealthy (Rubin, 2002; Stein, 1979).[7] Property development also remains disproportionately male and white. People in many professions are rich, however, and many highly-paid occupations are still dominated by white men, so it seems unlikely that these factors alone would account for anti-developer disdain. It is not unprecedented, furthermore, for some professions to be uniquely disliked. A small but substantial literature in law, for example, documents and investigates the public's widespread distaste for attorneys (Asimow, 2000; Galanter, 1994). Raymond (2007) suggests that anti-lawyer sentiment arises in part from lawyers' frequent association with—and profit from—criminals, and in part because their courtroom demeanor is inherently confrontational, and thus out of step with the norms of "polite society."

One could imagine similar attributes motivating anti-developer animus. People tend to be comfortable with the status quo (or at least suspicious of changes to it) and developers almost by definition threaten the status quo. In supply-constrained and expensive housing markets, moreover, residents might with some reason see developers as wealthy, confrontational and illegitimate. The validity of this impression, however, might be a consequence of the tightly-regulated market. In many expensive housing markets, a combination of high land costs and complex regulations make development difficult. These circumstances could select for developers who are both affluent and out-of-step with conventional ways of behaving.

A hallmark of the housing crisis in California's coastal MSAs, for example, is not just the absence of development in most places, but the growing *intensity* of development in the few places it occurs. In both Los Angeles and San Francisco, buildings with 50 or more housing units account for 10% of the total housing stock, but over 40% of the housing stock built since 2000.[8] Buildings this large are expensive to put up. They also rarely comply with as-written zoning codes and are often larger than the structures around them, which makes them difficult to approve. These factors could combine to push many smaller would-be developers out of the market. In places where successful building projects are large, and require many hearings and discretionary approvals, the development process will select for people who are willing and able to carry large land costs while they fend off lawsuits, tangle with neighbors, and lobby elected officials to bend or change some rules. Being a developer might *require* being deep-pocketed, hard-charging and confrontational.[9]

The same conditions that make development difficult, in other words, might also make developers less likeable and seem less legitimate, which could in turn increase hostility to development and make it more difficult still. Manville and Osman (2017), for example, show that the perception that developers were bending rules triggered a series of growth revolts in Southern California.

A related possibility is that in supply-constrained cities—where people both need housing and have trouble affording it—the mere idea of profiting from housing might seem morally inappropriate. In times and places when housing prices are not large burdens, property development might be relatively unobjectionable. When cities have housing crises, however, development might become what Roth (2007) calls a "repugnant market"—an unseemly exchange where profit is unethical. What matters here, again, is perception. Development could be considered repellent even if its overall

effect is to make housing *more* affordable. Many repugnant markets have social benefits that are lost because the transactions themselves seem wrong.[10]

Perception, in turn, is again probably attached to visibility. Logically, any repugnance that stems from antipathy to housing-based profits should also extend to real estate agents, and to people who sell their homes during housing crises. Yet we see little evidence that people begrudge homeowners the windfall profits they receive by selling at high prices. People do sometimes decry realtors, but usually for reasons other than the money they earn selling expensive homes (more often it is a fear that they conceal crucial information, e.g. Levitt & Syverson, 2008). Developers, again, may stand out for their salience: selling an existing home is less noticeable than building a new one.

An animus toward developers for profiting from housing, moreover, is likely to be compounded if people also believe that developers are bending rules or winning special permissions to build. Development would represent not only an unjust profit but also a corrupt purchase of government privilege.

To summarize: research into anti-housing sentiment has to date focused heavily on opposition to subsidized affordable housing. Opposition to market-rate housing has received less attention. To some extent, hostility to market-rate housing probably arises from many of the same factors as opposition to affordable housing: a basic fear of change, concerns about aesthetics, concerns about the character and (to some extent) the behavior of new residents. But one way that market-rate housing differs from nonprofit housing is its production: it is built for a profit, by a widely disliked group: developers. In traditional conceptions of NIMBYism, this production process should not matter: the relevant factor should be the impacts of the new house, not the identity or motivation of its producer. Yet there is reason to think that it does matter, and this idea is part of what we test.

Research design and methods

Our goal is to measure the relative power of three common arguments against new market-rate housing, and also the power of the less-common idea that developers themselves are distasteful. In general, an argument is more powerful if it is more persuasive. If people who hear one anti-housing argument are more likely to oppose new development than people who hear a different one, we consider the first argument more persuasive, and thus more powerful.

We measure persuasive power with an online survey framing experiment. Survey experiments randomly assign respondents to a control group or one of several treatment groups, and use that random assignment to evaluate how people's attitudes change when they are exposed to different contexts, or frames. Sometimes the frames are words or phrases: researchers have used experiments to show, for example, that suggesting an increase in "welfare," rather than "assistance to the poor," dramatically reduces support for redistribution (Smith, 1987; for other examples see Nelson, Oxley, & Clawson, 1997; Cobb, 2005; McCabe & Heerwig, 2011; Jacoby, 2000). Similarly, Goetz (2008), showed that white suburbanites were more likely to support subsidized housing when it was called *lifecycle* rather than *affordable* housing.

In other cases, framing studies evaluate the power of arguments, rather than the power of loaded words or phrases. Framing experiments that consider arguments have become increasingly common in political science and psychology (Chong & Druckman, 2007; Scheufele & Tewksbury, 2007), and are making inroads in planning and urban studies. McCabe (2018) used a framing experiment to show that mortgage interest deduction becomes more popular when portrayed as a tool to increase homeownership. Doberstein et al. (2016) use an experiment to show that density is more popular when proponents emphasize its public benefits, whereas Manville and Levine (2018) experimentally show that people are more likely to support taxes for public transportation when transit is portrayed as a solution to congestion or climate change. Whittemore and BenDor (2018b) use an experimental design similar to that of this study, and find that positive framing generally improves people's

attitudes toward new development, especially among individuals with specific concerns about development impacts.

Our experiment analyzes different arguments against housing. We randomly assigned subjects to vignettes that emphasized different frames about development, and then measured both their attitudes toward new development.

We administered the survey in July 2017, to a sample of over 1,300 LA County adults recruited by Survey Sampling International (SSI). SSI recruits respondents through different online networks and online ads. The firm emphasizes harder-to-reach groups, like the elderly, the low-income, and racial and ethnic minorities. Once recruited, SSI randomly invites participants to take different surveys, limited only by any quotas set by researchers.

We set a quota for our sample to match the countywide population on gender and age. Our sample is thus representative of LA County based on gender and age, but *not* representative of the county overall. Because our survey is experimental, this unrepresentativeness is less of a problem. Our goal is to examine the power of different arguments within a randomized group, not generalize from our sample to estimate the prevalence of different attitudes or arguments across the larger population.

The validity of our experiment hinges on three factors: the salience of the topic and its frames, random assignment and balance within the sample, and the invariance of all factors save the treatment itself. We discuss each in turn.

Salience is important because we want to elicit reactions that at least approximate the reactions people would have in the real world. If experimental surveys ask people about issues that to them may be abstract or unrealistic, their answers may not reflect strongly-held views, and thus yield little insight.

To some extent, our use of LA County addresses this problem: development conflict has long been endemic in many of the county's cities (e.g., Fulton, 1994; Fulton, Pendall, Nguyen, & Harrison, 2001; Manville & Osman, 2017). Only a few months before our survey, for example, residents of the City of Los Angeles voted on a large and controversial growth control ballot measure, Measure S, that received substantial media attention (for more, see Lens, Traynor, Brozen, & Huff, 2017).

Using Los Angeles also allowed us to choose frames that we knew were prevalent in development discussions. We drew on Monkkonen (2016), which compiled common arguments against new market-rate housing from hearing records and observations of planning meetings in Los Angeles, as well as media accounts of development controversies and the broader literature. Ultimately, we chose four frames. We elaborate on them below, but in short, they are concerns about congestion, concerns about neighborhood character, concerns about strained local services, and a frame about developers themselves—their processes and profits.

A more specific salience concern, for our purposes, is that not all development could plausibly occur in all neighborhoods. We might learn little, for instance, by asking people in a low-density suburb how they would feel about a proposed skyscraper nearby, simply because that prospect might seem so unlikely as to be absurd. To address this concern, we first sort respondents based on the type of neighborhood they live in. We ask them to choose the predominant type of housing in the three blocks around their residence (primarily single-family, low-rise multifamily, mid-rise multifamily, and high-rise multifamily).[11] This information gives us a baseline, and allows us to expose respondents to hypothetical but plausible developments—structures that are only moderately denser than their current environments.

After separating respondents into these neighborhood groups, we sort them randomly into experimental groups: either one of four treatment groups or a control group. This is where the concern about balance arises. If our random sorting deposits people with different socioeconomic attributes across the different frames equally, we can view differences across the frames as average treatment effects—the causal impact of each frame. If the random sorting does not yield a balanced sample, however, we will need to analyze the differences using controlled regressions.

The final concern is the variance in treatments. A true experiment varies nothing across subjects except the variable of interest (in this case, the argument against housing). Every respondent saw a vignette describing a proposed development near them, moderately larger than the typical housing in their neighborhood. Respondents in the control group who live in predominantly single-family neighborhoods saw the following:

> *Suppose a developer proposes to build a three-story apartment building on your block. The proposed building, which will contain 20 one-bedroom and studio units, is designed by Camarillo Architects, who have developed multi-family residential projects across Southern California for decades. Early renderings show a building with tasteful contemporary architecture and ecologically sensitive landscaping. Some advantages of this development are clear. Los Angeles badly needs more housing, and city planners hope that new construction will help make rents more affordable.*

Control group respondents living in predominantly multi-family neighborhoods saw this vignette:

> *Suppose there is a proposal to build a 10-story apartment building on your block. The proposed building, which will contain 90 two-bedroom and one-bedroom units, is designed by Solano Architects, who have developed multi-family residential projects across Southern California for decades. Early renderings show a building with tasteful contemporary architecture and ecologically sensitive landscaping. Some advantages of this development are clear. Los Angeles badly needs more housing, and city planners hope that new construction will help make rents more affordable.*

Respondents in the treatment groups also saw these vignettes, but also saw an additional three to four sentences that made an argument against the development. These additional sentences are the treatments.

Respondents in the "traffic and parking frame" saw this additional text:

> *However, some of your neighbors oppose this project. They worry that it will lead to increased traffic in the neighborhood and make street parking harder to find. Traffic and parking are always sources of concern to Angelenos, and there is reason to think that new housing does mean more cars.*

Neighborhood character frame:

> *However, some of your neighbors oppose this project. They worry that a taller apartment building will change the character of the neighborhood. Neighborhoods are often appealing because they have a consistent appearance where buildings of the same size are clustered near each other. Introducing a larger and different building could undermine the look and appeal of your neighborhood.*

Strain on services frame:

> *However, some of your neighbors oppose this project. They worry that the residents of this new building will put a strain on local public services like parks and schools, without paying their fair share. Many existing services are already strained, and existing residents should not have to endure further declines in service quality just to make room for new people.*

Developer profit frame:

> *However, some of your neighbors oppose this project. They point out that the project's developers obtained a special permit from the city, which lets them build at a higher density than zoning would normally allow. The developers stand to make large profits as a result. Your neighbors argue that the City Planning Department should not be in the business of making developers rich.*

We tried to make each frame roughly the same length, and to give each one a similar balance of specific and detailed information. For instance, the strain on services frame specifically mentions parks and schools, while more vaguely mentioning strained services and "fair share," while the congestion frame specifically mentions difficulties finding street parking, and more vaguely mentions traffic and "more cars."

An important aspect of the final frame—"developer profits"—is that it combines two elements that could elicit animosity: the idea that developers are bending the rules and getting special treatment, and the idea that developers are making large profits. From one perspective, writing such a double-barreled

question impedes interpretation of its answer. If this frame triggers anti-housing sentiment, we will be unable to know that the sentiment was caused by the special permission, the large profits, or both. We decided to keep these frames together for two reasons. First, these two arguments, especially in Los Angeles, are often made together: the idea that developers get rules changed, and reap large returns as a result, specifically motivated LA City's Measure S, and has been a prevalent theme in numerous other LA County growth revolts (Manville & Osman, 2017).[12]

Second, although these two points will be hard to disentangle within a single question, they are both aspects of housing development that are independent of the *product*, and instead aspects of the *process* and *producer*. They therefore tap into the distinction we identified earlier, between the long-lived commodity neighbors will actually have to live with (the new housing) and the way that commodity arrives. The latter may well be a legitimate source of concern for neighbors, but it is also qualitatively different. Living with a newly-congested street is not the same as living with the knowledge that a developer got a rule waived, or made money.[13]

After respondents read their vignettes, we asked them if they supported, opposed, or were indifferent to ("neither support nor oppose") the project, using a five-point scale.

As an extension to our primary hypothesis, we then asked two additional questions, each one as a separate framing experiment. In the first, we asked respondents if they would support the project they had just seen if it were built in a *different* neighborhood. So we asked people in low-density areas if they would support a multifamily project in a multi-family neighborhood and vice-versa. We again randomized with replacement the arguments respondents saw against the project. This question allows us to verify the basic NIMBY hypothesis: that housing will be more popular elsewhere. The question has limitations as well, however. People who have already stated opposition or support for a development near them might be primed to oppose or support it elsewhere, making the two scenarios more correlated than we would prefer.

Our second additional question creates a scenario where the developer offers a package of community benefits to mitigate the impact of the hypothetical project. We do not test what package of benefits is most attractive. Instead, we hold the mitigation constant, and ask if the circumstances in which it is offered make people more or less likely to support the development. We thus sort people into three frames (again randomly, and regardless of which argument they had seen previously). Each respondent sees the same set of community benefits: extra off-street parking spaces, a donation to the local school, and improvements to the nearby streetscape, such as planting trees and replacing sidewalks and curbs.

What we vary across frames is the manner in which the benefits are elicited. One group is told that the developer is providing the benefits voluntarily. Another is told that neighborhood groups exacted the benefits from the developer after a conflict, and the last group is told that the mitigations are required and "will cost hundreds of thousands of dollars, and could substantially reduce the developer's profit margins." In the first frame, then, the developer proactively engages the community, whereas in the others the developer is compelled, in one way or another, to mitigate. As before, the full text of these frames is in Appendix A.

This experiment further examines the distinction we have already drawn, between development's process and development's product. The community benefits package is in many ways part of the product. With the benefits, neighborhood will get not just new housing but also more parking, street improvements, and so on. Like the housing units, these amenities will remain after the development process is over and after the developer is gone.

How the benefits arrive, in contrast, is a matter of process. If NIMBYism is rooted in opposition to the development and its consequences (the product), then variance in how the product is delivered should have little effect on attitudes toward housing. If the manner of delivery does matter, however, we would have further evidence that some aspects of opposition to housing are divorced from the housing itself.

Table 1. Comparison of socioeconomic characteristics of sample and LA County.

Characteristic	Survey sample	LA County
Female (%)	64	51
Renter (%)	47	54
Lived in home 5 years or less (%)	35	32
Married (%)	42	49
Median household income (thousands)	62	56
Age 65 years and over (%)	10	13
BA or higher education	51	30
Self-identified race/ethnicity		
White alone, not Hispanic or Latino (%)	52	27
Hispanic (%)	27	49
Black alone, not Hispanic or Latino (%)	9	9
Asian, not Hispanic or Latino (%)	16	15
Foreign born (%)	13	35
Housing type		
Single family house (%)	65	71
Small multifamily < 21 units (%)	25	19
Large multifamily > 20 (%)	11	9

Source: 2011–2015 American Community Survey 5-Year Estimates

Results

Table 1 shows descriptive statistics from our sample, and compares them to LA County overall. As expected, the sample differs substantially from the county population. Compared to county residents, our respondents are more educated (51% have a BA compared to 30% in Los Angeles County), whiter (52% to 27%), and less likely to be foreign-born (13% as compared to 35%). Our sample is also higher income, slightly more female (despite explicit efforts to balance on gender), less likely to be married, and more likely to live in multifamily housing. Again, however, our experiment's validity rests on the sample being balanced across the treatments, not on it matching the county overall.

Table 1 of Appendix B shows our balance test. Respondents are sorted reasonably equally along most socioeconomic attributes, but the sample departs from balance in tenure and housing type. In all cases, therefore, we use logistic regressions with controls when we test differences between frames.

Table 2 shows, for each frame, the share of respondents that support, oppose, or have no opinion on the proposed housing development near them. Support ranges from 33% to 53%, depending on the frame, and opposition from 28% to 48%. A substantial share of respondents express no opinion, ranging from 16% to 20%, again depending on the frame. In general, people exposed to common arguments against housing are more likely to oppose it. People treated with the neighborhood character frame were 15 percentage points more likely to oppose the development than were people who saw the control frame. The strain on services and traffic/parking frames, similarly, both increased opposition by 10 percentage points relative to the control.

The most dramatic result, however, is the outsized influence of developer profit frame. Forty-eight percent of people told about the developers' large profit opposed the development, compared to 28% of respondents who saw the control frame.

Table 2. Opposition and support for new housing development under different frames.

Response	strain	traffic	developer	character	control
Support (%)	49	45	33	37	53
No opinion (%)	16	18	20	20	19
Oppose (%)	35	37	48	43	28
N	266	256	260	275	277

Table 3. Logistic regression results, DV: 1 = Oppose hypothetical housing development, 0 = Support or no opinion.

Frame	Model 1 (no controls)	Model 2 (with controls)
Strain on services	1.68***	1.53**
	[0.32]	[0.31]
Traffic/parking	1.81***	1.90***
	[0.35]	[0.39]
Developer profits	2.80***	2.61***
	[0.52]	[0.53]
Neighborhood character	2.34***	2.22***
	[0.43]	[0.44]
Constant	0.33***	0.10***
	[0.05]	[0.05]
Log likelihood	−864.05	−755.81
Observations	1,334.00	1,309.00

Notes: ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.1 levels. Standard errors in brackets. Model 2 includes the following as controls: housing tenure (renter/owner), housing type (single- or multi-family), the length of time in current residence, race/ethnic identity, gender, and highest level of education.

These raw percentages, however, should be interpreted with some caution. Because our sample is unbalanced, some of the differences we observe might be artifacts of the uneven socioeconomics or demographics across the frames.

To account for this potential bias, we estimate logistic regressions with a suite of person-level controls: tenure (renter/owner), housing type (single- or multi-family), length of current residence, race/ethnic identity, gender, and educational attainment. To estimate the logistic regression—which analyzes binary response variables—we condense our five-point Likert scale response (ranging from "strongly support" to "strongly oppose") into an oppose/not oppose dichotomy. We are interested in opposition, so we code responses that indicate opposition as 1, and all other responses, including "no opinion" as zero. Table 3 reports the results of this regression model.

The results of the regression model confirm what we see in the raw experimental output. All of the frames are associated with opposition to the housing proposal (all are statistically significant at the 0.01 level, except for the strain on services frame, which is significant at the 0.05 level in the model).

Once again, the developer profit frame has the largest association with opposition. Figure 1 presents these results graphically, as odds ratios with 95% confidence intervals. For each frame, the

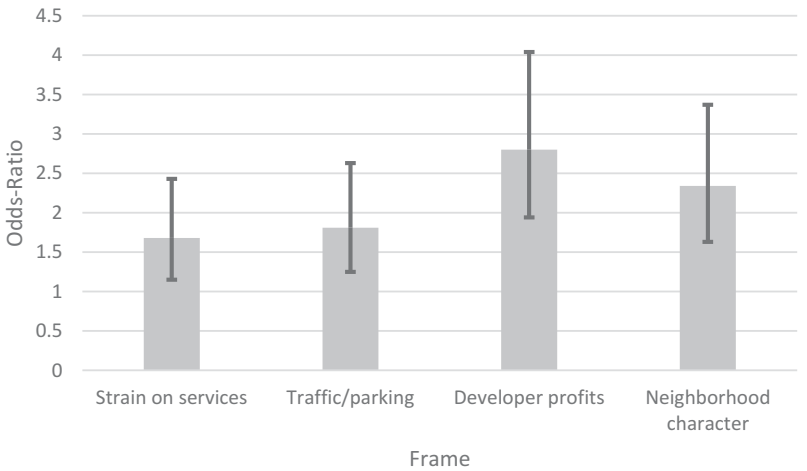

Figure 1. Odds of opposing new housing development by frame, with 95% confidence intervals.

Table 4. Does mitigation matter?

	Frames		
Opinion	Voluntary	Forced by community	Exaction/Developer loses money
More support (%)	63	57	50
No difference in support (%)	33	40	45
Less support (%)	3	3	5
N	465	415	458

odds ratio compares the odds of a respondent opposing the project to the odds that a member of the control group would oppose the project. For example, the odds of opposition from someone given the traffic/parking frame were nearly twice that of a control respondent, while the odds of opposition from someone in the developer profit frame were nearly three times higher.

Our second experiment had asked if respondents would support a similar development in a neighborhood whose housing stock was different from their own. Not surprisingly, a larger share of people supported the hypothetical development when it was somewhere else.

Of the respondents who opposed the development in their own neighborhood, 21% had no opinion on the building when it was proposed in another neighborhood. We consider this weak NIMBYism—opposition to housing nearby but indifference to it elsewhere. Another 23% actually supported the proposal, which we consider strong NIMBYism—opposition to housing nearby but support for it elsewhere. This finding is one more piece of evidence that people's opinions of developments are substantially influenced by their proximity to it. Scholars such as Wolsink (2006) have asserted that the NIMBY frame may not be based in fact. The coefficient here suggests otherwise.

Table 4 shows results from the second experiment, which examines the role that mitigation might play in changing people's minds about a development. In this experiment, we test not the benefits themselves but the manner in which they arrived: if the developer volunteered them, the community forced them, or the city exacted them as a matter of course (at great expense). In this experiment, we did not use a control frame.

Changing the delivery of the same community benefits package substantially changes support for the project—by up to 13 percentage points, providing more evidence that the development process can sway opinions about the development itself. The voluntary benefits frame was associated with the largest change—63% of people exposed to this frame said they supported the development more. The frame with a government exaction showed the least change, though 50% of people still indicated that they supported it more. People who did not support the development more generally said their

Table 5. Logistic regression results, DV: 1 = Support project more, 0 = No change or support project less (Base group is "forced by community pressure" frame).

Frame	Model 1: All respondents (with controls)	Model 2: Developer frame (with controls)
Voluntary	1.39**	1.84*
	[0.20]	[0.66]
Developer loses money	0.77*	0.78
	[0.11]	[0.27]
Constant	1.15	0.67
	[0.46]	[0.61]
Log likelihood	−850.27	−155.97
Observations	1299	246

***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.1 levels. Standard errors in brackets. Model 2 includes the following as controls: housing tenure (renter/owner), housing type (single- or multi-family), the length of time in current residence, race/ethnic identity, gender, and highest level of education.

opinion of it had not changed. Almost no one reported supporting the development less as a result of mitigation.

Table 5 presents the results of the models assessing the impacts of the mitigation frames. The differences between the frames of mitigation are statistically significant when controlling for individual characteristics. Respondents who saw the voluntary mitigation frame were 1.4 times as likely to state that they support the project more than those seeing the community pressure frame. This frame had an even larger effect (they were 1.8 times as likely to support the project more) for those respondents that had previously seen the developer profit frame.

Discussion and conclusions

Particularly in places where market-rate housing is expensive, opposition to it is prevalent, consequential, and understudied. Planners and geographers have made large inroads into the study of locational conflict, but their emphasis has traditionally been on so-called noxious land uses (like landfills or incinerators) or subsidized affordable housing. Much less attention has been paid to why neighbors oppose new market-rate housing. This opposition is hard to decode. People resist neighborhood change for many reasons, and it can be hard for analysts to know which of these reasons loom largest in people's minds. This difficulty arises because some reasons overlap, because people often make multiple arguments at once, and their stated reasons for opposing change might differ from their underlying reasons—which people may disguise even from themselves (Trivers, 2011).

The experiments we report in this article are a small step toward isolating and measuring the sources of housing opposition. We start from, and test, the premise that some opposition to market-rate housing arises from the same roots as opposition to affordable housing: anxiety about aesthetics, congestion, and property values. But we also account for the fact that market-rate housing differs from other NIMBY foci in some important ways, one of which is the presence of a for-profit developer. When neighbors oppose subsidized housing or noxious land uses, researchers usually assume that they resent carrying the local burden of a public benefit. Residents in places where new market-rate housing is proposed, in contrast, will bear the local burden of both a public benefit and someone's *private* profit. New market-rate housing does have positive social externalities (e.g., Rossi-Hansberg, Sarte, & Owens, 2010), and it delivers real social benefits by providing shelter. But it is also built for profit.[14] With market-rate housing, then, the NIMBY equation might require an additional variable: neighbors may weigh not just the (real or perceived) broader benefits traded against the (real or perceived) local costs, but also the private benefits to someone else against the local costs they may bear. People may oppose the housing because they oppose these private benefits.

Our approach, which isolates individual arguments against housing and measures their resonance across randomly-assigned groups, has advantages and disadvantages. The advantage is the ability to control the arguments people are exposed to, and thus better measure their power. The limitations are, first, that we report only one set of experiments. Further research should replicate and validate these results. Second, a hypothetical development in one's neighborhood is quite different from an actual development proposal in one's neighborhood. If the only difference between a real and hypothetical development is that the real development would elicit stronger reactions, then our results could be considered lower-bound associations between our frames and attitudinal change. It is possible, however, that a real development proposal would elicit different reactions, in which case our experiment misses some important aspects of development conflict.

Those concerns aside, much of what we find is in line with existing research on opposition to affordable housing. People are more likely to oppose the same building when it is in their neighborhood, as opposed to elsewhere. People are also more likely to oppose a housing proposal when opponents frame it as a source of congestion, or strained public services, or a deviation from the neighborhood's aesthetic character.

But we also find that people reminded of a developer's profit, or told that a developer had received special permission to build, become far more hostile to new housing. This frame, in fact, was the most powerful and persuasive of those we tested.

How should we think about this reaction? Interpreting the "developer profit" frame is complicated. As we discuss above, it combines two related but distinct strains of anti-developer sentiment: the fact that developers, in restrictive environments, often secure special permissions to build, and the perception (sometimes correct, sometimes not) that development in these same environments brings outsized financial rewards. The negative reaction to this frame might therefore suggest distaste for the idea of profiting from housing, distaste for a process that seems unregulated or prone to influence-peddling, or both.

Pulling apart these two explanations will be an important goal for future work. Even combined, however, they suggest that at least some opposition to market-rate housing (and perhaps a substantial share of it) owes less to the development and more to the developer. Neighbors may oppose not just the product of housing but its producer, and the process the producer uses.

A dislike of development that stems from dislike of developers can help explain some otherwise confusing aspects of locational conflict over housing. Renter opposition to new housing, for example, becomes less mysterious if renters and owners alike think that the process of building and profiting from housing is illegitimate. If people do hold this view, however, then efforts to increase housing affordability might be impeded by conflicting notions of equity; concerns about fairness of *procedure* in building new housing might undermine the equitable *outcome* that new housing can deliver.

Strictly speaking, in high-demand, supply-constrained cities, new development is itself a form of mitigation. It delivers needed housing, and helps make housing more affordable. But if residents find the manner that housing is produced distasteful, then a community norm of fairness might block an equitable policy. This scenario is not outlandish. A hallmark of expensive markets is that developers often *do* need to lobby and negotiate for permission to build, which in turn makes most development feasible only for deep-pocketed developers who are able to lobby, and to carry land costs while they do so. If people oppose development in part because they see developers as rich, confrontational, and willing to bend rules, they could trigger a self-fulfilling process. Communities suspicious of development will clamp down on it, and by clamping down they increase the probability that developers will be rich and confrontational.

In highlighting this tension, it is not our goal to dismiss all opposition to housing. Development conflict is difficult because many concerns that arise about new housing *are* reasonable. Most of those concerns are about the housing as a product, not about the nature of its producer, but it isn't hard to see how the modern development process can arouse ire. No one likes to see rules bent, and the large amounts of (highly visible) capital required to build new housing, when coupled with its often-ostentatious luxury marketing, can make new development in expensive cities a lightning rod for concerns about inequality.

Understanding where an attitude comes from, however, is not the same as endorsing action based on it. When communities block development because they dislike developers, they may inflict substantial collateral damage on housing consumers. For better or worse, private development today is the only viable path toward large amounts of needed new housing, and the failure to build new housing has devastating consequences for low-income people in expensive markets. Almost everyone in the United States lives in a home built by a self-interested developer. Blocking the product to punish the producer has a visible short-term consequence that might look progressive (assuming the developer is in fact rich) but a less-visible long-term consequence that lands on vulnerable people elsewhere. This trade-off, and the role that anti-developer animosity plays in it, deserves more attention from scholars and practitioners alike.

Notes

1. For example, the 2017 American Housing Survey shows that 38% of renters below the poverty level receive some sort of rent subsidy, be it public housing, a voucher, or a means-tested below-market unit. The remaining poor households live in market-rate units, albeit usually older units.
2. Rent control could also explain why tenants oppose new housing in some cities. Rent control transfers some property rights from owners to renters (Arnott, 1995), and should thus let renters behave more like homeowners, particularly in decisions to exclude outsiders from local collective goods. Only a handful of expensive cities have rent controls, however, and renter opposition to housing appears prevalent even in uncontrolled expensive cities.
3. Whether this perception is accurate is another matter, and beyond the scope of this paper, but localized rent increases are highly endogenous. It may appear that a new development made prices rise in the existing stock, but it is also plausible that the new development and the rising prices were both consequences of rising demand.
4. Calculated from the 2016 American Community 1-year sample.
5. Available at: https://evildevelopermovies.wordpress.com/ (accessed February 17, 2018).
6. The second edition changed this image to a rendering of MetroTech, a public-private development in downtown Brooklyn.
7. Distrust of affluence, in turn, may be an ingrained residual of our evolutionary past, since hunter-gatherer lifestyles were so egalitarian (e.g., Morris, 2015).
8. Calculated from the 2016 1-year American Community Survey.
9. The conditions we describe here have some similarity to the way developers are portrayed in both urban growth machine and urban regime literature (Logan & Molotch, 1987; Mossberger & Stoker, 2001), in that both situate developers as influential players in city politics. At the risk of simplifying these theories, however, they also tend to see developers as being relatively unregulated. We emphasize, in contrast, that developers' appearance of power and illegitimacy can arise from *some* developers being able to escape strict regulation.
10. The canonical example is people paying for organ transplants. Ample evidence suggests that many more people would get the kidneys they need if the organs were allocated by price, but such trades are banned for ethical reasons (Roth, 2007).
11. This approach is similar to one taken by Whittemore and BenDor (2018b). In the rest of the survey, we combined the three multifamily neighborhood types to simplify the structure of the questions. Only 5% of the sample (61 respondents) live in a predominantly 10+ story neighborhood. Unfortunately, this is too few to analyze separately with any statistical validity. We run later analyses without this group for robustness and find only trivial differences in results.
12. One could also make the argument that large profits *depend* on special permission, since the permission would increase a parcel's residual land value after the developer had purchased it. We think this point is probably valid. Our concern, however, is with how people perceive developer profits, and since most people are not aware of the relationship between profit and discretionary permission, we do not consider it a compelling reason to combine our frames.
13. Another, smaller difference with this frame is that this frame includes a statement of fact ("some of your neighbors … point out that") whereas the others suggest concern about probabilistic outcomes ("some of your neighbors … worry that"). This difference in phrasing might give the frame a slightly greater weight among respondents.
14. To be precise, the market-rate housing is different in being *sold* at a profit. Subsidized affordable housing is *built* at a profit by the developer, as anyone who has looked at an affordable housing pro forma knows. "Nonprofit" developers build housing that operates at a loss, but the development itself is profitable. The general public, however, probably does not make this distinction, and likely sees market-rate developers as interested in profit while nonprofit developers are not.

Acknowledgments

This research project was generously supported by the UCLA Ziman Center and the UCLA Lewis Center for Regional Policy Studies. Insightful comments on earlier drafts were provided by Andrew Whittemore, Weihuang Wong, the editors and anonymous reviewers at the *Journal of Urban Affairs*, and participants at the NYU Wagner Seminar on March 1, 2018.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was partially supported by the Ziman Center for Real Estate, University of California, Los Angeles, and the Lewis Center for Regional Policy Studies, University of California, Los Angeles.

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References

Alpert-Reyes, E. (2018, August 20). A Silver Lake historic treasure — Or 'a junky old gas station'? *Los Angeles Times*.

American Planning Association. (2016, April 6). *Planners and developers: Same community, different worlds*. Phoenix, AZ: National Planning Conference.

Angotti, T. (2016). *Zoned out: Race, displacement, and city planning in New York City*. New York, NY: Terreform.

Arnott, R. (1995). Time for revisionism on rent control? *Journal of Economic Perspectives*, *9*(1), 99–120. doi:10.1257/jep.9.1.99

Asimow, M. (2000). Bad lawyers in the movies: Law and popular culture. *Nova Law Review*, *24*, 533–594.

Baer, W. (2012). The house-building sector of London's economy, 1550-1650. *Urban History*, *39*(3), 409–430. doi:10.1017/S096392681200020X

Benjamin, J. D., Chinloy, P., & Jud, G. D. (2004). Why do households concentrate their wealth in housing? *Journal of Real Estate Research*, *26*(4), 329–343.

Brown, P. H. (2015). *How real estate developers think*. Philadelphia, PA: University of Pennsylvania Press.

Chong, D., & Druckman, J. N. (2007). Framing public opinion in competitive democracies. *American Political Science Review*, *101*(4), 637–655. doi:10.1017/S0003055407070554

Clingermayer, J. C. (2004). Heresthetics and happenstance: Intentional and unintentional exclusionary impacts of the zoning decision-making process. *Urban Studies*, *41*(2), 377–388. doi:10.1080/0042098032000165307

Cobb, M. D. (2005). Framing effects on public opinion about nanotechnology. *Science Communication*, *27*(2), 221–239. doi:10.1177/1075547005281473

Cuff, D. (2000). *The provisional city: Los Angeles stories of architecture and urbanism*. Cambridge, MA: MIT Press.

Dear, M. (1991). Understanding and overcoming the NIMBY syndrome. *Journal of the American Planning Association*, *58*(3), 288–301. doi:10.1080/01944369208975808

Doberstein, C., Hickey, R., & Li, E. (2016). Nudging NIMBY: Do positive messages regarding the benefits of increased housing density influence resident stated housing development preferences? *Land Use Policy*, *54*, 276–289. doi:10.1016/j.landusepol.2016.02.025

Dougherty, C. (2017, December 1). The great American single-family home problem. *The New York Times*.

Fainstein, S. (1993). *The city builders: Property development in New York and London, 1980-2000*. New York, NY: Wiley-Blackwell.

Fennell, L. A. (2006). Exclusion's attraction: Land use controls in Tieboutian perspective. U Illinois Law & Economics Research Paper No. LE06-006.

Fischel, W. (2002). *The homevoter hypothesis: How home values influence local government taxation, school finance, and land-use policies*. Cambridge, MA: Harvard University Press.

Fulton, W. (1994). *The reluctant metropolis*. Ventura, CA: Solano Press.

Fulton, W., Pendall, R., Nguyen, M., & Harrison, A. (2001). *Who sprawls most? How urban growth patterns differ across the U.S*. Washington, DC: Brookings Institution Center on Urban and Metropolitan Policy.

Galanter, M. (1994). Predators and parasites: Lawyer-bashing and civil justice. *Georgia Law Review*, *28*(3), 633–682.

Glaeser, E., & Gyourko, J. E. (2003). The impact of building restrictions on housing affordability. *Economic Policy Review*, *9*(2), 21–39.

Glaeser, E., & Kahn, M. (2001). Decentralized employment and the transformation of the American City. *Brookings-Wharton Papers on Urban Affairs*, *2*, 1–63. doi:10.1353/urb.2001.0008

Glaeser, E., & Ward, B. (2009). The causes and consequences of land use regulation: Evidence from Greater Boston. *Journal of Urban Economics*, *65*, 265–278. doi:10.1016/j.jue.2008.06.003

Goetz, E. G. (2008). Words matter: The importance of issue framing and the case of affordable housing. *Journal of the American Planning Association*, *74*(2), 222–229. doi:10.1080/01944360802010251

Gordon, D. (2002, June). Review of Fainstein, Susan S., The city builders: Property development in New York and London, 1980-2000. *H-Urban, H-Net Reviews*. Retrieved from http://www.h-net.org/reviews/showrev.php?id=6384
Hankinson, M. (2018). When do renters behave like homeowners? High rent, price anxiety, and NIMBYism. *American Political Science Review*, *112*(3), 473–493. doi:10.1017/S0003055418000035
Jacoby, W. G. (2000). Issue framing and public opinion on government spending. *American Journal of Political Science*, *44*(4), 750–767. doi:10.2307/2669279
Kahneman, D., Knetsch, J. L., & Thaler, R. (1991). Anomalies: The endowment effect, loss aversion, and status quo bias. *The Journal of Economic Perspectives*, *5*(1), 193–206. doi:10.1257/jep.5.1.193
Kendall, M. (2018, April 8). Who caused the Bay Area's housing shortage? Hint: It's not just tech. *The Mercury News/ East Bay Times*.
Kok, N., Monkkonen, P., & Quigley, J. M. (2014). Land use regulations and the value of land and housing: An intra-metropolitan analysis. *Journal of Urban Economics*, *81*(3), 136–148. doi:10.1016/j.jue.2014.03.004
Lake, R. (1996). Volunteers, NIMBYs, and environmental justice: Dilemmas of democratic practice. *Antipode*, *28*, 160–174. doi:10.1111/anti.1996.28.issue-2
Lens, M. C., & Monkkonen, P. (2016). Do strict land use regulations make metropolitan areas more segregated by income? *Journal of the American Planning Association*, *82*(1), 6–21. doi:10.1080/01944363.2015.1111163
Lens, M. C., Traynor, K., Brozen, M., & Huff, H. (2017). *The likely consequences of measure S: Higher housing costs*. Lewis Center for Regional Policy Studies Issue Brief, Los Angeles, CA.
Lester, A. (2016). *Project management, planning and control*. Oxford, UK: Butterworth-Heinemann.
Levitt, S. D., & Syverson, C. (2008). Market distortions when agents are better informed: The value of information in real estate transactions. *Review of Economics and Statistics*, *90*(4), 599–611. doi:10.1162/rest.90.4.599
Lewis, P., & Baldassare, M. (2010). The complexity of public attitudes towards compact development. *Journal of the American Planning Association*, *76*(2), 219–237. doi:10.1080/01944361003646471
Lewis, P. G. (2015). Moral intuitions and smart growth: Why do liberals and conservatives view compact development so differently? *Journal of Urban Affairs*, *37*(2), 87–108. doi:10.1111/juaf.12172
Logan, J., & Molotch, H. (1987). *Urban fortunes*. Berkeley, CA: UC Press.
Manuel, T., & Kendall-Taylor, N. (2016). *"You don't have to live here": Why housing messages are backfiring and 10 things we can do about it*. Washington, DC: Frameworks Institute.
Manville, M., & Levine, A. S. (2018). What motivates public support for public transit? *Transportation Research Part A: Policy and Practice*, *118*, 567–580.
Manville, M., & Osman, T. (2017). Motivations for growth revolts: Discretion and pretext as sources of development conflict. *City & Community*, *16*(1), 66–85. doi:10.1111/cico.2017.16.issue-1
Manzo, L. C., & Devine-Wright, P. (Eds.). (2013). *Place attachment: Advances in theory, methods and applications*. London, UK: Routledge.
McCabe, B. (2018). Costly, regressive, and ineffective: How sensitive is public support for the mortgage interest deduction in the United States? *Housing Policy Debate*, *28*(6), 963–978. doi:10.1080/10511482.2018.1494025
McCabe, B. J., & Heerwig, J. (2011). Reframing the marriage debate: Wording, context, and intensity of support for marriage and civil unions. *International Journal of Public Opinion Research*, *24*(4), 429–449. doi:10.1093/ijpor/edr025
Monkkonen, P. (2016). Understanding and challenging opposition to housing construction in California's urban areas. UCCS White Paper, University of California Center Sacramento.
Morris, I. (2015). *Foragers, farmers and fossil fuels*. Princeton, NJ: Princeton University Press.
Mossberger, K., & Stoker, G. (2001). The evolution of regime theory. *Urban Affairs Review*, *36*(6), 810–835. doi:10.1177/10780870122185109
Nelson, T. E., Oxley, Z. M., & Clawson, R. A. (1997). Toward a psychology of framing effects. *Political Behavior*, *19*(3), 221–246. doi:10.1023/A:1024834831093
Nguyen, M. T., Basolo, V., & Tiwari, A. (2013). Opposition to affordable housing in the USA: Debate framing and the responses of local actors. *Housing, Theory and Society*, *30*(2), 107–130. doi:10.1080/14036096.2012.667833
Peiser, R. (1990). Who plans America? Planners or developers? *Journal of the American Planning Association*, *56*(4), 496–503. doi:10.1080/01944369008975453
Pendall, R. (1999). Opposition to housing: NIMBY and beyond. *Urban Affairs Review*, *35*(1), 112–136. doi:10.1177/10780879922184310
Ratcliffe, J., & Stubbs, M. (1996). *Urban planning and real estate development*. London, UK: University of College London Press.
Raymond, M. (2007). On legalistic behavior, the advocacy privilege, and why people hate lawyers. *Buffalo Law Review*, *55*, 929–946.
Rossi-Hansberg, E., Sarte, P. D., & Owens, R. (2010). Housing externalities. *Journal of Political Economy*, *118*(3), 485–535. doi:10.1086/653138
Roth, A. E. (2007). Repugnance as a constraint on markets. *Journal of Economic Perspectives*, *21*(3), 37–58. doi:10.1257/jep.21.3.37

Rothwell, J. T., & Massey, D. (2009). The effect of density zoning on racial segregation in U.S. urban areas. *Urban Affairs Review*, *44*(6), 779–806. doi:10.1177/1078087409334163
Rubin, P. H. (2002). *Darwinian economics*. New Brunswick, NJ: Rutgers.
Saiz, A. (2010). The geographic determinants of housing supply. *Quarterly Journal of Economics*, *125*(3), 1253–1296. doi:10.1162/qjec.2010.125.3.1253
Scally, C. P. (2013). The nuances of NIMBY: Context and perceptions of affordable rental housing development. *Urban Affairs Review*, *49*(5), 718–747. doi:10.1177/1078087412469341
Scally, C. P., & Tighe, J. R. (2015). Democracy in action? NIMBY as impediment to equitable affordable housing siting. *Housing Studies*, *30*(5), 749–769. doi:10.1080/02673037.2015.1013093
Scheufele, D. A., & Tewksbury, D. (2007). Framing, agenda setting, and priming: The evolution of three media effects models. *Journal of Communication*, *57*(1), 9–20.
Schively, C. (2007). Understanding the NIMBY and LULU phenomena. *Journal of Planning Literature*, *21*(3), 255–266. doi:10.1177/0885412206295845
Smith, T. W. (1987). That which we call welfare by any other name would smell sweeter: An analysis of the impact of question wording on response patterns. *Public Opinion Quarterly*, *51*(1), 75–83. doi:10.1086/269015
Stein, B. (1979). *The view from Sunset Boulevard*. New York, NY: Basic Books.
Takahashi, L. (1998). *Homelessness, AIDS, and stigmatization: The NIMBY syndrome in the United States at the end of the twentieth century*. Oxford, UK: Oxford University Press.
Tiebout, C. (1956). A pure theory of local expenditures. *Journal of Political Economy*, *64*(5), 416–424. doi:10.1086/257839
Tighe, J. R. (2010). Public opinion and affordable housing: A review of the literature. *Journal of Planning Literature*, *25*(1), 3–17. doi:10.1177/0885412210379974
Trivers, R. (2011). *The folly of fools: The logic of deceit and self-deception in human life*. New York, NY: Basic Books.
Wainwright, O. (2017, January 31). Britain has enough land to solve the housing crisis – It's just being hoarded. *The Guardian*.
Whittemore, A. H., & BenDor, T. K. (2018a). Reassessing NIMBY: The demographics, politics, and geography of opposition to high-density residential infill. *Journal of Urban Affairs*, 1–20. doi:10.1080/07352166.2018.1484255
Whittemore, A. H., & BenDor, T. K. (2018b). Exploring the acceptability of densification: How positive framing and source credibility can change attitudes. *Urban Affairs Review*. doi:10.1177/1078087418754725
Wolsink, M. (2006). Invalid theory impedes our understanding: A critique on the persistence of the language of NIMBY. *Transactions of the Institute of British Geographers*, *31*, 85–91. doi:10.1111/tran.2006.31.issue-1
Zahniser, D. (2017, June 30). AIDS nonprofit reaches deal over contested Hollywood office high-rise. *Los Angeles Times*.
Zuk, M., & Chapple, K. (2016). *Housing production, filtering and displacement: Untangling the relationships*. UC Berkeley Research Brief, Berkeley, CA.