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Research Roundup: The Effect of Market-Rate Development on Neighborhood Rents

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UCLA The Effects of Market Rate Housing on Neighborhood Rents

Key Takeaways

- Researchers have long known that building new market-rate housing helps stabilize housing prices at the metro area level, but until recently it hasn't been possible to empirically determine the impact of market-rate development on buildings in their immediate vicinity. The question of neighborhood-level impacts of market-rate development has been hotly debated but under-studied.
- Taking advantage of improved data sources and methods, researchers in the past two years have released six working papers on the impact of new market-rate development on neighborhood rents. Five find that market-rate housing makes nearby housing more affordable across the income distribution of rental units, and one finds mixed results.
- These findings point to local benefits from market-rate development, but they should not be interpreted as an endorsement of market-rate development regardless of the project or neighborhood context. Housing production should still be prioritized in higher-resource communities where the risk of displacement and other potential harms is lower, and complementary policies such as tenant protections and direct public investments remain essential. Nonetheless, the neighborhood-level benefits of market-rate development are promising and indicate an important role for both market and non-market solutions to the housing crisis.

The Effect of Market-Rate Development on Neighborhood Rents

There's a growing debate among housing advocates over the neighborhood-level impacts of market-rate housing development.

On one side are those who think new market-rate units — unsubsidized homes whose price often places them beyond the reach of lower- and middle-income households — make nearby housing more affordable by increasing availability and relieving pressure on the existing housing stock. This is known as the "supply effect." An opposing view, however, is that new housing only attracts more wealthy households, brings new amenities to the neighborhood (including the housing itself), and sends a signal to existing landlords that they should raise their rents. This "amenity effect" or "demand effect" thus makes housing less affordable.

It's very likely that both supply and amenity effects are at play in many communities; the question isn't which effect is real, but which is stronger. Does the supply effect lower rents or home prices by more than the amenity effect raises them, or is it the reverse? Put more simply: When a new building goes up, what happens to rents in the older buildings nearby?

To be clear, this debate is not about whether new housing can reduce housing prices overall. At this point, that idea isn't really in doubt. There's good reason to believe that in regions with high housing demand, building more housing can help keep the prices of existing housing down. In their <u>Supply Skepticism</u> paper from 2018, Vicki Been, Ingrid Gould Ellen, and Katherine O'Regan offer an excellent introduction to the broader question of how market-rate development affects affordability. Citing numerous individual studies and reviews of dozens more, they conclude that "the preponderance of the evidence shows that restricting supply increases housing prices and that adding supply would help to make housing more affordable."

Since that article came out two years ago, at least six working papers have been released that examine the connections between market-rate housing production and affordability at the neighborhood level. Four of the papers conclude that market-rate development makes nearby housing more, not less, affordable. The fifth paper looks at rents across entire cities rather than at the neighborhood level, but finds that new development causes rents to fall for units across the income distribution. Findings in the sixth paper are mixed, and offer some reason to think new development makes nearby housing more expensive. Although the papers await peer review,

and readers should bear that in mind, the importance and near-unanimity of their findings makes discussing them worthwhile.

Why this flurry of new research now? Questions about the highly localized impacts of new development have traditionally been hard to answer for two reasons. The first and bigger problem was a lack of building-level data. Large, publicly available datasets that include rents, such as the U.S. Census Bureau's American Community Survey and American Housing Survey, provide information about anonymized individual households (e.g., the rent paid by a Black family) or about geographic areas (e.g., the median rent of a census tract in San Francisco). Estimating the effect of new development, however, requires time-series data about individual buildings near one another. Census datasets do not offer this level of granularity.

The second obstacle to research of this sort was the problem of statistically disentangling the two-way relationship between supply and prices. Answering the question of how new housing affects nearby prices requires controlling for the fact that prices nearby can affect supply: Developers are more likely to build in places where rents are rising. Failure to control for this, and naively comparing places where buildings rise to places where they don't, will misleadingly lead to conclusions that new buildings lead to higher rents.

The working papers we discuss below are made possible by newly available datasets that offer building-level rents over time, and sometimes offer a glimpse at who lives in those buildings as well. Researchers have been able to combine these datasets with various approaches to statistical analysis that help control for reverse causality.

Below, we offer a review of each working paper, and discuss their implications.

Research Findings

"SUPPLY SHOCK VERSUS DEMAND SHOCK: THE LOCAL EFFECTS OF NEW HOUSING IN LOW-**INCOME AREAS"**

BRIAN ASQUITH, EVAN MAST, DAVIN REED (2019)

This first paper analyzes the impact of large market-rate rental developments (50 units or more) on nearby rents in low-income census tracts. The data span 11 cities and tens of thousands of units. The authors find that rents for existing rental units within 250 meters of the new development fall by 5% to 7% compared to rents in buildings farther away, between 250 and 600 meters. As they clearly state in the introduction, "If there is an endogenous amenity effect, it appears to be overwhelmed by the standard supply effect."

While the authors are unable to rule out the possibility that rent trends affect the likelihood of development, using data at a very small geography helps with that problem, because developers do not have much choice within these small areas. Further, if their models were still biased in this manner, the bias would reflect the fact that rising rents make development more likely, making it less likely that we would observe these negative effects on rents. This paper's focus on multiple cities and low-income areas provides strong evidence that potential rent-raising amenity effects from new construction are likely smaller than the rent-reducing supply effects.

"THE EFFECT OF NEW MARKET-RATE HOUSING CONSTRUCTION ON THE LOW-INCOME **HOUSING MARKET" EVAN MAST (2019)**

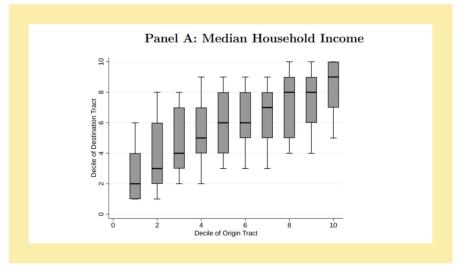
In this paper, Mast identifies nearly 700 market-rate multifamily developments in central cities, and then tracks 52,000 of their current residents to their previous address. He then identifies the current residents of those buildings, and traces them back to where they used to live. He repeats this cycle for six rounds and establishes a "migration chain": a series of household moves that can be attributed to the new development. A new market-rate project is completed and residents leave their previous address to move in, opening up their old home for someone else to move into; someone else moves into that unit, opening up their previous address for new occupants; and so on.

These migration chains reveal an indirect yet important effect of market-rate development on the lower- and middle-income housing market: It frees up space in cheaper housing. The people moving into a new unit probably have above average incomes for their metro area, and whoever moves into their previous home probably does as well. On average, each move in the migration chain is a move "up" to a higher-income census tract, so the first move in the migration chain might be from the 7th income decile to the 8th, and the second move from the 6th to the 7th. As a result, after several rounds of moves a unit in a lower-income neighborhood is often made

available. Mast estimates that building 100 new market-rate units leads to 45 to 70 and 17 to 39 people moving out of below-median- and bottom-quintile-income tracts, respectively, creating slack in the lower-end housing market. Almost all of this effect takes place within five years.

A possible objection to this finding is that migration chains can only open up cheaper housing for existing residents if the new residents come from the same metro area. If all or most arrive from elsewhere, as some development skeptics worry they will, then the affordability benefits will accrue in those other cities, not where the new housing is built. There are both empirical and theoretical reasons to think this concern is overblown. Empirically, most moves are within regions, not across them. In fact, in 11 cities Mast finds that 67% of residents come from the same metro area. Most likely the remaining 33% would have moved to the new city in any case: These were people who could afford to rent in a new market-rate unit, which suggests that if the new building didn't exist they could easily find some other, existing unit in their price range. Indeed, in the absence of new housing they would have taken up residence in an older, more affordable home instead. For this not to be the case, new residents would have to move to new regions for no reason other than that new housing was built. It would be the new buildings — not jobs or family considerations — pulling people into high-demand cities. That strains credulity. Many places that don't build attract residents, and many cities that do build do not. Affluent people have moved to the Bay Area even though its housing stock has not grown, and star-crossed efforts at redeveloping the Rust Belt have shown that simply erecting buildings cannot bring in affluent migrants.

Figure 1. "Migration between Census Tracts in Chicago Metropolitan Area" (From Mast (2019), pg. 31)

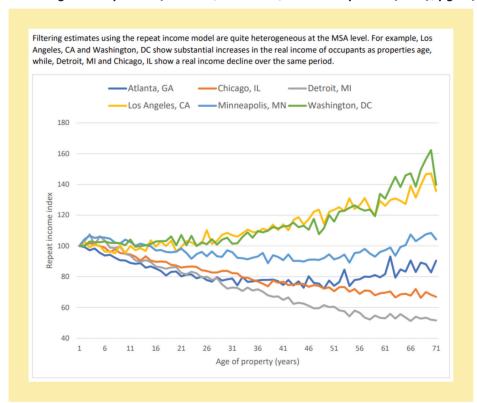


When people move from a home in a lower- or middle-income neighborhood, they tend to move to a census tract with a higher median income than the one they left. The median move from Chicago census tracts in the 1st decile of household incomes was up slightly, to the 2nd decile; the median move from the 3rd decile was to the 4th, and so on.

Mast's research illustrates the active mechanism behind "filtering," the process by which homes become more affordable as they age. That mechanism is new building. Without new homes coming onto the market, migration chains cannot be initiated and filtering cannot readily occur. This helps explain the findings of Liu, McManus, and Yannopolous (2020), in which older homes "filter up" — aka gentrify — to higher-income households in markets with limited housing production.

Figure 2.

"Filtering index by MSA" (From Liu, McManus, and Yannopolous (2020), pg. 21)



In metro areas like Minneapolis and Detroit, with low or moderate demand, or places with robust housing production like Atlanta, housing becomes more affordable as it ages. In areas with limited housing production and high demand, like Los Angeles and Washington, D.C., housing gets more expensive as it ages.

"DOES BUILDING NEW HOUSING CAUSE DISPLACEMENT?: THE SUPPLY AND DEMAND EFFECTS OF CONSTRUCTION IN SAN FRANCISCO" KATE PENNINGTON (2021)

Pennington looks at market-rate housing production in San Francisco, finding that it lowers rents by 2% within 100 meters of a development site. Within this radius she also finds that the risk of

displacement to a neighborhood with a lower income falls by 17.1%, and eviction notices decline by 31% in rent-stabilized housing but do not change for non-rent-stabilized homes. This latter finding is important: The gap between rents in a rent-stabilized unit and market-rate unit grow faster when rents are rising fast, and that gap gives landlords more incentive to evict rent-stabilized tenants. If new market-rate units slow or halt neighborhood rent growth, landlords have less reason to seek new tenants because rents in market-rate and rent-stabilized units are more similar.

Pennington also finds evidence of a demand effect, with a 16% increase in residential renovations and 22% increase in business turnover within 100 meters of new market-rate developments. Affordable developments appear to have no effect on local rents or displacement rates — though, of course, a home affordable to a low-income household provides its own benefit.

Again the conclusion is clear: The supply effect is stronger than the demand effect "at any distance" — market-rate housing improves affordability at both the metro area and neighborhood level.

"DO NEW HOUSING UNITS IN YOUR BACKYARD RAISE YOUR RENTS?" **XIAODI LI (2019)**

As with Pennington in San Francisco, Li's analysis of New York City finds a market-rate development demand effect accompanied by an even larger supply effect. The analysis is limited to high-rise buildings of seven stories or more, the costliest building type and therefore most likely to be classified as "luxury" units, with rents 60% higher than the average rents in their census tracts. If any development type is likely to have a larger demand effect than supply effect, it should be highrises.

The demand effect is measured by restaurant openings, with new high-rises increasing openings by 9%. Despite these (and presumably other) new amenities, however, rents fell by 1.6% within 500 feet of new high-rises one year after their completion and persistently thereafter. Rents declined for upper-, mid-, and low-rent buildings within 500 feet, but the results were not statistically significant for low-rent buildings.

¹ Eviction notices are not a perfect proxy for evictions because not all eviction notices lead to evictions, and not all evictions are preceded by a notice. Tenants may resolve the complaints that led to the eviction notice being filed, or they may be displaced by informal means including "cash for keys" agreements or landlord harassment; however, earlier studies noted by Pennington indicate that eviction notices and moves to lower income neighborhoods capture the majority of cases of involuntary displacement.

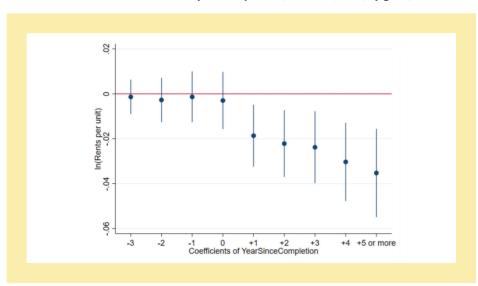


Figure 3. "Rents before and after the completion year" (From Li (2019), pg. 15)

When a new market-rate development is built, rents in nearby apartments decline significantly and persistently starting in the year after it was completed, compared to rents in existing buildings further away.

"THE IMPACT OF NEW HOUSING SUPPLY ON THE DISTRIBUTION OF RENTS" **ANDREAS MENSE (2020)**

This paper takes us to Germany, where Mense studies rents at the city rather than neighborhood level. We include his research because it also examines impacts by rental submarket based on rents per square meter. Mense finds that after new market-rate developments are completed, rents fall for units across the distribution of units, from low- to high-rent, with somewhat larger reductions for higher-end units. At the city level, he finds that for every 100 units currently available on the rental market, adding one new market-rate unit reduces rents by 0.4% to 0.7%. Expanding the overall housing stock by 0.1% is found to reduce average private market rents by 3% per square meter. The effect is visible immediately, with rents falling in the month of completion but not the months before.

"BUILD BABY BUILD?: HOUSING SUBMARKETS AND THE EFFECTS OF NEW CONSTRUCTION ON EXISTING RENTS" **ANTHONY DAMIANO AND CHRIS FRENIER (2020)**

Damiano and Frenier find mixed results in Minneapolis. For existing apartments within 300 meters of new market-rate development, they find that new market-rate development lowers rents (by 3.2%) in more expensive buildings nearby, but that it raises rents (by 6.6%) in less expensive nearby buildings, compared to similar apartments 300 to 800 meters from the development. This result, which received substantial media coverage when the paper was first released, suggests that the

fears of supply skeptics are not unfounded: Market-rate development benefits the affluent while worsening affordability for the poor.

How does this paper arrive at a conclusion different from the papers above? Even similar research articles often differ in many ways, ranging from how they define terms to how they choose treatment and comparison groups, and the papers here are no exception. To keep things brief, we'll focus on two big differences between this paper and the others, one that suggests the paper may be correct and one suggesting that further investigation may be warranted.

The first explanation is that many of the other papers didn't look for the problem Damiano and Frenier found. When Damiano and Frenier examined the impact of new development on rents overall, their findings resemble those of the other papers. Only when they break nearby existing units down by market segment do they find the troubling rise in the rents of lower-priced stock. (Note, however, that Mense, in his slightly different paper, did look at submarkets of housing, and found that new development made rents fall for cheaper stock, and Asquith, Mast, and Reed focused their analysis on new development in low-income neighborhoods, suggesting that many of the buildings they studied were in a lower submarket.)

A second difference lies in the data the authors use, and how they choose to use it. Damiano and Frenier do not adjust the rents in their study for inflation, which is an unusual decision, and one that makes the rent increases they report look much larger than they actually were. The table below, which is reproduced from their paper, shows the summary statistics for their data set. Between 2000 and 2018, by their calculations, mean rents in their sample increased by 47.9%, 39.4%, and 30.3% in the lower-, middle-, and upper-tier submarkets, respectively, and increased 38% overall.

Figure 4. "CoStar Characteristics by Market Tier" (From Damiano and Frenier (2020), pg. 17)

Market Tier	N Buildings	N Bld-Br Combo.	2000	2018	Pct. Change 2000-2018
Lower	88	116	578.6	851.5	47.9
			(122.7)	(252.5)	(35.5)
Middle	207	316	714	993.2	39.4
			(154.2)	(227.2)	(16)
Upper	113	183	961.9	1,239.8	30.3
			(343.3)	(400.7)	(15.2)
Total	408	615	762.2	1,039.9	38.3
			(263.5)	(325.2)	(21.7)

Average rents in Minneapolis by market tier in 2000 and 2018. Year 2000 rents are not adjusted for inflation.

Again, however, these values are not adjusted for inflation. If we do adjust them for inflation, as shown in the table below, we see that real rents in the lower-tier submarket grew by only 0.2% (essentially, they didn't change). In the middle submarket they fell by 5.3%, and in the upper submarket they fell by double-digits (12.2%). Rents declined 7% overall.

Table 1. Income-adjusted rents (authors' calculation)

CoStar Real Rents by Market Tier

Tier	Mea	Channe	
	2000	2018	Change
Lower	\$849.6	\$851.5	0.2%
Middle	\$1,048.4	\$993.2	-5.3%
Upper	\$1,412.6	\$1,239.8	-12.2%
Total	\$1,118.9	\$1,039	-7.1%

Note: All Dollars 2018

Those numbers are a bit puzzling. Minneapolis is not gripped by a housing crisis in the same manner as Boston or San Francisco, but it is also not a place where real rents have been falling. Data from the 2000 census and 2018 American Community Survey show that, in real terms, median gross rents in Minneapolis rose 25% over this period, while mean gross rents rose 30%. The census also shows that inflation-adjusted contract rents increased 23% in the lowest quartile of the rental housing market and 33% in the highest quartile. The incongruence between these overall rent trajectories — average rents are falling in the sample even though they were rising in the city raises the possibility that the buildings the paper focuses on are not representative of conditions in Minneapolis more broadly. (The papers discussed above all include sections showing that the rents in their samples align with rents in their cities more broadly).

Nevertheless, the fact that this paper's findings diverge from the others we cover makes it of particular interest. Housing scholars should pay attention to this ongoing work.

Related Research

"UPZONING CHICAGO: IMPACTS OF A ZONING REFORM ON PROPERTY VALUES AND HOUSING CONSTRUCTION" YONAH FREEMARK (2019)

Freemark's paper is often cited as evidence that efforts to increase housing production may not lower rents (e.g., here and here), and sometimes cited as evidence that new development worsens affordability (here, starting at 11:30). Freemark's paper is important, but it's actually about neither of those things. Calling it a paper about rents is misleading and incomplete, and calling it a paper that equates density with less affordability is flatly untrue.

Here's what Freemark did. In 2013 and 2015, the city of Chicago upzoned transit-adjacent properties to allow for modestly higher densities or reduced parking. Freemark examined this zoning change to see if it had an impact on development or property values. He found that upzoned parcels had higher property values — a 12.2% to 13.2% increase in condo sale prices for affected properties, for example — but were not any more likely to have seen increased housing production.

That's an interesting finding, but isn't one that has much bearing on whether development reduces rents, since a) Freemark found no increase in development and b) he didn't study rents. We can talk about b) first. Freemark only examined sale prices, and sale prices are not rents. Sale prices capture both current and expected value in a way that rents do not. Sale prices are like Tesla stock, which is speculative, and based at least in part on expectations about Tesla's future potential. Rents are like the price of a Tesla vehicle — based on how useful they are to customers right now. Sale prices still matter, but tell us little about rents. And because most lower-income households rent, not own, we are more concerned with impacts on rents.

The more important issue, though, is a): Freemark studies the impact of zoning changes intended to induce redevelopment. The question at hand, and the one the other authors we cover above study, is the impact of development if it occurs. Freemark's paper demonstrates how upzoning may worsen affordability if it doesn't lead to new development, but it doesn't tell us anything about the impacts of development itself.

Responding to misrepresentations of his work, Freemark has made similar comments: "Since I did not find any increase in construction resulting from the upzoning, I was not measuring the impact of higher density. So it is inaccurate to argue that I identify increased density as a cause of reduced affordability."

If there is reason to doubt that upzoning will lead to increased housing production, then

Freemark's findings are instructive. But Chicago, which Freemark studied, is a city that has long struggled with population loss. In coastal cities with higher housing demand — measured as low vacancy rates, high rents, or growing regional GDP (or all three) — upzoning without development is a less probable outcome. Indeed, if upzoning in expensive coastal metropolitan areas was unlikely to result in development, it would be hard to see why opponents of growth in these places

find zoning changes so threatening.

Discussion

The supply effects described in these papers are not large, but the authors make a persuasive case that market-rate development causes rents in nearby buildings to fall rather than rise. Their findings conform with long-standing planning and economic theory about the relationship between housing supply and affordability, and the common sense notion that the problem of too few homes cannot be solved without building more homes. Theory, evidence, and common sense are all in agreement, so we should approach claims to the contrary with a healthy dose of skepticism.

These findings do not give license for market-rate development irrespective of local impacts, which vary from place to place and project to project. Local, project-specific impacts are in fact impossible to predict. They do, however, support the argument that market-rate housing should be assumed to complement rather than undermine other affordability and economic empowerment strategies. If market-rate housing lowers nearby rents, it can help stabilize property values so that affordable housing construction and acquisition is less costly. It can lower the perhousehold cost of housing voucher subsidies so that we can help more people afford their rent, and limit the rising prices that are forcing residents out of their homes and onto the streets. It can be harnessed to cross-subsidize affordable units through policies like density bonuses and inclusionary zoning, and generate property taxes to support other essential public services.

The evidence above does not suggest that all development, in all cases, is unproblematic. It is possible for new housing to do more harm than good. A project could result in a net reduction of housing units, for example, or it could displace low-income households in exchange for only a modest increase in the housing supply.

Even if no homes are demolished, development could still create problems. If cities concentrate new housing in communities of color, that housing could accelerate demographic change, and this change could in turn be unsettling or alienating for longtime residents. Such change can also be physically threatening when, for example, newer affluent white residents call the police to impose their own social norms on their neighbors. Demographic change in low-income neighborhoods can cause pain, problems, and conflict, and cities should not be naive about that fact.

Development can be further problematic if it comes in spite of community resistance to it. While local residents should not have veto power over all development, affluent communities have had tremendous success blocking housing in most U.S. jurisdictions, so to elide similar concerns in less affluent, less white neighborhoods would replicate decades of racist planning mistakes. Planners need to make strong efforts to collaborate with concerned residents on planning for change,

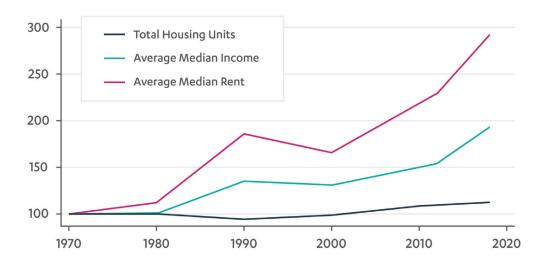
which may be inevitable.

Such efforts should start from the premise that preventing development in such communities is not the same as preventing change in them. Blocking development might slow the pace of change, but if demand is there change will still come, as properties turn over, existing units are renovated, and new businesses catering to more affluent people open in older buildings. When gentrification occurs in this manner, without new development, it will likely bring with it higher prices and more displacement than would have been the case if new development had been allowed. The lack of new units to absorb demand will lead to more price pressure on existing units, and more burdens on existing tenants.

As an example, consider the Los Angeles neighborhood of Echo Park, which is often held up as a poster child for gentrification and the painful dislocations that accompany it. Echo Park has unquestionably changed rapidly in a short time. It has become whiter and richer, and the character of its businesses has shifted as well, toward establishments catering to a more affluent clientele.

One way Echo Park has not dramatically changed, however, is in its total number of housing units. The graph below follows Echo Park's trajectory in rent, incomes, and housing units from 1970 to 2018 (it is a trend graph, so all 1970 values are set to 100). Rents and incomes first started rising in Echo Park in the 1980s, when L.A. was in a boom. During that time, however, the number of housing units in Echo Park actually fell, albeit modestly. L.A. had a deep recession in the early 1990s, and neighborhood rents and incomes dipped between 1990 and 2000. After 2000, however, both came roaring back, ushering in the most recent wave of neighborhood change.

In all this time, however, through booms and busts, the number of housing units in Echo Park barely moved. Construction occurred, especially in recent years, but mostly it involved people renovating existing homes, or tearing down an older smaller house to build a bigger new one. In 2018, the number of housing units in Echo Park was only about 10% higher than it had been in 1970. But while supply was constant, demand was not — the City of Los Angeles, during that time, added over 1 million people, and the county economy (measured by inflation-adjusted total personal income) more than doubled in size. More people, with more money, chased a basically fixed amount of housing. Not coincidentally, Echo Park's rents have almost tripled, and its median income has almost doubled. Preventing development did not prevent change. Figure 5.



Trends in Housing Units, Rent, and Household Income in Echo Park

Notes: Constructed from normalized census tract data using Neighborhood Change Database. Rents and household incomes are the average of the medians reported for each census tract in Echo Park. This is a trend graph where 1970=100. Real rents in absolute terms were \$463 in 1970 and just under \$1400 in 2018.

The point is not that neighborhoods should have no concerns about change. Protecting lowincome tenants in low-income communities, however, probably involves policies that are not directly related to the total quantity of housing. Rental subsidies and low-income development subsidies, rent controls or stabilizing measures, and neighborhood preference policies can all play an important role in helping manage and mitigate change.

Perhaps most important is that this whole discussion — of what happens when new development arrives in a neighborhood where many lower-income people live — could be largely avoided if we built new housing mostly in higher-income, higher-resourced communities. Development in more affluent places, where fewer residents are precariously housed, could allow more people access to opportunities and alleviate demand pressures elsewhere in a region. But such development rarely happens now, because zoning prevents it.

With all that said, the findings reported here are promising. If market-rate housing did not temper the affordability crisis — or worse, if it exacerbated it — we would have little hope for a resolution. Public budgets for housing are too small, the cost of housing is too high, and the number of

cost-burdened households too great, to provide everyone with subsidized homes. Many people, moreover, don't need the assistance. Even in cities that invest heavily in subsidized housing construction, like Vienna and Copenhagen, less than half of homes are social or public housing and market-rate development is commonplace. Efforts to increase public investment in housing are important and justified, but more public investment need not and should not mean less private investment. The private market does have a role to play in keeping housing affordable.

