

# A Summary of Supply Skepticism Revisited:

A Review of the Latest Research on the Relationship Between Housing Supply and Affordability

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# **Revisiting Supply Skepticism**

In 2019, we observed "supply skepticism" – the increased "questioning [of] the premise that increasing the supply of market-rate housing will result in housing that is more affordable" (Been, Ellen, and O'Regan, 2019, p. 26). The objective of that work was to rigorously, and sympathetically, assess supply skeptics' arguments and review research on housing supply's impact on affordability. While we concluded that both the theory and then-existing empirical evidence supported the premise that adding new homes moderates price increases and thus makes housing more affordable to low- and moderate-income families, we noted gaps in the evidence, and suggested where additional research was necessary. In this brief and a longer working paper (to come), we revisit and build on this work by looking at the most recent research on the relationship between housing supply and affordability.

In the four years since we published our article, the issue of housing affordability has become even more acute and widespread. In 2021, more American households than ever before were cost-burdened (paying more than 30 percent of their income for housing expenses) (Joint Center for Housing Studies at Harvard University, 2023). In addition, rental vacancy rates tightened considerably between 2011 and 2021: the share of metropolitan areas across the country in which the vacancy rate was below 7 percent<sup>1</sup> rose from 42 percent to 68 percent. While vacancy rates depend on a variety of factors,<sup>2</sup> persistently low rates suggest that too little housing is available to meet demand.

In response, a number of state legislatures, from a variety of political perspectives, have walked back their deference to local governments somewhat, and intervened to remove local and state barriers to development.<sup>3</sup> Yet at the same time, resistance to new housing and land use changes continues to be both highly vocal and deeply felt, often with supply skepticism at the heart of these arguments. The renewed focus on increasing housing supply – with many fighting passionately both for and against such efforts – makes this an opportune time to revisit the arguments and evidence underpinning these critical conversations.

<sup>&</sup>lt;sup>1</sup> A healthy vacancy rate is generally considered to be between 7 and 8 percent (Belsky et al., 2007), which only the south met in 2021, although the vacancy rate in that region also declined by almost 3 percentage points over the preceding decade.

<sup>&</sup>lt;sup>2</sup> Low vacancy rates may arise from a variety of reasons (Been, Rosof, and Yager, 2018).

<sup>&</sup>lt;sup>3</sup> States are using a range of strategies to require or nudge local governments to allow more construction (Been, Zhang and Kazis, 2023; Been, Jonlin, and Kazis, 2023; Kazis, 2023; Kazis, 2022). However, while many states have passed reforms, others have rejected or failed to take up reforms in the face of enormous resistance from local elected officials. For example, a recent plan by Governor Kathy Hochul to create 800,000 new homes failed to move forward after facing fierce opposition from state legislators from places like Westchester County and Long Island (Ferré-Sadurní and Zaveri, 2023). Some of the reforms that have been passed have required multiple iterations to make them effective. For example, legislation has been passed in California to increase housing density through measures such as Accessory Dwelling Units (ADUs) and dividing up residential lot sizes to create more housing units per lot. However, the effectiveness of such measures has required significant iteration and enforcement to truly translate into additional housing units at the local level (Alameldin and Garcia, 2022; Garcia, 2017). Further, some land use experts have expressed concern about the long-term implications of the reforms (Schragger, 2021; Serkin, 2020).

In our working paper (to come), we provide a full review of the new evidence addressing the question at the heart of supply skepticism: *How does increasing housing supply impact rents, neighborhood change, and the existing residents of the areas in which new housing is built?* This framing brief aims to highlight three research gaps we identified in our 2019 paper and provides a summary of recent work that addresses each of these topics:

- 1. The impact of additional housing supply on rents: Skeptics worried "that the more you build, the more they'll come, and the more that wealthier people in particular will come" (Been, Ellen, and O'Regan, 2019, p. 26). In a dynamic system, they argued, any decreases in price resulting from additional supply will be fully offset by additional demand resulting from the amenities that the new housing will bring to the neighborhood.<sup>4</sup>
- 2. The local effects of new development (such as gentrification and displacement): Skeptics focused on "potential localized spillover effects from newly constructed housing, and assert[ed] that even if increasing supply might slow the growth in housing costs across the city, new housing will increase rents and trigger displacement in the immediately surrounding neighborhood" (Been, Ellen, and O'Regan, 2019, p. 25 26).
- 3. How much housing filters down in submarkets: Skeptics "disputed the notion that new market-rate housing causes other housing to filter to lower income households, at least in a reasonable time frame," and argued that most new supply is aimed at the top of the market which "will do little or nothing to alleviate affordability challenges in lower priced segments of the market." (Been, Ellen, and O'Regan, 2019, p. 26).

In addition, this brief looks at two new concerns that have come to the forefront of the debate around housing supply in recent years:

- 4. The true problem is inefficient use of our existing housing: Skeptics have argued that new market rate supply is actually not needed, because sufficient housing exists it is just being held vacant or used for temporary use. They contend that instead of focusing on new development, policymakers should focus on discouraging the use of housing being held vacant as a form of investment, or used as second homes or short-term rentals.
- 5. Whether relaxing *land use regulations actually leads to increases in supply:*Skeptics have also questioned the policy tools best used to add to supply, arguing that interventions like upzoning either do not result in notable increases in development. An alternative version of this concern is that the housing crisis is more about demand than supply, so new supply will do little to mitigate rent increases.

<sup>&</sup>lt;sup>4</sup> In our 2019 article, we also noted that some skeptics were making a more ideological argument that because the supply of land is limited, all new construction should be limited to affordable housing, public housing, or "social" housing. Recent versions of that argument include Warren (2022).

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Over the last few years, researchers have produced a body of additional rigorous and nuanced evidence to help answer those concerns. In the sections below, we will revisit each of these topics, providing an overview of some of the recent evidence that addresses the challenges raised by supply skeptics.

### Recent Evidence Regarding the Concerns Supply Skeptics are Expressing

How does increased supply of market-rate housing impact local rents?

Recent research has attempted to provide a clearer causal link between additional housing supply and rents. One method researchers have employed is to compare rent changes in the vicinity of a new building to those further away within the same neighborhood while using sophisticated methods to isolate how rents respond to new housing from other factors, such as how heightened neighborhood demand affects rents.

Most recent research finds that new housing construction leads to decreases in nearby rents (or in the rate at which rents are increasing).

- Asquith, Mast, and Reed (2023) looked at the effect of new, large market-rate
  apartment buildings across 11 cities and found that "the average new building lowers
  nearby rents [within 250 meters of the new building] by 5 percent to 7 percent relative to
  trend, translating into a savings of \$100 to \$159 per month." The researchers used
  random variation in the time it took developers to complete buildings to isolate the effects
  of new construction from other trends in the neighborhoods.
- Similarly, Li (2022) used the same methodology to examine the effect the development
  of large market-rate buildings in New York City had on nearby rents. She found that for
  every 10 percent increase to the housing stock that new high rises add within a 500-ft
  ring, residential rents for the buildings in that ring decrease by 1 percent. The decreases
  were seen for nearby high- and medium-rent buildings, but were not significant in nearby
  low-rent buildings.
- Mense (2023) found similar results in German housing markets. The author exploited weather-related delays in new market-rate construction to isolate the effects of the new buildings and found that a 1 percent increase in new housing resulted in an average local rent level decline of 0.2 percent.
- Finally, Pennington (2021) used a related approach in San Francisco, looking at the
  effect on rents of new residential construction in sites where buildings were destroyed by
  serious fires (again to isolate the effects of the new housing from broader effects of

<sup>&</sup>lt;sup>5</sup> Asquith, Mast, and Reed (2023), p. 373. The authors use Zillow listing data for their measure of rents, which they note are asking rents rather than rents charged to sitting tenants, and thus are higher than the rents reported to the Census by existing tenants.

demand within the neighborhood). She found that monthly rents declined by roughly 1.2 to 2.3 percent for apartments within 500 meters of a new project.

Two studies comparing areas "treated" with additional supply to a control group not treated, however, find that adding supply is associated with increasing rents in the surrounding neighborhood.

- Damiano and Frenier (2020) examined the impact of new development in Minneapolis on rents in the apartments close by the new market-rate apartment buildings, as compared to those further away. They found that new buildings had no significant effect on rents in nearby units overall. But when they divided those buildings into neighborhood-level rent terciles, they found that the "new construction increased rent by 6.6 percent in the lowest rent tercile, had no effect on the middle tercile, and decreased rents by 3.2 percent in the highest tercile." Damiano and Frenier's methodology differs from other studies of the price effects additional supply has on rents in that they don't exploit a natural experiment, like fires, weather, or random delays that lead some buildings to be completed after others. Damiano and Frenier's sample also is limited their key estimate relies on just over 30 treated buildings in the lowest rent tier in Minneapolis. Their results highlight the point that the effects of new buildings may vary across cities and contexts.
- Singh and Baldomero-Quintana (2022) investigated the effect new buildings had on nearby apartments in New York City by exploiting changes in a local property tax exemption that would make it less generous. They found that overall, a 1 percent increase in the rental stock within 150 meters of an existing building results in a rise in rents in that building of 1.8 percent. That increase was driven by new units in census tracts with below-median-city-income; indeed, they found that additional units had a negative impact on rents in tracts with above-median-city-income. Estimated impacts were largest during the anticipatory period after changes had been announced but before they were officially implemented and then fell over time, perhaps as new units were completed and were added to the supply. A key question is whether their results are generalizable beyond the particular period that they study - which is during the Great Recession.

As the researchers recognize, new construction has both supply effects – the downward pressure on rents resulting from the additional competition new supply provides – and amenity effects - the upward pressure resulting from desirable amenities associated with the new construction and the changes brought about in part by the people it brings to the neighborhood.

quarter, as their measure of rents, while other studies use asking rents (which by definition only apply to those apartments in a building that are currently for rent) (Asquith, Mast, and Reed, 2023; Mense, 2023; Pennington, 2021), or use total rents for a building (Li. 2022). The effect of those differences merits exploration. Their results may also be subject to estimation problems related to variation in treatment times in difference-in-difference regressions. See Goodman-Bacon (2021). See also Lens, Manville, and Phillips (2021), who raise other concerns about Damiano and

Frenier's methodology and generalizability.

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<sup>&</sup>lt;sup>6</sup> Damiano and Frenier (2020), p. 3.

<sup>&</sup>lt;sup>7</sup> Damiano and Frenier use the quarterly reports of rents, attributed to each individual unit within a building each

In sum, significant new evidence shows that new construction in a variety of settings decreases, or slows increases in, rents for apartments located close to the new construction. The two papers that reach a contrary result raise important questions about how best to isolate the effects of new buildings from other trends in the neighborhood and about differences among cities that might determine how new supply affects rents. They also highlight the difficulty of determining how rents would have been affected if there was no new construction but gentrification continued.

Do increases in the supply of market-rate housing lead to gentrification and/or displacement?

Many discussions of the potential effects of new construction treat gentrification and displacement as the same thing, or at least as inevitably intertwined. But gentrification may happen without displacement if low-income residents leave a neighborhood for reasons other than being pushed out by high rents or other changes in the neighborhood, and if they are eventually replaced by higher-income in-migrants. Gentrification may also occur without displacement if sufficient new supply is added to address the demand from in-migrants without negatively affecting existing residents. Displacement may happen without gentrification if people pushed out of a neighborhood are replaced by new residents from the same demographic or even lower incomes. Further, gentrification can happen before or after new construction (or both). It is important for researchers to distinguish between three different issues – whether new construction: leads to gentrification that was not already underway; follows gentrification but slows, accelerates, or doesn't affect that trend; or leads to displacement (whether or not that displacement was already underway).<sup>8</sup>

#### Gentrification

Recent research finds that new construction of market-rate housing both follows gentrification and is followed by gentrification, because of the new residents of the new building itself and through spillover effects in the surrounding areas. **Asquith, Mast, and Reed (2023)** found that the areas receiving new construction in the eleven cities they studied were already gentrifying by the time the new buildings were constructed. They did not examine how the new construction then affected the gentrification trends.

Most new studies also find some evidence that new construction is followed by local gentrification. If new buildings add a significant number of apartments to the neighborhood and are occupied largely by wealthier, better educated households, that alone (all other things being equal) may lead the neighborhood to meet common definitions of gentrification. As we will discuss in the next subsection, a number of moving chain studies show, however, that new market-rate construction is not filled exclusively with higher income residents.

As to whether the areas surrounding the new building gentrify, **Pennington (2021)** found that parcels near new construction were more likely to experience gentrification after the new development than those further away, in part because households moving into the new building

<sup>&</sup>lt;sup>8</sup> There is a growing literature examining the effects other than displacement that gentrification may have on lower-income households. See for example: Brummet and Reed, 2022; Su, 2022.

were more likely than those moving into parcels further away to be coming from wealthier ZIP Codes. Singh and Baldomero-Quintana (2022) and González-Pampillón (2022) also both found that new construction results in gentrification in areas near new buildings. Finally, Li (2021) also found that new high-rise development attracted new restaurants, pointing to an amenity effect of new construction.

## Displacement

The evidence is mixed on whether new construction causes or prevents displacement. **Pennington (2021)** found that on average, the risk of displacement falls by about 17 percent for households living within 100 meters of an additional new project. **Asquith, Mast and Reed (2023)** found that "net migration from low-income areas does not meaningfully change during the sample period. While this evidence is not causal, it is inconsistent with large displacement effects of new buildings."

On the other hand, **Singh and Baldomero-Quintana (2022)** argued that evidence of gentrification, combined with a reduction in enrollment in local public and charter schools in areas near new buildings "suggest that low-income families in New York City are displaced from neighborhoods that gentrify due to new residential investment," although they had no direct evidence of out-migration by low-income households and were not able to separate whether the higher-income, better educated households they observed were residents of the new buildings or nearby parcels. <sup>10</sup> **Chapple and her colleagues (2022)** used two different datasets tracking individual moves to estimate the probability that a resident will move out of their census block group after new housing is built. The two datasets "both suggest that outmigration is lowest for lower-SES groups in block groups with new construction" but one of the datasets showed that new construction was correlated with slightly higher outmigration for the lowest-income groups. <sup>11</sup>

Does new housing make older existing housing more affordable through filtering or chain moves?

In our 2019 article, we concluded that new construction (other than subsidized housing) tends to serve medium and high-end submarkets due to the cost of building new housing, and that it can take years for new homes to decline in quality and *filter down* to lower-priced submarkets. But we noted that new housing built for the more expensive submarkets can fairly quickly make lower-rent submarkets more competitive by sparking *chains of moves*, some of which will free up lower-rent apartments. We also pointed out that new housing also can divert demand from lower-cost neighborhoods by providing an alternative to households who otherwise would buy older housing and rehabilitate it to meet their needs.

#### Chains of Moves

<sup>&</sup>lt;sup>9</sup> She also finds similar results using eviction notices as a proxy for involuntary displacement. Further, she finds that the probability of an eviction notice at a rent-controlled unit drops by 31 percent within 100m of a new project, and remains the same for uncontrolled units.

 $<sup>^{\</sup>rm 10}$  Singh and Baldomero-Quintana (2022), p. 20.

<sup>&</sup>lt;sup>11</sup> Chapple et al (2022), p. 5, 95.

In the last few years, researchers have developed significant evidence that indeed, new housing does trigger chains of mobility across a wide variety of neighborhoods. They show that as households vacate the cheaper units they occupy to move into the new units, competition for the units they leave is reduced. Mast (2023) reviewed the address histories of households in large new market-rate multifamily buildings in 12 cities, 12 tracing the chain of moves caused by each vacancy. He found that, by the sixth round of movers, the share of households moving to the unit vacated in the earlier round from lower-income areas increased to 40 percent, suggesting that the reallocation of housing reached a broad spectrum of submarkets. 13 Bratu, Harjunen, and Saarimaa (2023) used detailed data to look at chains of moves in the Helsinki metropolitan area, comparing move chains that originated in new market-rate, high-rent buildings to chains originating in new rent-controlled social housing in similar neighborhoods. They found that in later rounds of moves, the origin neighborhoods and socio-economics of movers looked very similar. Mense (2023) found that additional supply reduces the rents even of lower-priced apartments, which he posited was because households moving into the new, higher-rent units move from units of varying quality and price, which frees up apartments at a number of quality levels, providing competition and lowering prices across the rent distribution. He also found that the effect on rents across the rent distribution was even larger in markets facing strong growth in demand.

## **Filtering**

Researchers have also found evidence supporting the argument that homes get less expensive, and therefore more affordable to lower-income residents, as they age. **Liu, McManus, and Yannopoulos (2022)** modeled the filtering of homes in 180 MSAs, finding examples of both upward filtering (relatively affordable homes becoming more expensive over time) and downward filtering (relatively expensive homes becoming more affordable over time). No rental properties were included in their research, which the authors note likely leads to a significant underestimate of the extent of filtering. They found lower rates of downward filtering in markets with high price and income growth, more restrictive land use regulations, lower elasticity of supply, and gentrification. Even within those areas, however, there are neighborhoods that saw significant filtering to lower income owners.

Finally, **Nygaard et al. (2022)** found that in Sydney, Australia, the rental value of older rental properties declines with the age of the property, which suggests that filtering is occurring, but that the deterioration of the quality of the unit is interrupted (by rehabs or sales) before the housing filters all the way down to low-income households. And in Melbourne, they found

<sup>&</sup>lt;sup>12</sup> New York City, Chicago, Dallas, Houston, Washington, Philadelphia, Atlanta, Boston, San Francisco/Oakland, Denver, Seattle, and Minneapolis. Mast notes that the data he used is not very reliable in capturing moves by people under 25, so that markets in which many residents are younger may not show the same effects (although the effect their moves would have on competition would theoretically be similar, they may have different mobility patterns).
<sup>13</sup> Mast supplemented that descriptive analysis with a simulation of how new high-end construction affects the low-and middle-income housing markets. He simulates what would have happened if the household had moved to tracts that they likely would have found attractive if the new construction had not been available, and so on, throughout the chain. He found that in the simulation that assumes marginal increases in supply, building 100 new high-end units reduces demand in below-median income neighborhoods by the equivalent of adding 70 older units to those areas, with almost 40 of those units falling in the bottom quintile of the metro area's median income. In the more conservative simulation that captures the effects of a larger supply increase and consequent increases in in-migration and household formation, that number falls to 45.

"limited evidence that age-related filtering is a significant source of low-income housing." The researchers note that filtering can only work when the supply of new housing (net of demolitions or conversions of older housing) is sufficient to meet new demand caused by new net in-migration or new household formation, which is not the case in Melbourne (where supply is almost completely unresponsive to demand).

In sum, recent research that traces the chains of moves brought on by new construction provides evidence that new construction frees up apartments in a variety of neighborhoods across the income spectrum, and therefore provides additional competition that can lower prices in neighborhoods across a city or metropolitan area, not just in the area surrounding the new construction. Research on traditional notions of filtering shows that the role filtering plays in providing more affordable housing depends critically on the supply of new housing and other features of the local housing market.

# **More Recent Concerns of Supply Skeptics**

Since we published our 2019 paper, supply skeptics have voiced two new concerns. Below, we summarize the key literature on both topics:

Is the problem a shortage of housing, or inefficient use of our existing housing?

Some skeptics argue that the problem of affordability is not caused by a lack of housing, but by inefficient use of our existing housing. They point to the number of apartments that are sitting vacant or only sporadically occupied, because they are purchased as investments, second homes, or short-term rentals. Those uses, they argue, mean that even if more housing is built, it may not lead to price decreases, because the new housing is not actually providing primary homes for any household. Supply skeptics also now argue that many cities (especially those in which housing is least affordable, such as San Francisco and New York), are seeing less demand because remote work policies have reduced the need to live in those areas.

Answering those concerns requires attention to factual questions about how properties in a jurisdiction are actually being used along with analyses of the potential returns from various uses and identification of the specific barriers to moving them from their current state to occupied housing. There are also lessons to be learned from those analyses that could be generalizable from one jurisdiction to others. Accordingly, research evaluating measures to tax or prohibit ownership by investors or the owners of multiple homes, or prohibitions on warehousing of apartments or on short-term-rentals, along with analysis of programs and policies to encourage conversion of offices or other uses to housing is important to pursue. So,

<sup>&</sup>lt;sup>14</sup> Nygaard et al. (2022), p. 25.

<sup>&</sup>lt;sup>15</sup> See for example: Thompson, 2020; Badger, 2017.

<sup>&</sup>lt;sup>16</sup> See for example: Carbonaro, 2023. In some cities with rent regulation, skeptics also allege that landlords are keeping apartments off the market in order to pursue opportunities to further raise the rent (for example, by waiting to rent the apartments until the market has fully recovered from the pandemic, or until they can combine it with another apartment to escape regulation), and argue that rather than building more housing, policymakers should prohibit such "warehousing" of apartments. See, e.g., example: Hall, 2023; Rabiyah, 2022; Susman, Loftman, Kent-Daggett and Ratliff, 2022.

too, is research about the effectiveness of registry systems to help localities assess how properties are being used.

Does relaxing the restrictiveness of land use regulations actually lead to increases in supply?

Another argument skeptics make is not so much an argument that supply won't affect rents, but instead that changes in land use regulation won't actually produce much additional supply,<sup>17</sup> or that the additional supply won't successfully address the housing affordability crisis, because it is more about the nature of the demand than about supply.<sup>18</sup>

For the first argument, the most direct research is **Anagol**, **Ferreira**, **and Rexer (2023)**, which examined a policy change that the city of Sao Paulo, Brazil instituted in 2016, that allowed an average of 36 percent more construction for a given lot size, and resulted in greater allowable density in more than half the city's blocks. Six years after Sao Paolo instituted the change, the researchers found that total housing units for sale increased by 10 percent in blocks in which allowable density was increased, as well as in aggregates of the blocks that represent larger neighborhoods. In addition, **Stacy**, **et al.**, **(2023)** built a cross-city panel dataset of land-use reforms that increased or decreased allowed housing density and estimated their association with changes in housing supply and rents. They found that reforms loosening restrictions are associated with a statistically significant, 0.8 percent increase in housing supply (both new and existing housing) within 3 to 9 years of reform passage. The increase occurred, as expected, in the higher-rent segments of the housing market. In addition, a variety of recent studies have studied reforms to specific local land use regulations and have found associations between the reforms and increases in the supply of the types of housing the reforms targeted.<sup>19</sup>

A few research teams have found disappointing results from land use changes, however. **Krimmel and Wang (2023)** evaluated the results of Seattle's Mandatory Housing Affordability program (MHA), which relaxed zoning regulations in 33 neighborhoods to allow denser new development, but also required either a set aside of affordable units or contributions to an affordable housing fund. They found that the policy actually reduced new development in rezoned areas, and that new development shifted to lots just outside of the rezoning. In addition, **Freemark (2020)** examined how rezonings affected new construction when Chicago upzoned a large number of parcels in 2013 and 2015. He found "no evidence for short- or medium-term increases in housing-unit construction," even five years after the rezonings were implemented. As Manville and his colleagues note (Manville, et al., 2020), Freemark's study focused on parcels near railway stations in Chicago, some of which were zoned for uses other than (or in addition to) housing, and many of which were already occupied by condominiums (which are very hard to replace with denser buildings). They conclude that Freemark's results therefore "may offer limited lessons for broad upzonings, and especially broad upzoning of residential

<sup>&</sup>lt;sup>17</sup> See, for example: Britschqi, 2022.

<sup>&</sup>lt;sup>18</sup> See, for example: Rodríguez-Pose and Storper, 2020.

<sup>&</sup>lt;sup>19</sup> See, for example: Wegmann, Baqai, and Conrad, 2023; Huennekens, 2023; Marantz, Elmendorf, and Kim, 2023; and Dong, 2021.

<sup>&</sup>lt;sup>20</sup> Freemark (2020), p. 759.

parcels outside of developed neighbourhoods in dense central cities."<sup>21</sup> The mixed evidence shows just how challenging it can be to implement supply-focused policies in practice.

The second version of the argument that relaxing restrictions won't affect housing supply was offered by **Rodríguez-Pose and Storper** (2020) in work focusing primarily on housing's role in inter-regional inequality. They assert that the affordability crisis in major urban areas "is due less to the over-regulation of housing markets than to underlying wage and income inequalities," which shape demand for housing in productive regions, and have driven "a sharp increase in the value of central locations within metro areas, as employment and amenities concentrate in these places." In their view, no "reasonably imaginable price effect of supply changes induced by less restrictive zoning, would overcome the skills and equity barriers or the differences in perceptions about opportunity that these populations face in the new economy." In a response to Rodríguez-Pose and Storper, **Manville and his colleagues (Manville, et al., 2020)** argued that whether the problem is more about demand than supply misses the point – in areas that are seeing considerable demand, increasing supply would help to make those areas less expensive, regardless of how that demand relates to changing employment patterns or the skill levels of workers not moving to the highly productive regions.

### Conclusion

In cities and states across the country, policymakers have been implementing changes aimed at encouraging new housing supply, with examples of evidence-based successes. A variety of studies we recently published as a <u>land use research series</u> show the positive and negative impacts of different types of regulatory reforms designed to add housing supply.<sup>24</sup> As policymakers, stakeholders, and organizers work to improve housing affordability, further research is needed to better understand a number of questions at the heart of supply skepticism. We continue to believe that supply skepticism is a useful reminder that researchers and policymakers must provide more specific and concrete answers to concerns that communities have about the costs, benefits, and distributional effects of development in their neighborhoods and communities. The affordability crisis is especially salient today, and the crisis will not be solved overnight. But the speed with which we secure appropriate reforms to allow new supply, along with protections against any harms it may cause, really matters, both to this and the next generation.

<sup>&</sup>lt;sup>21</sup> Manville, et al. (2020), p. 49-50.

<sup>&</sup>lt;sup>22</sup> Rodríguez-Pose and Storper (2020), p. 225.

<sup>&</sup>lt;sup>23</sup> Ibid., 237.

<sup>&</sup>lt;sup>24</sup> See Wegmann, Baqai, and Conrad (2023); Huennekens (2023); Marantz, Elmendorf, and Kim (2023); and Krimmel and Wang (2023), all of which focus on whether policy changes that relax land use restraints result in increased supply. There is also new evidence that as the restrictiveness of land use regulations increases, the supply of new housing decreases. See Murray and Schuetz (2019), whose regression results provide evidence that more restrictive zoning correlates with less multifamily development.

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