Residential Development Capacity Analysis that planning did
- https://montgomeryplanningboard.org/wp-content/uploads/2021/01/Attachment-2-Residential-Development-Capacity-Analysis.pdf I've pulled out two of the key tables. In an email exchange with Lisa, she confirmed that the greatest capacity for residential development lies in the larger parcels already zoned for greater height and density, but that developers find building to the zoned envelopes is too expensive.

Table 2.) Capacity by Number of Units for Parcels with Residential Capacity

Parcel Net Capacity	Parcel Count	Percent of Developable Parcels	Net Capacity Sum (Units)	Net Capacity Percent	Average Units of Capacity per Developable Parcel
1-24 units	3,204	86%	16,442	25%	5
25-99 Units	408	11%	18,523	28%	45
100 to 500 Units	111	3%	22,038	33%	199
More than 500 Units	10	0.3%	9,566	14%	957
Total Developable Parcels	3,733	100%	66,569	100%	18

As shown in Table 2, most of the parcels in Montgomery County with residential capacity only have small amounts of residential capacity available – 86 percent of these parcels have capacity for a net of fewer than 24 units, with 18 units being the average number of units available per parcel. The net capacity of all 3,204 parcels with capacity fewer than 24 units is only 25 percent of the county's total residential capacity. While only three percent of parcels have capacity from 100 to 500 units, these parcels represent 33 percent of total net capacity. Sites carrying large amounts of capacity (more 500 units) are less than one percent of all parcels (0.3 percent), but these ten sites contain 14 percent of the all the net capacity.

Table 3.) Capacity by Size of Parcel

Parcel Size	Parcel Count	Percent of Parcels in Size Range	Sum of Net Capacity	Percent of Capacity
0-1 Acre	1,926	52%	21,104	32%
1-5 Acres	950	25%	24,436	37%
5.01-25 Acres	419	11%	11,746	18%
25.01-50 Acres	216	6%	4,297	6%
50.01-100 Acres	117	3%	1,978	3%
Over 100.01 Acres	105	3%	3,008	5%
Total	3,733	100%	66,569	100%

As shown in Table 3, most parcels with residential capacity are on sites smaller than five acres (77 percent of developable parcels), with those 2,876 parcels containing capacity for over 45,000 units, or 69 percent of the total capacity. Furthermore, 52 percent of the parcels with capacity are less than one acre, and these sites hold 32 percent of all the capacity.

Only six percent of all parcels with excess capacity are over 50 acres, and those large parcels only contain only eight percent of the total capacity.

I've omitted clearly partisan sources and those from people with no particular or evident expertise, as well as some videos that seem to rely more on emotion than evidence. Also, most of the research here relies on data from before the 2008 housing bust, and all of it relies on data from before the pandemic. The first 8 articles are from a YIMBY list of supporting studies. Following that is a general look at Montgomery County by former Council staffer Jacob Sesker that is helpful in understanding current context. And following that are excerpted studies/articles that question upzoning and discuss corporate ownership of housing units, followed by some additional links.

https://www.urban.org/urban-wire/understand-citys-pace-gentrification-look-its-housing-supply 2018 data from Home Mortgage Disclosure Act and 2018 American Community Survey data

Written by Laurie Goodman (VP Housing Finance Policy at Urban Institute), Ellen Seidman https://www.urban.org/author/ellen-seidman, Jun Zhu https://www.urban.org/author/jun-zhu) This article focuses on home ownership and was published in mid-2020.

"At the national level, high-income buyers (those earning above 120 percent of the AMI) take out new mortgages to buy homes in LMI [low and moderate income] neighborhoods at a slightly higher rate (29 percent) than they already own homes in these neighborhoods (26 percent).

But low-income buyers (earning up to 50 percent of the AMI) are taking out new mortgages to buy homes in LMI neighborhoods at much lower rates (14 percent) than their homeownership rates in these neighborhoods (31 percent). For households with moderate incomes (earning 50 to 80 percent of the AMI), the share of new mortgages (31 percent) is significantly higher than the share of current homeowners (21 percent), and for middle income households (earning 80 to 120 percent of the AMI), the share of new mortgages is somewhat larger (27 percent) than their rates of already owning homes in the neighborhood (21 percent)."

"There are comparatively few new mortgage borrowers with low incomes relative to the share of current homeowners with those incomes. This difference is, in part, the result of a lack of supply of houses for sale and of mortgages at the low end of the housing price spectrum."
"These data show that when even affluent buyers must stretch to become homeowners, they are likely to look to LMI neighborhoods to purchase homes. Boosting the housing supply by easing local land use, building, and zoning restrictions and encouraging alternative forms of housing like manufactured housing and accessory dwelling units would make homes more affordable and allow more buyers at all income levels to find homes, slowing the pace of gentrification."

Summary: The study suggests that more housing will allow more lower income people to become owners and extrapolates that that will reduce gentrification because they will have a greater presence in LMC neighborhoods.

https://mises.org/wire/why-housing-more-affordable-tokyo by Paul Boyce, a Business Economics graduate from the University of Greenwich. He currently works as a consultant in financial services and is the founder and editor at Boycewire.com.

This brief article notes that a number of factors influence housing costs in Tokyo, including relaxed zoning as well as smaller units, a shorter lifespan for housing with the assumption it will be replaced in about 30 years, continuing improvements in earthquake-resistant technology and construction techniques, and height regulations that were eased in 2002. “We only need to look at Japan for the benefits of reduced regulation. It relaxed development rules the Urban Renaissance Law of 2002. The rules were relaxed, allowing apartments to grow higher. Height,is a key factor in increasing affordability due to very high land prices.” The author's reasoning is based in part on a 2002 report, https://www.nber.org/system/files/working_papers/w8835/w8835.pdf

Summary: Tokyo may have less expensive housing but there is no per square foot comparison. Japan has a severely constricted land area and up is the only way to go in urban centers. In Montgomery County, planners found in a “Residential Development Capacity Analysis” in 2021 (https://montgomeryplanningboard.org/wp-content/uploads/2021/01/Attachment-2-Residential-Development-Capacity-Analysis.pdf) that the most unused capacity was in already-zoned height and density in CR properties but developers were not using it because it was too expensive.

https://www.nber.org/system/files/working_papers/w8835/w8835.pdf

This is the 2002 study referred to in the Boyce article about Tokyo. Written by Edward Glaeser of Harvard and Joseph Gyourko of the Wharton School for a conference on affordable housing.

"Does America face an affordable housing crisis and, if so, why? This paper argues that in much of America the price of housing is quite close to the marginal, physical costs of new construction. The price of housing is significantly higher than construction costs only in a limited number of areas, such as California and some eastern cities. In those areas, we argue that high prices have little to do with conventional models with a free market for land. Instead, our evidence suggests that zoning and other land use controls, play the dominant role in making housing expensive.

"What is it that creates places where the cost of housing is so much higher than the physical construction costs? We offer two basic views. First, there is the classic economics approach which argues that houses are expensive because land is expensive. According to this view, there is a great deal of demand for certain areas, and land, by its very nature, is limited in supply. As such, the price of housing must rise. Traditional models, such as the classic Alonso-Muth-Mills framework, take this view. Our alternative hypothesis is that homes are expensive in high cost areas primarily because of government regulation, i.e. zoning. According to this view, housing is expensive because of artificial limits on construction created by the regulation of new housing. This view argues that there is plenty of land in high cost areas, and in principle new construction might be able to push the cost of houses down to physical construction costs. However, the barriers to building create a potentially massive wedge between prices and building costs."

Summary: The paper is interesting but as it's nearly 20 years old, written prior to the housing crisis of 2008 and the current pandemic, and in part based on 1989 data, its analysis and conclusions may not be fully accurate today. It also fails to take into account what market forces may be at work today.

https://www.tandfonline.com/doi/full/10.1080/01944363.2019.1651216

"It's Time to End Single Family Zoning," by Michael Manville, Paavo Monkkonen, Michael Lens, all UCLA associate professors in 2019, when this was published.

"We are arguing against a type of *law*, not a type of building. There is nothing intrinsically wrong with detached single-family homes. Two of the three of us live in them, and we all grew up in them. Living in a detached single-family home is a perfectly acceptable private choice, albeit one with real social and environmental costs (Arnold, Graesch, Ragazzini, & Ochs, 2012; Norman, MacLean, & Kennedy, 2006). But it is not a choice that warrants public protection. People in detached single-family homes neither need nor deserve laws ensuring that nothing will surround them but structures like their own."

"Because opportunity is unevenly distributed both between and within metropolitan areas, and because moving people to opportunities is generally easier than moving opportunities to people, letting more people live in the most prosperous and amenity-rich neighborhoods of our urban areas would dramatically increase wellbeing (Chetty & Hendren, 2018a, 2018b; Lens, 2017; Sanbonmatsu et al., 2011; Sharkey, 2013). Many people, however, are effectively barred from these cities and neighborhoods because access to them is sold primarily in large, expensive, and inefficient chunks—through R1. Lower and middle-income families would benefit immensely from a small foothold in prosperous neighborhoods—perhaps a modest apartment or duplex—but R1's prevalence means few such small footholds are available. The result is scarce housing in desirable places."

" When land is not upzoned, values rise because housing cannot be built. When land is upzoned, in contrast, values rises because housing can be built, and homeowners can only access that value when they sell to someone planning to build it. Accessing that value, moreover, makes it liquid. When homeowners sell, their windfall housing wealth becomes windfall income, and taxing income is easier, politically and administratively, than taxing wealth. If local governments pair upzoning with a progressive tax on real estate transfers, they can get more market-rate housing and more funding for subsidized affordable housing. The question, then, is not whether homeowners will receive windfalls. It is whether those windfalls will come from maintaining housing scarcity or enabling housing abundance."

Summary: This is a pretty straightforward argument - with a heavy tilt toward redistribution - in favor of removing single-family residential zoning. It is based on one logic path with little empirical evidence. Note language, "People in detached single -family homes neither need nor deserve laws ensuring that nothing will surround them but structures like their own." See also the last excerpt regarding taxes. And note that all the internal citations link to a single article.

https://blocksandlots.com/wp-content/uploads/2020/02/Do-New-Housing-Units-in-Your-Backyard-Raise-Your-Rents-Xiaodi-Li.pdf Xiaodi Li, researcher at Moody's Analytics, PHD NYU, December 2019, study based on data from a limited period more than 10 years ago in

New York City. Also, a number of units in NYC in this period were subject to rent controls or stabilization.

"...within census tracts, new high-rises significantly decrease rents for mid-range rental buildings. It is presumably because of migration chain [filtering] that as high-income neighbors move into new high-rises, leaving behind older housing stock for middle-class households. Those older housing stock increase mid-range housing supply. However, the rent decrease for low-end rental buildings is not significant in the medium-term."

Summary: Uses data from nearly 10-20 years ago. Seems to me this is a serious limit: "When I estimate equation (1) and equation (2), the 2003-2013 residential rents dataset does not allow me to observe three years before the completion of new high-rises completed between 2003 and 2005. Similarly, the dataset does not allow me to observe four years after the completion of new high-rises completed between 2010 and 2013. Therefore, I further restrict the sample to rental buildings within 500 feet of new high-rises that received approved Building Permits between 2003 and 2006 and examine new high-rise completions between 2006 and 2009. Rental buildings within 500 feet of new high-rises completed during 2003-2005 and 2010-2013 are removed from the dataset. Also, the older housing stock is what would become naturally occurring affordable housing as long as it is not prematurely redeveloped, as happens here.

https://www.nber.org/system/files/working_papers/w21154/w21154.pdf

Written pre-pandemic, in 2015, this very technical paper argues that housing regulations set at the local level "can also have large effects on other cities. Specifically, we find that a major impediment to a more efficient allocation of labor across US cities is the constraint to housing supply in high TFP cities." (TFP is a mathematical formula that takes into account multiple variables relating to productivity.) It is difficult to see how this pertains to housing shortages, especially given the lack of job formation here.

https://www.doria.fi/bitstream/handle/10024/181666/vatt-working-papers-146-city-wide-effects-of-new-housing-supply--evidence-from-moving-chains.pdf?sequence=1&isAllowed=y by Cristina Bratu, Aalto University School of Business and Helsinki GSE; Oskari Harjunen, VATT Institute for Ecoomic Research; And Tuukka Saarimaa, Aalto Univerity School of Business and School of Engineering and Helsinki GSE.

This study was done in Helsinki Finland.

“In addition to the direct effect of increasing the housing stock in the neighborhood it is built in, new market-rate housing may have more far-reaching indirect effects through a moving chain process. As new residents move into the newly constructed units, they vacate their old units. These vacant units then get occupied by a new set of residents whose old units become vacant and so on. Through this process, new market-rate housing can have moderating price effects in the city’s lower-income neighborhoods, not just in its immediate neighborhood, by effectively loosening the housing market in these areas through vacancies.[1] However, if a city’s housing market is segmented into separate sub- markets so that people do not move between them, the moving chains may not reach low-income neighborhoods. Whether and to what extent this is the case is ultimately an empirical question. “

“New housing built in expensive areas of the city does indeed primarily house the better-off. However, the moving chains triggered by these new units reach middle- and low-income neighborhoods quickly, within a year or two. Our register data also allows us to show that low-income individuals are part of the moving chains. This is direct revealed-preference evidence that low-income individuals in the city area also benefit from new expensive housing, even when the new units are allocated to individuals higher up in the income distribution.”

“We find that for each 100 new, centrally located market-rate units, roughly 29 (60) units are created in the bottom-quintile (bottom half) of neighborhood income distribution through vacancies. Given that the moves we study happen between two adjacent years, i.e. we study the very short-run, these numbers are significant. The corresponding figures for social housing units are 43 and 75, respectively.”

Here are some of the authors’ caveats as regard its applicability to the US:

“Compared to US cities, the moving chains in the HMA [Helsinki Metropolitan Area] are more likely to reach middle- and low-income neighborhoods and reach them faster. The difference may be partly driven by differences in the data and methodology used to construct moving chains, but they probably largely reflect differences in underlying income inequality and residential segregation. That is, the socio-economic distance between expensive and affordable neighborhoods is smaller in the HMA compared to US cities.”

“It is important to note that our results speak to the potential of new construction to loosen middle- and lower-income sub-markets in the metropolitan area. However, we cannot make any claims about the effect of new construction on the immediately surrounding neighborhoods (see e.g. Diamond and McQuade 2019; Li 2019; Singh et al. 2019; Pennington 2020; Asquith et al. 2021), nor do we look at price effects in the neighborhoods reached by the moving chains (see e.g. Mense 2020).”

“The most striking difference is that in our case the shares of moves from the bottom-half and bottom-quintile in each round are higher compared to the US case. That is, the moving chains are more likely to reach middle- and low-income neighborhoods and reach them faster in our case. The difference may be partly driven by differences in the data and methodology used to construct moving chains, but they probably also reflect differences in income inequality and residential segregation between US cities and the HMA. This would mean that the socio-economic distance between expensive and low-income neighborhoods is smaller in the HMA compared to US cities. The price differences between neighborhoods are also likely to be smaller.”

“… we stress that while market-rate housing supply seems to have wide-ranging beneficial effects, it is not a panacea for all housing market problems. Some people may get discriminated out from the housing market and for some others even the cheapest housing in the city may not be affordable. Housing allowance or voucher programs, as well as social housing are important complements to market-rate supply."

Summary: The authors specifically and repeatedly caution that their results are probably not applicable to the US at least in part because of differences in income inequality and residential segregation, and the inclusion of rent-controlled ("social") housing in their analysis.

https://watermark.silverchair.com/rest_a_01055.pdf?token=AQECAHi208BE49Ooan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485ysgAAAtIwggLOBgkqhkiG9w0BBwaggqK_MIICuwIBADCCArQGCSqGSIb3DQEHATAeBglghkgBZQMEAS4wEQQMHnZSZmI5LaZzOWTVAgEQgIIChTR4PbJyL7r9h3T7nQvhSg7ohvL2rMyc4GnyEzsrSxH3rfvNtEI1piXGT9xr9ahAUf971OU7-LTtvyv56WZJyk57HatsmI3_KmqywTs_ISCqmp0kw4Lg4q9P035wcpURWcikela9HWeK_4ymGwjC31Hp8cMODgu7gdYiecmps07wgBCULKp2dPARfsZgtrTMUShhgsWQYQQdz_EyMFzqG1KMR8cCGt0pUIql4c1VF8prqWm-kijw9GqfLgZbD_YUGhr5I-NV4uVdILQGaXkaWAk-ZGLSccNI5xw4zPGiPzh95n2F9ZPtTVju2de9rCf_hfWgJocj5T-V32jImQiwbSePgMpUinjERykyrI2SaqxjkmsDI0x8CzXSkD6-CeRRjhqu9R_pp2zt8TM94-eq0WtVLyiLObgHmEC4QbASqjV-uxAbYAcPT-kqQWD5p6eMOIVe7uvJSptsZSbXY6WbA2uYOI8yOPLEBWyZrW2pF2YfUvpgtCKKhsWIirsgvyrZN-U9xjf8gunSen8X0zbjGXS_trk_EoVgjOEeLg3XvRxLRqp3av9XhIEy8yTQ8gYQp-Zc3vIYDq0swVXNn2cJbXRwjYUkjXec6PVzYrPEe7SiVuECHIBj1hNG1bLWy-QaIuTbN-QEVk02T6fm_6ticHPRkz2q7E1GkYYgUda29bFVWbBRnwv9hSf5HfcXw62OK2behHsLqLcnbg3xQd0H4TDMsCkLiRgorVHAx877pbqIR75bxIftIs0mK-Ihg0xcqksV7EUp3j8o_V7QFInW-I_Cem2FWkLYiXXxaI0VvM4Et0dmD4XMoYrL6POqN2sXIMOOXjGI4teW3vTa83uK1UGx-mFBbQ

"This paper provides new empirical evidence on how the construction of large market-rate rental apartment buildings in low-income, central city neighborhoods affects rents in nearby buildings and migration."

"We first study the effect on rents using listing-level data from Zillow™ that span 2013 to 2018. We focus on "pioneer" buildings—those that are the first recent market-rate construction in their area—because these are most likely to change a neighborhood and because buildings subsequently constructed nearby may be part of the pioneer building's effect. All three empirical approaches show that new buildings in low-income neighborhoods (census tracts) reduce nearby rents by 5 to 7 percent."

"While there is a strong observed correlation between new construction and rising rents, this appears to be because new buildings are typically constructed in areas that are already changing. When these new buildings are completed, they actually slow rent increases in the nearby area: the average new building lowers nearby rents by 5 to 7 percent relative to trend, translating into a savings of $100 to $159 per month. In addition, we find that new buildings increase low-income in-migration, implying that this improved affordability can foster more integrated, economically diverse neighborhoods that may improve economic mobility (Chetty, Hendren, and Katz 2016; Chetty et al. 2018). We suggest that the mechanism underlying these results is a simple story of supply and demand. If high-income households like a particular neighborhood, preventing the construction of new housing simply leads them to outbid lower-income people for the housing already available in that neighborhood. By contrast, when new housing is built, many high-income households choose this option instead of nearby existing units. While the new building could theoretically change local amenities or reputation by enough to instead increase demand and raise nearby rents, our findings suggest this is not the case. This may be because new buildings typically go into areas that are already changing, limiting their marginal reputational effect. Disamenity or congestion effects could also contribute to rent decreases near the building, but prior literature on hyper-local supply effects and spatially concentrated housing search suggest that added supply plays an important role….. However, there are several caveats to our findings. First, our sample consists of areas where developers actually chose to, and were allowed to, build in. While these are likely similar to the neighborhoods that would receive new construction if regulations were relaxed, effects may be different in other types of neighborhoods. Second, relaxing land-use regulation is quite complicated in practice. The particulars of a reform could matter both for how much supply is actually added and, depending on the incentives built in (such as encouraging redevelopment of the existing housing stock versus vacant land), the local effect of that new supply. Finally, we consider only rents, not prices for land or existing homes. These caveats point to important areas for future research."

Summary: This study is based on data from new housing in inner city low-income areas. Not what Moco is talking about. The last excerpt notes the authors own caveats about completeness and applicability of their study.

Specific to MoCo

https://harpswellstrategies.com/ten-things-i-know-about-the-mo-co-economy-and-you-should-too/?fbclid=IwAR2AJ6JBi6v5ITXPqh_P-hE5O4LZNAhiot8K27KJHBWNZyfbmvdTyXbU_J0

Sept. 10, 2021. Jacob Sesker, former staffer MoCo Planning Dept, Council, Economic Development Corp.

Worth reading in its entirety. Excerpting only housing-related text.

"…generally speaking, residential development generates more in terms of services and infrastructure costs than it does in terms of revenue to pay for those costs at current inclusionary zoning standards. While a lot of folks chafe at what they view as "corporate welfare", the alternative to growing the commercial tax base is increasing pressure on households to pick up the cost of the County employees' compensation and benefits, public service programs, and infrastructure projects. And oh yeah, if you haven't noticed, commercial real estate development isn't really "a thing" right now in Mo Co in the absence of market interventions."

"So, to start with let me say that housing affordability is a very real problem that has very real impacts on actual people. It is also a regional problem that is difficult to address without coordination. And it is a problem that must be addressed, at least in part, through the public sector funding and constructing affordable housing.
The County's inclusionary zoning program is top-notch, and it has been of significant value to many of the people who have lived in moderately priced dwelling units over the years. The program is managed by dedicated people who really know what they are doing and care about

program outcomes. It has resulted in levels of economic integration that probably could not have been achieved in the absence of the program and may have contributed to positive educational outcomes for generations of children from low-income families. But as with over-reliance on progressive tax structure, sometimes you really can require too much from the private sector and end up getting results that aren't what anyone was hoping for.

Economically, the inclusionary zoning requirement functions as a targeted tax on the real estate development industry for the benefit of some low-income residents. As a tax, it does seem a little *too* targeted (is real estate development responsible for the need for affordable housing?), but no one should argue with the public purpose. And frankly, few do – I have been talking to real estate developers about the County's tax and regulatory structure for years, and rarely do any complain about the 12.5% MPDU requirement (the complaints have come when other requirements get added to that – e.g., the 15% MPDU requirement in certain parts of the County, and before that, the workforce housing requirement).

"Here are some facts from the 2018 Housing Needs Study:

- Since 2010, the County captured only 5% of the household growth in the region.
- 1 out of 2 new households in the County is making less than $50,000/year
- In 2018, 17% of low-income households in the region live in Montgomery County (trailing only the District and Prince George's County).
- More incredibly, from 2010 to 2018 the County captured 20% of the net new low-income households in the region, beating out all of the competition.

Look, I think it is great that Mo Co is doing so much for low-income households. Clearly, we are winning at being virtuous, but being virtuous is a very expensive game to win. Contrast our high-and-getting-higher share of the County's low-income households to the low-and-getting-lower share of high wage jobs and you can understand why I am concerned. Low (and very low) income households require a lot of services that we can only afford when there is enough "net positive" economic activity in the County, whether that activity is market rate housing downcounty or non-residential development. In case you fell asleep and scrolled down to get here, there isn't enough non-residential development, and we shouldn't expect much anytime soon unless someone puts forth an aggressive economic development agenda and action plan. I think the fact that we only captured 5% of regional household growth and yet somehow managed to capture 20% of low-income households is a decent signal that we need to recalibrate our inclusionary zoning requirements. A possible explanation for this is that we are requiring projects to provide too much more affordable housing (in terms of units, income levels, and/or control period). That said, my sense is that the prevailing winds are blowing in the direction of more affordability, deeper affordability, and a whole lot of other burdens on new residential development and landlords in the County. And in the end, I'm not sure that Mo Co and Mo Co taxpayers will be the winners."

General
https://voxeu.org/article/we-cannot-build-our-way-out-inequality?fbclid=IwAR3GRdsEW8xfrKJG9rFkiAdpxq62UGeqCym885eLJYYjQ3hxiPjk8cUM9Mc

October 2, 2019. Andrés Rodríguez-Pose (London School of Economics), Michael Storper (UCLA).

"…a fast-growing coalition of high-income millennials ('yes in my back yard', or YIMBYs), urban planners who want density, developers, and elected officials has thrust this view into the public debate…. What's novel about this coalition is that it draws on mainstream housing economics and then claims that this new 'deregulationist' market urbanism is socially and economically progressive. In like fashion, they consider those who oppose their endorsement of blanket upzoning to be self-centred NIMBYs, uninterested in justice, inclusion or equality, and to have caused the current crisis. YIMBYism can be seen as a generational clash between the younger segment of the top 30% that resent the existing (somewhat richer and older) segment of the top 30%, who occupy the neighbourhoods where the millennials would like to live but cannot, but who represent themselves as the avant-garde for the lower 70% of the population. The beauty of their solution to the housing and inequality woes of our cities is that it is straightforward – to deregulate to allow more housing units on high-demand existing lots, and when the market generates higher buildings in the most lucrative neighbourhoods, wait for the benefits to trickle down the social and geographical ladder."

"First, the evidence on trickle-down benefits is weak to non-existent. The intra-urban housing markets in cities are highly segmented. This means that the interest in prime land in the downtowns and job-, transit-, and amenity-rich areas is far greater than in virtually all other urban land. There are considerably more benefits to be made by building in these areas than in more distant and less accessible locations. There are also far greater benefits to be had by targeting the upper- than the middle- or lower-end of the housing markets…. Supply expands and the cost of housing for the upper income segment declines, while having little to no positive effect for the rest of the population (Freemark 2019, Popov 2019)."

"No amount of affordable housing in the Bay Area, London, or Frankfurt can facilitate the job market integration of a high school graduate from, say, Youngstown (Ohio), Sheffield, or Chemnitz, respectively. The problem in this respect lies not in housing unaffordability, but in education systems that leave so many people behind, while prosperous metro areas concentrate jobs in the industries requiring the most education."

"In other words, carefully targeted – not blanket – upzoning may ultimately be part of a delicate and complex policy mix that is required to address inequalities both within our cities and across our regions. This mix includes at least combining education, social, health, and housing policies. And in the realm of housing policy, this will mean more and different types of regulation that may appeal to neither YIMBYs nor NIMBYs."

Summary: Although aspects of this analysis are somewhat polemical the authors note that upzoning is one possible tool – an argument that roughly coincides with the initial pitch for "gentle upzoning" from planners.

https://www.planningreport.com/2019/03/15/blanket-upzoning-blunt-instrument-wont-solve-affordable-housing-crisis?fbclid=IwAR18Ik1jk30eNh7yFj7ir8UctaYauPVn1fR_LaqIquILzLi_95E-bVSYOKM

2019 interview with Michael Storper, UCLA/London School of Economics professor.

“Our analysis shows that blanket upzoning is likely to miss its affordability target, even without attracting in more people from left behind regions. Blanket upzoning is a blunt instrument, whereas people’s housing needs are diverse. Even if the upzoning is aimed at, for example, transit-served corridors, it doesn’t mean that all such areas are going to attract housing investment. This is because, even with transit, people don’t live and work in the same neighborhoods, and there is no evidence that transit changes these patterns in any significant way. So, when we upzone around transit corridors, for example, only some locations are likely to attract big increases in housing construction. These are areas with strong attractiveness. It will favor those who can pay the price of housing in high-demand areas—marginally improving the housing prospects for highly skilled people at the upper end of the income distribution.”

“Cities like LA, San Francisco, or anywhere else in coastal California have a strong economic base that attracts skilled people in occupations with high wages. They also have a large population with very low incomes. What drives housing prices up is the strength of the fundamental economic forces that causes the skilled to want to be in big metropolitan areas today. This force is much stronger than 30 years ago. The payoff for a skilled person to locating in a big city today (in terms of higher wages compared to locating in other places) is much bigger than in the past. That is why the skilled continue to crowd into LA and even the Bay Area, in spite of their high housing costs. It’s also why any increase in supply will mostly benefit them (in terms of better housing choices for them). That’s fine, but what it is unlikely to do is have a strong trickle-down effect, and upzoning legislation is largely being sold on the affordability or trickle-down argument.”

“That’s the problem with blanket upzoning: It doesn’t actually require housing to be created for these groups. It just allows upzoning itself to be created wherever you want, and for market speculation to dominate. The market will naturally respond best in areas with the greatest returns on upzoning—mostly places with dense, white-collar employment where high-income people will want to live to be closer to their jobs. This is how blanket upzoning produces the consequence of displacement. Skilled people with high incomes—those who would benefit most from upzoning—are going to move into upzoned neighborhoods and crowd out the middle- and lower-income people who are living there. This displacement is exactly the opposite consequence of what the authors of upzoning bills claim they want to produce. The consequence of bad urbanism is related to what I call the “Sao Paulo solution” or the “Mexico City solution”: allowing nonconforming high density to be built in areas with relatively low density. That’s exactly how a lot of cities in Latin America have urbanized—with towers or jumbled densities all over the place, chaotically shooting up all over the place next to single-family homes.“
Summary: A key comment is that blanket upzoning doesn’t require affordable or attainable housing, and that market forces will continue to dominate. And that in areas that attract skilled people with high incomes, the brunt of upzoning will be felt in areas where land values are lower.

https://calmatters.org/commentary/my-turn/2021/06/zoning-changes-could-put-a-hurt-on-black-homeownership/
An opinion piece by Madalyn Barber, housing specialist at Housing is A Human Right in California. She is Black.

“Elected officials say that more housing needs to be built to address the housing affordability crisis, but their harmful agenda is based on failed trickle-down policy. They want to build expensive, market-rate apartments, contending that rent prices will eventually drop. It’s ludicrous. First, middle- and working-class residents, especially people of color, are getting hit the hardest by the housing crisis. They need more quality, affordable housing, not luxury apartments they can’t afford. Second, there’s no guarantee that rents will decrease over time. Third, developers build where land is cheapest — which usually is in working-class communities. When they construct market-rate apartments, rents rise in the entire neighborhood, triggering gentrification and the displacement of longtime, lower-income residents. Perhaps worst of all, the effect of politicians’ trickle-down housing agenda could turn people of color into permanent renters. That would strip us of our ability to build wealth through homeownership, and create a massive transfer of wealth that benefits the corporate landlords and real estate companies who will own the new apartments — and likely charge sky-high rents.”

New York City

https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=1224&context=jlasc

Published 2018. Bradley Pough. An effort to determine the causes of displacement utilizing areas of NYC in the context of the particular legal doctrine of disparate impact.

“Some scholars present gentrification-fueled displacement as symptom of myriad economic forces that are hard to identify. Others instead focus on the actors most clearly at fault for *particular instances* of displacement, including landlords and the developers of new luxury residences that have quickly come to characterize gentrifying neighborhoods. Few scholars, however, have focused on the role that local governments can play in fueling gentrification and displacement. Cities, in their capacity as the chief architects of our country’s zoning policy, certainly have an outsized role in shaping the development patterns of our urban centers. While much has been written about exclusionary zoning’s ability to keep particular demographics *out* of neighborhoods, few have fully explored the way that liberal zoning policies (i.e. upzoning) can precipitate a demographic *influx* into a neighborhood (as well as the resulting wave of displacement that comes afterward).”

“Interestingly, several scholars and advocates are now looking to a recent Supreme Court decision, *Texas Department of Housing & Community Affairs v. Inclusive Communities Project, Inc.* (*Inclusive Communities Project*), as one possible avenue for legal redress. In *Inclusive Communities Project*, the Court established that disparate impact claims were cognizable under the Fair Housing Act (FHA). Despite circuit court unanimity on the issue, until the *Inclusive Communities Project* decision, Supreme Court jurisprudence only recognized claims of housing discrimination grounded in actions that were *on their face* discriminatory. With this ruling, the Court affirmed that it would also recognize housing discrimination claims brought against facially neutral actions that, nevertheless, had disparate negative impacts on a protected class. In the wake of this decision, several housing discrimination cases have brought disparate impact claims using the Court’s guidance on the issue. And yet, despite rumblings about the possibility of disparate impact litigation against municipal upzoning decisions, no litigant or scholar has explored this issue fully.”

“In their book *Zoned Out*, Professors Tom Angotti and Sylvia Morse put forth a similar thesis for the causes of displacement in Manhattan and Brooklyn, arguing that “[u]pzoning increases the future value of land, and land value increases are what drives new development.” According to the authors, upzoning in New York influences displacement through an opaque yet consistent four step process. First, developers, searching for a neighborhood for new construction, target “underutilized” areas and begin assembling parcels of property on which to build. This initial sign of economic movement from large developers often precipitates a “buying frenzy,” and might also result in landlords gradually ending leases with low-income tenants in anticipation of new rental demand. Second, developers will appeal to the Department of City Planning (DCP) for a rezoning of their targeted neighborhood. The DCP will engage in a series of studies to determine if the proposed development requires a new zoning designation, and if there is enough demand to warrant such a change. As word gets around that the DCP is considering a neighborhood for a revised zoning designation, a second flurry of speculative purchasing often occurs with similar disruptive effects on the low-income, minority communities who already call this “underutilized” neighborhood home. Next, the planning board and developers will submit a formal rezoning proposal to the City Planning Commission (CPC). It is worth noting that these kinds of proposals are almost invariably initiated by well-resourced parties (i.e. government entities or corporate developers).“

“Angotti and Morse marshal convincing evidence to back up their assertion that upzoning and minority displacement are causally linked. The authors note that in a study of 76 rezonings between the years of 2003 and 2007, upzoned lots were disproportionately located in “areas [with] higher concentrations of African American and Hispanic residents than the city median.” The authors go on to illustrate that these upzonings have exerted upward pressure on everything from property values and taxes, to rental costs and the types of small businesses that are able to operate in the neighborhood.”

“During the early 2000’s, the Bloomberg mayoral administration employed a conscious policy of liberalizing the zoning restrictions in a handful of neighborhoods around the City. Almost invariably, as these once diverse areas grew in density, they shrank in their numbers of minority residents. As bodegas and corner stores gave way to Starbucks and cross-fit gyms, few would argue with the notion that the apparent result of these upzoning policies was to transfer the neighborhoods’ agglomorative resources from the historically disadvantaged to the historically advantaged.”

“Historically, for example, the primary mechanism for providing affordable housing in cities like New York was through units owned, operated, and maintained by the *public*. Municipal housing authorities across the country each housed tens of thousands of people in units that were permanently affordable for low-income and working-class residents. Changes in neighborhood demographics or land use designations did not threaten that permanence—those units were guaranteed by the government and therefore largely insulated from any economic tumult occurring in the traditional housing market. Today the distinction between public and private housing is falling apart. Many of the substantive reforms in the affordable housing world are occurring under the guise of “public- private partnerships.” These privately facilitated policies, like inclusionary zoning, lack many of the protections and advantages inherent in a more traditional public housing regime. For example, while inclusionary zoning programs aim to counteract the lack of new affordable public housing units, in practice they often end up serving a demographic noticeably wealthier than the intended recipients of the original public housing programs.[185]”

"…community land trusts in cities like Boston, Durham, and Albuquerque have illustrated that local, pubic control of traditionally private assets can go a long way to providing meaningful homeownership opportunities for low-income Americans. Under this model, locally managed community organizations retain ownership of neighborhood land that they then use to build and sell homes at significantly lower-than-market prices. By removing the cost of land from the construction equation, these organizations have been able to develop an ecosystem of truly affordable housing in some of the most desirable urban locations. Community land trusts have shown that by returning to a model centered on public ownership, cities are still making good on the promise of economic inclusivity."

"At its core, the community-based planning movement simply asserts that residents living in areas slated for change ought to have some real say in how their neighborhoods develop. Achieving this admittedly modest goal requires two formal concessions from city governments. First, it requires that large city governments create neighborhood planning councils with real power to drive zoning change. Although some form of neighborhood planning council exists in most major American cities, these bodies often exercise little more than advisory powers in the zoning process. While full veto power almost certainly is not appropriate, the ability to cast votes of consequence over the changes occurring in their neighborhoods is necessary for ensuring that municipal policies do not completely trample local considerations."
Summary: this analysis argues that upzoning may have a disparate – that is, a negative – impact on certain communities that amounts to discrimination. That impact would be displacement or other disruptions. A logical extension is that unless upzoning specifically limits the types and costs of new structures, the market will prevail. And in some respects there is a undesirable transfer, of a neighborhood's resources from lower income residents to the new higher income residents. One way to avoid that is through mechanisms like community land trusts. Another is to ensure a community voice through neighborhood planning councils.

https://www.thewagnerreview.org/wp-content/uploads/2020/05/Team-1_Final-Version_v2.pdf

NYU, May 2020. By Ignacio Aravena, Anastasia Lopatina, Alexia Nazarian, Doug Rose, Yunan Yao

"We examine demographic changes before and after city-initiated upzonings occurring between 2000 and 2007 with a focus on the White population. Our research uses a fixed effects regression model to compare upzoned census tracts with census tracts that were not upzoned but had a similar demographic makeup and historic trends in the period preceding the upzoning. We find that large upzonings are associated with a five to nine percentage point increase in the share of White people, while smaller upzonings had no significant impact. Although we do not claim that displacement has taken place per se, we find that the new housing units created by an upzoning become predominantly occupied by White and Asian residents."

"Churches United For Fair Housing (2019), a grassroots community organization, used descriptive statistics to examined the demographic change that occurred following two controversial Bloomberg-era rezonings in Park Slope and Greenpoint-Williamsburg. Using descriptive statistics only, this study found that the latino and Black population decreased following up zonings, while the White population increased significantly. Goldberg (2011), studied Bloomberg-era rezonings similar to ours using descriptive statistics, which suggested that the White population in hybrid and upzoned areas increased substantially in comparison to the citywide figures, which show a decrease in White population. A paper by Yunda and Jiao (2019) used a similar regression analysis to ours to study the demographic impacts of designating areas of New York City as Special Purpose Districts and Historic Districts. Yunda & Jiao's results suggest that designating an area with these special types of preservationist zoning had little impact on the racial composition of the neighborhoods."

"Upzonings that occurred between 2000 and 2007 were associated with a five to nine percentage point increase in the share of White people in that area, an increase that is particularly notable given the stagnation of White population growth in the city over the same period. Still, we caution against conflating an influx of White people with displacement because this paper examines changes in the net population only. A study focused on displacement would require a more sophisticated methodology. Still, we observe a strong likelihood that many of the new housing units are occupied by new White or Asian residents."

"For large rezonings [30-100% of census tract], the vast majority of population growth associated with upzoning is driven by White and Asian population groups to statistically significant degrees. Populations identifying as Black or 'other' have small and statistically *insignificant* increases in population. Finally, the Hispanic population change is negative and statistically *insignificant*. To see no (or potentially negative) population change for Hispanics is particularly noteworthy given that Hispanics are the fastest growing population group citywide."
Summary: As with some earlier studies, the data on which this is based dates from before the housing crisis. But this study is looking at changes in demographics, not housing supply. The data examined show that White and Asian populations increased and Black and Latinx populations decreased in upzoned areas, at a time when the overall White population in the city was stagnant. It leaves open whether upzoning caused this.

https://www.brookings.edu/blog/how-we-rise/2021/07/15/the-double-edged-sword-of-upzoning/?fbclid=IwAR2F0xFzTIP40E2DRH1AnpuLzD8s8Mxd7z_yKcRU6X9H15ZW8ew_w58Lt9Q

Julie 15, 2021. Jenna Davis, Urban Planning PHD student, Columbia University.

"I recently conducted a study examining how a series of upzonings implemented in New York City in the early 2000s interacted with subsequent gentrification pressures (using growth in the non-Hispanic white population as a proxy for gentrification). I find that upzoning activity is positively and significantly associated with the odds of a census tract becoming whiter, suggesting that upzonings might accelerate, rather than temper, gentrification pressures in the short-term.**"**

"…additional research is needed to better understand how different kinds of upzoning policies shape subsequent neighborhood change. For example, to what extent do upzoning policies that incorporate stronger tenant protections, such as just-cause eviction standards, ward off displacement pressures? How do upzonings impact housing affordability in different real estate submarkets in the long term? How do upzoning policies that are targeted at wealthy neighborhoods impact gentrification?"

Chicago

https://yonahfreemark.com/wp-content/uploads/2019/01/Freemark-Upzoning-Chicago.pdf

Freemark wrote this while at MIT; he is now at ULI. Published 2019. Impacts of upzoning in Chicago.

"I detect significant, robust increases in values for transactions on parcels that received a boost in allowed building size. I also identify value increases for residential condominiums, indicating that upzoning increased prices of existing housing units. I find no impacts of the reforms, however, on the number of newly permitted dwellings over five years. As such, I demonstrate that the short-term, local-level impacts of upzoning are higher property prices but no additional new housing construction."

"In both 2013 and 2015, the city upzoned a large cohort of parcels uniformly, allowing higher housing unit density, increased floor-area ratios (FAR), and reduced parking requirements [to encourage transit-oriented development]. I examine parcel-level transaction values and construction permit levels. My conclusions are two-fold. First, I find statistically significant, robust evidence that a byproduct of upzoning is growth in property values on affected parcels. I specifically find some evidence for an increase in transaction prices of already-existing individual residential units affected by the change, offering evidence for higher housing prices in the short term on the properties where zoning is executed. These impacts occurred within two years of the zoning changes, suggesting a relatively rapid capitalization by landowners and developers. Second, I find no evidence for short- or medium-term increases in housing-unit construction, potentially a product of the relatively slow financing and approvals processes for new projects, but indicating that upzoning does not produce a supply response within five years after policy implementation."

"Prior research identifies a link between regulations that limit housing density and increased housing costs (Ihlanfeldt 2007), as well as higher land costs (Kok, Monkkonen, and Quigley 2014). Quigley and Raphael (2005) and Pollakowski and Wachter (1990) suggest that housing costs are higher in places with these stricter regulations. That said, as Quigley and Rosenthal (2005) emphasize, there is some ambiguity in these results. In comparing municipal regulations, for example, Glaeser and Ward (2009) show that stricter land-use controls are not correlated with differences in property prices when controlled for demographics and density, since there are sufficiently close substitutes available nearby. Moreover, since market demand is the "primary determinant of housing prices," it is worth emphasizing that restrictions on construction—whether in the form of zoning or growth controls—are only influential on prices to a limited extent (Nelson et al. 2002, p. vi). We should expect different outcomes from changes in those restrictions depending on *where* they are implemented, meaning impacts from a similar policy are likely to vary between blocks, neighborhoods, cities, or metropolitan areas."

"First, the upzone for increased construction (density classes) quickly increased transaction values. This is a sign that land prices adjusted to the expanded ability to build, providing a one-time boost to incumbent landholders and suggesting interest in future redevelopment at higher densities. Second, the finding that the reduction in parking requirements (parking classes) had a greater impact on the value of vacant land suggests that upzoning's largest impact will be on

land ripe for building. These results indicate that by upping the future potential for building, upzoning increases land value. This occurs quickly, in advance of development.
Third, the study identifies growth in prices among already-existing residential condominiums in some of the models I undertake (likely because of the larger number of observations, the parking-class models produced higher levels of significance but similar coefficients as the density-class models). It is worth emphasizing that this study does not address the affordability of *rental* properties directly, but it seems reasonable to extrapolate that whatever forces changing the prices of owned units would also affect rented ones. An increase in housing unit-level values may suggest that affordability for potential new owners on affected parcels declined with upzoning, at least in the short term. On the *specific parcels where upzoning occurs*, costs appear to go up for individual housing units…. But I also find no medium-term effect—over five years—on construction permitting, a surprising result given commonly held expectations about how upzonings work. Developer reactions to an unexpected zoning change may be limited given the riskiness of adapting to new density allowances."
Summary: this is one of the most important of the upzoning studies. Unike most others, it looks at more recent data, from upzonings in 2013-15 and the subsequent 2-5 years. Even though this is pre-pandemic, it reflects post-housing crisis circumstances. The author found that in the short and mid term, there were no increases in housing units and housing costs increased. Thus, there are no best practices to identify as the results did not bear out the expectations. Whether this will change over a longer period remains to be seen.

https://chicago.suntimes.com/2021/1/22/22244749/rent-control-neighborhood-displacement-logan-square-affordable-housing-chicago-carlos-ramirez-rosa?fbclid=IwAR34ThQ7nWsO5ewoLbq-24d6IKeQmcDLLn9IdsHeYWBcJ8zhOwIGkYPce5Y

Commentary by local representative Carlos Ramirez-Rosa

"An analysis of publicly available construction permit data for these blocks finds that 54.5% of the time developers didn't take advantage of the less restrictive RT-4 zoning to add units, and developers were just as likely to de-convert a multi-unit building into a single family home on blocks zoned RS-3 as they were on blocks zoned RT-4. In one egregious example, a developer demolished three buildings on three adjacent lots zoned RT-4 — buildings with a combined total of six legal units — to build just one six-unit condo building. A condo unit in that new building recently sold for $800,000. One of the two-flats demolished to make way for that condo was listed for $279,900 in 2016."

"A 2019 working paper published by the Upjohn Institute found that the residents who were moving into Chicago's new luxury developments often were moving from far flung suburbs, and were almost always moving from one affluent community to another. This means the housing they were vacating for new developments in Logan Square would be out of reach for those facing displacement from the community. And even if this older housing was within financial reach of those displaced from Logan Square, it likely would be in another neighborhood or another county."

San Francisco

https://www.urbandisplacement.org/sites/default/files/images/udp_research_brief_052316.pdf

May 2016. Karen Chapple, UC/Berkeley Professor City/Regional Planning. Miriam Zuk, Sr Fellow.

Relationship between housing production, affordability and displacement in San Francisco Bay Area. 1990/2013.

"…other researchers have found that on average across the United States, rental units become occupied by lower-income households at a rate of approximately 2.2% per year. Yet in strong housing markets such as California and New England the rate is much lower and researchers find that filtering rates have an inverse relationship with housing price inflation; in other words, places that have rapidly rising housing prices have slower filtering rates." ("Filtering" is the extent to which higher income people leave and free up lower cost apartments for lower income people.)

"Yet, Rosenthal finds that rents decline by only 0.3% per year, indicating that units become occupied by lower-income households at a faster rate than rents are falling, which could result in heightened housing cost burden. Furthermore, if we were to assume that developers are building housing for people at the median income, then it would take approximately 15 years before those units filtered down to people at 80% of the median income and closer to 50 years for households earning 50% of the median income. Again, however, this does not mean that such units are actually affordable to the low-income households occupying them."

"Yet market-rate development in the 2000s is associated with higher rents, which could be expected as areas with higher rents are more lucrative places for developers to build housing. Furthermore, development in both the 1990s and 2000s is positively associated with housing cost burden for low-income households. Thus, while filtering may eventually help lower rents decades later, these units may still not be affordable to low- income households."

"We find the effect of subsidized units in reducing the probability of displacement to be more than double the effect of market-rate units. In other words, for every one subsidized unit, we would need to produce two or more market-rate units to have the same reduction in displacement pressure."

"What we find largely supports the argument that building more housing, both market-rate and subsidized, will reduce displacement. However, we find that subsidized housing will have a much greater impact on reducing displacement than market-rate housing. We agree that market-rate development is important for many reasons, including reducing housing pressures at the regional scale and housing large segments of the population. However, our analysis strongly suggests that subsidized housing production is even more important when it comes to reducing displacement of low-income households."

Minneapolis

https://www.planningreport.com/2019/06/17/minneapolis-planning-commissions-alissa-luepke-pier?fbclid=IwAR1R_-P3-tQ_0OQ_9nZ-UXxeBNHiMSMjx4qvjDZXKMdkYB_BN9dLTa7VUpo

Interview with Minneapolis City Planning Commissioner Alissa Luepke Pier, architect, as Minneapolis was considering allowing triplexes everywhere.

“ many of the most controversial policies in the plan, including the elimination of single-family zoning, have not been vetted through an economic lens. The policy took as its starting point that more units automatically equals more affordability, and there wasn’t any interest in delving into whether or not that was actually a factual equation on which to base major decisions. The policy does not cite any research to support its assertion, nor does it even lay out any aspirational goals regarding the extent of the impact they hope to achieve (such as in anticipated added units, or even in theoretical decreases to housing costs). Without any sort of concrete metric, it is impossible to analyze the policy's effectiveness in achieving its goal of improved housing affordability.”

“We don’t have any safeguards for this proposed policy, and once we enact these rights, they’re grandfathered in forever. There is no contingency plan, no method to test effectiveness, and no metrics for success.”

“But, even if the city doesn’t want to back away entirely from the proposed upzoning, there are still a variety of safeguards they could put in place to mitigate the unintentional harm that this policy will cause to communities like mine. For example, they could amend the policy to allow triplexes by right, but only on currently vacant lots—of which there are hundreds throughout our city. This would add the desired density without some of the negative consequences to the community and its existing housing stock. The city could also explore the possibility of an either-or: allowing developers to either build to the current zoning (single-family or duplex) or build a fourplex—with no option like a duplex or triplex in between. Why? Because a fourplex triggers the requirement for an architect and for sprinkling, which would indicate that the developer is thoughtfully improving the property and making meaningful investment, rather than just trying to maximize investor dollars while running an existing structure into the ground. The best safeguard, in my opinion, would be an owner occupancy requirement: allowing people throughout the city to build new or convert their own homes into duplexes or triplexes and rent out the additional space. This idea is sometimes poopooed, but the fact is that many people succeed in getting a foothold into homeownership because of rental income from their home that supports their mortgage payments and improves their financial sustainability.”

“We’re seeing investors come in, run the housing stock into the ground, treat the tenants like garbage, and immediately take all their rental income—money that could be invested in the community—out of the neighborhood. This is an immediate capital flight from the community, leaving local residents without the expendable income to invest in local opportunities or support local businesses. I’m fearful that blanket upzoning will exacerbate this problem, which, so far, our regulatory services haven’t been able to control. I also worry that it will deny homeownership opportunities to the very people whose housing problems we’re claiming to try to solve: low-income families and people of color. Currently, a lot of absentee investors in Minneapolis shy away from single-family homes because they aren’t as profitable and they cost more money to maintain. But with the new policy, a potential first-time homebuyer in my community will suddenly have to compete with an investor from another state who’s looking to buy the place sight unseen, slice it up into three units with minimal improvements, and start renting it right away. Those investors are not looking for homes, but for cash flow opportunities…. What will happen in the long run is that we’ll end up with smaller units (as we see existing housing chopped up to create triplexes in our less affluent neighborhoods), in poorer shape (because the goal of an absentee investor is to maximize profit, and there is little consequence for failing to properly maintain a safe living environment for tenants)—yet there’s no indication at all that they will go for a lower price. To summarize: In an effort to alleviate the affordable housing crisis, the city is offering my community smaller, crappier housing for no less money, with the added insult to injury of making it harder for them to buy a house and build generational wealth within their own community."

Santa Monica

https://smmirror.com/2021/07/sma-r-t-column-blind-upzonings-false-promise/?fbclid=IwAR0Qqi86hH8HDWTmEGQ2vnU323r85JoWiqdPxvXLy2I5ffO30U1X67TbqcM

Essay by former chair Santa Monica Rent Control Board Nicole Phillis.

"Upzoning relies on free market principles for the creation of housing, which will almost always skew the economics toward luxury, high value residences, especially where, as here, lot values alone often exceed $2 million. It is not lost on me that many of the rent controlled properties that we've lost to the Ellis Act in areas zoned for multifamily residences have actually been redeveloped either as luxury condos or single family homes. This again underscores the fundamental flaw of upzoning as a panacea: when we leave the production of affordable housing to the free market in a highly desirable area like Santa Monica or Culver City, upzoning rarely produces affordable residential opportunities for working families."

"But rather than winning the hearts and minds of the residents—and meaningfully grappling with their fears about the effect of upzoning on their communities—it seems that many upzoning advocates have resorted to polarizing rhetoric about single family homes, heteronormativity, and white supremacy, and have engaged in a particularly combative form of discourse that mocks and ridicules residents who are not already with them. This is not an effective means to build coalitions. We need to listen to our community members, particularly our friends and neighbors in historically marginalized communities, when they express their legitimate fears about acceleration of gentrification and further displacement."

Investment/Speculation
https://slate.com/business/2021/06/blackrock-invitation-houses-investment-firms-real-estate.html?fbclid=IwAR0JPIPJmsgepssP-K22Vsdb7AgloJdWs3RJcW8tETVcVqyIC1YPY3_qGts

June 19, 2021.

"Invitation Homes, a $21 billion publicly traded company that was spun off from Blackstone, the world's largest private equity company, in 2017. Invitation Homes operates in 16 cities, with the biggest concentration in Atlanta, where it owns 12,556 houses. (Though that's not much compared with the 80,000 homes sold in Atlanta each year, Invitation Homes bought 90 percent of the homes for sale in some ZIP codes in Atlanta in the early 2010s.) While normal people typically pay a mortgage interest rate between 2 percent and 4 percent these days, Invitation Homes can borrow money for far less: It's getting billion-dollar loans at interest rates around 1.4 percent. In practice, this means that Invitation Homes can afford to tack on an extra $5,000 to $20,000 to the purchase price of every home, while getting the house at the same *actual* cost as a typical homeowner. While Invitation Homes uses a mixture of debt and cash from renters to buy houses, its offers are almost always all cash, which is a big leg up in a competitive market…. Invitation Homes' portfolio of homes is worth of total of $16 billion (after renovations), and the company collects about $1.9 billion in rent per year. That means it takes only about eight years of rental payments to pay back a typical house that Invitation Homes has bought. The usual rule of thumb for evaluating a fair sale price, says Kundan Kishor, professor of economics at University of Wisconsin-Milwaukee, "is that price to rent ratios are around 20 to 1." When price-to-rent ratios are very high, it makes more sense for consumers to rent than to buy, and when they are low, it makes more sense to buy than to rent. That Invitation Homes is getting deals twice as good as a typical homebuyer shows that it's not just buying any homes: It's buying the specific houses with the greatest potential to be wealth-building for the middle class."

"They're really buying up the stock of relatively inexpensive single-family homes built since the 1970s in growing metro areas. They mostly ignore bigger and more expensive houses, especially ones that are move-in ready: Wealthy boomers and the nation's finance and tech bros nab those properties. And they're also ignoring cities with stable or shrinking populations, like Providence and Pittsburgh. But investors *are* depleting the inventory of the precise houses that might otherwise be obtainable for younger, working- and middle-class households, in the cities where those workers can easily find good-paying jobs, like Atlanta (22 percent of home purchases according to Redfin data), Charlotte (22 percent), and Phoenix (20 percent)."

https://www.millionacres.com/real-estate-investing/commercial-real-estate/what-is-upzoning-and-what-does-it-mean-for-investors/#:~:text=Upzoning%20refers%20to%20the%20process,such%20as%20duplexes%20and%20triplexes.

May 11, 2020. This is provided by Motley Fool.

"According to the University of California, Berkeley's, Urban Displacement Project, "While upzoning may change market dynamics in some neighborhoods, in others, the existing stock or costs of construction may mean upzoning will do little to make new housing developments financially viable.""

"By putting more units in one area, cities are also increasing their tax revenue. According to the World Bank, a 358-acre mixed-use area in Washington, D.C., called NoMa was upzoned in 2006, and by 2012 the area was generating an additional $49 million in revenue for the city annually."

https://strangesounds.org/2021/07/blackrock-is-buying-up-us-homes-like-no-tomorrow-real-estate-market-housing.html?fbclid=IwAR34ThQ7nWsO5ewoLbq-24d6lKeQmcDLLn9IdsHeYWBcJ8zhOwIGkYPce5Y

"In the first quarter of 2021, 15% of U.S. homes sold were purchased by corporate investors — not families looking to achieve their American dream. While they're competing with middle-class

Americans for the homes, the average American has virtually no chance of winning a home over an investment firm, which may pay 20% to 50% over asking price, in cash, sometimes scooping up entire neighborhoods at once so they can turn them into rentals."

Miscellaneous
https://mb4albany.org/?m=202001&fbclid=IwAR01CLs1k6NXG-EidTd9ps8nINz6o01H5efDft8646GpIKSwyRIEj8RaY2E

https://ny.curbed.com/2019/12/5/20995175/nyc-rezonings-racial-displacement-jumaane-williams?fbclid=IwAR0s6gLn9Lqtjp3uZDqbAJtgESzArWobyyzckE__vOnDS1y3o0-MzVz5D9E

https://media.villagepreservation.org/wp-content/uploads/2021/03/14230337/Upzoning-SoHo-NoHo-Report-March-2021.pdf NYC

https://www.mas.org/news/a-tale-of-two-rezonings-ceqr/

2018. A look at rezonings in Long Island City 2001 (NYC) and Downtown Brooklyn 2004.

Adding Density Destroys Neighborhoods One House at a Time; https://douglasnewby.com/2014/07/adding-density-destroys-neighborhoods-one-house-at-a-time/#:~:text=1

Blanket Upzoning—a Blunt Instrument—Won't Solve the Affordable Housing Crisis
https://www.planningreport.com/2019/03/15/blanket-upzoning-blunt-instrument-wont-solve-affordable-housing-crisis

California's Yimbys
http://dollarsandsense.org/archives/2018/0918bronstein.html

City Policies Can Accelerate Displacement and Gentrification;
https://communitynotcommodity.com/wp-content/uploads/Displacement-paper-06-07-17.pdf

Don't Be Dupe-plexed:
https://stopbtownupzoning.org/2021/02/19/dont-be-dupe-plexed/

Investment Houses Aren't Buying All the Houses: Just the Important Ones
https://slate.com/business/2021/06/blackrock-invitation-houses-investment-firms-real-estate.html

Is Upzoning Progressive?
https://stopbtownupzoning.org/2021/02/22/is-upzoning-progressive/

Just Upzoning the Suburbs Won't Solve Our Housing Problems
https://citywatchla.com/index.php/cw/los-angeles/21351-just-up-zoning-the-suburbs-won-t-solve-our-housing-problems

Longtime Black Homeowners Feel Pressure to Sell Houses
https://www.washingtoninformer.com/longtime-black-homeowners-feel-pressured-to-sell-houses/?fbclid=IwAR3xrC74MKSRaYg2LtENPDRw8eOS1WI1S9QjhQTeiPqr8EiWJM-J3kGjJeg

Lori Droste"s New Missing Middle Policy Needs a Reality Check:
https://sfceqa.wordpress.com/2019/03/19/lori-drostes-missing-middle-housing-proposal-needs-a-reality-check-public-comment/

Looking at Minneapolis Should Give California Pause in New Housing Bills
https://www.citywatchla.com/index.php/neighborhood-politics-hidden/22413-looking-at-minneapolis-should-give-california-pause-in-new-housing-bills

Minneapolis Residential Upzoning Risks Unintended Consequences:
https://www.planningreport.com/2019/06/17/minneapolis-planning-commissions-alissa-luepke-pier

Neighborhood Gentrification and Racial Displacement: Potential for Disparate Impact Legislation;
https://scholarship.law.upenn.edu/jlasc/vol21/iss4/1/;'

The Double-Edged Sword of Upzoning
https://www.washingtoninformer.com/longtime-black-homeowners-feel-pressured-to-sell-houses/?fbclid=IwAR3xrC74MKSRaYg2LtENPDRw8eOS1WI1S9QjhQTeiPqr8EiWJM-J3kGjJeg

The Rise of the Wimbys;
https://stopbtownupzoning.org/2020/12/21/the-rise-of-the-wimbys/#:~:text=The%20so%2Dcalled%20Yes%20in,%E2%80%9Caffordable%20housing%E2%80%9D%20for%20all.

Will Up zoning Neighborhoods Make Homes More Affordable?
https://archive.curbed.com/2020/1/30/21115351/upzoning-definition-affordable-housing-gentrification

Who Benefits from Upzoning: On Equity and Housing Affordability:
https://stopbtownupzoning.org/2021/01/25/who-benefits-from-upzoningon-housing-affordability-and-equity/

Veirs Mill Corridor Masterplan: There's a link to full final plan (2019) and a few notes on various pp (p. 95++ and following) to look at. This is an area (as well as Newport Mill and Twinbrook) that has affordable housing, providing families with moderate incomes (and retired persons) with safe and adequate housing; and the plan suggests that single family homes might be **"vulnerable"** to aggregation and redevelopment because of the proximity to transit. This is exact opposite of the concept of preserving vulnerable affordable housing -- and it is infuriating. One of the threats of upzoning is the verbiage in this final, approved plan.

Veirs Mill Corridor Masterplan https://montgomeryplanning.org/wp-content/uploads/2020/01/Veirs-Mill-Corridor-Master-Plan-Approved-and-Adopted-WEB.pdf

p. 95 and see many following pages

Single-Family Parcels at Robindale Drive The single-family residential parcels across Veirs Mill Road from the Rock Creek Terrace Apartments provide an opportunity to evaluate options for the introduction of alternative housing prototypes that improve the relationship between the scale and character of the high-rise apartments and the residential community to the north, as illustrated in Figure 26. While these residential parcels currently provide market-affordable housing, they are also vulnerable to redevelopment due to their proximity to a significant roadway and transit corridor.

As discussed in greater detail in Chapter 2, this plan recommends that subsequent phases of bus rapid transit planning and design evaluate proposed station locations to prioritize proximity to higher density land uses and potential redevelopment opportunities to maximize ridership.

For these reasons, the parcels near Robindale Drive are particularly appropriate to consider for increased residential densities.

The plan recommends rezoning two singlefamily residential properties near Robindale Drive, 12607 and 12615 Veirs Mill Road from R-60 to CRN 1.5, C-0.0, R-1.5, H-45.

In addition, the plan supports a future floating zone application for the single-family residential properties that directly abut 12607 and 12615 Veirs Mill Road, bordered by Adrian Street to the north and Robindale Drive to the east, if these property owners initiate assembly for a consolidated redevelopment of higher-density residential uses, such as townhouses, stacked townhouses or a small apartment building. This limited redevelopment promotes investment in the community, provides an improved transition between the high-rise apartments.

Retail and office market study was conducted in Feb 2021 especially looking at Downtown Silver Spring. The study link is here plus a few direct excerpts that are really telling about the market viability of commercial real estate going forward. (Perhaps explains why Council is so hot to use housing to drive the economy.) Below are direct quotes

"Annual Net Absorption, Montgomery County and Washington Metro Area Montgomery County Metropolitan Area 54 square feet per year from 2010 through 2018 prior to Discovery vacating its buildings. In 2018 net absorption reached 253,000 square feet, downtown's highest rate since the mid1990s. **Comparing the scale of potential vacant space to historic absorption rates suggests that it may take many years before new construction is again feasible. At the nine-year average absorption rate, it would be 53 years before the downtown office market returned to a 9.0-percent vacancy level when development once again could** be possible. If the downtown market could achieve and sustain half the absorption pace of 2018, downtown's vacancies could decline from a 2021 total of 1,285,000 square feet to 9.0-percent vacancies."

Retail and office market study Feb 2021 – a few excerpts

THESE ARE THE WORDS DIRECTLY FROM THE STUDY!
https://montgomeryplanning.org/wp-content/uploads/2021/02/Downtown-SS-Mrkt-Final-2-22-2021.pdf

Downtown has 143,300 square feet of vacant retail space, 62 percent of which is located in the Ellsworth District1 due to the impact of COVID-19, retail chain bankruptcies and some renovations and re-tenanting of spaces in the Downtown Silver Spring and Ellsworth Place developments. This represents a vacancy rate of 11.0 percent, significantly higher than the 3- to 5-percent vacancy typical in wellfunctioning retail markets.

Silver Spring is positioned as a cost-effective alternative to downtown Washington, DC. Vacancies in downtown Silver Spring are very high following the relocation of Discovery Communications and years of businesses downsizing their spaces. Even at the high levels of absorption experienced in 2018, it would take five years of steady absorption before vacancies would reach a level that makes the area attractive for new development. The prospects are not promising in the face of COVID-19 and resulting changes in office use. With businesses allowing greater teleworking with employees coming to the office less than five days per week, vacancies are likely to rise and persist for an extended period.

p 37, 39

p 62,63

North Silver Spring The North Silver Spring subarea includes roughly 1.6 million square feet of office space, of which 908,000 square feet are in Class B buildings. Approximately 62 percent of the building stock was constructed in the 1960s (400,000 square feet) and 1970s (accounting for 634,000 square feet) prior to Metro's opening. North Silver Spring has much of the downtown's smaller office building stock with 173,000 square feet of Class C space typically in buildings of less than 10,000 square feet.

This subarea has seen the only new downtown office space constructed in the last 10 years thanks to the presence of United Therapeutics. United Therapeutics is a biotechnology company that started looking for treatments for a rare lung disease and has since expanded into developing a variety of drugs for rare diseases as well as other biotechnology and telemedicine innovations.

Over the last 20 years, the company has acquired Class C buildings and a County-owned garage site along Spring Street to develop four buildings with roughly 200,000 square feet of space, including the Unisphere, downtown's first net-zero building, and a dedicated manufacturing facility most recently. Other major tenants include Social & Scientific Systems, Conflulytics, Synergy Enterprise North Silver Spring's large supply of Class B office space consisting of just under 1.0 million square feet markets a

stable environment for businesses unable to afford the Metroadjacent Class A spaces. Several buildings are outfitted specifically for medical offices

read espec 43, 44

esp 53

Over the next five years, downtown is unlikely to see new office development as the owners of existing buildings compete to fill their vacant spaces and lower rents below those required to finance new construction. If companies decide to downsize or not renew their leases, vacancy rates might increase to 19 percent over the next two years, adding 79,000 square feet of vacant space over the pre-COVID level. Net absorption averaged 12,900 (2,000,000) - 2,000,000 4,000,000 6,000,000 Square Feet of Office Space 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Annual Net Absorption, Montgomery County and Washington Metro Area Montgomery County Metropolitan Area 54 square feet per year from 2010 through 2018 prior to Discovery vacating its buildings. In 2018 net absorption reached 253,000 square feet, downtown's highest rate since the mid1990s. Comparing the scale of potential vacant space to historic absorption rates suggests that it may take many years before new construction is again feasible. At the nine-year average absorption rate, it would be 53 years before the downtown office market returned to a 9.0-percent vacancy level when development once again could be possible. If the downtown market could achieve and sustain half the absorption pace of 2018, downtown's vacancies could decline from a 2021 total of 1,285,000 square feet to 9.0-percent vacancies

Pp 64 65

Overall, the Georgia Avenue / Fenton Village subarea has a 12.7-percent vacancy rate. That ranges from 1.6 percent for Class C space to 14.2 percent for Class B space and 17.8 - 50,000 100,000 150,000 200,000 250,000 300,000 350,000 Prior to 1960s 1960s 1970s 1980s 1990s 2000-2009 2010-Present Square Feet of Space Georgia Ave /Fenton Village Office By Year Built A 55% B 18% C 27% Class of Space 65 percent for Class A space. Rents are $29 to $35 per square foot for Class A space and $22 to $25 per square foot for Class B space. Map 27 – Georgia Avenue / Fenton Village Office S

P 67

Ellsworth District has an office vacancy rate of 16.5 percent with most of the vacant space focused in the Silver Spring Business Center and Lee Plaza buildings with vacancies of 36,300 and 25,900 square feet, respectively. CoStar reports Class A rents of $29.50 to $39.50 per square foot. One 32,500 square-foot buildi

P 70 auto zone (south SS)

Silver Spring has a cluster of service commercial/light industrial businesses in the southern part of Fenton Village that could be vulnerable to redevelopment. The new plan will need to address long-term accommodation and preservation of downtown Silver Spring's service commercial/ light industrial businesses or risk losing their valuable services in support of local residents.

Also of concern to the future of this industrial cluster is the potential expansion of mixeduse development from the north. The CR-3 zoning between Georgia Avenue and Fenton Street south to Sligo Avenue allows residential development that could come into direct contact with the auto repair cluster, setting up likely conflicts over parking, early morning activity, noise and aesthetics. Industrial-type uses typically find it hard to persevere when encroachment brings residents to their area

Notes on housing real estate: "Planning staff conducted interviews with stakeholders involved in real estate and development in Montgomery County and that have experience with the Missing Middle typology." (I think this was done in conjunction with the developing Downtown SS Masterplan) Here's where the rubber seems to meet the road on what developers/real estate people actually want (or don't).

BRIEFING ON ADJACENT COMMUNITIES FOR PLANNING BOARD – EXCERPTS BELOW
https://montgomeryplanningboard.org/wp-content/uploads/2021/02/Item3_SSDAC-Market-Study-Staff-Report-tfk-Img-lh.pdf

Intro to section

“The Market Study on Missing Middle Housing builds upon the 2018 Missing Middle Study and is a precursor to the visioning phase of the Silver Spring Downtown and Adjacent Communities Plan. The Market Study is comprised of analyses of zoning, entitlement, affordability and market feasibility of different Missing Middle typologies, as well as interviews with industry professionals to help understand the barriers and opportunities to building Missing Middle housing in Montgomery County. This Market Study aims to provide necessary background knowledge and to serve as the starting point for the visioning phase of the Silver Spring Downtown and Adjacent Communities Plan and consideration of adding new housing types and forms to the adjacent communities.”

Planning staff conducted interviews with stakeholders involved in real estate and development in Montgomery County and that have experience with the Missing Middle typology. Interviewees included small-scale builders, for-profit residential developers, non-profit residential developers, architects, and brokers. The interviews focused on understanding the potential for Missing Middle to increase the supply of housing in Montgomery County; the changes that would be required to zoning, development standards, and the entitlement process to make Missing Middle an attractive investment; and the relative costs to construct different Missing Middle typologies to increase the supply of housing in Montgomery County. The interviews identified the following findings:

• Stakeholders strongly feel that Missing Middle typologies must be allowed by-right, including a quicker and more predictable subdivision process, or builders will default to constructing profitable, by-right, new custom-homes, a quicker and more predictable subdivision process.

• Market-rate developers are most interested in townhomes (including stacked flats and 2 over 2’s), the typologies that now dominate middle levels of density.

• Affordable housing developers who have an objective that is not solely focused on profits will pursue (limited) amounts of Missing Middle where allowable in order to maximize unit counts.

• Developers believe that the best opportunity currently for Missing Middle is mid-size sites (4- to 5-acres) in residential areas with obsolete uses, like unused schools or churches. Missing

Middle is mid-size sites (4- to 5-acres) in residential areas with obsolete uses, like unused schools or churches.

• Stakeholders stated that attracting private sector interest in the redevelopment of existing habitable single-family homes to other building typologies will require a meaningful increase in density, particularly if the desired units are to be smaller in size to help make them less expensive.

• The existing R60 zoning/development standards do not physically accommodate Missing Middle housing, even a duplex. Lot coverage, height limits, and setbacks were the most common items mentioned in relation to challenges with development standards.

• There is heavy competition for properties in close-in Metro accessible neighborhoods, which makes it harder to acquire and assemble lots. If a house is habitable an end-user who desires to live in that house will most likely out-bid a builder interested in redeveloping the property.

• The most likely builders of Missing Middle types of housing are small firms that are currently working in the teardown, custom home market. Missing Middle products would need to be proven to be economical and scalable to be built with some regularity.

• While there are significant hurdles to building this product, taking no action will depress the supply of homes, resulting in housing continuing to get more and more expensive. With increased demand and limited supply, over time many single-family homes will be bought and through the tear-down process be replaced by larger and more expensive structures. Even small, modest numbers of duplexes, triplexes, and small apartment buildings help combat teardowns and rebuilds.

P 4

Entitlement Analysis

Missing Middle housing typologies could not be built in the single-family zoning under the current standards. While many of the single-family zones in Montgomery County do allow for some types of Missing Middle housing, namely duplexes and townhouses, there are additional requirements that functionally prevent redevelopment of existing properties into Missing Middle in these zones

https://www.jchs.harvard.edu/blog/are-millennials-so-different-generations-them

ARE MILLENNIALS SO DIFFERENT FROM THE GENERATIONS BEFORE THEM?

Tuesday, May 4, 2021 | Hyojung Lee

1. **Marital status:** As is well known, millennials are less likely to get married than earlier generations, and tend to marry later if they do. The share of people ever married (including currently and formerly married) when they were 20 years old was about 40 percent among early baby boomers born in 1950, but was only 7.2 percent among late

millennials born in 1995. However, this is not a peculiar trait among millennials but a long-term trend: compared to earlier generations, the younger birth cohort has always had lower “ever-married” share at any ages. The trajectory patterns suggest that there have been not only delays but also declines in marriage over the life course among younger generations.

2. **Homeownership:** While millennials have been less likely to become homeowners than previous generations at the same age, the gaps between them are narrowing. Indeed, the homeownership rate at age 30 among the early millennials was about 41 percent, while it was 50.5 percent among Gen Xers and even higher among the early boomers (57.8 percent). However, as indicated in my co-authored paper, millennial homeownership has been rapidly catching up in recent years, narrowing the early millennial-Gen X gap from 9.5 percentage points at the age of 30 to 4.8 percentage points at the age of 34.
3. **Average Personal Income:** Despite the popular media portrayal of struggling millennials, their average personal income has surpassed that of earlier generations as they age into their 30s. Since average income is a function of wage and employment rates, women have taken an important role in these changes as they’ve had a large increase in educational attainment and labor force participation. Also, millennials’ higher education level could explain the rapid income growth during the recent economic boom.
4. **Multifamily Residence Share:** The millennial generation is living in multifamily housing far more frequently than boomers did, but they are following their parents’ migration into single-family homes. The share of people living in multifamily buildings with five or more units tends to peak around the mid-20s and then declines rapidly as people transition into adulthood and move into single-family homes in their late 20s and early 30s. Millennials are not forever young, and it’s time for many to admit that (sadly, I am one of them).

Given that multifamily rental units are predominantly built in urban areas, the changes in millennial homeownership and multifamily residence might hint where millennials are heading. Indeed, another finding of this paper was that millennials started to move out of urban centers to suburbs. However, while some might suspect this would result in urban decline, or even urban exodus, my next blog post will explain why the demand for urban living is not going anywhere.

Source: Authors’ analysis based on the 1962–2019 Integrated Public Use Microdata Series, Current Population Survey: Version 7.0.

Note: Early/Late B = Early/Late Boomers; Early/Late M = Early/Late Millennials. All figures are computed using three-year moving averages to avoid yearly fluctuations. All dollars are adjusted to 2019 dollars.

https://montgomeryplanning.org/wp-content/uploads/2021/03/Missing-Middle-Market-Study_03-04-2021_Staff-Report.pdf