Light Touch Density

A SERIES OF POLICY BRIEFS ON ZONING, LAND USE, AND A SOLUTION TO HELP ALLEVIATE THE NATION'S HOUSING SHORTAGE

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A Series of Policy Briefs on Zoning, Land Use, and a Solution to Help Alleviate the Nation's Housing Shortage

AEI Housing Center

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Source for cover photo: Most recent zoning map from each municipality's master plan. Map may be found on p. 56.

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Introduction: A Series of Policy Briefs on Zoning, Land Use, and the Nation's Housing Shortage

In this series of policy briefs, we provide an overview of current challenges in the U.S. housing market, where constrained supply and high prices are burdening household budgets and preventing people from living where their best job opportunities are located. The next five briefs provide an overview of the land use restrictions that limit housing construction and opportunities for reform based on case studies of places that have taken steps to reduce these barriers.

Chapter 1 covers important events in the history of land use regulations in the United States with a focus on the origins of single-family zoning and land use controls under the states' police power. We show that starting in the 1920s and continuing into the 1950s, the federal government played an important role in encouraging localities across the country to adopt low-density, single-family zoning policies that still govern housing construction in much of the U.S. today. We also show how beginning in the 1950s, states and local zoning jurisdictions began enacting land use rules that went beyond setting fixed standards for land use and development density. New rules gave substantial approval power and discretion to policymakers and created a platform for interest groups to block growth.

We define light-touch density (LTD) as housing including detached single-family houses with accessory dwelling units (ADUs), small-lot single-family houses, attached single-family houses, and duplexes, triplexes, and fourplexes. We show that the widespread adoption of zoning and other land use restrictions across the country has corresponded with a declining share of LTD as a portion of the total housing stock.

In Chapter 2, we provide a summary of the evidence of the relationship between local land use restrictions and high housing costs. Local policymakers often face incentives to restrict housing construction, resulting in regional affordability problems and nationwide reductions in economic output and income mobility. We show that housing has become less affordable over time, and that supply restrictions in some of the most productive regions of the country are preventing people from living in the regions where their best job opportunities may be located.

Chapter 3 delves into the benefits of permitting LTD construction based on examples of states and localities that have done so. Relative to greenfield development at the outskirts of developed areas, LTD infill development generally allows people to live closer to job centers and requires less new infrastructure. Based on recent reforms to permit LTD construction, we argue that LTD may be a politically feasible approach to reducing policy barriers to housing construction that cause affordability problems. In recent years, cities and states, including Oregon, California, and Minneapolis have passed reforms that return some development rights to property owners replacing single-family zoning with rules that permit some forms of LTD.

We cover ADUs in Chapter 4. In recent years, cities and states, particularly on the West Coast have passed reforms that make it easier for homeowners to add ADUs—like garage apartments, backyard cottages, and basement apartments—to their properties. We show that ordinances often include many barriers to ADU construction that all need to be removed to facilitate widespread construction. Under the right conditions, ADUs can provide a relatively low-cost rental option, but ADU construction alone is not enough to solve the housing affordability problems in high-cost regions.

Finally, in Chapter 5, we provide a case study of two-family zoning in Bergen County, NJ, with a focus on the borough of Palisades Park. We show that in localities that permit LTD construction, gradual infill redevelopment leads to an increase in housing supply and contributes to regional affordability relative to localities that maintain single-family zoning instead.

Chapter 1: Talking Points - A Short History of Zoning in the U.S.

Single-family zoning is restricting housing supply in large swathes of the U.S. Despite the shortage of affordable housing in the US, particularly in and around urban centers, American cities restrict the majority of the land where they permit residential development to one-unit, detached housing. Over the past several decades, single-family attached housing along with two- to four-unit housing structures have declined as a share of the country's total housing stock as zoning has made these denser types of housing more difficult to build.

In 1916, New York City became the first U.S. municipality to adopt a zoning ordinance, with other localities following shortly behind. The ordinance created separate zones across the city for different types of land uses. While on paper the rules separated different types of land uses, proponents of the ordinance also advocated for segregating classes of people. One of the ordinance's purposes was to separate garment factories from department stores in order to discourage largely immigrant factory workers from spending time near high-end retail.

Since 1921, the federal government has been an important force behind the widespread adoption of zoning by municipalities, encouraging single-family zoning in particular. This effort was initially spearheaded by the U.S. Department of Commerce, its Division of Building and Housing, and the department's long-time cabinet secretary and later U.S. president, Herbert Hoover. Scholarly advocates for zoning in the U.S. promoted it as a tool for segregating real estate by price point directly and segregating it by race indirectly.

In 1926, a pivotal Supreme Court decision on *The Village of Euclid v. Ambler Realty Co*. gave the practice of zoning constitutional sanction. This decision, along with the Supreme Court ruling on *Zahn v. Board of Public Works* the following year, created the legal foundation for zoning districts that limit development to one-unit detached dwellings, the zoning designation that covers the majority of residential land in most U.S. localities.

Beginning in 1934 the Federal Housing Administration began to play a pivotal role in using housing finance and zoning to segregate residential development. The lasting impact of the Commerce Department's and Federal Housing Administration's actions is clear; today both land-use restrictions and housing finance policy bias construction toward detached single-family housing. In later chapters, we examine in more detail where the nation is today as a result of overly-restrictive zoning policies and the potential for reforming detached one-unit zoning to permit small-scale infill redevelopment could improve housing supply and affordability.

Chapter 1: A Short History of Zoning in the U.S.

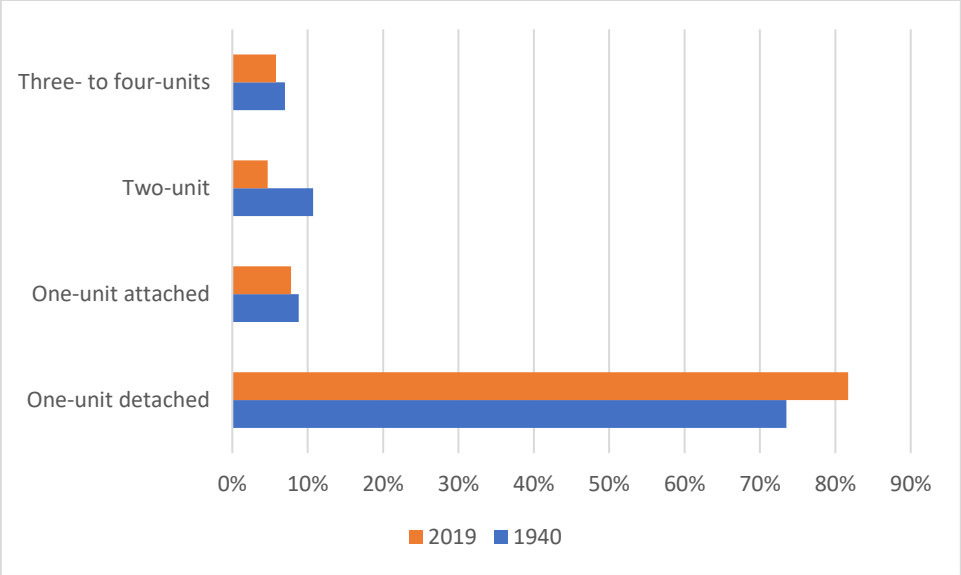
Single-family zoning, minimum lot size requirements, other land use restrictions, and an extended and complex approval processes are restricting housing supply and driving up its cost in large swathes of the U.S. Despite serious housing affordability challenges in many regions, particularly in and around highly productive urban centers, it is currently "illegal on 75 percent of the residential land in many American cities to build anything other than a detached single-family home."[1] In this brief we provide a short overview of land use policy and the federal government's role in encouraging localities across the country to adopt low-density, one-unit zoning. By the 1950s, local policymakers implemented discretionary approval processes in addition to the zoning rules that proliferated in the early 20th century. Government bodies and neighborhood interest groups increasingly began determining what could be built on a site-by-site basis with a lengthy approval process.

Prior to the 1920s, development in the U.S. was not generally restrained by zoning. Until that point, different types of residential and commercial development were interspersed. In this series, our focus is on what we call light-touch density (LTD), including single-family houses with accessory dwelling units, small lot detached single-family houses, attached single-family houses, and duplexes, triplexes, and fourplexes. Prior to zoning, the full spectrum of LTD was much more commonly built adjacent to larger-lot single-family houses. The varied residential stock created opportunities for people of different income levels to live in the same neighborhoods.

As seen in the charts below, the share of attached single-family houses and two-, three-, and four-family homes out of the total housing stock has shrunk over time, down from 26.5% in 1940 (the earliest year for which data comparable to 2019 is available) to 18.3% in 2019. Two-unit dwellings have been impacted the most. In 1940 they comprised 10.7% of the stock of 1-4 housing units. By 2019, their share dropped by more than half to 4.7%.

[1]Emily Badger, "Cities Start to Question an American Ideal: A House with a Yard on Every Lot," *The New York Times,* June 18, 2019, https://www.nytimes.com/interactive/2019/06/18/upshot/cities-across-america-question-single-family-zoning.html.

Chart 1: Share of 1-4 Housing Units by Type: 1940 vs 2019



Source: U.S. Census Bureau, 1940 Decennial Census and 2019 American Community Survey. 1940 is the earliest date for which there are consistent definitions for comparison purposes.

In 1916, New York City became the first U.S. municipality to adopt a zoning ordinance. The Fifth Avenue Commission was one of the driving forces that encouraged local policymakers to implement zoning. The Commission was made up primarily of New York City department store owners who were frustrated by the development of garment factories—and their accompanying immigrant workers—in the neighborhoods that they wanted to make exclusive domains of their wealthy shoppers.[2] The zoning ordinance created separate zones for different land uses, segregating workshops from department stores. It served as a backdoor way of preventing low-income immigrant workers from spending their time in and around commission members' expensive stores. **From its initial use in the United States, zoning has been as much a tool for segregating people as for separating land uses.**

During the Progressive Era, urban reformers across the country began implementing big changes to land use policy, promoting rigid separation of land uses, including separating detached single-family houses from all other types of denser housing. The extent to which U.S. zoning segregates land uses, including varying intensities of residential development from each other, makes it an outlier among developed countries.[3]

New York City's attempt to segregate people indirectly by separating land uses followed attempts to explicitly use zoning to enforce racial segregation elsewhere in the United States. In the early 20th century, localities from Baltimore to Los Angeles limited the rights of individuals to own

[2] Seymour Toll, *Zoned American* (New York: Grossman, 1969).
[3] Sonia Hirt, *Zoned in the USA: The Origins and Implications of American Land-Use Regulation* (Ithaca and London: Cornell, 2014).

property or do business in certain neighborhoods based on their race. In the 1917 case *Buchanan v. Warley*, the Supreme Court determined that these local rules violated the Fourteenth Amendment's due process protections.

Nonetheless, some localities continued enforcing these unconstitutional rules.[4] For decades after the *Buchanan v. Warley* decision, state courts enforced racial deed restrictions that prevented African Americans and, in some cases, other racial and ethnic groups from purchasing restricted properties. In addition to these efforts to maintain unconstitutional direct segregation of real estate, localities across the country began following New York City's model of segregating people indirectly by segregating land uses directly.

In the first comprehensive book on zoning and planning in the United States published in 1922, lawyer Frank Williams argued that the "invasion of the inferior [races] produces more or less discomfort and disorder, and has a distinct tendency to lower property values. As a result, zoning along race lines has been attempted in various parts of our Southern States, where [N]egroes are most numerous. Such zoning in this country, however, is illegal, and has never been attempted as a part of zoning of any other country."[5] Williams advocated for zoning districts and land use restrictions that could be used to separate higher-cost neighborhoods, consisting of single-family detached dwellings, from lower-cost neighborhoods with lots of rental units. Because the legacy of slavery and discrimination meant that African Americans had much lower incomes and wealth than white Americans, economic zoning further entrenched racial segregation from the time these rules were implemented.

Williams published his book on the heels of the federal government's first efforts to encourage the state and local adoption of standardized zoning ordinances that would achieve his goal of segregating land uses economically directly and segregating people by race indirectly. Then Secretary of Commerce Herbert Hoover assembled what he considered to be the country's best and brightest experts in zoning and planning into the Advisory Committee on Zoning in 1921.[6] In 1922 the Commerce Department published a Zoning Primer, stating:

> For several years there had been developing a feeling that some agency of the Federal government should interest itself in building and housing. The Congress of the United States made an appropriation for such activities for the year 1921-1922. The department was to "collect and disseminate such scientific, practical, and statistical information as may

[4] For a history of U.S. government policies that enforced *de jure* racial segregation, see Richard Rothstein, *The Color of Law: A Forgotten History of How Our Government Segregated America* (New York and London: Liveright, 2017).
[5] Frank Backus Williams, *The Law of City Planning and Zonin*g (New York: MacMillan, 1922), 200. This compendium runs over 700 pages and was the most authoritative book on planning and zoning at the time.
[6] Department of Commerce, *A Zoning Primer by the Advisory Committee on Zoning* (Washington: Government Printing Office, 1922).

> be procured, showing or tending to show approved methods in building, planning, and construction."[7]

That same year, the Commerce Department published its first Standard State Zoning Enabling Act, which state legislators could adopt as a means of granting zoning authority to their localities.[8] The Primer and Standard State Zoning Enabling Act were a how-to guide for implementing district-based zoning. Both encouraged state and local policymakers to adopt zoning that established detached single-family zoning districts that excluded other, more affordable structure types including attached single-family development and two- to four-unit structures along with larger apartment buildings.

The 1922 primer focused on the perceived evils of residential density:

> A zoning law, if enacted in time, prevents an apartment house from becoming a giant airless hive, housing human beings like crowded bees. It provides that buildings may not be so high and so close that men and women must work in rooms never freshened by sunshine or lighted from the open sky.[9]

It spoke favorably of a 1920 Ohio court case which held that "[o]ne and two-family houses were less subject to noise, litter, danger of contagion, and fire risk than multi-family houses, and that they could be placed in different districts under the police power."[10] Similarly, the Commerce Department's Standard State Zoning Enabling Act noted that the grant of zoning power under the state's police power is "for the purpose of promoting health, safety, morals, or the general welfare." But the Act went beyond addressing health and safety or nuisance concerns. It contradicted the Primer's favorable view of placing one and two-family houses in the same district by explicitly stating the ultimate, desired result: "With proper restrictions, [limiting population density] will make possible the creation of one-family residence districts."[11] Thus, the goal right from the start was to create zones where all structure types but one-family homes were outlawed and two-plus family structures were relegated to other zones.

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[7] Advisory Committee on Zoning of the U.S. Department of Commerce, Zoning Primer, 1922. Committee members included the president of the National Association of Real Estate Boards (now National Association of Realtors), two representatives from the U.S. Chamber of Commerce, president of The American Civic Association, president of The American Society of Landscape Architects (and past president of the American City Planning Institute), secretary and director of The National Housing Association, counsel of the Zoning Committee of New York, and a representative of the National Conference on City Planning and National Municipal League (and past president of the American City Planning Institute). The president of The American Society of Landscape Architects was Frederick Law Olmsted, Jr., son of famed landscape architect Frederick Law Olmsted, Sr. Three members of the Committee were involved in promoting and crafting New York City's first zoning ordinance.

[8] Advisory Committee on Zoning of the U.S. Department of Commerce, *A Standard State Zoning Enabling Act Under Which Municipalities Can Adopt Zoning Regulations,* 1922.

[9] Ibid.

[10] U.S. Department of Commerce, *A Zoning Primer*, 1922.

[11] Advisory Committee on Zoning of the U.S. Department of Commerce, *A Standard State Zoning Enabling Act*, 1922.

The enabling act established the legal basis for one-family [detached] residence districts, and it went on to argue: the "essence of zoning" is the ability to have "regulations [on the use of buildings and structures] in one district … differ from this in other districts."[12] These regulations would include limitations on minimum lot size, building size, front, back, and side setbacks, and maximum building height and number of stories; all of which tended to drive up the cost of such homes.

Zoning proponents in the early 1920s made clear that land use restrictions could be used to make newly built houses too expensive for African Americans and recent immigrants from Southern and Eastern Europe. These households would be segregated into other zones consisting of multi-unit structures and older, less expensive single-family detached houses in neighborhoods with mixed housing typologies.

The Primer and Standard State Zoning Enabling Act ushered in a rapid adoption of zoning by localities across the country. As of September 1921, only 48 cities and towns, with a total of fewer than 11,000,000 inhabitants, had adopted zoning ordinances. By 1931, a total of 46,000,000 U.S. inhabitants lived under zoning, comprising 67% of the urban U.S. population.[13] In his book on the early days of American zoning, historian Seymour Toll argued "[that] such a swift spread of law could occur despite the intricate processes of many state legislatures and hundreds of local governments is at least statistically extraordinary."[14] As local zoning ordinances spread rapidly during the 1920s, most municipalities shifted to dividing residential districts into sub-districts; one district limited to single-unit detached housing, separated from all other, more affordable, types of housing.

Over time, supporters of zoning openly described this economic segregation as a means of achieving racial segregation. Stanley McMichael and Robert Bingham, leading observers of real estate markets and the growth of cites, made only two observations about racial and national groupings in the 1923 edition of their treatise on zoning:

> Zoning by race or color is invalid under the United States Constitution. [15]
>
> […]
>
> In some allotments, attempts have been made to prevent [by private deed restrictions] the sales of lots to so-called undesirable people. Courts, however, have refused to enforce restrictions of this nature.[16]

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[12] Ibid.
[13] Advisory Committee on Zoning of the U.S. Department of Commerce, *The Preparation of Zoning Ordinances. A Guide for Municipal Officials and Others in the Arrangement of Provisions of Zoning Regulations*, 1931.
[14] Toll, *Zoned American,* 193.
[15] Stanley L. McMichael and Robert Fry Bingham, *City Growth and Values*, (Cleveland: Stanley McMichael Publishing Organization, 1923), 326.
[16] Ibid., 200.

In a 1928 edition, McMichael and Bingham added a new chapter, entitled "Racial and National Settlements and Groupings":

> Immigrants entering the country in such large numbers, many being unable to speak English, caused the growth of many racial and national settlements in American cities. While settlements of foreign-born residents or colored people sometimes have the effect of making cities grow rapidly, it is significant that in some instances, notably where Negroes congregate, land values in the locality occupied by them are depressed…. [While welfare workers often disapprove of the geographic congregation of foreign born into settlements,] if the population should spread throughout a city, it might have a decidedly depressing influence over a wide range of residential territory.[17]
>
> […]
>
> Attempts to pass laws segregating the colored people to a given district have not been successful from a legal standpoint, on account of the fourteenth amendment to the constitution of the United States.[18]

They also expanded the title "Zoning" in the first edition to one titled "Zoning and Private Restrictions." It echoed Williams' language portraying African Americans as "invaders":

> The steady flow of the Negro into the middle and northern states and cities has made the racial problem national in importance. Neighborhoods populated by white persons have been invaded by colored families, and often aristocratic residential districts have suffered tremendous lessening of property values because of the appearance of a Negro resident.[19]

I**n 1926, a pivotal Supreme Court decision, The Village of Euclid v. Ambler Realty Co., gave the federal-led zoning wave an important legal victory.** Ambler Realty sued the village of Euclid, OH, arguing that the town's zoning ordinance on 68 acres of Ambler's land that limited its use, in part through one-unit zoning, had reduced the value of its property without compensation.[20] However the Supreme Court ruled on the side of Euclid, finding that local land use restrictions, including single-family zoning, were a valid use of police powers. One initial justification for zoning was that it protected property values by excluding specific nuisances in residential areas— "an odious factory invading a high-class residential district, or a ubiquitous grocery store appearing on a corner opposite an aristocratic residence."[21] The Supreme Court echoed this argument, describing apartments as "very often … a mere parasite" and "very near to being nuisances." The lower

[17] Ibid., 340-349.
[18] Ibid., 200.
[19] Ibid., 370.
[20] Village of Euclid v. Ambler Realty Co., 272 U.S. 365, 1926.
[21] Ernest McKinley Fisher*, Principles of Real Estate Practice* (New York: Macmillan, 1923), 216-219.

court's trial record noted that the commission that drafted Euclid's zoning ordinance relied on "the primer that is issued by Mr. Hoover's department in Washington."[22]

In the following year, the Supreme Court granted zoning another legal victory in *Berry v. Houghton,* finding that Minneapolis could exclude a four-unit apartment house in a one-unit residential district.[23] Recall that the Commerce Department's very first Standard State Zoning Enabling Act published in 1922 set as a goal "the creation of one-family residential [zoning] districts."[24] With these two decisions, the U.S. Supreme Court validated the constitutionality of this objective.

During the New Deal, the federal government transitioned to encouraging racial segregation more directly. In 1933 the Roosevelt administration established the Home Owners' Loan Corporation (HOLC) to provide a refinancing option to avoid foreclosure for homeowners who had fallen behind on their mortgage payments. With the stated intention of reducing taxpayers' risk from the program, the HOLC created maps indicating where it would and not would purchase loans, preventing loan purchases in "redlined" areas that were either integrated or exclusively home to African Americans.[25]

In 1934 Congress and the Roosevelt administration established the Federal Housing Administration (FHA) to expand access to mortgage credit. The FHA insured private mortgages, reducing risk to lenders and homebuilders and also expanding access to credit by encouraging lending with longer terms, lower interest rates, and lower down payment requirements. But the FHA insured loans primarily for white Americans, discriminating against African Americans and other minorities. As the FHA made it easier for white homebuyers to purchase single-family houses, it subsidized their decisions to move out of denser neighborhoods that were more integrated in terms of housing typologies, and in some cases in terms of race as well.

The FHA continued the HOLC's redlining practice. The agency created underwriting manuals for participating lenders, limiting federal underwriting to only those "areas surrounding the location to determine whether or not incompatible racial and social groups are present, to the end that an intelligent prediction may be made regarding the possibility or probability of the location being invaded by such groups." [26] The FHA made the tie to and purpose of zoning explicit:

> The best artificial means of providing protection from adverse influences is through the medium of appropriate and well drawn zoning ordinances. If the framers of the zoning

[22] Toll, *Zoned American*, 216.
[23] Zahn v. Board of Public Works, 274 U.S. 325 (1927).
[24] U.S. Department of Commerce, *Standard State Zoning Enabling Act,* 1922.
[25] Rothstein, *Color of Law*, 64.
[26] FHA Underwriting Manual, April 1, 1936, Part II, Section 2: Rating of Location, Section 233. The forward to City Growth Essentials was written by Ernest McKinley Fisher, former assistant executive secretary to the National Association of Real Estate Boards (whose president was appointed to the Advisory Committee on Zoning in 1921) and later the first chief economist at the Federal Housing Administration in 1934, where he was a key author of the FHA Underwriting Manual.

> ordinance have used excellent judgment in establishing areas, and if the provisions of the ordinance itself have been well worded and drawn from a thorough knowledge of conditions existing in the city and those which will most probably exist in the future, and if the zoning ordinance receives the backing of public approval, an excellent basis for protection against adverse influences exists.[27]

The FHA's underwriting standards were explicit and detailed:

- "Areas in which development has been accomplished in accordance with accepted principles of good housing are quite apt to be much more stable than those areas where little thought or attention has been paid to … controlled similarity of structures."[28]
- "The [FHA] Valuator should investigate areas surrounding the location to determine whether or not incompatible racial and social groups are present, to that end an intelligent prediction may be made regarding the possibility or probability of the locations being invaded by such groups….A change in social or racial occupancy leads to instability and reduction in values….Once the character of a neighborhood has been established it is usually impossible to induce a higher social class than those already in the neighborhood to purchase and occupy properties in its various locations."[29]
- "Of prime consideration to the [FHA] Valuator is the presence or lack of homogeneity regarding types of dwellings and classes of people living in the neighborhood."[30]
- "[I]f the children of people living [in a pleasant area] are compelled to attend school where the majority or a goodly number of the pupils represent a far lower level of society or an incompatible racial element, the neighborhood will prove far less stable and desirable than if this condition did not exist."[31]
- "Recommended [deed] restrictions include: prohibition of the occupancy of properties except by the race for which they were intended."[32]
- "The [new] development which bases its sales program solely upon lower-cost land in order to compensate for its inaccessibility to community and cultural centers, especially when the sales appeal to a low-income group, will seldom prove successful."[33]

From 1935, the FHA was a significant force in real estate finance, and its underwriting standards were widely adopted, cementing existing patterns of segregation in place by encouraging investment in exclusively white neighborhoods and discouraging it in predominantly African American or integrated neighborhoods as a result.[34]

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[27] Ibid. Section 227.
[28] Ibid. Section 210.
[29] Ibid. Section 210.
[30] Ibid. Section 252.
[31] Ibid. Section 266.
[32] Ibid. Section 284.
[33] Ibid. Section 289.
[34] Rothstein, *The Color of Law*, 77.

In addition to creating new barriers to racial integration, the FHA's practices built on the Hoover administration's efforts to promote low-density, single-family zoning across U.S. localities. By 1940, 80% of the subdivisions built to FHA underwriting standards were exclusively single-family construction, at an average density of 3.26 houses per acre.[35] Developments in localities from Los Angeles to upstate New York were denied FHA financing because their zoning ordinances did not confine development to low-density single-family strictly enough.[36]

While the zoning laws implemented under the model of the Commerce Department's Enabling Act limited development rights substantially, owners generally still retained the right to build what was legally permitted within a zone with by-right approval. However, by the 1950s some state and local policymakers substantially eroded this principal as they adopted increasingly discretionary approval processes. They granted increasing power to neighborhood groups that often sought to limit development.

Policymakers in San Francisco and other California localities were early adopters in the curtailment of by-right approval and the birth of discretionary review. In 1954 the San Francisco City Attorney determined that "the city had 'supreme control' to issue building permits and could use its own discretion to decide whether projects were compliant."[37] Following this decision, city policymakers adopted a policy of holding discretionary review hearings for many proposed developments, providing a platform for anyone with the resources to attend these hearings to delay or prevent building permits.

The move to discretionary approval was not limited to urban jurisdictions. Critics of suburbia as it developed after World War II played an important role in the evolution of land use restrictions to becoming a growth control regime. As a 2011 report by the California Department of Transportation explains:

> The postwar suburban boom fascinated but also appalled many urban theorists, reform advocates, planners, architects, and others. Both the landscape and the society of suburbia have been critiqued, and often condemned, by a succession of commentators, beginning in the immediate postwar years and continuing to the present. The critics have reacted to the scale of postwar tract construction, the rapid loss of farmland and other open space, the lack of architectural variety, and the perceived (or imagined) social ills of the new suburbs. Some

[35] Andrew H. Whittemore, "How the Federal Government Zoned America: The Federal Housing Administration and Zoning," *Journal of Urban History* 39, no. 4, 2012.
[36] Ibid. This is about 13,000 square feet per one-unit detached structure. This amount of land could comfortably accommodate four to 20 LTD units.
[37] Hunter Oatman-Stanford, "Demolishing the California Dream: How San Francisco Planned Its Own Housing Crisis," Collectors Weekly, https://www.collectorsweekly.com/articles/demolishing-the-california-dream/, September 21, 2018.

predicted that the new tracts of inexpensive houses built shortly after World War II would become the slums of the future.[38]

Zoning and attendant land use regulations had changed from a means to regulate development types and costs to a means to limit growth of any sort, with California leading the way by enacting growth control regulations beginning in the 1960s.[39] Notwithstanding this shift, the use of zoning to regulate development types continued. For example, San Francisco's Residential Rezoning of 1978 eliminated about 180,000 legally buildable housing units.[40] The result was entirely foreseeable. Housing in California went from being about as affordable as the rest of the United States to the least affordable.[41]

The legacy of the zoning and land use regime encouraged by the Department of Commerce and expanded by the FHA continues today in the form of thousands of state and local zoning and land use codes, the vast majority of which continue to reserve large areas zoned exclusively for single-unit homes. These codes increased the cost of building housing in a successful effort to price racial and ethnic groups out of newly built neighborhoods. These same policies were designed to keep multifamily housing in zones away from neighborhoods consisting of one-unit, detached structures.

Over the past century, policymakers have erected higher and higher barriers to housing construction, particularly in the country's highest-cost regions. But recently some states and localities have adopted reforms intended to make more, lower-cost housing construction feasible. In the next brief, we will examine housing supply and housing affordability under the constraints of historical and current zoning in more detail. Later briefs cover how reforming low-density single-family zoning to permit LTD can partially mend the wounds caused by more than a century of federal and local policies intended to segregate neighborhoods and localities by income and race.

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[38] California Department of Transportation, "Tract Housing in California, 1945-1973: A Context for National Register Evaluation," 2011, https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/ser/tract-housing-in-ca-1945-1973-a11y.pdf.

[39] Karen M. Stray-Gundersen, "Regulatory Responses to the Condominium Conversion Crisis," *Washington University Law Review*, January 1981. California's state laws that limit and delay housing construction include The California Land Conservation Act of 1965, the California Environmental Quality Act of 1970, and the California Coastal Control Act and Commission (1972 and 1976).

[40] Karl Beite, "Did Overzealous Activists Destroy Housing Affordability in San Francisco?" https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.912.2519&rep=rep1&type=pdf.

[41] William Fischel, "An Economic History of Zoning and a Cure for its Exclusionary Effects," *Urban Studies* 41, no. 2, February 2004.

Chapter 2: Talking Points - The Current State of the Housing Market

Today, the U.S. housing market faces tight supply and high prices, which particularly affect low-income and minority households. These problems are due in large part to local zoning and other land use regulations that limit housing construction and drive up the cost of new and existing housing stock. The relationship between restrictions on housing construction and house prices is born out in both nationwide empirical evidence and case studies. The regions where zoning and other land use regulations are most binding are also those with the most severe affordability challenges.

The consequences of housing supply constraints and high prices fall hardest on low- and moderate-income earners in high-cost regions, and the problem is becoming worse over time. AEI's Carpenter Index—a tool which quantifies affordability problems by asking the question: "Can the people who build homes afford to buy them?"—captures the impact of these trends on affordability. While the results vary among the top 100 ranked metros, over the last seven years there has been a clear downward trend in the Carpenter Index due in part to increasingly binding local land use constraints.

In spite of the severe problems that housing supply constraints present, powerful political forces support the *status quo*. Homeowners often support existing housing supply constraints. These regulations may inflate their property values, homeowners may oppose any change due to risk aversion, or they don't want to live in a more crowded neighborhood. Homeowners' preferences tend to be reflected in local-level policy decisions.

Housing supply constraints and affordability problems are most severe in parts of the country where some of the best economic opportunities are located. Zoning is particularly constraining—and housing costs are particularly high—in the country's most productive regions. By limiting the number of people who can move into these regions, local restrictions on housing construction reduce wages, economic output and innovation. Further, high housing costs lead individuals with fewer financial resources to live in locations where housing is relatively affordable rather than where their highest paying job opportunity may be. In turn, these rules have reduced income mobility.

In this series, we focus on the potential for incremental increases to allowable density as part of a solution to the problems that current restrictions on housing construction are causing. These reforms, which we call light-touch density (LTD) have proven to be a path toward increased infill housing construction in some locations. Additionally, policymakers in several states and localities have adopted LTD reforms in recent years, demonstrating that this may be a politically feasible way to increase homebuilding opportunities and improve housing affordability.

Chapter 2: The Current State of the Housing Market

Today, much of the U.S. housing market faces tight supply and high prices, which particularly affect low-income and minority households. Restrictive zoning rules that limit housing supply and drive up the cost of new housing construction are a major cause of these problems.

In the last brief, we reviewed how the U.S. federal government played a pivotal role in pushing the adoption of zoning districts limited to single-family detached units across the U.S. in the first half of the 20th century. Then, in the mid-20th century, some states and localities began enacting land use rules that went beyond fixed standards for building sizes and uses. They implemented new development approval processes that give substantial discretion to elected officials and administrators. They also created opportunities for residents and interest groups to obstruct development by voicing opposition at meetings or requesting additional layers of review. In this brief, we will outline the problems the housing market faces today as a result of local land use restrictions that the Commerce Department and Federal Housing Administration (FHA) encouraged, as well as the complex permit approval processes that emerged later.

Legal scholar and economist Ernest McKinley Fisher describes real estate markets as follows:

> The basis of value in real estate is the same as that in any other valuable thing. The value of real estate arises from its desirability and its scarcity---another way of saying that it depends on the demand and the supply.[42]

Zoning rules prevent housing markets from responding to high land values with dense development and in turn have caused per-unit housing prices to rise precipitously in some U.S. regions where demand for housing is high.

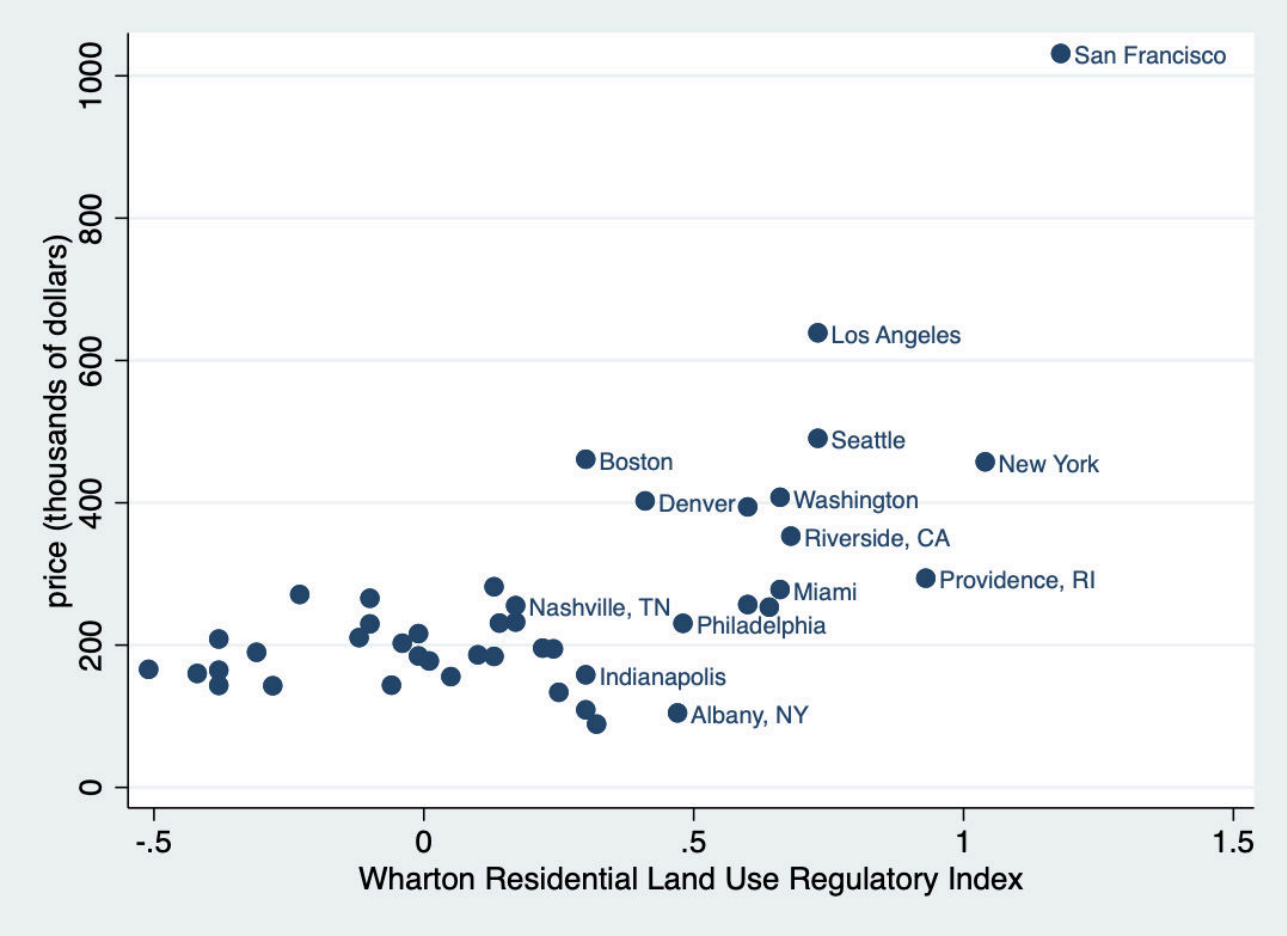
Housing supply can increase either by building new structures on undeveloped land, i.e. greenfield development, usually on the outskirts of an existing metropolitan area, or by building new structures within developed areas that can house more people, i.e. infill development. Greenfield development requires more new infrastructure investment, longer commutes for residents, and more environmental damage than infill development. In some regions, geographic barriers limit greenfield development as an option for increased housing supply. In others, we see extensive greenfield development relative to infill development because it can be faster and politically easier relative to new construction in a built-out area.

A robust literature on the relationship between land use restrictions and housing supply provides evidence that local land use policies limit housing construction and, in turn, reduce housing affordability.[43] Chart 1 depicts the relationship between one measure of local regulatory

[42] Ernest McKinley Fisher, *Principles of Real Estate Practice* (New York: Macmillan, 1923), 216-219.
[43] Joseph Gyourko and Raven Molloy, *Regulation and Housing Supply*, *in* Handbook of Regional and Urban Economics, 1291-2. (Gilles Duranton, J. Vernon Henderson, William C. Strange, ed., vol. 5 2015).

constraints on housing construction, the Wharton Residential Land Use Regulation Index, and median house prices across metropolitan areas. There is a positive correlation between this measure of housing supply constraints and prices with San Francisco, an outlier on prices, having the highest score on the index.

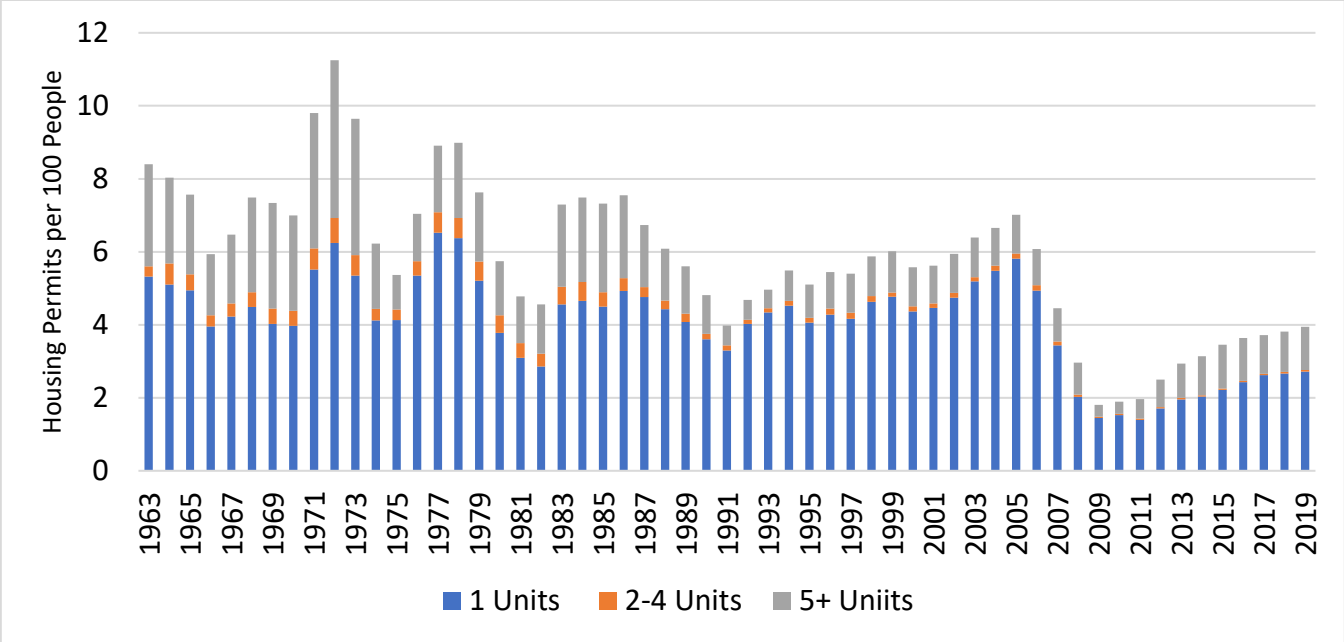
Chart 1: Wharton Residential Land Use Regulation Index and House Prices



Sources: Index values are from Joseph Gyourko, Jonathan Hartley, and Jacob Krimmel, "The Local Residential Land Use Regulatory Environment across U.S. Housing Markets: Evidence from a New Wharton Index" (NBER Working Paper No. 26573, National Bureau of Economic Research, Cambridge, MA, December 2019); median house price data are from "Housing Data," Zillow Research, ZHVI All Homes Time Series ($) (data set), accessed February 24, 2020, https://www.zillow.com/research/data/.

Supply, particularly of smaller, lower-cost units, has been tightening for decades in some regions, and nationally since 2012. Chart 2 below shows housing starts for one, two- to four-, and five or more unit projects. Throughout the economic recovery following the 2008 financial crisis, per capita housing starts never reached the levels of the 1970s, 1980s, or 1990s. Two- to four-unit construction has seen a particularly sharp collapse over time.

Chart 2: Housing Starts for One, Two- to Four-, and Five or More Unit Projects per 100 People



Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development, New Privately-Owned Housing Units Started: Single-Family Units, New Privately-Owned Housing Units Started: Units in Buildings with 2-4 Units, and New Privately-Owned Housing Units Started: Units in Buildings with 5 Units or More, retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org, May 26, 2021.

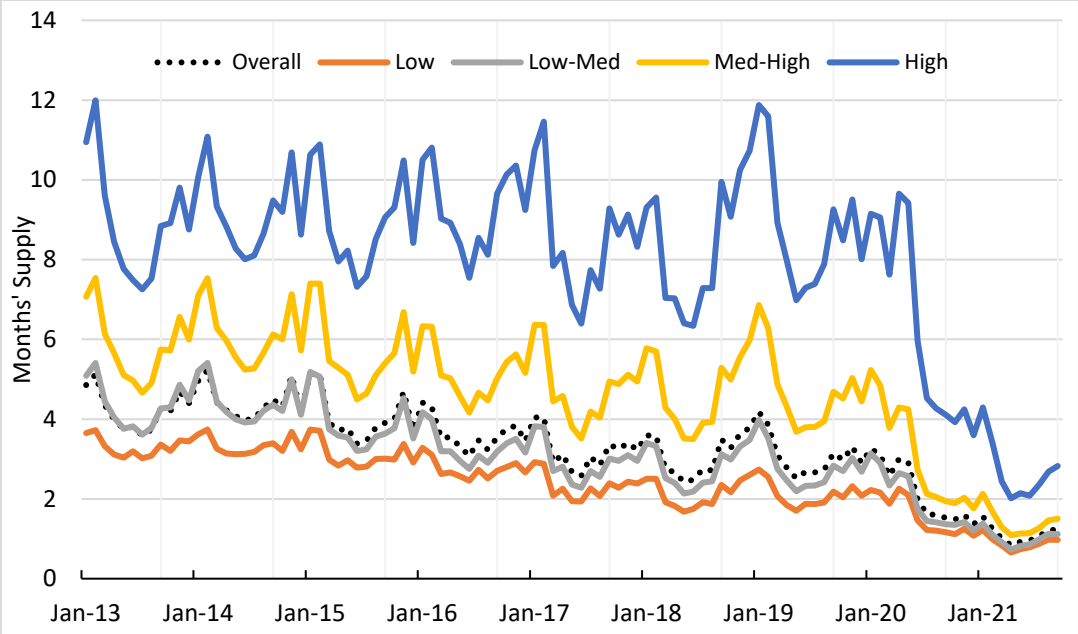
Burdensome regulations have caused higher house prices and rents than we would otherwise see because builders face barriers to building new housing in response to demand increases, particularly in neighborhoods close to job centers where demand is highest. Research indicates that restrictions including parking requirements, minimum lot size requirements, and bans on multifamily housing all contribute to reduced housing supply and higher prices and rents.[44]

Real-world examples bear out the economic theory that permitting more housing construction improves affordability. Regions that have allowed for large housing supply expansions in response to increasing demand have remained affordable to households of a broad range of income levels. For example, the population of Houston, the fourth largest city in the U.S., has grown faster than the country as a whole, yet its median house price is lower than the national median. In contrast to Sun Belt cities that are growing fast while remaining relatively affordable, some of the regions where demand for housing and house prices are highest, like the Bay Area, Los Angeles, and New York City, are permitting housing at lower rates than Rust Belt cities with declining populations.[45]

[44] Emily Hamilton, "Land Use Regulation and Housing Affordability," *Regulation and Economic Opportunity, Adam Hoffer and Todd Nesbit eds.* (Logan, UT: The Center for Growth and Opportunity at Utah State University, 2021).
[45] Kevin Erdmann, Shut Out: How a Housing Shortage Caused the Great Recession and Crippled Our Economy (Lanham, MD: Rowman & Littlefield, 2019), 20.

AEI's Housing Market Indicators track the remaining months' supply by price tier.[46] Since 2012, the low-price tier[47], the low-medium tier[48], and the medium-high tier[49] have all been consistently below six months' supply. While pre-pandemic the high tier[50] had been consistently above six months' supply, it also is now well below six months. Recently all tiers have been at about three months or less (see Chart 3).

Chart 3: Months' Supply by Price Tier: 2013-2021



Source: AEI Housing Center, Zillow, and Realtor.com

AEI's Carpenter Index—a tool which quantifies affordability problems by asking the question: "Can the people who build homes afford to buy them?" —captures the impact of these trends on affordability. While the results vary among the top 100 ranked metros, over the last seven years there has been a clear downward trend towards less affordability due in part to increasingly binding local land use constraints.

The effects of zoning constraints and other barriers to new, relatively-low-cost housing construction have been crippling supply at the lower ends of the market and increasing prices as buyers bid up the prices of existing homes. In the most extreme cases, such as the San Diego region, only 7% of entry-level housing units purchased with FHA loans—defined as any sale below

[46] American Enterprise Institute Housing Center, "Home Price Appreciation Index and Months' Remaining Inventory," https://www.aei.org/home-price-appreciation-index-and-months-remaining-inventory/.
[47] The low-price tier is defined as sales at or below the 40th percentile of the Federal Housing Administration (FHA) sales prices.
[48] The low-medium tier is defined as sales at or below the 80th percentile of FHA sales prices.
[49] The medium-high tier is defined as sales at or below 125% of the government-sponsored enterprises' (GSE) loan limit.
[50] The high-price tier is defined as the relatively small portion of sales that are above 125% of the GSE loan limit.

the 80th percentile of FHA loan values—are affordable to the typical carpenter household compared to 63% in the Houston region.

Figure 1. San Diego and Houston Home Comparison for a Typical Blue-Collar Household

San Diego, CA

Home cost: $256,000 (7% of entry level)

Home size: 3 bed, 1 bath, 1,008 sq. ft.

Houston, TX

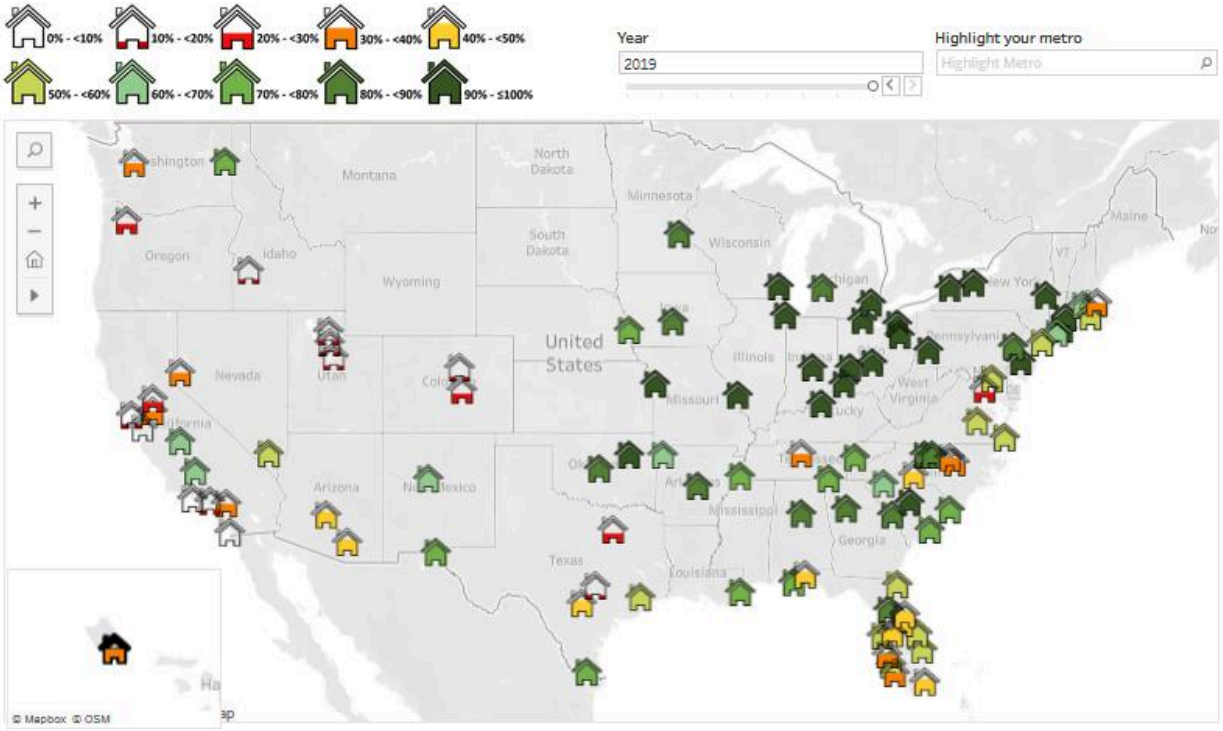
Home cost: $205,000 (63% of entry level)

Home size: 3 beds, 3 baths, 1,934 sq.ft.

Source: Zillow

The map below shows that, while some regions continue to be affordable, metros in the West, along with Boston, Washington, DC, and parts of Florida, are unaffordable for a carpenter household. Eighty-seven of the 100 metros covered by the Carpenter Index were less affordable in 2019 than in 2012.

Figure 2: Carpenter Index across U.S. Cities



Source: The AEI Housing Center's 2019 Carpenter Index interactive map, https://www.aei.org/the-carpenter-index/. The house icons indicate the percentage of entry-level houses that are affordable to the typical carpenter household.

The incentives facing local policymakers help to explain why local land use policies constrain housing construction. Economist William Fischel developed a theory called the "homevoter hypothesis" to explain why local policies tend to limit development that could potentially reduce local property values.[51] He argues that local elected officials face incentives to implement policy that restricts housing development in accordance with homeowners' preferences, often at the expense of renters, prospective residents, and the jurisdiction as a whole. Homeowners are more likely to vote relative to renters, and they are more likely to stay in the same jurisdiction over time.[52] These factors make them more influential constituents for local politicians relative to renters who could live in new multifamily housing if it were permitted. Local politicians tend to fare better when they keep homevoters happy by blocking policies and individual projects that would allow newcomers to move into their jurisdictions. In turn, local government policy tends to constrain new housing construction through both the rules on their books (such as single-family zoning with large lot size requirements) and their permit approval processes (such as discretionary permit approvals).

[51] William A. Fischel, *The Homevoter Hypothesis: How Home Values Influence Local Government Taxation, School Finance, and Land-Use Policies* (Cambridge, MA: Harvard University Press, 2005).
[52] Jonathan Levine, *Zoned Out: Regulation, Markets, and Choices in Transportation and Metropolitan Land Use* (Washington, DC: RFF Press, 2005), 70.

In their book *Neighborhood Defenders,* Katherine Levine Einstein, David M. Glick, and Maxwell Palmer offer an alternative to Fischel's homevoter hypothesis with their concept of "neighborhood defenders."[53] Neighborhood defenders are residents who oppose change near their residences and show up to planning commission meetings to voice their opposition. Based on their findings from gathering data on planning meetings in Massachusetts, they find evidence that neighborhood defenders tend to oppose any projects that would bring change to their neighborhoods even if the change would likely increase their property values, such as the redevelopment of blighted industrial land into residences.[54] They describe the neighborhood defenders who attend planning meetings in Massachusetts:

> We find that the individuals who participate in community meetings on new housing developments differ starkly from the broader population. They are older, whiter, longtime residents, and more likely to be homeowners. They overwhelmingly oppose the development of new housing, with only 15 percent of meeting attendees showing up to support proposed housing projects. In concert, the meeting minutes reveal that these forums are dominated by an unrepresentative group of neighborhood defenders.[55]

Einstein and Glick provide empirical support for the theory Fischel developed; that environmental concerns play a large role in the publicly-stated rationale that homevoters or neighborhood defenders present when they oppose new housing construction. They find that meeting attendees who speak in opposition to new housing proposals cite environmental concerns more often than any other reason besides traffic.[56]

Under the current policy, many of those living in single-family zoning districts have children and grandchildren who are unable to purchase a home they can afford in the locality where they were raised. Since 1982 householders 65 and over have seen their homeownership rate increase from 74% to 79% while the rate for those 35-44 has declined from 70% to 59% (Chart 4).[57] This is notwithstanding the lowest mortgage rates in history and trillions of dollars in housing finance assistance, the stated purpose of which is to make housing more affordable.

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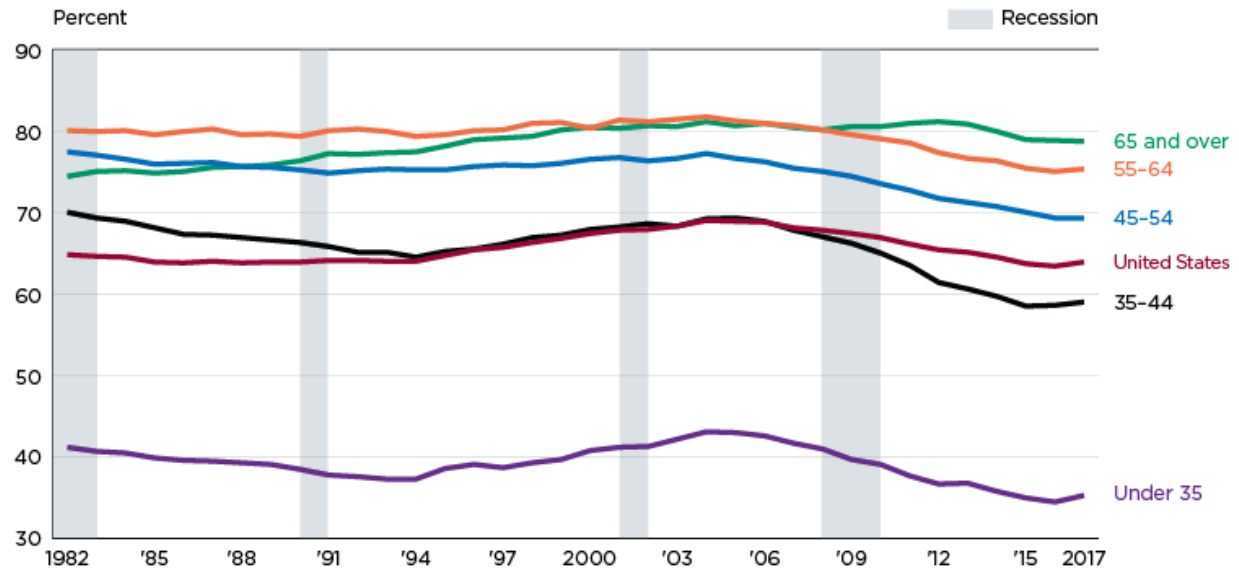
[53] Katherine Levine Epstein et al., *Neighborhood Defenders: Participatory Politics and America's Housing Crisis* (Cambridge, UK: Cambridge University Press: 2020).
[54] Ibid., 95.
[55] Ibid., 97.
[56] Ibid., 117.
[57] U.S. Census Bureau, "Housing Vacancies and Homeownership," https://www.census.gov/housing/hvs/data/histtabs.html; U.S. Department of Housing and Urban Development, "U.S. Housing Market Conditions Historical Data," https://www.huduser.gov/periodicals/ushmc/summer97/histdat4.html.

Chart 4: Annual Homeownership Rates for the United States by Age Group: 1982-2017[58]



Source: U.S. Census Bureau, Current Population Survey/Housing Vacancy Survey, February 27, 2018; recession data from the National Bureau of Economic Research, www.nber.org.

In addition to intergenerational consequences, local land use restrictions have reduced economic output, as measured by gross domestic product. When zoning restrictions prevent housing construction in high-productivity places, they limit the number of people who can live in the places with some of the best economic opportunities for workers in the U.S. Economists Chang-Tai Hsieh and Enrico Moretti call this effect "spatial misallocation." They explain, "The creeping web of these [housing] regulations has smothered wage and gross domestic product growth in American cities."[59] Gilles Duranton and Diego Puga estimate the effects of extensive land use deregulation in the three most productive U.S. regions that would permit their population densities to rise to 40 million each. Under their simulation, this land use deregulations could be expected to increase consumption by 8.2%.[60]

The consequences of spatial misallocation are not shared evenly; rules that limit new housing supply and increase housing costs disproportionately burden low-income residents who live in high-cost cities and those who are shut out of high-cost cities. In a study of the effects of land use regulations on income mobility, Peter Ganong and Daniel Shoag find that income convergence

[58] Derrick Moore, "Homeownership Remains Below 2006 Levels for All Age Groups," U.S. Census Bureau, August 13, 2018, https://www.census.gov/library/stories/2018/08/homeownership-by-age.html.
[59] Chang-Tai Hsieh and Enrico Moretti, "How Local Housing Regulations Smother the U.S. Economy," *The New York Times,* September 6, 2017, https://www.nytimes.com/2017/09/06/opinion/housing-regulations-us-economy.html.
[60] Gilles Duranton and Diego Puga, "Urban Growth and Its Aggregate Implications" (working paper, December 16, 2019), https://diegopuga.org/papers/hcgrowth.pdf.

between low- and high-income states between 1990 and 2010 occurred at less than half the rate it proceeded at over the past several decades.[61]

Because African American and Hispanic households in the U.S. disproportionately earn below median incomes, land use constraints that increase housing costs harm them disproportionately and contribute to maintaining historic patterns of segregation. Research on the effects of single-family zoning in the Boston region finds that blocks zoned for multifamily housing have higher shares of African American and Hispanic populations relative to adjacent blocks with single-family zoning.[62] The same study finds that local constraints on housing construction explain over half the difference in segregation between Boston, the 27th most segregated region in the country, and Houston, which ranks 53rd.[63]

Reforming single-family zoning is emerging as a strategy to address housing affordability and racial and income segregation in localities across the country. Policymakers are increasingly experimenting with reforms to permit what we call light-touch density (LTD) housing. We define LTD to include detached single-family houses with accessory dwelling units (ADUs), one-unit development with lot sizes of 2,500 square feet or less, and two-, three-, or four-unit development.

In this series, we focus on Palisades Park, a small borough in Bergen County, NJ, as a successful case of land use regulations that make LTD construction feasible. In Palisades Park, two-unit zoning, combined with rules that make permitting two-unit housing construction simple, has allowed the population to increase by more than 150% since 1940 while its neighbors have seen much less growth. Chapter 5 of this series provides a detailed case study of land use policy in Palisades Park and neighboring jurisdictions, many of which are seeing little LTD construction.

Policymakers in other parts of the country are looking to LTD as an opportunity to permit construction in neighborhoods that were previously zoned for detached one-unit development exclusively. Some recent LTD reforms include:

- In 1998, Houston policymakers reduced minimum lot size requirements within the city's I-610 loop from 5,000 square feet down to effectively 1,400 square feet. In 2013, the reform was expanded to the rest of the city. This reform has permitted three townhouses or three small-lot detached houses to be built where only one would have been permitted previously. Tens of thousands of infill units have been built under this reform.[64] In addition

[61] Peter Ganong and Daniel Shoag, "Why has regional income convergence in the U.S. declined?" *The Journal of Urban Economics* 102 (2017).
[62] Matthew Resseger, "The Impact of Land Use Regulation on Racial Segregation: Evidence from Massachusetts Zoning Borders," Harvard University Working Paper, November 26, 2013, https://scholar.harvard.edu/files/resseger/files/resseger_jmp_11_25.pdf.
[63] Ibid.
[64] M. Nolan Gray and Adam Millsap, "Subdividing the Unzoned City: An Analysis of the Causes and Effects of Houston's 1998 Subdivision Reform," *Journal of Planning Education and Research* (2020).

to making new infill construction possible in residential neighborhoods, Houston has never had Euclidean zoning, and it's seen small-lot construction on former commercial sites.

- In California, statewide laws have required municipalities to remove barriers to homeowners building ADUs. The results have been varied, ranging from a surge of ADU permits in Los Angeles to small increases in other localities. In Chapter 3 of this series, we provide a brief history of California's experience with preempting ADU bans and the decades-long efforts of state policymakers to craft policy that makes them an appealing option for homeowners to build.
- Oregon's House Bill 2001, passed in July 2019, requires cities with populations above 10,000 to permit duplexes in zones previously reserved for one-unit homes, and those with populations above 25,000 to permit structures with up to four dwelling units. Portland policymakers later passed reforms that go further than state law requires to make LTD feasible to build by eliminating parking requirements, permitting up to six units per lot in some cases.[65]
- Minneapolis became the first major U.S. city to completely eliminate single-family zoning in 2019. City policymakers adopted new zoning rules that permit up to three units on every lot that was previously zoned for exclusively one unit. The reform is still new, but so far the number of duplex and triplex permits has been low.[66] Barriers that limit the size of duplexes and triplexes still stand in the way of making it economically feasible for homebuilders to replace one unit with three. Chapter 3 and Chapter 5 of this series provide further details on potential barriers to LTD construction, even in the face of reforms with the stated intention of making it feasible.
- California's Senate Bill 9, passed in September 2021, legalized two-unit structures and lot splits across much of the state's land that was previously zoned for one-unit structures. The law also preempts other rules that make two-unit housing unfeasible to build and contains provisions intended to block the creation of local obstacles to LTD.

LTD reforms have proved to be politically feasible in at least some cases, and they've earned policymakers accolades for reforming the exclusionary and racist history of single-family zoning that we covered in Chapter 1. Nonetheless, homevoter-driven policy continues to obstruct housing construction, as evidenced by concerning trends in new housing supply and affordability. Unfortunately, LTD reforms have, in some cases, been paired with rules that limit how large LTD units can be, often with restrictions that make LTD units much smaller than the typical unit in a Palisades Park duplex.

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[65] Michael Andersen, "Portland Just Passed the Best Low-Density Zoning Reform in U.S. History," Sightline Institute, August 11, 2020, https://www.sightline.org/2020/08/11/on-wednesday-portland-will-pass-the-best-low-density-zoning-reform-in-us-history/.

[66] James Brasuell, "Zoning Reforms Underwhelm in Minneapolis as Development Market Holds Course," Planetizen, September 2, 2020, https://www.planetizen.com/news/2020/09/110400-zoning-reforms-underwhelm-minneapolis-development-market-holds-course.

Land use restrictions reduce opportunities for low- and middle-income households to live in locations where their best opportunities are located. Land-use controls prevent land from being redeveloped for higher and better uses over time as demand for housing increases. In the following chapters we will explore policies proven to facilitate LTD construction and cover further permits of relatively minor changes to zoning that make infill construction feasible.

Chapter 3: Talking Points – Why Light-touch Density Matters?

We define light touch density (LTD) as single-family houses with accessory dwelling units, small lot single-family development, attached single-family units, and two- to four-unit dwellings. Even when zoning rules appear to permit LTD, restrictions on building size and other zoning details can still make it infeasible to build multi-unit dwellings or small lot single-family houses.

LTD's potential is not just theory. Examples from across the country show that in places with increasing demand for housing, LTD construction is built in large numbers where land use regulations and permitting processes accommodate it. We detail examples from Houston, TX to the small borough of Palisades Park, NJ.

It is time to change the status quo and allow dense single-family development along with two-, three-, and four-unit dwellings to supplement the housing stock in current one-family residential areas through conversion, replacement, or expansion of existing structures. Some researchers estimate that local land use restrictions have caused a nationwide housing shortage of several million units. Reforms to permit LTD could be an important piece of addressing this shortfall.

Relative to less-dense types of housing, LTD is efficient to build. Because LTD is often built as infill development in existing neighborhoods, existing infrastructure can often fully or partially accommodate LTD construction, whereas each new greenfield unit may require tens of thousands of dollars of new infrastructure investment. LTD construction often allows for population growth close to job centers, allowing residents to live in locations where they can have relatively short commutes and where they may be able to walk or use public transit for at least some trips.

LTD construction has declined precipitously as local zoning rules have made it more difficult to build over time. In particular, two-unit or duplex construction has declined over the past several decades. Prior to the early twentieth century, real estate development was largely determined by private property owners, guided by prices for land and various types of development. However, as we detailed in previous chapters, today many localities restrict the majority of their residential land to exclusively detached one-unit housing on lots that meet minimum size requirements. This hegemony is a key cause of housing supply constraints causing affordability problems today.

Relative to one-unit zoning, LTD is a market-driven approach as it allows a broader base of landowners to naturally realize their land's highest and best use—the "best possible and legal use or employment of land which will yield the greatest return per dollar of investment." In parts of the country where demand for housing is high or increasing, the highest and best use of land may be a LTD residential structure.

By-right LTD zoning reestablishes the balance between the interests of homeowners who wish to limit change and exert control over neighboring properties vs. current and future property owners. By widely increasing development rights across what might be tens of millions of properties, the impact on any one neighborhood will be reduced relative to reforms applied to small areas.

Chapter 3: Why Light-touch Density Matters?

Light-touch Density (LTD) is the low-hanging fruit of reforms intended to address housing shortage. Throughout the first installments of this series of briefs, we have identified the expanded use of LTD as a promising and cost-effective reform to ameliorate the nation's housing shortage. In this brief, we will go into detail about the features and benefits of LTD. We define LTD as single-family development with accessory dwelling units, small-lot single-family development, attached single-family development, and duplexes, triplexes, and fourplexes. Further, owner-occupants can purchase LTD housing units with Federal Housing Administration, Freddie Mac, or Fannie Mae loans, making them an attractive option for homebuyers. Through LTD redevelopment, these types of housing can make substantial additions to the housing stock in existing lower-density single-family areas through conversion, replacement, or expansion of existing structures.

Over time, the share of LTD as a percentage of the national housing stock has shrunk drastically as local zoning ordinances enacted by municipal governments have prohibited their construction on much or all of their land. From 1940 to 2018, the combined share of one-unit attached housing and two-, three-, and four-unit structures declined from 26.5% of the one- to four-unit housing stock to 18.4% in 2019. If LTD construction increased enough to return to its 1940 share of the one- to four-unit housing stock all else held constant, LTD construction could be expected to contribute eight million additional housing units to the total stock over the next 20 years.

It's not unrealistic to assume that eliminating the regulatory barriers to LTD construction that U.S. localities adopted in the twentieth century would have a large effect on construction. As we showed in Chapter 2, housing construction generally and LTD construction in particular have slowed dramatically over past decades, and supply constraints are affecting supply and housing affordability in many parts of the country. One estimate puts the national underproduction of housing at 7.3 million units between 2000 and 2015.[67]

In some cases, policies that facilitate LTD reforms have led to large increases in housing construction. In Houston, for example, local regulations permit LTD construction in the form of small lot detached townhouses. Between 2005 and 2018, more than one-quarter of the housing construction within Houston's Beltway 8 has consisted of small lot single-family development.[68] During this time period, Houston's combined standard detached single-family development and

[67] Madeline Baron et al., "Housing Underproduction in the U.S.: Economic, Fiscal and Environmental Impacts of Enabling Transit-Oriented Smart Growth to Address America's Housing Affordability Challenge," Up for Growth, Holland Government Affairs, and ECONorthwest, 2018, https://www.upforgrowth.org/new-report-indicates-housing-shortage-more-severe-once-thought.

[68] John Park et al., "Re-Taking Stock: Understanding How Trends in the Housing Stock and Gentrification are connected in Houston and Harris County," Kinder Institute at Rice University, April 6, 2021.

multifamily construction per capita have also exceeded the national rate of these housing typologies.

LTD can often be built as infill development, where denser development replaces lower-density housing or commercial development. Permitting LTD infill construction presents the opportunity for new development at much lower infrastructure cost relative to greenfield development of detached single-family houses. According to one estimate, the required infrastructure for a unit of housing on a greenfield site costs $50,000 more relative to the required infrastructure for a unit of housing on an infill site. Based on this figure, permitting eight million infill LTD units nationwide could require $400 billion less in infrastructure investment relative to permitting eight million greenfield units, a big return from a modest policy change.[69]

As covered in Chapters 1 and 2, the U.S. approach to segregating land uses not only separates different types of land uses into different zones but also limits housing construction by severely limiting both LTD development and larger multifamily development.[70] Some jurisdictions have permitted substantial increases in their housing supply through large multifamily developments. In the Washington, DC region, for example, large multifamily developments along transit corridors have been an important part of new housing supply over the past 50 years. In addition to Washington, Arlington County, VA, Montgomery County, MD, and Fairfax County, VA have permitted extensive high-rise residential development near the region's Metrorail stations.[71] The result has been less expensive housing costs than other high-income coastal jurisdictions.[72] Similarly, Seattle, WA has better accommodated increasing housing demand with new supply relative to other West Coast cities through its "urban villages" planning strategy that permits high-density residential in neighborhoods well-served by buses.[73]

However, in other jurisdictions local politics have stood in the way of all types of construction, resulting in anemic housing supply growth and large price spikes in response to demand increases.[74] Naturally, the way to address a supply shortage of this type is by addressing the culprit: restrictive land use policies. LTD presents an opportunity to expand housing supply at a

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[69] Evans Paull, "Infrastructure Costs, Brownfields vs. Greenfields," June 2012, Redevelopment Economics, http://www.redevelopmenteconomics.com/yahoo_site_admin/assets/docs/Infrastructure_Costs_-_brownfields-greenfields_final2.208110246.pdf. While this study just covers infrastructure costs in Massachusetts, it is believed to be generally representative.

[70] Sonia Hirt, *Zoned in the USA: The Origins and Implications of American Land-Use Regulation* (Ithaca and London: Cornell, 2014).

[71] For a case study of transit-oriented development in Fairfax County, VA, see Emily Hamilton, "The Politics oof Redevelopment Planning in Tysons and Outcomes 10 Years Later," Mercatus Center at George Mason University, Working Paper, July 13, 2020.

[72] Salim Furth, "Housing Supply in the 2010s," Mercatus Center at George Mason University, Working Paper, February 14, 2019.

[73] Kevin Erdmann et al., "The Link Between Local Zoning Policy and Housing Affordability in America's Cities," Mercatus Center at George Mason University, Policy Brief, March 13, 2019.

[74] Furth, "Housing Supply in the 2010s."

lower public and private cost than new greenfield development, and LTD would require current homeowners to accept minor changes to their neighborhoods relative to larger infill projects and thus may be politically easier for the homevoters discussed in Chapter 2 to accept.

Multiple states and localities have made reforms in recent years intended to make more LTD construction feasible. In July 2019, Oregon legislators passed House Bill 2001, requiring cities with populations of 10,000 or more to permit duplexes in zones previously reserved for one-unit homes, and those with populations above 25,000 to permit four dwelling units per lot. Portland policymakers passed a package of LTD reforms that go further than state law requires to permit larger infill projects. They also eliminated parking requirements, a common barrier to LTD construction, across much of the city.[75]

In 2021, California policymakers passed Senate Bill 9, which requires localities to permit two-unit dwellings and lot splits in many areas that were previously zoned for single-family housing exclusively. The same statute also loosened some other local land use restrictions that can make two-unit dwelling unfeasible to build.

State preemption of local housing supply restrictions is an appropriate way to permit increased housing construction and improved affordability, including by requiring localities to permit LTD. The spillover costs of housing construction are local. Typically, the greatest opposition to development comes from the people who live right next door to it. Determining land use policy at higher levels of government puts decisions at a level where policymakers weigh the benefits of new housing—affordability, economic growth, and quality of life—against the costs of construction for the local community. Because localities get their authority to regulate land use from their states, state policymakers have a clear role to play in limiting housing restrictions. In 2020, state legislators introduced bills similar to Oregon's state preemption laws in Virginia, Maryland, Nebraska, Vermont, Virginia, and Washington. They were joined by policymakers in California, Connecticut, Montana, New Hampshire, and North Carolina in 2021, but so far Oregon and California remain the only states that have passed limits on single-family zoning.

Eight months prior to zoning liberalization in Oregon, Minneapolis became the first city with a history of single-family zoning to eliminate one-unit zones, with the city council voting to allow duplexes and triplexes in all residential zones. While the city broke ground with single-family zoning reform, so far permitting triplexes on paper has led to little construction. In the first 15 months that Minneapolis' triplex reform was in place, the city permitted just 10 triplexes and 44 duplexes.[76] Minneapolis policymakers liberalized unit restrictions in their previously single-family

[75] Michael Andersen, "Portland Just Passed the Best Low-Density Zoning Reform in U.S. History," Sightline Institute, August 11, 2020, https://www.sightline.org/2020/08/11/on-wednesday-portland-will-pass-the-best-low-density-zoning-reform-in-us-history/.

[76] Christian Britschgi, "Seattle Is Proposing to Get Rid of Single-Family Zoning In Name Only. Literally." *Reason, June 29, 2021, https://reason.com/2021/06/29/seattle-is-proposing-to-get-rid-of-single-family-zoning-in-name-only-literally/.*

zones, but they maintained setback, height, and square footage restrictions that may make it difficult for homebuilders to profit on triplex conversions.[77]

Houston provides another relatively rare case of land use regulatory reform that permits infill redevelopment in existing single-family neighborhoods. In 1998 city policymakers reduced the minimum lot size requirement from 5,000 square feet to effectively 1,400 square feet within the city's I-610 Loop.[78] The reform was later expanded to cover the entire city. The reduced minimum lot size requirement makes it feasible to replace a single-family house with three new attached or detached units. Following this reform, tens of thousands of townhouses have been delivered. Even prior to the formal adoption of the smaller minimum lot size requirement, Houston permitted extensive townhouse construction through its variance process. The rule change, however, led to more townhouse construction in the city's high-income neighborhoods close to downtown job centers.[79] Houston's generally liberal permitting process has contributed to the city's housing affordability. In spite of decades of rapid growth, the median house price in Houston remains below the national median.[80]

On paper, Houston's minimum lot size reform is similar to Minneapolis' triplex zoning reform, with both generally permitting three units where one was permitted previously. Townhouses in Houston are commonly over 2,000 square feet, which is permitted by the city's height and setback requirements. In contrast, under Minneapolis' triplex reform, three new units on a 5,000 square foot lot are only permitted to be 2,500 square feet in total in the city's largest residential zone. Townhouse infill in Houston can result in up to 6,000 square feet of living space on 5,000 square feet of land relative to 2,500 square feet in Minneapolis. This discrepancy may explain the slow rate at which LTD construction is replacing detached single-family houses in Minneapolis.[81]

[77] James Brasuell, "Zoning Reforms Underwhelm in Minneapolis as Development Market Holds Course," Planetizen, September 2, 2020, https://www.planetizen.com/news/2020/09/110400-zoning-reforms-underwhelm-minneapolis-development-market-holds-course.

[78] M. Nolan Gray and Adam Millsap, "Subdividing the Unzoned City: An Analysis of the Causes and Effects of Houston's 1998 Subdivision Reform," *Journal of Planning Education and Research* (2020).

[79] Ibid.

[80] The U.S. median is $308,220 compared to $235,559 in Houston in November 2021. Zillow, Zillow Home Value Index, accessed November 5, 2021.

[81] City of Minneapolis, "Built Form Overlay District Interior 1," Built Form Regulations, https://minneapolis2040.com/implementation/built-form-regulations#Regulations.

Seattle provides another opportunity to compare housing market outcomes under single-family zoning relative to zoning that permits LTD.[82,83] The city's Single-Family (SF) zone covers the majority of its land and permits only one-unit detached structures whereas its Low-Rise Multifamily (LRM) zone, allows for development of single-family or multifamily housing. In the SF zone, each house must sit on a lot of 5,000 square feet or more, whereas 1,300 square feet are required per dwelling unit in the lowest-density portion of the LRM zone.[84] The SF zone contains almost three times as many units as the LRM zone. However, about twice as many units have been built in the LRM zone compared to the SF zone since 2000. New construction has increased the stock of housing in the SF zone by 7% compared to 35% to in the LRM zone, where the housing stock has grown by 10% just since 2015.

In the SF zone, new construction primarily consists of replacing existing single-family houses with newer, much larger single-family houses. The typical house built since 2000 in the single-family zone is 2,600 square feet relative to a median house size of 1,800 square feet for the zone as a whole. The median house built in the SF zone since 2000 costs $1.25 million compared to a median price of $875,000 for all houses in the district. In contrast, when new construction replaces a single-family house in the LRM zone, homebuilders typically build townhouses.[85] Houses in the LRM that have been built since 2000 have a median lot size of 1,400 square feet compared to 4,500 square feet for the zone as a whole. As Table 1 below shows, new construction houses in the LRM are only marginally larger and more expensive than the zone's median house.

[82] In order to analyze construction across Seattle's zones, we use the city's zoning map from Seattle Information Technology "Land Use Zoning GIS map", https://data-seattlecitygis.opendata.arcgis.com/search?collection=Dataset April 6, 2021. We overlay the zoning maps with geocoded property-level county assessor data allowing us to assign each property assessed in 2020 to a zone. The assessment data includes when the structures were built, lot size, and built square footage. Next, we merge this data with an Automated Valuation Model (AVM), which estimates a sale price for each property for December 2020. Assessor and AVM data come from First American via DataTree.
[83] City of Seattle, Municipal Code, Title 23, "Land Use Regulations." October 25, 2021. Here we focus on the city's single-family and LTD zoning, but the bulk of Seattle's recent growth has come from multifamily construction. From 2000 to 2019, the city's housing stock increased by 38% with structures including more than five units accounting for 73% of that growth. U.S. Census Bureau, American Community Survey 5-year Estimates, "Units in Structure."
[84] City of Seattle, Municipal Code, Title 23 - Land Use Regulations." October 25, 2021.
[85] Seattle's stock of townhouses has increased from about 6,000 in 2000 to about 19,000 in 2019. U.S. Census Bureau, American Community Survey 5-year Estimates, "Units in Structure."

Table 1: City of Seattle Existing Housing Stock and New Construction Activity by Zone

	Single Family Zone			Low-rise Multifamily Zone		
	All Units	Built since 2000	Built since 2015	All Units	Built since 2000	Built since 2015
Number of units	124,000	8,800	2,700	46,000	16,000	4,600
Number of 1-units	116,000	7,700	200	9,200	1,200	300
% Additions to Housing Stock		7%	2%		35%	10%
Median Lot Size	5,700	5,100	5,000	4,500	1,400	1,300
Median Living Area	1,800	2,700	2,600	1,300	1,400	1,500
Median Price (in $*)	875,000	1,245,000	1,300,000	715,000	765,000	845,000
New Construction Price Premium over Median House		142%	149%		107%	118%

*Based on First American via DataTree Automated Valuation Model from Dec. 2020.
Note: Values are slightly rounded for readability.
Source: AEI Housing Center.

If the City of Seattle upzoned all of its SF zones, consisting of about 124,000 homes, to the permitted density of the LRM zone and homebuilders replaced 20% of the one-unit structures with two townhouses, private enterprise could potentially add up to 25,000 housing units or an 11% increase in the city's total stock of one- to four-unit dwellings over a decade without subsidies.

In the following chapter of this series, we provide case studies of ADU reforms that have led to substantial increases in ADU construction. As with reforms to single-family zoning, some cities and states have passed laws that allow them on paper but fail to remove technical barriers to actually building new units. Other rules including permitting rules, parking requirements, and occupancy limitations can all remain as barriers to ADU construction in localities that have passed bills designed to make them easier to build. Jurisdictions that see substantial ADU construction or construction of LTF more broadly consistently permit this development "by-right," paired with other land use regulations that make it possible and cost-effective to replace or expand existing single-unit houses to accommodate multiple residences.

In Chapter 5, we provide a case study of Palisades Park, NJ, a suburb of New York City just across the Hudson River from Manhattan, where LTD zoning has been particularly effective at facilitating LTD construction. Palisades Park was originally developed with predominantly one-unit houses, but today its housing stock is mostly made up of duplexes. Since the adoption of its first zoning ordinance in 1939, the borough has allowed both one- and two-family homes to be built on a near-equal basis in residential zones which comprise virtually all of its area. Palisades Park's height limit permits 3-story structures, and its small setback requirements permit large duplex units on

existing lots.[86] Tighter constraints in any one of these types of regulations could have made it infeasible to profitably build two- to four-unit housing.

Opponents of new market-rate housing often argue that new construction—like Houston townhouses or Palisades Park duplexes—only benefits high-income residents.[87] In general new construction is more expensive than older housing stock, but through a process known as "filtering," new housing construction contributes to broad-based housing affordability.[88] When new housing becomes available, many of the residents who move into it leave behind less desirable housing in the same region, freeing up units that are affordable to lower-income households, who then free up units affordable to even lower-income households, and so on. One study of new housing supply delivered in large multifamily buildings finds that the construction of 100 new market-rate units leads to more than 45 households moving out of below-median income census tracts and more than 17 households moving out of bottom-quintile income tracts.[89]

Opponents also commonly complain that infill construction of any sort exacerbates traffic congestion and on-street parking shortages. It's true that a growing population often means more cars. But relative to greenfield construction, infill construction often allows more people to live in locations where they can drive shorter distances, use public transportation, or walk, contributing less to traffic than they would if they lived in a farther-flung location. Parking can best be managed by charging high enough prices for street parking to maintain availability on each block.[90]

Those who oppose liberalizing current single-family zoning to accommodate LTD may also frame their opposition as a desire to maintain local or neighborhood control. Preventing change in a neighborhood is generally impossible. If land use regulations prevent the built form from changing, the neighborhood community will change nonetheless. Homeowners age, children move out, and, when zoning leads to skyrocketing home prices, they often cannot afford to move back to start families of their own.

Finally, those who favor the status quo often raise concerns about what LTD may mean for their property values, the key motivation for homevoter behavior that we described in the previous chapter. The broad-based adoption of LTD zoning would likely lead to modest changes in the values of existing homes. It could be expected to increase property values somewhat in locations where LTD redevelopment is financially feasible and, as a result of new better-located housing alternatives, may decrease property values somewhat in places where LTD development is not feasible. One study of Minneapolis' triplex reform found that the policy change increased the

[86] Borough of Palisades Park, General Legislation, Chapter 300, "Zoning," https://ecode360.com/9264492.
[87] For one example, see Roland Li, "Protesters shut down Oakland City Council vote on Lake Merritt tower," *San Francisco Business Times,* May 5, 2015, https://www.bizjournals.com/sanfrancisco/morning_call/2015/05/lake-merritt-tower-oakland-vote-protest-housing.html.
[88] Siegan, Bernard, *Land Use Without Zoning* (Lexington, Massachusetts: D.C. Heath and Company, 1972), 92-5.
[89] Mast, Evan, "The Effect of New Market-Rate Housing Construction on the Low-Income Housing Market," Upjohn Institute WP 19-307, 2019.
[90] Donald C. Shoup, *The High Cost of Free Parking* (Chicago: American Planning Association, 2011).

value of the city's single-family houses on average with the new option to redevelop these houses as duplexes or triplexes.[91]

'By-right' LTD zoning in place of detached single-family zoning restores property rights to landowners and reduces localities' control of land use. Zoning acts to restrict an individual right vested in the property owner and to create a community right vested in a neighborhood and municipality through ordinances and hearings. Since the 1920s the pendulum has swung far towards establishing and expanding community rights.[92] By-right LTD zoning would be a moderate restoration of individual property rights relative to government restrictions.

LTD reforms have proven to be politically feasible in some localities and states across the country. As demonstrated in cases from Houston to Palisades Park, reforms that make LTD feasible to build can play a meaningful role in reforming the barriers to housing construction that are causing insufficient housing supply and high prices in regions across the country.

[91] Daniel Kuhlmann, "Upzoning and Single-Family Housing Prices: A Very Early Analysis of the Minneapolis 2040 Plan," *Journal of the American Planning Association*, 2021.
[92] Katherine Levine Epstein et al., *Neighborhood Defenders: Participatory Politics and America's Housing Crisis*, (Cambridge, UK: Cambridge University Press, 2020).

Chapter 4: Talking Points - Accessory Dwelling Units as Part of the Light-Touch Density Reform Opportunities

What is an ADU? An accessory dwelling unit (ADU), also known as a mother-in-law unit, secondary dwelling unit, or carriage house, has its own kitchen, living area, and entrance. An ADU may be attached to a house or garage, or it can also be built as a stand-alone unit such as a backyard cottage.

In recent years, policymakers in many cities and states have adopted reforms intended to make it easier for homeowners to build ADUs. ADUs are the lowest-hanging fruit of the light-touch density reforms that are the focus of this series. ADUs are one of the most politically-feasible reforms available because many homeowners can see themselves wanting to add an ADU to their house at some point as a way to help pay their mortgage, provide retirement income, or to provide housing for a family member.

Even when a locality permits homeowners to build ADUs, regulations may make them unappealing or infeasible for homeowners to add. Localities where ADUs are built in large numbers tend to share the following features of ADU regulation:

- No owner occupancy requirements
- No additional parking requirements for adding an ADU
- By-right permitting that doesn't require ADU permits to go through a subjective approval process

Measuring ADUs' impact on expanding the stock of housing:

We analyze ADU reforms and permitting in Portland, Seattle, and Los Angeles. These three cities have seen substantial increases in ADU permitting following recent policy changes.

Based on these cities' ADU permits in recent years, we estimate the number of new ADUs that can expect to be added to these cities' housing stocks in the coming years. In all three cities, it would take decades for ADU construction to increase the stock of single-unit housing by 10% at current permitting rates.

Allowing ADUs to be built shares many similarities with permitting two principal dwelling units per lot in terms of permitted housing density. However, ADUs generally have limited flexibility for ownership structures, size limits, and they often rely on homeowners taking initiative to build them rather than professional homebuilders. Our case studies point to two-unit zoning reform as a more promising reform for substantial housing supply increases relative to permitting ADUs on the lots of principal dwelling units.

There is no one silver bullet to address the severe land use regulations that are standing in the way of new housing supply and contributing to growing unaffordability. The expansion of by-right zoning for Accessory Dwelling Units (ADUs) alone is unlikely to make a significant contribution in most jurisdictions, but in combination with other types of regulatory changes to permit more housing construction, ADUs can be one important step toward increased housing construction and improved affordability.

Chapter 4: Accessory Dwelling Units as Part of the Light-Touch Density Reform Opportunities

What is an ADU?

An accessory dwelling unit (ADU) is also known as an in-law or mother-in-law suite, secondary dwelling unit, granny flat, backyard cottage, basement apartment, or carriage house. An ADU has its own kitchen, living area, and separate entrance. An ADU may be attached to a house or garage, or it can also be built as a stand-alone unit. Often ADUs make use of the water and energy connections of the primary house, although some jurisdictions require separate metering.

ADUs and Zoning Reform

Housing has become unaffordable for many households because house prices have risen significantly faster than incomes. Burdensome regulations - in some jurisdictions more so than others - have deterred builders from adding sufficient new supply to meet new demand from household formation and immigration, or the necessary construction to replace an aging housing stock. A robust literature in economics finds that local land use regulations play an important role in constraining housing supply and contributing to increasing housing unaffordability.[93]

By right ADU zoning in single-family districts represents the lowest hanging fruit of land-use reform politically. Because many homeowners can see themselves wanting to add an ADU at some point—for extra income, a family member to live in, or guests—advocates in favor of legalizing ADUs have won out over homeowners who are opposed to ADUs in many recent cases at the state and local level.[94] ADU reform has a diverse set of proponents including housing affordability advocates, urbanists, and AARP, which points to the potential for ADUs to allow seniors to age in place.[95]

Adding ADUs in already developed areas can help address the nation's housing supply shortfall. ADU construction presents an opportunity to increase housing supply and to allow for housing at different price points within neighborhoods while having a small impact on any one neighborhood. The expansion of by-right zoning for Accessory Dwelling Units (ADUs) alone is unlikely to make a significant dent in housing costs in most jurisdictions. However, ADUs together with other types of light touch density construction (LTD) can provide significant increases to housing supply when

[93] For a review of the economic literature on the relationship between land use regulations and housing supply, see Joseph Gyourko and Raven Molloy, "Regulation and Housing Supply" (NBER Working Paper No. 20536, National Bureau of Economic Research, Cambridge, MA, October 2014).
[94] Margaret F. Brinig and Nicole Stelle Garnett, "A Room of One's Own? Accessory Dwelling Unit Reforms and Local Parochialism," *The Urban Lawyer* 45, no. 3, 2013.
[95] Ibid.

local rules allow them to be an appealing option for homeowners, buyers, and tenants. We define LTD as single-family houses with ADUs, small-lot single-family development, attached single-family houses, and duplexes, triplexes, and fourplexes. See Chapter 3 for an in-depth discussion of LTD.

The Policy Debate about ADUs

Over time, the balance of power regarding development and redevelopment of private property has shifted from property owners to local governments, where the interests of homeowners have disproportionate influence.[96] Across the U.S., homeowners' preferences for restrictions on housing construction have manifested in widespread single-family zoning combined with minimum lot size requirements. Under standard single-family zoning, ADUs are not permitted. See Chapter 2 for a discussion of homeowners' role in shaping local restrictions on new housing construction.

Reforming land use restrictions to permit ADUs comes with both benefits and costs.

Benefits:

- Allows owners to take advantage of high land values by adding a housing unit where demand for housing is high;
- Increases homeowners' property rights;
- Research on ADU construction in Los Angeles finds that ADUs substantially increase property values for the homeowners who build them[97];
- Allows entry-level workers to better afford rental housing and contributes to housing affordability through permitting increased housing supply[98];
- Increased density provides additional customers for nearby commercial areas and public transit;
- Little or no new infrastructure required;
- Allows for aging in place and provides additional income sources to help seniors to stay in their homes[99];
- Allows for intergenerational living[100];

Concerns Opponents of ADUs Often Cite:

[96] Ed Glaeser et al., "Why Is Manhattan So Expensive? Regulation and the Rise of House Prices," (NBER Working Paper No. 10124, National Bureau of Economic Research, Cambridge, MA, November 2003).
[97] Sarah Thomaz, "Investigating ADUs: Determinants of Location and Their Effects on Property Values," (Working Paper) https://sites.google.com/view/sarahthomaz/research.
[98] In Los Angeles County, for example, a survey of homeowners with ADUs finds that the median ADU rents for $2,000 per month compared to $2,441 for the median rental in the Los Angeles region. Karen Chapple et al., "Implementing the Backyard Revolution: Perspectives of California's ADU Owners," UC Berkeley Center for Community Innovation, April 2021; Zillow Research, "ZORI All Homes Plus Multifamily Time Series ($), accessed April 27, 2021, https://www.zillow.com/research/data.
[99] AARP State Advocacy & Strategy Integration, "Accessory Dwelling Units Model State Act and Local Ordinance."
[100] Ibid.

- Worsening of traffic congestion, creation of parking shortages, crowding of schools, and exacerbating storm water drainage;[101]
- Perceived decline in value of properties; and,[102]
- Loss of neighborhood control.

Regarding Common Concerns about ADUs:

- Regarding congestion and school crowding, many urban and suburban neighborhoods were developed when families were much larger, therefore density may already be lower than it was in the past. As average household sizes shrink in the United States it will require a larger number of housing units to house the same number of people.
- Parking can best be managed by charging high enough prices for street parking to maintain availability on each block.[103] This creates incentives for homeowners and homebuilders alike to provide an efficient amount of off-street parking;
- ADUs' addition to impervious surfaces would be minor, especially when compared to the large increases in impervious surfaces for greenfield development in lieu of infill development. Many ADUs are built within the existing footprint of a house or garage and have no effect on drainage;
- The broad-based permitting of ADUs would likely lead to modest changes in the values of nearby houses. Research on Vancouver's laneway houses finds that the construction of ADUs has no effect on neighboring property values in neighborhoods with low or medium house prices (low or medium for the expensive Vancouver region), and they have a small negative effect on house prices in the highest-cost neighborhoods;[104] and,
- Permitting ADUs and other types of LTD is a minor shift in the balance of power regarding development and redevelopment from local government control to property owners.

Reforming single-family zoning districts to permit ADUs and other Light-Touch Density (LTD) presents a market-based reform that would help ameliorate the current supply-demand imbalance.

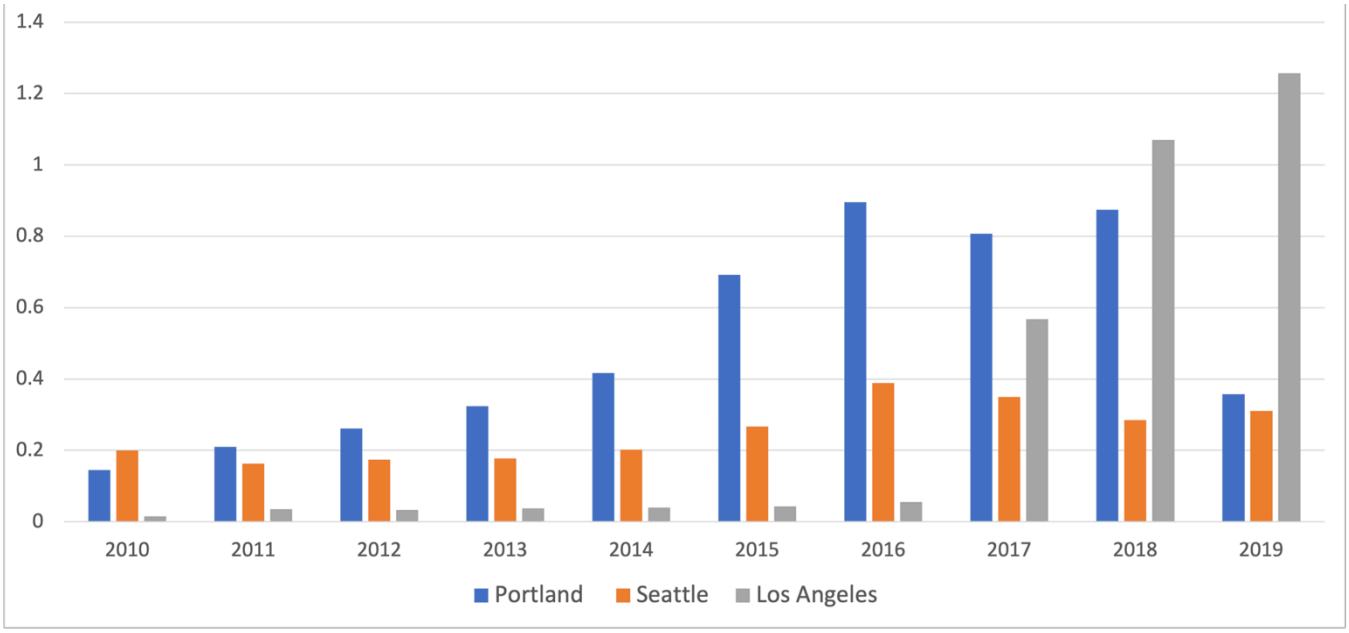
Please see the appendix for a portfolio of photos of ADUs from Portland, Seattle, and Los Angeles. These demonstrate how ADUs may be integrated into existing neighborhoods.

Policymakers in many jurisdictions have recently liberalized ADU policy, including Durham and Gainesville at the local level, and Oregon, Washington, and California at the state level. Here we

[101] Ally Schweitzer, "A Big Fight Over Small Apartments In Montgomery County," WAMU American University Radio, July 8, 2019, *https://wamu.org/story/19/07/08/in-montgomery-county-a-big-fight-over-small-apartments/.*
[102] Ibid.
[103] Donald C. Shoup, *The High Cost of Free Parking* (Chicago: American Planning Association, 2011).
[104] Tom Davidoff et al., "Not in my neighbour's back yard? Laneway homes and neighbours' property values," The University of British Columbia Faculty and Research Publications, March 2019, https://open.library.ubc.ca/cIRcle/collections/facultyresearchandpublications/52383/items/1.0365257.

focus on reforms in Portland, Seattle, and Los Angeles, which have all seen substantial increases in ADU permitting in recent years. In all three cases, ADU construction became feasible due to a combination of state and local laws. Chart 1 shows ADU permitting per 1,000 residents for each of these three cities from 2010 to 2019.

Chart 1: ADU Permits per 1000 Residents



Source: Authors' calculations based on permit data from Portland Maps Reports, Seattle Open Data, and Los Angeles Open Data; population data from the Census Bureau's American Community Survey.

Los Angeles

California's experience with legalizing ADUs shows the importance of removing multiple local rules that stand in the way of building them. In 1982, California legislators passed a law intended to allow homeowners across the state to build ADUs.[105] In response, many local policymakers, driven by homeowners' concerns about ADU construction, implemented new barriers to building them, including high impact fees, parking requirements, and large lot size and setback requirements. Since then, state policymakers have passed a series of laws in a "whack-a-mole" effort to preempt ongoing local obstacles to ADUs.[106]

A 2016 law, passed 34 years after the state's initial law failed to make ADU construction feasible, required localities to reduce many of the barriers standing in the way of ADU construction, including a mandate that localities permit ADUs by-right rather than through a discretionary

[105] 1982 Cal. Stat. 5484, ch. 1438.
[106] John Infranca, "The New State Zoning: Land Use Preemption Amid a Housing Crisis," *Boston College Law Review* 60, no. 3, 2019.

review process.[107] Laws passed in the years since have further increased homeowners' opportunities to add ADUs to their properties, including a 2019 law that gives many homeowners the opportunity to add a junior ADU in addition to a larger ADU.[108] Under California law, homeowners can choose whether to build an ADU with separate utility hookups and metering from the principal dwelling or to share utility connections.

California state policymakers' efforts to facilitate ADU construction combined with local reforms have been particularly successful in Los Angeles. In 2017 the city permitted more than 2,000 ADUs compared to about 200 in 2016. Los Angeles' high housing cost combined with housing stock that is well-suited to ADU additions has contributed to their appeal to homeowners.[109]

Portland

As in California, a combination of state and local reforms have contributed to making ADU construction feasible and appealing to homeowners in Portland. Policymakers first passed an ADU ordinance in 1981.[110] In the late 1990s they removed owner-occupancy requirements for ADU construction.[111] Then, in 2010, Portland introduced a pilot program to reduce impact fees for ADUs and permitted the construction of smaller ADUs along with permitting ADUs on smaller lots.[112] Fewer than 50 ADUs had been permitted in any year prior to 2010, but following the 2010 reform, ADU permits have averaged more than 300 per year. In 2019 impact fees for Portland ADUs returned, corresponding with a drop in ADU permitting.[113] While state preemption played a key role in making ADUs feasible to build in Los Angeles, Portland adopted reforms ahead of its state. A 2018 Oregon law preempted ADU bans for many localities across the state[114], and a 2019 law preempted local requirements for ADU parking and owner-occupancy requirements.[115]

Seattle

[107] Dan Bertolet and Nisma Gabobe, "LA ADU Story: How a State Law Sent ADU Construction Off the Charts," Sightline Institute, April 5, 2019, https://www.sightline.org/2019/04/05/la-adu-story-how-a-state-law-sent-granny-flats-off-the-charts/#:~:text=At%20the%20start%20of%202017,of%2030%E2%80%94yes%2C%2030.

[108] Benjamin Donel, "California's New Accessory Dwelling Units Laws: What You Should Know," *Forbes, March 12, 2020.*

[109] Salim Furth and Jess Remington, "Ordinances at Work: Seven Communities That Welcome Accessory Dwelling Units," Mercatus Center at George Mason University, Policy Brief, April 2021.

[110] Lydia R.P. Lo et al., "Land Use Reforms for Housing Supply: Case Studies on the Process for Passing and Implementing Regulation Changes," Urban Institute, October 2020.

[111] Ibid.

[112] Ibid.

[113] City of Portland, "Deadline to Finalize ADU Permits Submitted for Review Prior to July 31, 2018 is June 30, 2020," April 1, 2019, https://www.portland.gov/bds/news/2019/4/1/deadline-finalize-adu-permits-submitted-review-prior-july-31-2018-june-30-2020.

[114] Ibid.

[115] Ibid.

In Seattle, a 1994 ordinance permitted homeowners to build ADUs attached to a principal dwelling. A 2009 reform made detached ADUs, known locally as DADUs, to be built as well.[116] In 2019 policymakers eliminated parking requirements and owner occupancy requirements for ADUs and allowed homeowners to build two ADUs on their lots rather than one.[117] As in Portland, Seattle's ADU reforms have been accompanied by state-level preemption that requires localities across Washington to permit homeowners to build ADUs.[118]

Common Barriers to ADU Construction

While these three cities show that ADU reforms have the potential to lead to construction of relatively low-cost housing units, many other jurisdictions where ADUs are permitted have seen little to no permitting. Three policies in particular often stand in the way of widespread ADU construction in the localities that enforce them:[119]

- **Owner-occupancy requirements.** Many localities permit ADUs only if the homeowner lives in either the primary residence or the ADU. This cuts off investors—who may be a significant share of the property owners who want to add ADUs—from building them. Perhaps more importantly, owner-occupancy requirements make it more difficult for homeowners who want to build an ADU at their primary residence to qualify for financing to do so.[120] Further, owner-occupancy requirements significantly reduce the appraised value that an ADU will contribute to a property, making them a riskier financial decision for homeowners to make.[121]
- **Parking requirements.** Localities that allow ADUs to be built often require that property owners add additional parking for the new unit. This may be infeasible if homeowners do not have land that can accommodate both an ADU and an additional parking space.
- **By-right permitting.** Often localities allow ADUs to be built, but only if homeowners go through a lengthy and uncertain review process. This adds costs to ADU construction and may turn off homeowners who are interested in building an ADU but don't want to jump through bureaucratic hoops to do so or who don't want to risk spending time and money on plans for an ADU that may not be approved.
- **Requirements for separate utility metering.** Homeowners may wish to save money by adding an ADU that shares utility hookups with the principal dwelling units. Shared utilities

[116] Dan Bertolet and Margaret Morales, "Seattle Says Yes to the Best Rules in America for Backyard Cottages," Sightline Institute, July 2019, https://www.sightline.org/2019/07/01/seattle-approves-best-backyard-cottages-rules-united-states/.
[117] Ibid.
[118] Ibid.
[119] AARP State Advocacy & Strategy Integration, Government Affairs, "Accessory Dwelling Units Model State Act and Local Ordinance."
[120] Kol Peterson, *Backdoor Revolution: The Definitive Guide to ADU Development* (Portland, OR: Accessory Dwelling Strategies, LLC, 2018), 146.
[121] Ibid., 144-5.

generally mean that the ADU tenant's utilities would be included in their rent, which may be a worthwhile tradeoff. One estimate from Washington, DC finds that separating utilities for a basement ADU can cost up to about $10,000.[122]

Measuring ADUs' impact on expanding the stock of housing

Homeowners have many potential uses for an ADU, including housing for family members, long-term rentals, guest suites, or short-term rentals. One study found that only about 50% of ADUs are in either current or intended use as a long-term residence.[123] While many policy analysts treat short-term rentals as a completely distinct market from long-term rentals, this is not always the case. A locality's long-term residents may seek short-term rental options as they go through life changes that put them between long-term rental options.[124] Professionals such as traveling healthcare workers may use short-term rental housing on an ongoing basis as their work takes them to different locations for months at a time.[125] AARP's research on ADU policy indicates that owner occupants or investors may initially build ADUs to use as short-term rentals, but when the property changes hands, future owners who don't want to manage a short-term rental may turn ADUs into long-term rentals or housing for family members.[126]

While the line between the short-term and long-term rental markets is blurry, for the purposes of this series, our focus is primarily on the role ADUs play in meeting long-term housing needs. In Table 1 below, we estimate the number of ADUs that can be expected to contribute to the long-term housing supply in Portland, Seattle, and Los Angeles. ADU permitting rates may increase in future years as homeowners become increasingly aware of their opportunities to build them and lower-cost, prefabricated ADUs come to market. On the other hand, ADU permitting rates in the early years of a successful program may be higher than later years as homeowners turn preexisting illegal ADUs into legally permitted units. Given this ambiguity, we assume that these three cities will continue permitting ADUs at the rate of their average number permitted between 2017 and 2019, and that 50% of these new units will be used as long-term housing. This is a conservative estimate since some ADUs built as short-term rentals will likely become long-term housing over time.

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[122] Cheryl Cort, "ADU D.C. Homeowner's Manual: How to Build an Accessory Apartment or Second Dwelling in the District of Columbia," Uniting People with Opportunities, Coalition for Smarter Growth, and Citi, 2020, https://www.upo.org/wp-content/uploads/2020/12/ADU_DC_HomeownersManual.pdf.

[123] Karen Chapple et al., Jumpstarting the Market for Accessory Dwelling Units: Lessons Learned from Portland, Seattle and Vancouver," Terner Center for Housing Innovation at the University of California at Berkeley, April 2017, https://ternercenter.berkeley.edu/research-and-policy/more-adus/.

[124] Ellen McCarthy, "Top bunk for $30 a day: Life inside one of Airbnb's modern boardinghouses," *The Washington Post,* May 8, 2018, https://www.washingtonpost.com/lifestyle/top-bunk-for-30-a-night-inside-one-of-airbnbs-modern-boarding-houses/2018/05/07/58db6cdc-be09-4d5a-b798-74321e9f812b_story.html.

[125] AARP State Advocacy & Strategy Integration, Government Affairs, "Accessory Dwelling Units Model State Act and Local Ordinance."

[126] Ibid.

Table 1: Estimated Number of ADUs that Can Be Expected to Contribute to the Housing Supply

City	Stock of Single Family 1-unit (Attached and Detached)	Estimated Annual ADU Permit Volume	Annual ADU Permits x 50%	Years until 10% of single-family houses have ADUs for long-term tenants
Portland, OR	176,020	434	217	81 years
Seattle, WA	166,958	226	113	149 years
Los Angeles, CA	646,851	3,826	1913	34 years

Source: Authors' calculations based on the number of detached and attached one-unit houses in the Census Bureau's 2019 American Community Survey and 2017-2019 ADU permits from the cities of Portland, Seattle, and Los Angeles.

Reforming zoning policy to permit ADUs to be built on lots with attached or detached one-unit houses is similar to permitting two principal dwelling units on lots previously zoned exclusively for single-family development in terms of allowable housing density. However, we expect regulations that support construction of two principal dwelling units to result in larger increases to housing supply relative to permitting only ADUs. Two-unit construction is more likely to be driven by professional homebuilders who have developed some economies of scale in construction. Two-unit construction can be structured as single or condo ownership in many jurisdictions, whereas ADUs generally must be owned by the same owner as the principal dwelling unit. Often, localities cap the maximum square footage of ADUs at much smaller sizes than two-unit zoning would permit. Further, the vacancy rate of units in typical two-unit structures is about 10% relative to the 50% estimate we rely on for ADUs.[127]

Zoning that facilitates duplex construction is our focus in Chapter 5 of this series, in particular two-family zoning that has facilitated extensive duplex construction in Palisades Park, NJ. Since the adoption of its first zoning ordinance in 1939, Palisades, Park, NJ has permitted two-unit construction on a nearly equal basis as one-unit construction. In the 20-year period from 2000 to 2019, more than one-quarter of the borough's detached single-family houses were replaced with duplexes. This has resulted in a 14% increase in Palisades Park's one- and two-unit housing stock. This rate of housing stock growth through duplex infill construction is much faster than any U.S. cities have experienced through ADU construction alone.

While ADUs can be one piece of a reform agenda to reduce housing supply constraints and improve housing affordability in high-cost localities, they are not likely, on their own, to lead to a transformative amount of housing construction. Flexible rules that permit various types of LTD construction, including duplexes, can be expected to result in more housing construction than rules that only permit ADUs to be added to primary dwelling units.

[127] Furth and Remington, "Ordinances at Work: Seven Communities That Welcome Accessory Dwelling Units."

Appendix

Figure1: An ADU in Portland

Source: Google Street View

Figure 2: An ADU in Portland

Source: https://www.sightline.org/research_item/washingtons-adu-bills-can-create-modest-affordable-home-choices/

Figure 3: An ADU in Los Angeles

Source: https://www.jpbuildersus.com/adu-garage-conversion/

Chapter 5: Talking Points – A Case Study of Palisades Park and Neighboring Boroughs in Bergen County, NJ

Most urban and suburban areas across the U.S. have adopted single-family detached zoning for the majority of their residential land. However, some jurisdictions, including a number in Northern New Jersey, are an exception to this rule. Some Northern New Jersey localities permit what we call light-touch density (LTD), which we define to include small-lot single-family houses, townhouses, duplexes, triplexes, and fourplexes on large portions of their land zoned for residential development.

Variation in the regulation of LTD among nearby localities presents an opportunity to compare housing market outcomes across jurisdictions. In this Policy Brief we focus on seven localities in Bergen County, NJ and Palisades Park in particular.

- When Palisades Park first adopted a zoning ordinance in 1939, policymakers chose to implement combined one- and two-family zoning districts for nearly the entire jurisdiction with no zones that exclusively permit single-family detached homes.
- Nonetheless, market forces led Palisades Park to be initially developed primarily with single-family detached housing. However, as home prices and land values have increased, Palisades Park saw progressively more extensive two-family development, especially side-by-side duplex redevelopment.
- Relative to its neighboring jurisdictions that do not permit LTD construction, Palisades Park has experienced:
    - More housing construction;
    - Greater population growth;
    - Higher land values;
    - Stronger commercial activity; and,
    - Lower property tax rates.

Chapter 5: A Case Study of Palisades Park and Neighboring Boroughs in Bergen County, NJ

In the last four chapters, we outlined the supply and affordability problems the U.S. housing market is facing today as a result of restrictive zoning and land use laws. We argued that permitting small-lot single family development, townhouses, accessory dwelling units, and two-, three- and four-unit residential structures (what we call light-touch density or LTD) in built-up areas is part of the solution. In Chapter 3, we explain the potential for permitting more LTD construction to result in a significant increase in new housing supply in regions of the country where population is growing at lower prices for both new housing and infrastructure than current regulations permit.

In this brief, we present a case study of seven contiguous boroughs in southeastern Bergen County, New Jersey, examining rules that facilitate or block LTD construction. Zoning for LTD varies across these jurisdictions, and, in turn, their housing stocks have differing proportions of LTD housing. They illustrate on a micro-scale how by-right LTD can, over the span of decades, contribute to housing supply growth and affordability. However, this case study also serves as a warning that details matter in LTD zoning. Ordinances that limit flexibility of LTD design or require subjective approval processes can easily choke off LTD construction.

Palisades Park, which has allowed LTD for many decades, plays the central role in our case study. We compare and contrast this borough with six neighboring localities. Most, with one exception (Cliffside Park), have rules that explicitly or implicitly prevent LTD development, particularly the side-by-side duplexes that are prominent in Palisades Park.

Palisades Park, which allows one- or two-unit development across the entirety of its primary residential zone, has outperformed its neighboring jurisdictions in several key metrics:

- Since 1940, Palisades Park's population has grown 154%, the most of the seven boroughs.
- Fifty-one percent of Palisades Park's housing stock has been built since 1969. In neighboring Leonia, in contrast, only 24% of the housing stock has been built since 1969.
- From 2000 to 2019, Palisades Park experienced a 24% increase in its one- to four-unit housing stock. This one- to four-unit housing stock was flat for most of its neighbors.
- Palisades Park has lower property tax rates for both residential and commercial structures than the other six boroughs in this case study.
- Palisades Park has higher land values per acre than all but one of the other six boroughs.
- It has a more vibrant commercial sector as compared to its neighbor Leonia as measured by greater restaurant and retail activity per capita.

If, since 1940, the other 6 boroughs had grown at the same rate as Palisades Park, their combined populations in 2018 would have been about 205,000, rather than 108,000. Table 1 shows characteristics of the housing stock, zoning constraints, and population of Palisades Park and neighboring jurisdictions.

Table 1: Characteristics of the Housing Stock, Zoning Constraints, and Population of Palisades Park and Neighboring Jurisdictions

Borough	# of 1-4 housing units (2018)	% 1-unit detached (2018)	% 1-unit attached (2018)	% 2-units (2018)	% 3-4 units (2018)	Zoning for side-by-side duplexes	Population growth - 1940-2018	Population per Sq. Mile (2018)
Palisades Park	5,243	21%	10%*	55%*	14%	By right across all residential land	154%	16,750
Bogota	2,641	74%	3%	19%	3%	Legal barriers	8%	11,061
Cliffside Park	6,443	33%	10%	38%	19%	By right in limited areas	55%	26,056
Leonia	2,714	74%	8%	9%	9%	Legal barriers	57%	5,905
Ridgefield	3,521	48%	3%	38%	10%	Legal barriers	112%	4,423
Ridgefield Park	3,972	51%	4%	39%	6%	Procedural barriers	14%	7,631
Teaneck	11,846	86%	4%	6%	4%	Legal barriers	19%	6,702

*** Percentages adjusted to reflect that at least 50% of 1-unit attached units are actually side-by-side 2-unit duplex structures, inconsistently characterized as 1-unit attached structures by the U.S. Census.**

Note: 'By right' means that a property owner has the right to convert or redevelop a 1-unit structure to a duplex without being subject to special review and approval by a local policymakers, combined with equal treatment under applicable zoning ordinances and other legal requirements. 'Legal barriers' means that 2-unit structures are directly prohibited by zoning laws throughout large swaths of the borough. 'Procedural barriers' means that, while not explicitly prohibited by zoning laws, duplex construction is effectively restricted by zoning restrictions or barriers in the approval process for two-unit housing.

Source: U.S. Census Bureau (2018 5-year American Community Survey), and USDA.

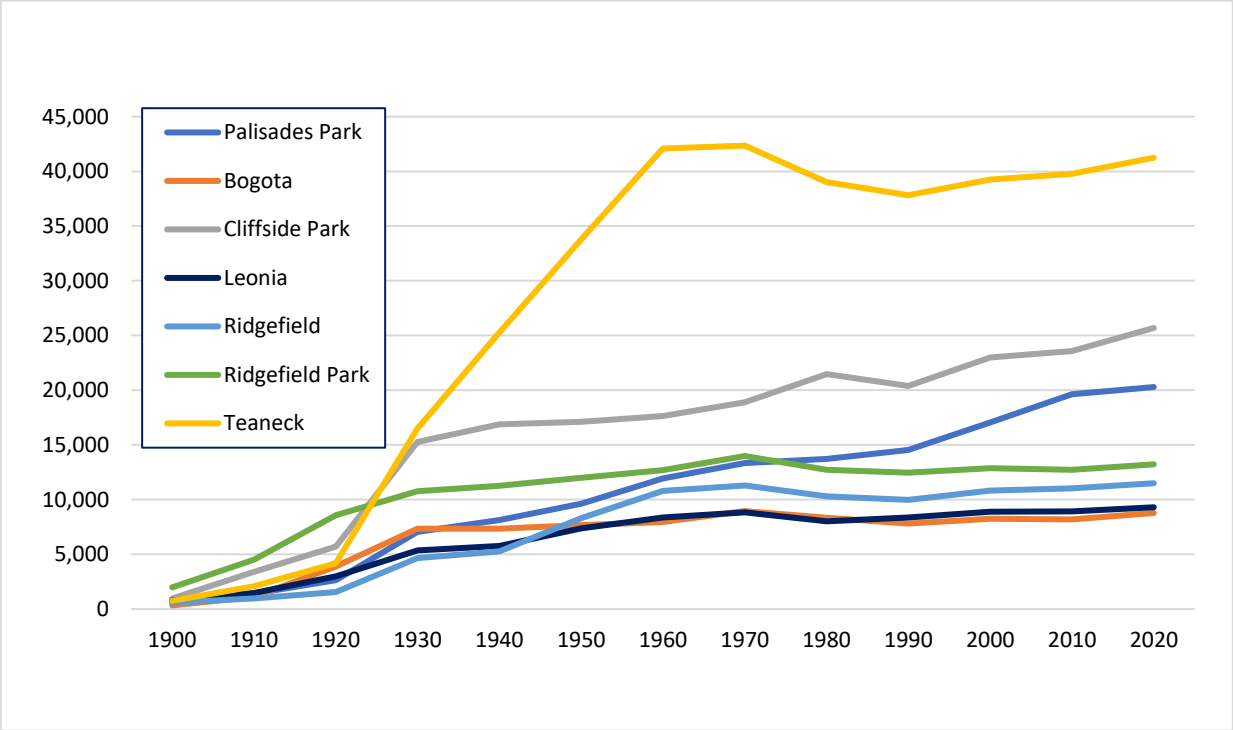
Case Study Background

The seven boroughs in this case study are in a relatively small corridor about 3 miles wide and 5 miles long in Bergen County near the George Washington Bridge that connects the county to Manhattan. They lie east of the Hudson River and west of the Hackensack River. (See Map 1 in the Appendix.) They are well-located for Manhattan commuters, including the terminus of the New Jersey Turnpike and other major arteries. All have similar economic conditions and have had little greenfield land left for development since the 1950s. These conditions create an opportunity to evaluate infill development from single-family to LTD across boroughs where this infill construction has been permitted and those where it hasn't.

Palisades Park ranks as third densest of 70 municipalities in Bergen County and the second densest in this case study after Cliffside Park. Palisades Park's high population density has been achieved by embracing duplex construction, which comprise an estimated 37% of total housing stock vs.

14% for one-unit detached. Chart 1 below shows how these localities' population growth over time under their varying approaches to land use regulations.

Chart 1: Census Population in Select Boroughs of Bergen County (1900-2010)



Source: U.S. Census Bureau.

Palisades Park

An expansion of housing – mostly of side-by-side duplexes as shown by example in Figure 1– has underpinned population growth in Palisades Park since 1960. Today, an estimated 55% of its one- to four-unit housing stock consists of two-unit housing, and 13% consist of three- to four-units.[128] Notably, during the 2000 to 2019 period, the borough was able to add 24% to its one- to four-unit housing stock, net of demolitions.

[128] U.S. Census Bureau, American Community Survey, 2018. Two-unit percentage adjusted to reflect that an estimated 50% of one-unit attached units are actually side-by-side duplex structures on single lots.

Figure 1: Side-by-side Duplex in Palisades Park

Source: Google Street View

Palisades Park's Zoning History

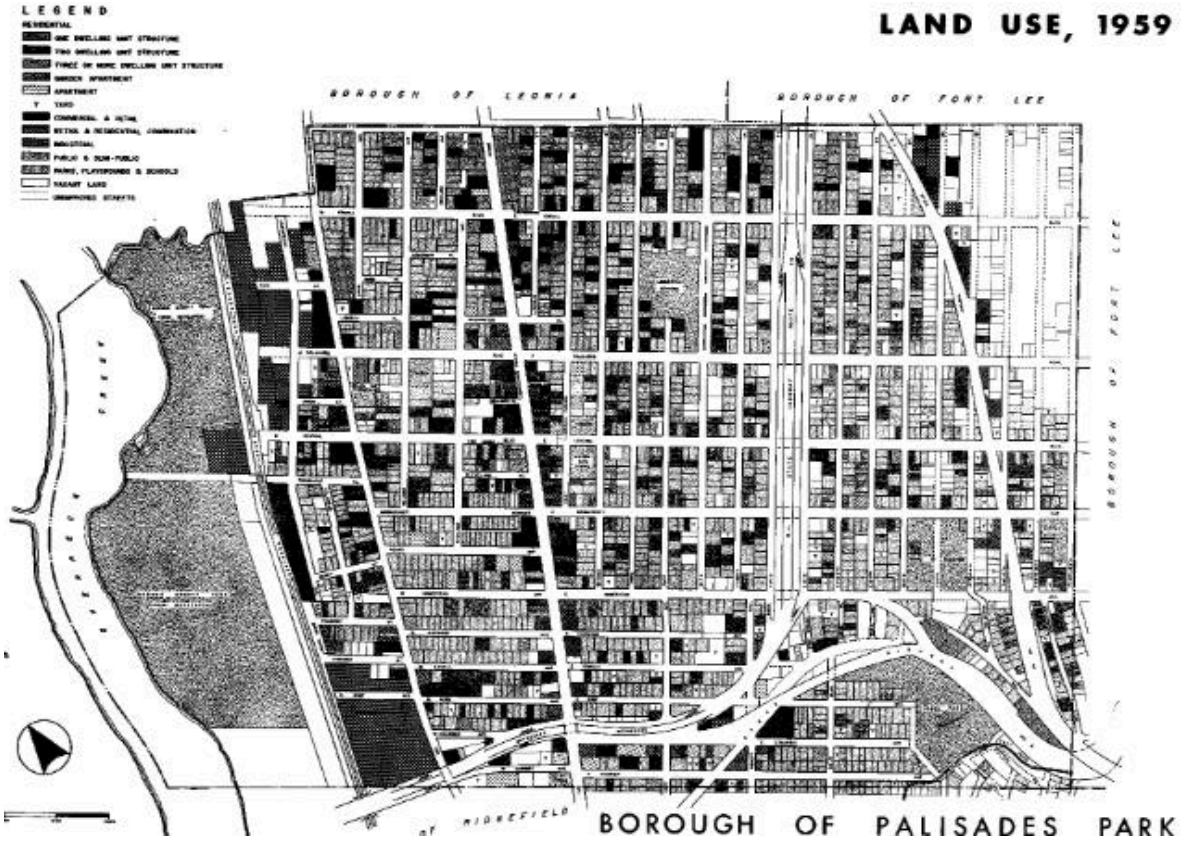
Since the adoption of its first zoning ordinance in 1939, Palisades Park has allowed one- and two-unit homes to be built on 5,000 square-foot lots in the two residential zones which comprise virtually all of its residential area. This stands in contrast to the near-nationwide conformance to one-unit zoning as the primary residential designation. The only exception to Palisades Park's allowance of duplexes was a one-year moratorium in 1996 which briefly prohibited side-by-side duplexes.[129] This has allowed a consistent market-based expansion of housing supply even though almost no vacant land has been available for the past several decades.

Although two-unit development has been permitted throughout Palisades Park's history, according to 1930 census data, only 10% of Palisades Park's one- to four-unit housing stock consisted of two-unit houses at that time. The city's 1959 Master Plan and Neighborhood Renewal Plan states that "present zoning regulations in Palisades Park permit the conversion of any single-family home to two-family occupancy."[130] Based on a lot-by-lot land use survey from 1959, planners predicted that they would ultimately be the "predominant housing type" in the borough: "There is a very noticeable trend toward the construction of two-family homes and the conversion

[129] Borough of Palisades Park, Ordinance No. 1239, Section 2A, 1996, https://ecode360.com/9265854.
[130] Neighborhood Renewal Plan for Palisades Park (1959), 4, http://bcgisweb.co.bergen.nj.us/planning/masterplans/Palisades%20Park/45-005.pdf.

of one-family homes to two-family uses in Palisades Park."[131] At that time, two-unit structures made up roughly a quarter of the 4,000-unit total housing stock. The land use map (Figure 2) shows that the various housing types (single-family houses, duplexes, and apartment buildings) were interspersed with each other.

Figure 2: Palisades Park Land Use Map, 1959 Master Plan



Source: Borough of Palisades Park, Master Plan Memoranda, 1959

While the borough's elected officials have mostly welcomed two-family development, they have prioritized banning three-family development in the primary residential zone. This contrasts with recent reforms in jurisdictions we cited in previous briefs as having recently embraced LTD, such as Minneapolis, Durham, and Oregon. The 1993 Master Plan states:

> The Borough recognizes that three-family and multifamily units represent an intrusive element which erodes the established character of the community and represents a drain on facilities. The Borough's land use policy is designed to prevent the construction or

[131] Neighborhood Renewal Plan for Palisades Park (1959), 1-2, http://bcgisweb.co.bergen.nj.us/planning/masterplans/Palisades%20Park/45-005.pdf.

> expansion of three family and multi-family units. It is the express policy of the Borough to discourage such development in the municipality.[132]

However, the Palisades Park case demonstrates that a change as small as by-right two-family development in a one-family zone can result in substantial additions to supply.

The Duplex Redevelopment Process

As Palisades Park officials foresaw in 1959, the borough has experienced significant infill construction. The redevelopment of one-unit structures into duplexes accelerated greatly during the 1990s and 2000s. Since 1939, when Palisades Park enacted its first zoning ordinance, both one- and two-family homes have been permitted on 5,000 square-foot lots. Setback requirements for one- and two-unit structures are equivalent. The 28-foot height limit in Palisades Park's primary zoning district accommodates two stories above the first floor with a garage, as shown in Figure 1. The primary difference in requirements between one-unit and two-unit houses is that two-unit houses must include four garage parking spots and four driveway parking spots, relative to one covered parking space required per one-unit house.

In 2017, a builder with experience in the Palisades Park market provided the following example of redevelopment financials:

> A builder might pay in the high $500,000s for a single-family home on a 50-by-100-foot lot in Palisades Park and then spend an additional $750,000 in construction and other costs to build a duplex, which would have a selling price of about $750,000 per side, yielding a total profit of about $150,000.[133]

Homebuilders typically prefer to sell new two-family houses rather than hold them as rental properties. A side-by-side duplex is well-suited to a condo ownership structure because the owners of each side only need to coordinate on insurance for the property's exterior. They aren't required to pay other homeowners association fees or otherwise coordinate on the property's upkeep.[134] Palisades Park requires each side of a side-by-side to have its own sewer connection and utilities hook ups. The ownership structure and physical characteristics of Palisades Park duplexes give them similar characteristics to townhouses or the small-lot detached houses in Houston that we cover in Chapter 3.

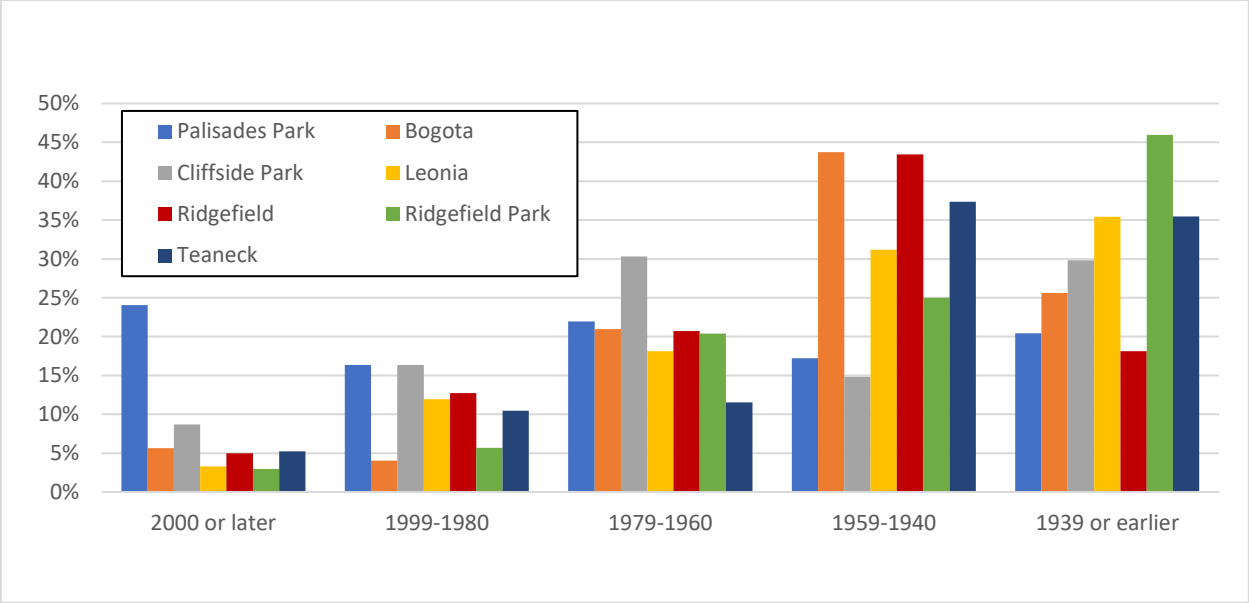
Following Palisades Park's initial boom in duplex construction in the early 1990s, redevelopment picked up in the 2000s and remained strong in the 2010s. This construction can be seen on Chart 2 below, which shows that Palisades Park has a higher share of houses built post-2000 than any of

[132] Palisades Park Master Plan (1993), 8, http://bcgisweb.co.bergen.nj.us/planning/masterplans/Palisades%20Park/45-008.pdf.
[133] Kathleen Lynn, "Side by side: The rise of duplexes," *Northjersey.com,* March 10, 2017, https://www.northjersey.com/story/money/2017/03/10/side-side-rise-duplexes/96963622/.
[134] Ibid.

its neighbors. Furthermore, Cliffside Park, the closest borough to Palisades Park in terms of LTD-friendliness, experienced a boom of similar magnitude in the 1960s-70s. The other neighboring boroughs have a comparatively old housing stock. Between 2000 and 2018, more than 1,000 new LTD housing units were built in Palisades Park, primarily in duplexes, and accommodating population growth of nearly 15%.

Palisades Park's extensive duplex redevelopment is not a product of its two-family zoning alone. In a region of highly constrained housing supply and high prices, Palisades Park allows one outlet for homebuilders to provide new housing supply. Further, Palisades Park's own land use regulations have facilitated more duplex construction relative to units in larger multifamily buildings.

Chart 2: Property Year Built for Select Boroughs in Bergen County: 2018 5-year ACS



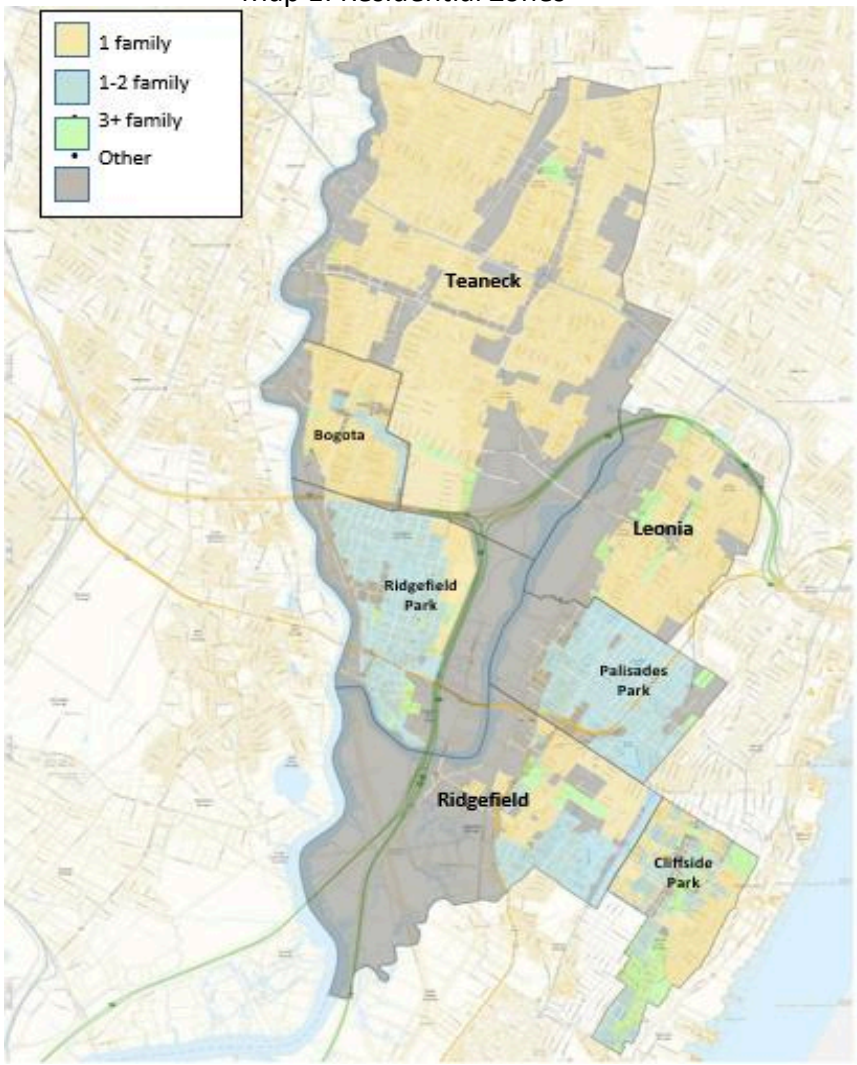
Source: U.S. Census Bureau

Research by the AEI Housing Center shows that Palisades Park has close to the same land value per acre as Cliffside Park, and both have substantially higher land values than nearby Teaneck, Bogota, Leonia, Ridgefield Park, and Ridgefield (see Map 2).[135] Land values in Palisades Park reflect in part its relatively small minimum lot size and that two units are permitted in its primary residential zone rather than one. In nearby boroughs where broad economic and housing market conditions are roughly comparable but zoning laws require more land per unit, lower land values are the natural consequence. However, since a duplex requires roughly half the land of a one-unit detached home, the land cost per unit is generally less for a duplex.

[135]AEI Land Value Data: https://www.aei.org/wp-content/uploads/2020/08/AEI_adjusted-Land-Data-2019-1.xlsx

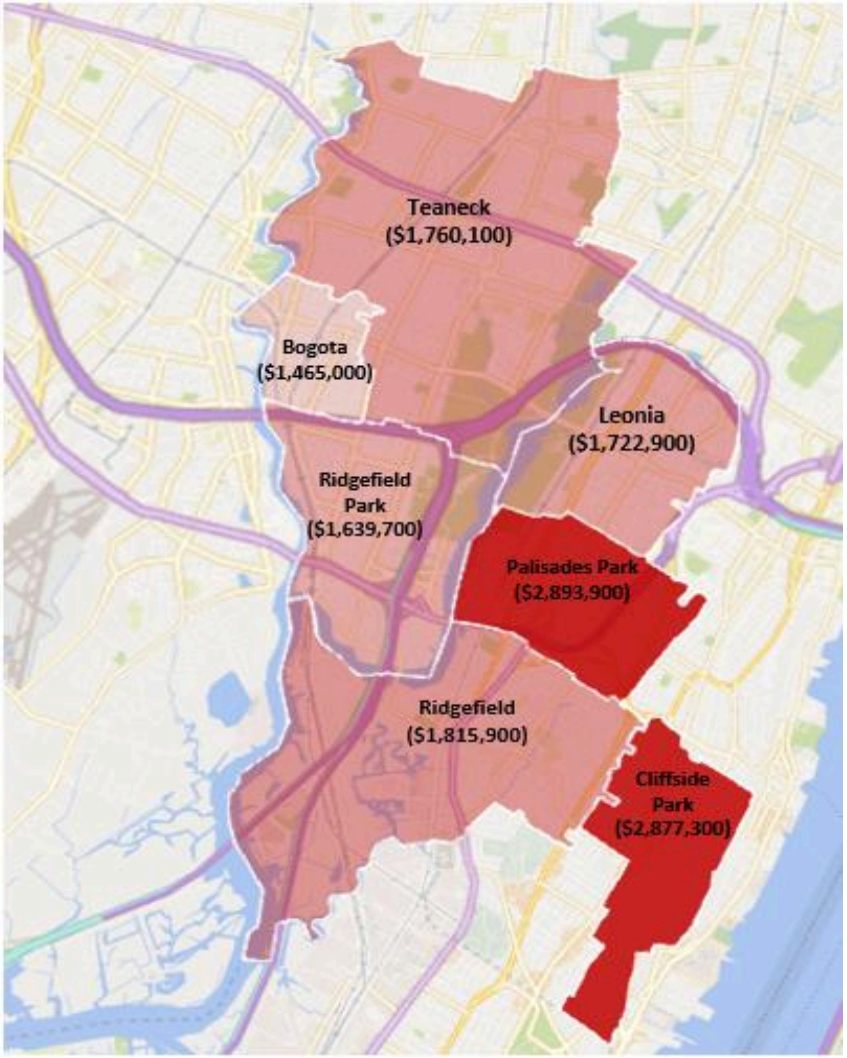
Maps 1 and 2: Residential Zoning and Land Values in Selected Bergen County, New Jersey Boroughs

Map 1: Residential Zones



Note: "Other" is industrial or land not used for housing.
Source: Most recent zoning map from each municipality's master plan.

Map 2: 2019 Land Values (as-is price per acre)

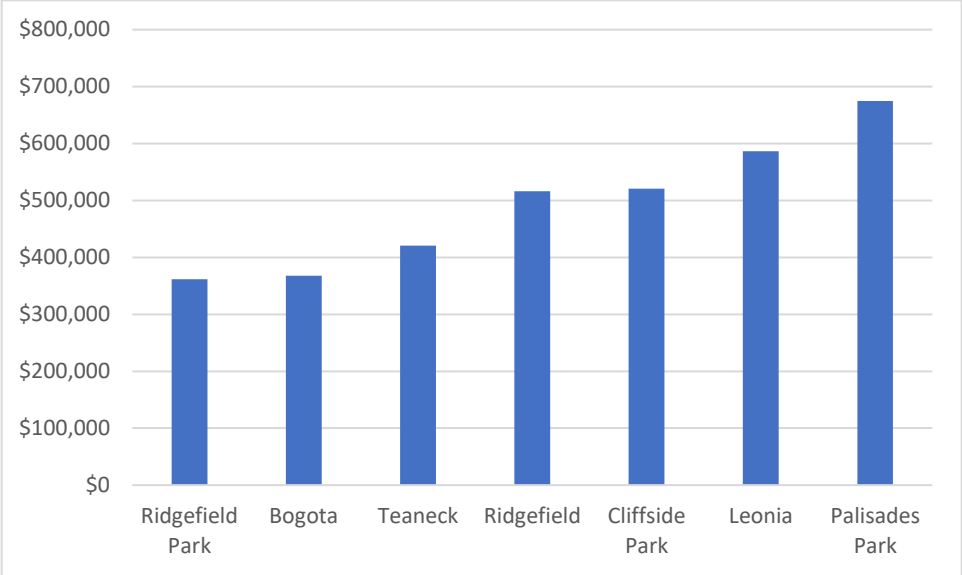


Note: AEI-adjusted land values are based on data for 2012 from "The Price of Residential Land for Counties, ZIP Codes, and Census Tracts in the United States" by Davis (Rutgers), Larson (FHFA), Oliner (AEI), and Shui (FHFA). The Davis et al. data are adjusted using AEI's constant-quality home price appreciation index.

Affordability in the Bergen County Study Area

Among the jurisdictions in our case study, Palisades Park has the highest median house prices, reflecting in part its much newer housing stock and lower property tax rates.

Chart 3: Median House Prices in 2020 for Select Boroughs in Bergen County



Source: Zillow, ZHVI All Homes, https://www.zillow.com/research/data/.

However, in terms of new construction house prices, Palisades Park averaged $820,000 in 2019, compared to $855,000 in Leonia, and those purchasing relatively newly built homes in Palisades Park have on average around $15,000 lower incomes than those purchasing existing homes in Leonia, the borough most clearly implementing policies diametrically opposite to those of Palisades Park.[136]

Housing prices are determined by regional supply and demand. Zoning that facilitates LTD in a locality like Palisades Park, which makes up a tiny portion of the New York City region is not enough to have a big effect on prices either within the locality or in the region as a whole. Nonetheless, relative to boroughs with more restrictive zoning, Palisades Park is contributing to regional affordability through a process known as filtering. When a new housing unit is delivered, the household that moves into it often leaves another housing unit in the region, freeing it up for another household in the process. More often than not, households are moving into more desirable, more expensive housing, freeing up less expensive housing for someone else.[137]

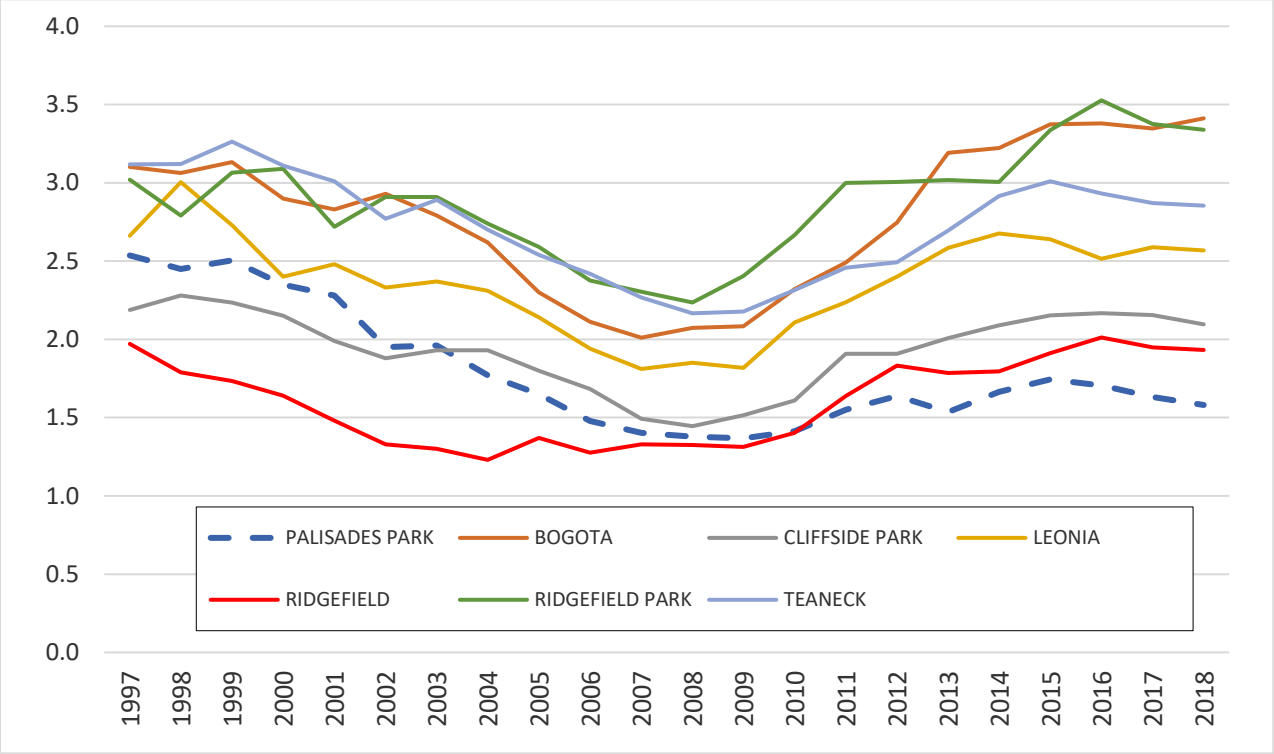
Economist Evan Mast estimates the size of the filtering effect that new multifamily construction has on housing affordable to middle- and low-income households regionally. He identified tens

[136] Source; AEI Housing Center.
[137] Bernard Siegan, *Land Use Without Zoning* (Lanham, Maryland: Rowman and Littlefield, 2020): 87-95.

of thousands of residents moving into hundreds of new market-rate buildings in central cities and the housing that they freed up as a result of their moves. He estimates that 100 new market-rate units result in vacancies in at least 45 units in below-median income Census tracts and 17 units in bottom-quintile income Census tracts.[138] Through this process, new housing that may not itself be affordable to low- or middle-income households contributes to housing availability and affordability for low- and middle-income households.

Beyond the cost savings of new infill construction that benefits homebuyers, infill construction that takes advantage of existing infrastructure can benefit taxpayers. The type of housing expansion Palisades Park has experienced has saved residents money, as property tax rates for the borough fell below neighboring boroughs' rates throughout the 2000s (see Chart 4).

Chart 4: Effective Property Tax Rate for Select Boroughs in Bergen County (1997-2018)



Source: New Jersey Treasury Division of Taxation, applicable to residential and commercial property.

The Palisades Park case study also demonstrates that businesses, like homeowners, can benefit from significantly reduced property tax rates when by-right LTD is allowed. Palisades Park benefits from higher commercial property values, even though the tax rate is lower. The extent of these savings is illustrated by comparing Palisades Park and Leonia. Here we analyze commercial properties located along the Broad Street corridor – the primary commercial district of the area that runs through both Palisades Park and Leonia.

[138] Evan Mast, "The Effect of New Market-Rate Housing Construction on the Low-Income Housing Market," Upjohn Institute working paper, 19-307, 2019, https://research.upjohn.org/up_workingpapers/307/.

Relative to detached single-family development, LTD's higher population density can support more commercial development. In 2012 Palisades Park grossed $52 million in total accommodation and food services, compared to Leonia's $5 million, while its population was about double Leonia's. In terms of retail sales, Palisades Park grosses $190 million, compared to Leonia's $118 million.[139]

Table 2. Commercial Property Statistics in Palisades Park and Leonia

	Median Assessed Value (per sq. ft.)	Median Property Taxes Paid (per sq. ft.)	Total Assessed Value (in mil)	Property Tax Rate	Number of Properties	Total Sq. Footage
Palisades Park	$ 237	$401	$297.2	1.57%	116	752,000
Leonia	$ 168	$500	$105.3	2.55%	37	246,000

Source: AEI Housing Center, www.AEI.org/housing; First American via DataTree.com; New Jersey Division of Taxation.

Relative to Leonia's single-family development, LTD in Palisades Park corresponds with higher commercial property values, nearly three times the commercial square footage, and lower property tax rates. Despite a lower property tax rate and lower property tax collections on a per square foot basis, Palisades Park generates three times the property tax revenue from commercial properties that Leonia does.

Palisades Park Duplex Moratorium

Parking concerns were a key political issue during the initial expansion of duplex construction in Palisades Park in the 1990s. In 1996, the perceived dearth of on-street parking availability led to a one-year moratorium on duplexes as policymakers considered parking policy. This issue was foreseen decades before the moratorium. As the city's 1959 Neighborhood Renewal Plan states:

> The trend towards more conversions and two-car families will cause this problem to grow. It is imperative that regulations be developed to control the use of curb parking spaces for all day parking and over-night parking.[140]

[139] U.S. Census, "QuickFacts," 2019, https://www.census.gov/quickfacts/fact/table/teanecktownshipbergencountynewjersey,ridgefieldboroughnewjersey,palisadesparkboroughnewjersey,leoniaboroughnewjersey/PST045218.

[140] Neighborhood Renewal Plan for Palisades Park (1959), pg. 5, http://bcgisweb.co.bergen.nj.us/planning/masterplans/Palisades%20Park/45-005.pdf.

The issue was resolved politically by the introduction of a new requirement that each duplex must have a two-car garage for each unit and driveways big enough to accommodate four more cars, for eight total parking spaces. With the moratorium lifted, duplex construction resumed. Now, roughly ten building firms specialized in duplexes throughout the region.[141] A large majority of two-family houses in Palisades Park are side-by-side duplexes, however homebuilders have the option to build up-down two-family houses if they think that option works better for a certain site or client.

In Chapter 4, we covered LTD reforms at the state level in Oregon and at the local level in Minneapolis. These reforms have been paired with efforts to reduce parking requirements to improve the feasibility of new LTD construction. Rather than requiring off-street parking, policymakers can manage demand for on-street parking by charging more for it, either through meters or residential parking permits.[142]

Lessons from Palisades Park

Proposals to permit increased LTD construction in the U.S. are often met with political opposition from homeowners who argue that infill construction would harm their property values.[143] However, in the case of Palisades Park, zoning that permits more intensive land use corresponds with higher land values relative to neighboring boroughs with more restrictive zoning. During Palisades Park's duplex moratorium, land values fell as homeowners lost the option for side-by-side duplex redevelopment that had increased their property values.[144] As a result, policymakers increased property tax rates as homeowners' asset values fell. When the moratorium was lifted the following year, property values bounced back, and policymakers permitted property tax rates to fall. LTD allows the costs of maintaining a relatively fixed stock of infrastructure to be shared across a growing population.

Leonia

In contrast to Palisades Park, its northern neighbor, Leonia, zoned almost all its residential land for exclusively single-unit structures. Its small areas zoned for multifamily development are mostly pushed to the edges of the borough. This is in spite of the fact that the average lot size in Leonia is more than sufficient to accommodate duplexes (Palisades Park undertook its transformation with an average lot size of 5,300 square feet, compared to 8,000 for Leonia).

Leonia's commitment to maintaining single-unit zoning is evidenced across multiple iterations of its master plan:

[141] Based on an interview conducted by the authors with Palisades Park Borough Administrator David Lorenzo, November 2019.
[142] Donald Shoup, "Buying Time at the Curb," *The High Cost of Free Parking* (New York: Routledge, 2017).
[143] See Chapter 3 for a description of homeowners' political and financial incentives in shaping land use policy.
[144] Based on an interview conducted by the authors with Palisades Park Borough Administrator David Lorenzo, November 2019.

- "The Board has approached this study from the basis of a conviction that the majority of Borough residents desire to see retained the single-family character which the town has had for so long."[145]
- "The Borough of Leonia hereby emphasizes that its land use policy is to retain its single-family character, including the area along the Palisades Park border."[146]
- "The Borough's policy is to continue to accommodate this broad array of housing, and encourage the provision of some additional multifamily residential development… but not to encourage any additional attached residential development."[147]

Leonia has been generally successful at achieving its stated objective of preventing "out-of-character development" through its zoning rules, which come at the expense of additions to supply and new housing construction.[148]

Ridgefield

The borough of Ridgefield, Palisades Park's southern neighbor, appears at first glance to have taken a more density-friendly attitude towards residential redevelopment than Leonia; as Appendix: Map 1 shows, roughly a third of its residential land is zoned for one- to two-unit structures. However, the borough's zoning ordinance explicitly outlaws side-by-side duplexes. At 38%, of its one- to four-unit housing stock, two unit housing plays and important part of Ridgefield's housing stock. But since 2000, as duplex construction boomed in Palisades Park, only about 60 two-unit structures have been built in Ridgefield.[149]

As we explained earlier, side-by-side duplexes are an attractive option for Bergen County homebuilders and buyers. Limiting duplex construction to up-down two-family configuration alone has inhibited redevelopment to the point that very few two-family units exist in Ridgefield, even in its one- to two-unit zones. Ridgefield also passed an ordinance mandating a minimum ceiling height of 6'10" in basement accessory dwelling units.[150] This has had a similar

[145] Leonia Master Plan (1966), pg. 22, http://bcgisweb.co.bergen.nj.us/planning/masterplans/Leonia/29-001.pdf.
[146] Leonia 2002 Master Plan objective as cited in 2009 Master Plan Reexamination Report, (pg. 6), http://bcgisweb.co.bergen.nj.us/planning/masterplans/Leonia/29-010.pdf.
[147] Leonia 2002 Master Plan objective as cited in 2009 Master Plan, (pg. 7,) http://bcgisweb.co.bergen.nj.us/planning/masterplans/Leonia/29-010.pdf.

[148] Anecdotally, our on-site interviews noted that some builders who redevelop single-unit homes in Palisades Park find that many of the homes they purchase have serious structural problems.
[149] U.S. Census Bureau, Decennial Census 2000; U.S. Census Bureau, American Community Survey 2019, 5-year estimates.
[150] Town of Ridgefield, "Building Code Requirements for Accessory Dwelling Units," Planning and Zoning Commission, 2008, https://www.ridgefieldct.org/sites/g/files/vyhlif4916/f/uploads/building_code_requirements_for_accessory_dwellings.pdf

chilling effect on adding basement units in the borough's zone where two-unit development is permitted.

Cliffside Park

Cliffside Park is closer on the LTD-friendliness spectrum to Palisades Park. The borough has seen fairly large population increases since 1940—55% compared to 154% in Palisades Park[151]—and has allowed *some* LTD redevelopment to accommodate it as seen on the zoning map (Appendix: Map 1). Cliffside Park has accommodated a larger share of its population growth in multifamily developments. Forty-two percent of Cliffside Park's units are in structures with five or more units.

Cliffside Park's zoning varies throughout the borough, even within blocks. Like Palisades Park, Cliffside Park allows by-right conversion or redevelopment of one-unit houses to duplexes in areas zoned for one- or two-unit structures. Zoning regulations for the areas where two-family structures are permitted in Cliffside Park are, for all intents and purposes, similar to Palisades Park, and both side-by-side and up-down two-unit housing is allowed. Unlike Palisades Park, however, the borough maintains one-unit zones, where one-unit structures are not allowed to be converted or replaced with two-unit structures. Due in part to Cliffside Park's zoning that permits LTD and larger multifamily projects, it has the highest land values per acre out of these seven boroughs.

Ridgefield Park

As seen in Appendix: Map 1, the borough of Ridgefield Park (not to be confused with the borough of Ridgefield) appears to have a large percentage of its area zoned for one- to two-unit structures. However, the borough's 2009 Master Plan reflects a desire to obstruct two-unit development, with two of its stated goals being:

1. "Establish Neighborhood Areas - To maintain and enhance the quality and character of established neighborhoods in the Village and to discourage inappropriate increases in housing density in these area." [152]
2. "Prevent Overcrowding – To provide light, air and open space." [153]

These attitudes have manifested in several hurdles which make duplex construction generally unfeasible even in one- to two-unit zones today. In order to build a two-family dwelling in the one- to two-unit zone (called the R-2 zone in the borough's zoning ordinance), a plot plan must be submitted to the planning board. This applies to new structures, conversions of single-unit

[151] Cliffside Park's population increased 54% since 1940, compared to 154% for Palisades Park (see Chart X).
[152] Village of Ridgefield Park Master Plan Reexamination (2009), pg. 4, http://bcgisweb.co.bergen.nj.us/planning/masterplans/Ridgefield%20Park/50-018.pdf.
[153] Village of Ridgefield Park Master Plan Reexamination (2009), pg. 5, http://bcgisweb.co.bergen.nj.us/planning/masterplans/Ridgefield%20Park/50-018.pdf.

dwellings, or expansions of single-unit dwellings.[154] In contrast to Palisades Park and Cliffside Park where duplex permitting is by-right, in Ridgefield Park they require a costly and time-consuming hearing, which is not required for permitting one-unit structures. As in Ridgefield, two-unit housing makes up a significant share of Ridgefield Park's existing one- to four-unit housing stock, but few have been added in the past two decades.[155]

Besides these process barriers, zoning requirements also stand in the way of two-unit development in Ridgefield Park. Based on data from Davis et al., the average lot size in Ridgefield Park is 5,600 square feet. The minimum lot size for a two-unit structure in Ridgefield Park is 10,000 square feet.[156] Additionally, the maximum building coverage of a two-unit structure on any R-2 lot is 2,500 square feet, the maximum number of floors any structure can have is two, and there must be at least four parking spaces for each two-unit dwelling. This means that even if a builder can find a 10,000 square foot or larger lot, they will be extremely limited by building area, number of floors, and land.[157] In sum, it is nearly impossible and very costly to build a duplex in Ridgefield Park.

The difference between recent two-unit construction in Ridgefield Park and Palisades Park illustrates the importance of seemingly small details in zoning regulations and the permit approval process in determining whether LTD construction will be feasible. In Palisades Park, high parking requirements don't stand in the way of duplex construction because other siting and massing requirements make it feasible for builders to build them. The requirements that Ridgefield Park imposes on two-family construction have proven to be a much more significant barrier to their construction.

Bogota

Bogota has had little population growth since 1930 and a stagnant population since 1960. Its approach to zoning is similar to Leonia's. Bogota policymakers' attitude toward development is made clear in its 2015 master plan, which states as one of its goals: "Maintain and enhance the quality of established neighborhoods in Bogota including the protection of the residential character and prevailing densities of the community." [158]. In its primary residential zone, Bogota permits only detached single-family construction.

[154] Village of Ridgefield Park Municipal Code, Part II: Land Use Legislation, Chapter 96-6.8, https://ecode360.com/13321806.
[155] U.S. Census Bureau, Decennial Census 2000; U.S. Census Bureau, American Community Survey 2019, 5-year estimates.
[156] Davis, M., Larson, W., Oliner, S. & Shui, J. (2019), "The Price of Residential Land for Counties, ZIP Codes, and Census Tracts in the United States." *FHFA Staff Working Paper Series.*
[157] Village of Ridgefield Park Municipal Code, Part II: Land Use Legislation, Chapter 96, Attachment 4. , https://ecode360.com/attachment/RI0926/RI0926-096d%20Schedule%204.pdf.
[158] Bogota 2015 Master Plan Reexamination Report, pg. 3, http://bcgisweb.co.bergen.nj.us/planning/masterplans/Bogota/04-022.pdf.

Teaneck

The borough of Teaneck is by far the largest of these seven boroughs in both land area and population. In terms of LTD redevelopment, it is similar in attitude to Leonia and Bogota, as evidenced by their 2007 Master Plan, which states as one of its goals: "preserve the character of existing low-density residential neighborhoods", and expresses "concerns about transformation of neighborhood and aesthetic character." [159] The vast majority of the borough's residential land is zoned exclusively for one-unit housing, with only a few small patches zoned for multi-unit structures. Two- to four-unit structures comprise only around 10% of Teaneck's housing stock.

Conclusion

This study of select boroughs in Bergen County documents a surprisingly diverse land use pattern in a small corner of Bergen County—one with significant differences in development patterns and outcomes for LTD construction and local housing markets. We identify Palisades Park as a potential model for a zoning and permit approval process that facilitates LTD construction. It offers lessons for implementation of two-family zoning that facilitates substantial two-family construction for jurisdictions that are considering reforms to single-family zoning

Palisades Park (along with similarly situated Cliffside Park) enjoys lower property taxes and higher land values than nearby municipalities. In Palisades Park where duplexes are permitted, new construction housing costs 4% less than in neighboring Leonia where they are not. Further, unlike most of the nearby boroughs, Palisades Park is contributing to regional affordability by accommodating population growth and the filtering process that its new construction facilitates.

Widespread duplex redevelopment in Palisades Park is not a product of its zoning that facilitates their construction alone. In a region of tightly constrained housing supply, Palisades Park provides an outlet for housing construction. Palisades Park's own zoning rules direct construction to duplex redevelopment rather than larger multifamily buildings.

In most of the jurisdictions in this case study, the typical arguments used to preserve the status quo of single-family zoning provide a glimpse of what points are likely to be raised in opposition to LTD reform across the country. For example, Leonia's policymakers, reflecting their constituents' preferences, demand that the "character of the neighborhood be preserved" under its land use policy. But the argument that single-unit zoning achieves this goal in the long term is highly questionable. While it may prevent the immediate emergence of new housing, it

[159] Township of Teaneck Master Plan (2007), pg. 27, https://www.teanecknj.gov/media/Government/Master%20Plans/2007%20Master%20Plan%20(PDF).

also worsens affordability in the face of increasing demand for housing, changing the demographics of households that can afford housing in a supply-constrained locality.

This study provides a roadmap as to how LTD structures can play an important part in accommodating the need for additional housing in high-demand areas. The divergent experiences of the seven boroughs in our case study make clear that LTD zoning alone is not enough. Only localities with policy that makes infill LTD construction legal, predictable, and profitable will experience anything like the transformation that Palisades Park has seen.