



What would it take to ensure quality, affordable housing for all in communities of opportunity?

Margery Austin Turner

Solomon Greene

Corianne Payton Scally

Kathryn Reynolds

Jung Choi

URBAN

INSTITUTE · ELEVATE · THE · DEBATE



About Urban's Next50

The Urban Institute was founded 50 years ago by President Lyndon B. Johnson to provide “power through knowledge” to help solve the problems that weighed heavily on the nation’s hearts and minds. Today, we’re exploring promising solutions to advance equity and upward mobility and identifying what transformational leaders need to know to drive forward groundbreaking ideas. This brief is one of our eight-part Catalyst series, in which we share what it would take to advance bold solutions over the next 50 years.

We are grateful to Citi Foundation for its generous support of Urban Next50.

ABOUT THE URBAN INSTITUTE

The nonprofit Urban Institute is a leading research organization dedicated to developing evidence-based insights that improve people’s lives and strengthen communities. For 50 years, Urban has been the trusted source for rigorous analysis of complex social and economic issues; strategic advice to policymakers, philanthropists, and practitioners; and new, promising ideas that expand opportunities for all. Our work inspires effective decisions that advance fairness and enhance the well-being of people and places.

Copyright © February 2019. Urban Institute. Permission is granted for reproduction of this file, with attribution to the Urban Institute. Cover image by John Wehmann.

Contents

Acknowledgments	iv
Advancing Solutions: Local Action and Investment, Advocacy, and Private-Sector Innovation	3
Solution Set 1: Produce More Housing at Lower Cost	4
Solution Set 2: Preserve Unsubsidized Affordable Housing and Protect against Displacement	7
Solution Set 3: Expand Assistance for People at the Bottom of the Income Ladder	11
Solution Set 4: Expand Access to Secure Homeownership	13
Building Knowledge Changemakers Need	17
Priority 1: Unlock Zoning Data and Assess the Effectiveness of Reform Strategies	18
Priority 2: Understand NIMBY Opposition and Assess Strategies for Achieving Consensus	21
Priority 3: Inventory the Unsubsidized Affordable Housing Stock and Risks of Loss	23
Priority 4: Develop Early-Warning Indicators of Neighborhood Displacement and Evaluate Prevention Strategies	24
Priority 5: Forecast the Full Costs and Benefits of Alternative Models for Expanding Housing Assistance	26
Priority 6: Disentangle Drivers of the Racial Homeownership Gap and Assess Tools and Strategies for Narrowing It	27
Notes	30
References	35
About the Authors	39
Statement of Independence	41

Acknowledgments

To produce this report, Urban engaged a diversity of changemakers in the housing field, including experts, advocates, practitioners, and policymakers working to improve housing innovation, quality, and affordability. Through a series of conversations, these changemakers proposed knowledge gaps that keep innovators in the housing field from advancing change and discussed new solutions to the nation's most challenging housing problems. The engagement culminated in a roundtable discussion on October 30, 2018. The authors extend a special thanks to the changemakers who engaged in this process and generously offered insights for this report:

- Ruby Bolaria, manager, housing, Chan Zuckerberg Initiative
- Vanessa Brown Calder, policy analyst, CATO Institute
- Stacey Epperson, president and founder, Next Step
- Jeanne Fekade-Sellassie, project director, Funders for Housing and Opportunity
- Eileen Fitzgerald, president, Stewards of Affordable Housing for the Future
- Caitlyn Fox, director, Policy and Advocacy, Chan Zuckerberg Initiative
- Ryan Gerety, technology fellow, Equitable Development Team, Ford Foundation
- Steve Glenn, CEO, Plant Prefab
- Amy Kenyon, program officer, Metropolitan Opportunity Unit, Ford Foundation
- Adam Krahn, vice president, Quicken Loans
- Michael Lens, PhD, associate faculty director, UCLA Lewis Center for Regional Policy Studies
- Willow Lung-Amam, PhD, assistant professor, University of Maryland School of Architecture, Planning and Preservation
- Eoin Matthews, CBO and cofounder, Point
- Lisa Rice, president and CEO, National Fair Housing Alliance
- Tony Romano, director of Organizing and Strategic Partnerships, Right to the City
- David Troutt, professor of law and founding director, Rutgers Center on Law in Metropolitan Equity
- Bill Young, CEO, Home Partners of America

In addition, the authors acknowledge Mary Cunningham, Erika Poethig, and Alanna McCargo, who reviewed and provided feedback on this brief.

What would it take to ensure quality, affordable housing for all in communities of opportunity?

If everyone could afford quality housing, and every neighborhood offered a diversity of housing options, people up and down the income ladder could enjoy housing security and build wealth through homeownership. Achieving this vision requires more than incremental tinkering with today's market institutions and public policies. It calls for bold action at all levels of government and in the private and nonprofit sectors:

- Mayors and local planners modernize local zoning and land use regulations so builders and developers can **produce more housing, at lower cost** in response to 21st century housing needs and preferences.
- Local housing officials work with both private-sector property owners, financial institutions, and community-based nonprofits to **preserve affordable housing and protect residents** of revitalizing neighborhoods from displacement.
- Federal and state policymakers **expand housing assistance**, ensuring that people at the bottom of the income ladder can afford what it costs to deliver decent housing in the marketplace.
- Financial institutions offer new loan products and innovative processes that **expand opportunities for secure homeownership** and close the persistent gaps in homeownership and home equity for people of color.

These four ambitious solution sets, if pursued effectively and at scale, could correct the fundamental mismatch between housing needs and housing supply we face today.¹

The challenge is urgent. In many communities across the country, home prices and rents have climbed out of reach for a growing share of households. New housing construction disproportionately serves the affluent, and housing subsidies serve only a fraction of those in need. Market pressures and gentrification are pushing many lower-income people out of their communities. America's history of racial discrimination and segregation has locked too many people out of neighborhoods that support their well-being and their children's life chances. Moreover, in the aftermath of the Great Recession, the homeownership gap between whites and people of color has widened. Continued population growth, demographic change, and widening inequalities will only exacerbate the housing mismatch. Increases in

housing inequalities, in turn, will unavoidably increase threats to families' stability, children's well-being, and opportunities for upward mobility.

Changemakers are rising to this challenge at every level of government, in private enterprises and community-based nonprofits, in advocacy organizations and philanthropy, and in resident-led community initiatives. But they lack reliable information with which to design and implement solutions:

- Local and state planners lack reliable information about how zoning and land use regulations differ across jurisdictions nationwide, how these differences affect housing availability and costs and what reform strategies have been effective at unleashing housing supply. A program of knowledge-building to unlock zoning data, compare regulations and their impacts across places, and assess the effectiveness of reform strategies would help these planners prioritize local barriers to housing innovation and production and implement models that work for peer communities.
- Mayors, housing officials, private developers, or nonprofit organizations attempting to expand the housing supply are often stymied by fierce “not in my backyard” (NIMBY) opposition. Many of these housing advocates seek “playbooks” based on rigorous analysis to understand opposition to housing development and how to achieve consensus.
- Community-based organizations and local housing officials trying to preserve affordable housing urgently need data and analytic tools to monitor the unsubsidized affordable housing stock; assess risks of loss so they can prioritize properties (and property owners); and design effective strategies for maintaining housing availability, quality, and affordability.
- Mayors and community development officials need evidence-based early-warning indicators and displacement prevention strategies so they can make timely and effective investments in housing affordability and resident protections.
- Low-income housing advocates arguing for increases in federal housing assistance are too often dismissed because the cost to the federal budget is perceived as too high. Policymakers need compelling evidence about the long-term costs and benefits of alternative models for expanding housing assistance to assess the return on investment.
- Efforts by fair housing advocates, financial institutions, federal regulators, and local leaders have thus far failed to close persistent gaps in homeownership between white people and people of color. They need data and analysis to disentangle key drivers of the racial homeownership gap and test the potential of products and tools for narrowing it.

This brief draws on interviews and roundtable conversations with a broad array of changemakers (see the acknowledgments for the complete list). These interviews highlighted innovative solutions being explored across the country and identified the gaps in facts and understanding that stand in their way. They also suggested opportunities for new knowledge-building that could inform and accelerate solutions to the profound housing challenges facing our country.

Advancing Solutions: Local Action and Investment, Advocacy, and Private-Sector Innovation

No single approach, however bold, can resolve the complex housing challenges facing US communities. We argue that these challenges could be overcome through four interlocking sets of solutions.²

- The first solution set focuses on expanding the supply of housing and reducing its cost by easing regulatory constraints and accelerating innovations in design and construction.
- The second aims to preserve the existing stock of unsubsidized affordable housing and protect against displacement when neighborhoods revitalize.

If these two solution sets were effectively advanced, many more people, up and down the income ladder, could find quality homes and apartments they could afford. But market rents would almost certainly still be out of reach for the lowest-income households.

- So the third solution set focuses on expanding assistance to make quality housing affordable for people at the bottom of the income ladder.
- Finally, the fourth solution set aims to expand access to secure homeownership, particularly for people of color, by creating new forms of ownership and expanding financing options.

As changemakers in the public, private, and nonprofit sectors design and advance approaches for the four strategies, they generate new insights and articulate critical questions about what works.

Solution Set 1: Produce More Housing at Lower Cost

Innovations in building technologies and more flexible local regulations would enable the market to deliver more housing faster and more cheaply. These solutions focus on what type of housing is built and how and where it can be built. Reforms to state and local land use regulations and building codes would allow more housing to be built where it is needed most. Innovations in construction techniques and design would lower the costs of development and allow builders to build more housing for a broader range of household types on less land.³ Combined, these solutions would improve housing affordability for both renters and homeowners, overcome barriers to building affordable housing in high-opportunity neighborhoods and regions, and allow real estate markets to more flexibly respond to changing housing needs and demand.

Reform Local Land Use Laws and Building Codes

Restrictive local land use regulations constrain housing supply and drive up housing costs. These constraints stunt local, regional, and national economic growth and widen income and wealth inequalities (Glaeser and Gyourko 2018; Gyourko and Molloy 2015; Hsieh and Moretti 2019; HUD 2018; Ikeda and Hamilton 2015).⁴ Some state and local policymakers are taking a hard look at their laws, regulations, and approval processes to find opportunities to create more flexible zoning and building codes that can ease housing supply constraints (HUD 2018; Urban Land Institute 2018; White House 2016).

Some localities, such as Miami and Buffalo,⁵ are experimenting with new frameworks for land use regulation, such as form-based codes that reject traditional Euclidean zoning codes entirely. The City of Minneapolis recently adopted an ambitious zoning reform that eliminated all single-family zoning and allowed triplexes to be built anywhere in the city.⁶ These alternatives allow more housing to be built in mixed-use developments and can support more economically integrated neighborhoods. More modest regulatory reform strategies can also contribute. For example, some local governments, such as [Montgomery County, Maryland](#), and Cambridge, Massachusetts,⁷ require affordable housing to be built as part of new development through inclusionary zoning ordinances (Ramakrishnan, Trekson, and Greene 2019). Other local governments offer incentives to developers to build more affordable units in exchange for greater densities (Arlington, VA)⁸ or expedited approvals (San Diego, CA).⁹

Many states are also taking more aggressive steps to break logjams in the permitting and approval of affordable housing development or overcome NIMBY (“not in my backyard”) opposition. Massachusetts¹⁰ passed statewide laws that streamline local approval processes for affordable housing

permits, grant developers a right to appeal housing permit denials in municipalities that lack affordable housing, and allow by-right development in “smart growth” locations (HUD 2018). More recently, California adopted sweeping legislation that includes a provision forcing cities to approve projects if not enough housing has been built to keep pace with home-building targets;¹¹ it also fast-tracks projects with at least 50 percent affordable housing. However, zoning changes may be more likely to occur in neighborhoods with vulnerable populations and less political power. Expanding the housing supply without policies to protect residents may lead to displacement (Been, Ellen, and O’Regan 2019).

State and local interventions are hindered by a lack of comparable data on the restrictiveness of local land use regulations and rigorous research on which regulations have the greatest effect on housing supply, rents, and sales prices. Local government leaders also know too little about how costs associated with local regulations may be offset by benefits in community preservation and environmental, health, and safety protections, and to whom these costs and benefits accrue. Trade-offs between local regulatory strategies have not been fully understood or quantified. These knowledge gaps contribute to reform opposition from traditional NIMBYs, newer equity advocates, and other “supply skeptics” (Been, Ellen, and O’Regan 2019).

Accelerate Innovation in Design and Construction

Unconventional housing designs (e.g., accessory dwelling units and micro units) and innovative construction technologies can potentially increase the range of housing options while reducing costs and sprawl.¹² Accessory dwelling units can increase rental options in otherwise owner-occupied neighborhoods, increasing choices for low-income renters and providing multigenerational housing options for persons who wish to age-in-community (Been, Gross, and Infranca 2014). Modular, small unit housing can produce more housing units in otherwise tight housing markets. In San Francisco, for example, Panoramic Interests Developer produces prefabricated, modular units for infill development on underused urban land.¹³ In Europe, where modular housing has a longer history and broader acceptance, there is new experimentation with incremental design. *Ausbauhaus* in Berlin lowers the cost of housing by giving purchasers a choice on completeness of the interiors, allowing owners to build out over time.¹⁴ In San Bernardino, California, Neighborhood Housing Services of the Inland Empire is piloting solar, efficient, high-quality manufactured housing on vacant lots.¹⁵

Firms in the United States are also experimenting with new construction techniques. The design-build model, in which the architect/designer, engineer, and contractor work together from the beginning of the project, reduces project delays and additional costs. Firms such as *Blokable*,¹⁶

Factory_OS,¹⁷ and Katerra¹⁸ have combined design-build project delivery with new building technology to vertically integrate services. Combining several stages of production normally held by different companies increases efficiency and, theoretically, decreases final construction costs. Questions remain about the long-term success of these models. Building materials are expensive to ship, housing is highly customized by location and owner preferences, and local labor unions have opposed the overseas construction of units.¹⁹ Unconventional housing designs and construction techniques may also be more difficult to finance. And we do not know how well innovative designs will respond to future housing demand and preferences and if sufficient market demand will emerge for lower-cost designs and construction technologies.

Innovations in housing design and construction and local regulatory reforms are often interconnected. Creating more flexible local regulations and providing public-sector financing and incentives can unleash innovation in design. New York City's Kips Bay relaxed rules on minimum apartment sizes and donated public land to create a model of micro-apartments for millennials, low-income singles, and homeless veterans.²⁰ "Smart city" technologies and innovations in infrastructure, transportation, and data processing may also encourage land use reforms by mitigating nuisances, easing congestion, and creating new opportunities for housing delivery (Tomer and Shivaram 2017).

Innovations in regulation and design could remove fundamental limitations on housing supply that research suggests are driving up housing costs across the United States (Calder 2017; Fischel 2015). They also share a political advantage over some of the other solutions we discuss. Because these innovations are principally market driven and focus on reducing government interference in markets, they can bridge ideological divides and generate bipartisan support.²¹ However, they are unlikely to address the housing needs of individuals and families with very low incomes who may require additional subsidy, support, and antidiscrimination protections to secure stable and affordable housing. Therefore, hybrid solutions that combine market-based interventions and public subsidies will be necessary (Brennan and Greene 2018).

Despite growing awareness that local regulations impede housing supply and innovation in housing design and construction technologies, significant barriers remain. These barriers include an entrenched ideology of local control over land use,²² the outsized influence of incumbent homeowners in local development politics (Fischel 2005), high public infrastructure costs (Nelson et al. 2002), and strong fiscal disincentives (Hills 2016). Any one of these barriers can prevent local innovation in land use regulations and lead to suboptimal allocation of housing. Bewilderingly complex and obsolete building codes²³ and bureaucratic inertia can inhibit new construction technologies and housing designs, even when these innovations could satisfy public policy priorities or help meet local housing demand.

Further, the cost of construction in the United States is rising in large part due to labor shortages in the construction industry.²⁴ Supply is likely to be constrained without cheaper, less labor-intensive construction techniques combined with a pipeline of skilled construction workers.

“Although zoning regulations don’t typically change dramatically from year to year, incremental changes in zoning add up.”

–Vanessa Brown Calder, Cato Institute

Innovations in housing design and regulations can also force us to rethink what constitutes “socially acceptable” housing (Woetzel et al. 2014)²⁵ and for whom. Perhaps most challenging, and least recognized, is that reforming local housing regulations will require us to directly confront structural racism. Even though individual preferences for living in integrated communities have shifted, entrenched racism continues to perpetuate exclusionary practices (Greene 2019; Turner et al. 2018). As demand grows for land and housing in once-disinvested communities, we will need to strike a balance between empowering communities to set their own priorities and ensuring that every community provides its fair share of a region’s need for housing.

Solution Set 2: Preserve Unsubsidized Affordable Housing and Protect against Displacement

In many communities, housing market pressures drive up rents and home prices, making housing unaffordable and pushing long-time residents out of their communities. Sometimes these pressures result from targeted investments aimed at improving the quality of distressed neighborhoods. They can also result from gentrification, rapid growth in local jobs and population, or rising income inequality. Expanding the supply of housing (solution set 1) plays an essential role in moderating these market pressures, but it is not sufficient. New housing supply should go hand in hand with preserving existing affordable housing so long-time residents are not displaced just as the conditions in their communities begin to improve.

Preserve Unsubsidized Affordable Housing

Only about one in five eligible households receives federal housing assistance (Kingsley 2017). Therefore, the stock of privately owned properties charging low to moderate rents plays a critical role in meeting housing needs. This stock, often referred to as “naturally occurring affordable housing” (NOAH), is already in short supply and faces serious risk of further loss (Getsinger et al. 2017).²⁶ Some of these units suffer from deferred maintenance and require extensive renovation to be habitable. In hot housing markets or revitalizing neighborhoods, owners have strong market incentives to either raise rents substantially or redevelop properties as luxury rentals or sell.

A major impediment to preserving unsubsidized affordable housing is the absence of a clear definition or inventory. Local actors lack the data they need to proactively identify properties, property owners, or what conditions may place the properties at risk. Some commercial data providers have attempted to identify markets with larger concentrations of affordable units based on quality ratings of the rental housing stock (CoStar Realty Information 2016). An advocacy group representing homeless people in New York City mapped properties that were being “warehoused,” kept empty because it was more profitable for owners to hold them for sale or renovation when the surrounding neighborhood gentrified.²⁷ And researchers and advocates have identified at-risk properties in selected neighborhoods to help target preservation initiatives there, including in Minnesota (Family Housing Fund 2013); Miami, Florida;²⁸ Austin, Texas (Hedman et al. 2017); and Denver, Colorado (Elliot et al. 2017).

“Entering before the market heats up is absolutely critical. It helps to strategize. In Washington, DC, implementing inclusionary zoning before the market heated up was helpful.”

–Willow Lung-Amam, University of Maryland School of Architecture, Preservation and Planning

Financing the preservation of unsubsidized affordable housing is a relatively new endeavor for most cities, foundations, lenders, and loan purchasers. The few organizations focused on preserving at-risk units face barriers assembling sufficient capital, especially for smaller properties or properties with deferred maintenance issues. Moreover, they may not be able to secure funding quickly enough to compete with speculators and other investors. To address these challenge, cities like San Francisco²⁹ and Oakland, California,³⁰ have earmarked public funds for the acquisition and rehabilitation of

unsubsidized buildings that serve low-income households. Private funders and lenders (NOAH Impact Fund,³¹ NOAH Preservation Loan,³² and Community Investment Corporation)³³ in Chicago and Minneapolis have established impact funds and loan products focused on preserving unsubsidized rentals, especially smaller properties that are harder to fund. Minnesota took an innovative approach by allowing local governments to provide tax breaks to landlords who agree to income and rent restrictions (Family Housing Fund 2013).

Prevent Displacement from Revitalizing Neighborhoods

In many cities across the country, economic growth, neighborhood revitalization, shifting neighborhood preferences, and intensifying housing market pressures threaten to displace long-time residents from their communities. A strong case can be made for policies that give these residents (both renters and homeowners) meaningful voice and power in decisions about the future of their neighborhoods and allow low-income people and people of color to share in the benefits of revitalization (Fullilove 2016; Hartman 1984; Newman and Wyly 2006). Such policies must anticipate displacement pressures, empowering residents and putting protections in place before it is too late.

In recent years, researchers have attempted to model the process of gentrification and develop early-warning systems by using administrative and survey data on neighborhood characteristics (Bousquet 2017; Chapple and Zuk 2016; Greene and Pettit 2016). “Big data” sources like social media and rental listings are being tapped to understand patterns of gentrification that may lead to displacement, and technology makes it easy to visualize and track changes over time.³⁴ Seattle includes measures of proximity to job centers, businesses, and civic infrastructure such as schools, parks, and libraries to calculate its displacement risk index (City of Seattle Department of Planning & Development 2015). New York City’s [building-specific index](#) teases out the likelihood of removal of rent regulations, property sale or construction, and eviction. Los Angeles has paired indicators of neighborhood change with measures of displacement pressure to understand where gentrification has already occurred and where it is likely to occur (Bousquet 2017). The data are publicly available in interactive mapping tools that city agencies use to target outreach efforts. However, these indices do not capture the onset or extent of displacement itself. In fact, it is almost impossible to reliably track displaced residents, understand why they moved, or assess their outcomes over time (Eckerd, Kim, and Campbell 2018).

In addition to tools to understand and anticipate gentrification, community activists and local governments are experimenting with policies and investment strategies to prevent displacement and support more inclusive neighborhood revitalization. Some solutions focus on keeping land and housing

affordable through community ownership, including through land banks and community land trusts.³⁵ These efforts require substantial capital to assemble land and preserve affordability. Some cities and public housing authorities give preference for subsidized housing or rental assistance vouchers to people at risk of displacement (NYU Furman Center 2016). Other approaches rely on legal protections and direct assistance to tenants. Oakland’s “just cause eviction” ordinance protects tenants from arbitrary or discriminatory evictions.³⁶ New York City guarantees access to legal counsel for all income-eligible tenants facing eviction (NYU Furman Center 2018). To prevent landlords from driving out tenants by neglecting maintenance, shutting off utilities, or creating environmental and noise pollution with construction, some cities conduct proactive rental inspections to ensure maintenance (Seattle)³⁷ or require owners to obtain a certificate of no harassment to get a building permit for renovation work (New York City).³⁸ Washington, DC, gives tenants the first shot at purchasing their home when a landlord puts it up to sale (Reed 2013), and the city provides low-cost loans and other financial assistance to tenant associations that form to purchase properties.³⁹ Increasingly, neighborhood residents, businesses, and advocates are joining to design their own plans for equitable and inclusive local development. These plans, like the Right2Root campaign in Portland, OR, pull multiple policy levers and are tailored to local needs and priorities.⁴⁰

Despite efforts to tap new data sources and test models to predict gentrification, we still know little about the processes that drive residential displacement (Been 2018a). Filling these knowledge gaps is essential to designing effective antidisplacement policies. For example, better information about how household financial insecurity interacts with neighborhood dynamics (such as rising property values or changing demographics) and regional pressures (such as housing supply shortages or shifting employment centers) could help local leaders decide whether interventions should be targeted at the household, neighborhood, or regional scale. Better evidence about how public policies and investments intended to revitalize distressed communities (e.g., the Opportunity Zone tax incentive) might instead trigger real estate speculation can help local redevelopment officials design policies that support more inclusive development. Because involuntary displacement might never be completely stemmed, city and community leaders also need to understand how displacement affects a range of life outcomes, where people go after they are displaced, and how policies and services can ease transitions to communities of opportunity.

Solution Set 3: Expand Assistance for People at the Bottom of the Income Ladder

Despite a range of federal, state, and local housing subsidy programs, most households eligible for housing assistance do not receive it. If solution set 1 (reducing construction costs and expanding the supply of decent, low-cost housing) and solution set 2 (preserving existing affordable housing) were effectively implemented, the number of households in need of assistance could be dramatically reduced. But some households would still lack sufficient income to afford housing in the private market. The significant housing cost burdens of these households compete with spending on food and health care and raise the risk of eviction and homelessness. This third set of solutions aims to improve housing stability and affordability for very low-income renters either by boosting their incomes or by dramatically expanding public subsidies.

Provide Direct Income Supports

One strategy for tackling this challenge would be to boost household incomes by providing a universal basic income or substantially expanded earned income tax credit. In theory, this approach would ensure that all households have enough income to make housing affordable without explicitly earmarking any income for housing.⁴¹ The United Kingdom recently replaced six public benefit programs (child tax credit, housing benefit, income support, jobseeker's allowance, employment and support allowance, and working tax credit) with a Universal Credit,⁴² although there are concerns that the combined level of assistance falls short of what people actually need.⁴³

Variations on this approach provide targeted tax credits aimed at helping people cover the high costs of housing. Several states (including California and Maryland)⁴⁴ currently offer renters' tax credits, which supplement the disposable incomes of qualifying renters to help them pay for housing in the private market. Recent proposals would apply this approach federally (Sard and Fischer 2013; see also legislation introduced by Senator Kamala Harris).⁴⁵ Because housing costs vary significantly across markets, an approach of this kind would fall short if it did not provide a sufficient income boost to residents of high-cost markets or if the income supplement failed to keep pace with changes in housing costs over time. Katz and Turner (2007) proposed providing variable supplements to the earned income tax credit that would reflect local housing costs. Their proposal also included incentives for reforms to local land use and zoning regulations aimed at reducing the cost of housing in the private market and narrowing the gap requiring subsidy. An alternative would be to give direct cash transfers instead of housing vouchers to eligible households (Galvez et al. 2017). All these approaches offer the advantage

of putting households in control and increasing their ability to obtain housing in neighborhoods of their choice.⁴⁶ But some critics question whether households would actually allocate enough of their income to obtain decent housing.

Dramatically Expand Housing Assistance

Strategies for making housing affordable through housing subsidies include giving the subsidy to the household to spend on housing in neighborhoods of their choice (demand-side model) or giving the subsidy to the housing provider to build and operate units with below-market rents or sales prices (supply-side model). Variations of both models operate in the United States, but only about one in five eligible renters receives assistance.

The demand-side approach supplements what eligible households pay for housing in the private market. It fills the gap between what households can afford to spend and the cost of decent housing. The federal Housing Choice Voucher Program is an example of this type of assistance. Many housing activists have long argued for making the federal housing voucher program an entitlement, so all households with incomes below some qualifying level receive assistance (BPC 2013; Olsen 2010). But serious questions remain about the effectiveness of this solution. Markets might not effectively absorb a universal housing voucher program. Developers might not build the types of housing required by large families or special-needs households. Landlords might be unwilling to accept the vouchers (particularly in desirable neighborhoods). Or the increase in housing demand might push rents up to less affordable levels.

These concerns with the demand-side model argue for solutions that directly subsidize housing developers and owners to build and operate housing units that charge below-market rents or prices and are earmarked for occupancy by low- or moderate-income households. Many such programs subsidize the production and operation of housing by public agencies, nonprofit organizations, and private businesses. But the current system of subsidies and other incentives is mind-bogglingly complex, requiring providers to patch together multiple sources of support to make projects financially feasible. Moreover, the scale of these programs falls woefully short of need in every jurisdiction across the country. In addition, the per unit costs of some of these programs are high, in part due to local regulatory constraints and high land costs, but also due to the transaction costs of complex financing arrangements. And management and maintenance of publicly subsidized housing developments has sometimes fallen short, severely undermining the quality of housing for residents.

Other high-income countries have more systematically supported a social-housing sector that delivers quality housing at below-market rents and prices affordable for low-income households. In the

European Union, social, public, and cooperative housing accounts for 11 percent of the housing stock.⁴⁷ The specifics of these solutions vary across countries, but they have shared a national commitment to delivering affordable housing for all outside the private, for-profit market. However, in recent years, many of these countries have faced challenges of both escalating costs and deteriorating quality. Consequently, they have scaled back their commitments by selling off publicly owned units, cutting back on levels of new construction, or shifting to demand-side subsidies.

In Singapore, 80 percent of the population lives in government-owned apartment developments that serve households with a mix of income levels.⁴⁸ These developments are well-designed and well-maintained so they advance social integration as well as housing affordability and quality. Granted, Singapore's supply-side housing model may not be realistic for the United States. Nonetheless, it suggests the genuine possibility of new models for subsidizing the construction and operation of quality housing with below-market rents and sales prices that avoid the complexity of current programs and meet the needs of low-income households.

A major barrier to any of these proposals has been their cost. As long as the cost of producing housing remains at today's high levels (especially in high-cost markets and high-opportunity neighborhoods), an entitlement voucher or tax-credit solution would be extremely expensive. It would also reward jurisdictions that maintain restrictive zoning and land use regulations by providing their residents with the biggest subsidies. If, however, states and localities were incentivized to reform regulations, and innovations in housing and design helped push housing costs down, an entitlement demand-side housing subsidy solution might be more feasible.

Solution Set 4: Expand Access to Secure Homeownership

A stable and affordable home not only supports a household's economic security and well-being, it can also help build wealth. Goodman and Mayer (2018) find that homeownership, following the Great Recession, still financially outperforms stocks and bonds.⁴⁹ Yet many US households, particularly households of color, face steep barriers to buying a home or sustaining homeownership. Not only do people of color have lower homeownership rates than white people, they are less likely to sustain their homeownership.⁵⁰ Black homeownership rates dropped significantly after the Great Recession to levels similar to those before the passage of the federal Fair Housing Act in 1968.⁵¹ New forms of housing ownership and innovations in financing products can potentially expand stable housing and wealth-building opportunities to the nation's increasingly diverse population. Some financial institutions are exploring the use of new data and technology to equitably expand access to credit. By expanding access

to homeownership, these tools and strategies may also narrow homeownership gaps between white people and people of color.

Develop New Forms of Housing Ownership

In the United States, housing tenure has been divided into extremes of sole ownership and fixed-term tenancies. Alternative forms of owning land and housing can create or preserve more affordable and stable housing. Shared equity programs, particularly those that preserve long-term affordability, create homeownership opportunities for low- and moderate-income people. Equity sharing imposes restrictions on the resale of the subsidized housing and can be achieved through a variety of mechanisms, including deed restrictions (e.g., San Francisco’s Below Market Rate Ownership Program; see HUD 2016); community land trusts (e.g., model policies developed in Burlington, VT);⁵² and limited equity cooperatives (common in New York City;⁵³ see, generally, Theodos et al. 2015). By reducing housing costs, shared equity homeownership can increase housing stability for low-income households and help them enter desirable neighborhoods or stay in neighborhoods experiencing gentrification or other market pressures.

“It’s important to take each piece of homeownership’s value and then pull them apart and think whether there are alternative ways to provide similar benefits of homeownership in different forms.”

–Adam Krahn, Quicken Loans

One criticism of shared equity housing is that the resale restrictions that ensure the housing can be sold at below-market cost limit equity gains, a key means of accumulating wealth in the United States. Another concern is that rising property values, especially in gentrifying neighborhoods, may increase local property tax and push monthly costs to participating homeowners out of reach (Reynolds 2018; Theodos et al. 2015). However, a 2009 evaluation of the Champlain Housing Trust, one of the oldest shared equity homeownership models in the country, found that this program was an effective way for low-income households to accumulate assets. Households in this program had lower foreclosure rates than similar households in market-rate homes (Jacobus and Davis 2010).

Most cities have few shared equity homes, and expansion is limited by several factors. Assembling land for community land trusts can be difficult and costly, although some publicly driven models leverage city-owned land to mitigate these costs. Interested buyers may not have access to the specialized financing products required, and loan origination may be costly owing to the unique nature of these mortgages. Since 2016, Fannie Mae and Freddie Mac have supported shared equity financing for affordable homeownership. Fannie Mae has committed to improve liquidity in the mortgage market for shared equity housing models by purchasing an additional 1,100 to 1,300 loans from this market between 2017 and 2021. Both Fannie and Freddie have committed to conduct outreach and education to traditional lenders to promote more shared equity loan originations.

Lease-purchase agreements, also known as rent-to-own, offer another ownership model that can potentially provide stable housing and an opportunity to build housing wealth. In this model households who do not qualify for a mortgage or cannot afford a down payment rent a home they will purchase within a designated time span at a predetermined price (Galante, Reid, and Sanchez-Moyano 2017). The largest single-family lease-purchase company, Chicago-based Home Partners of America, operates in 50 metropolitan areas in 20 states (Stegman 2017). Divvy and Ribbon are also well-established lease-purchase companies. Along with financing the purchase and maintenance of the properties, lease-purchase companies sometimes face challenges transitioning renters to homeowners. Because a record of on-time rental payments does not affect a person's credit score, many lease-purchase renters have trouble obtaining mortgages when it is time to purchase the home.

Create and Expand Responsible Lending Products

The combination of rising home prices and tight credit has made qualifying for mortgages more difficult for first-time homebuyers with limited incomes and wealth or less-than-perfect credit records. Changes in the labor market promise more instability and volatility in income and employment (Dyan, Elmendorf, and Sichel 2012). New products are needed to better match households' financial circumstances. And mission-driven financial institutions like credit unions and community development financial institutions, need to build capacity to deliver these new products responsibly.

Shared equity mortgages (also referred to as shared appreciation loans) are designed to reduce the cost of homebuying by allowing buyers to sell a percentage of their property (including any future capital gains) to the lender in exchange for a reduction in the loan. Although shared equity loans are uncommon in the United States, some city governments, nonprofits, and private-market investors use this model when issuing down payment assistance loans. For example, San Francisco and Texas⁵⁴ offer

shared equity loans to first-time homebuyers with moderate income levels, as do City First Homes Washington, DC,⁵⁵ and the Housing Fund in Nashville, Tennessee.⁵⁶ Only a few private institutions (Unison, Own Home Finance, Point, and Landed) currently offer shared equity mortgages, and all are based in California. Although these products have the potential to improve housing affordability by reducing monthly payments, so far they have mostly been used by middle- and upper-income households.

There are concerns that shared equity loans could be predatory for borrowers in the absence of adequate regulation. In addition, because lenders take a portion of the capital gain when the house is sold, they have an incentive to target markets where home prices are most likely to appreciate. These concerns raise questions about the advisability of expanding shared equity mortgages nationwide. The Grounded Solutions Network recently proposed and evaluated a model to expand shared equity mortgages nationally but concluded that the model lacks financial viability (Thaden and McQueen 2018).

Small-dollar loans are another mortgage product that could help low- and moderate-income homebuyers. Many homes, especially in rural areas, are valued at less than \$70,000, but because small loans generate lower sales commissions, spreads, and servicing income, lenders have little economic incentive to provide them (McCargo et al. 2018). Expanding access to small loans could also encourage the construction and sale of more low-cost manufactured or modular homes. These loans can also be used to buy and renovate older housing.

Apply Technology and New Data to Expand Access to Credit

The evolution of financial technology (fintech) could enable lenders to better assess borrowers' creditworthiness and expand access to mortgage credit. Fintech's ability to access and share bank statement data safely and efficiently could bring a major revolution to the current mortgage underwriting system. For example, rental payment history data can be a good predictor of whether borrowers will default on their mortgage payment.⁵⁷ Utility payment and supplementary income can also be incorporated into the underwriting process, and accessing bank statements can allow lenders to better count income from jobs in the gig economy. VantageScore's latest methodology applies new machine-learning technology to predict the future performance of people who may lack of a robust credit history, potentially enabling them to borrow.⁵⁸ FICO plans to incorporate more factors, such as bank account information, into its new UltraFICO score, which will be launched in 2019.⁵⁹ These innovations can potentially expand access to sustainable homeownership for historically underserved groups, including people of color, who are more likely to have no or low credit scores (Dey and Brown 2019). Using additional data to evaluate creditworthiness could increase their access to homeownership

As yet the promise of fintech has not been realized. Preliminary research shows that fintech has not expanded credit to previously underserved populations, and instead has served borrowers who are more creditworthy according to existing standards (Buchak et al. 2017). Furthermore, those who borrow from fintech firms are more likely to default on their loans, casting doubt on the reliability of fintech's current underwriting criteria (Di Maggio and Yao 2018). Although fintech firms reduce the time associated with lending (Fuster et al. 2018), there is no evidence that they are less likely to discriminate than traditional banks. Bartlett and colleagues (2018) find that both fintech and traditional banks charge higher interest rates to people of color than similar white borrowers. This finding suggests that variables included in the existing underwriting algorithms may be inherently biased.

There is little doubt that fintech will expand its role in the mortgage industry, posing critical questions about what information should be included to improve the evaluation of a borrower's creditworthiness and how the risk of racial bias in the algorithms that compute creditworthiness can be reduced. Adding more data and introducing complicated technology could widen information asymmetries across market participants depending on their access to information and technological competence. The complex and fast-changing nature of fintech makes designing and implementing regulation extremely challenging, especially as players move in and out of the market.

Building Knowledge Changemakers Need

Exciting work is under way across the country to correct imbalances between housing needs and housing availability. Changemakers advancing potential solutions draw on existing evidence about evolving market conditions, changing needs and preferences, and the effectiveness of past policies and programs. However, critical gaps in the available evidence can stymie their efforts by obscuring key market trends and fueling disputes about what works and for whom. These data gaps also undermine support for policy reforms and slow the replication of successful innovations.

Drawing on interviews and roundtable conversations with a broad array of changemakers, we identified six priorities for knowledge-building that would help inform and accelerate solutions to the profound housing challenges facing our country:

1. Unlock zoning data and assess the effectiveness of reform strategies so mayors and planning officials can prioritize local barriers to housing innovation and production and implement models that work for peer communities.
2. Understand opposition to housing development and the effectiveness of strategies for achieving consensus so mayors, housing officials, private developers, and nonprofit organizations have fact-based “playbooks” for addressing NIMBY opposition.
3. Inventory the unsubsidized affordable housing stock and assess risks of loss so community-based organizations and local housing officials can prioritize properties (and property owners) and design methods to maintain availability, quality, and affordability.
4. Develop evidence-based early-warning indicators and displacement prevention strategies so mayors and community development officials can make effective, timely investments in housing affordability and resident protections.
5. Forecast the full costs and benefits of alternative models for expanding housing assistance so low-income housing advocates and policymakers can assess the return on investment from expanded federal housing assistance.
6. Disentangle key drivers of the persistent homeownership gap between white people and people of color and test products and tools for narrowing the gap so fair housing advocates, private financial institutions, federal regulators, and local leaders can pursue the most effective strategies for closing it.

These knowledge-building priorities do not aim to address every pertinent question about housing in the United States. Instead, they seek to fill critical gaps from the perspective of policymakers, practitioners, advocates, and philanthropists working to advance solutions. Each priority is discussed below, with a focus on how new data, analytic tools, and evidence could help accelerate solutions to ensure quality, affordable housing for all in communities of choice and opportunity.

Priority 1: Unlock Zoning Data and Assess the Effectiveness of Reform Strategies

Understanding how cities and regions regulate local land uses can help developers, advocates, and policymakers identify and lift barriers to building affordable housing in areas of opportunity. There is growing consensus that local regulations constrain housing supply and drive up costs. However, we

know little about how these regulations vary across places, or what reform strategies have been effective at unleashing housing supply. No national database exists on local land use regulations and zoning codes and maps are often “locked” in files held by local planning agencies. Even when codes and regulations are published online, they can be difficult to decipher and impossible to compare. As a result, comparative research on local land use laws and regulations is limited and relies on dated surveys or questionable proxies to make sweeping generalizations about the need for reforms.⁶⁰

Similarly, evidence on the effectiveness of local land use reforms is thin and anecdotal. Several national organizations and federal agencies have published guides and “tool kits” for lifting local land use barriers to affordable housing production (for example, Morris 2009; White House 2016; and Abt Associates and NYU Furman Center).⁶¹ Few studies have examined how well these reforms achieve measurable progress in improving housing affordability or more equitable siting of affordable housing. Even fewer studies have examined the local political conditions that drive successful reforms or how their effectiveness over time varies by place. Lacking comparable zoning data or reliable research on zoning reforms and processes, local leaders rely on assumptions and influence rather than evidence to create local land use policy.

“It would be great to have zoning and building data online in GIS format across cities and states. What are we zoned for and what have we built—what is the delta? It’s nearly impossible to know. A more data-informed analysis could lead to increased efficiency and better land use practices that benefit communities.”

—Ruby Bolaria, Chan Zuckerberg Initiative

Applying Knowledge to Accelerate Solutions

Access to comparable data would allow city and county governments to evaluate their regulatory restrictiveness relative to other jurisdictions. This could help them identify local challenges and bottlenecks for housing development and find models of more permissive rules and regulations adopted by peers. Greater data transparency could help developers and advocates push for more effective reforms. Similarly, it could arm community members with the information they need to advocate knowledgeably on their own behalf and compare their communities to others in the region or nation.

Comparable data would also allow researchers to empirically test both the benefits of changes and the costs of retaining the status quo in land use regulations on housing production, safety, and affordability. This research could provide the evidence base for more effective local reforms. It may also help shift the narrative about the trade-offs between “local control” and “shared prosperity” that often drive NIMBY pressures. Rigorous evidence could help localities and states design solutions that tax “winners” and compensate “losers” from zoning changes, thereby paving the way for greater buy-in and support and contributing to more regional approaches to regulating land and housing (Hills and Schleicher 2011).

Approaches to Knowledge-Building

We anticipate that two strategies will be necessary to fill these knowledge gaps. The first strategy will “unlock” foundational data on local land use regulations and practices and use them to build and maintain two essential databases:

- The first database would include local land use and zoning restrictions related to factors such as use, density, height, lot setbacks, and parking requirements across the United States. This database could be expanded to include zoning variances and local building codes, which also play critical roles in determining land uses and built environment. Building such a dataset could rely on advanced data science techniques (e.g., web scraping, natural language processing, and machine learning) to collect and classify codes and regulations cost-efficiently.
- The second database would contain major state and local land use regulatory reforms, incentives, and state overrides of local law over the past 20 years. This information would be tagged with relevant context, such as the requirements, regulations, or procedures that were the targets of these regulations.

The second strategy would be to apply these data to produce research, tool kits, factsheets, and data visualization features to inform policy and practice. A learning community of local practitioners could use the outputs from this effort to better target resources, share best practices, and identify how land use can address housing affordability.

Priority 2: Understand NIMBY Opposition and Assess Strategies for Achieving Consensus

NIMBY has for many years described homeowners, particularly in the suburbs, protecting their market interests from perceived threats of higher-density housing. Used in combination with exclusionary zoning regulations, NIMBY movements have effectively excluded low-income people and people of color from access to high-amenity suburban communities. More recently, public opposition to new housing development led by low-income renters and community advocates has expanded to city neighborhoods (Hankinson 2018). Advocates and practitioners express the need to better understand the motivations and attitudes that undergird opposition, especially the new “city NIMBY” (Been 2018a; Scally 2013). Better evidence about the localized short- and long-term impacts of increased density and new development on vulnerable populations could help address concerns. The availability of research is especially relevant as cities begin to institute zoning changes to increase housing supply and affordability, with forerunners in New York City, California (SB 50 and AB 2923), and Minneapolis (Minneapolis 2040).⁶²

“There is a big knowledge gap in how to model the projected impact of zoning changes on neighborhoods. We are having conversations and making assumptions but don’t have the evidence. Filling these knowledge gaps could help communities plan their own future.”

–Ryan Gerety, Ford Foundation

Applying Knowledge to Accelerate Solutions

Systematic research tracking and diagnosing community opposition against regulatory changes across time and places could help community development practitioners better understand the phenomenon. To address the fears underlying opposition, policymakers and advocates need evidence on factors such as the neighborhood-level impacts of luxury, market-rate, and mixed-use development on renters and homeowners. Some recent research has started to demystify the impact of additional housing supply on housing costs and vulnerable populations, but more is needed to provide a nuanced understanding of these impacts (Been et al. 2019). For example, localized, short-term rent or price impacts may differ

from citywide, long-term impacts. In fact, researchers in the San Francisco Bay Area have posited that an increased supply of luxury units is unlikely to reduce low-income renters' housing costs in the short term owing to the distorting effects of racism, unequal access to capital and credit, and the spatial preferences of high-income residents (McElroy and Szeto 2017).⁶³ Such research could lead to an understanding of the effectiveness of strategies for overcoming opposition in areas where increased development would improve housing affordability, particularly for lower-income residents. This knowledge could help local, state, and regional leaders and policymakers to more effectively address and overcome the attitudes and opposition that hamper needed housing development and affordable housing options.

Approaches to Knowledge-Building

The comprehensive databases on land use regulations and regulatory reforms recommended in priority 1 would provide the foundation for needed research on NIMBY opposition. Researchers could use these data to identify the characteristics of communities most likely to experience regulatory changes; select communities for in-depth case studies; and track changes in housing availability, costs, and values over time and in different types of communities. For example, if up-zoning is more likely to occur in neighborhoods with little political voice, a root cause of community opposition could be related to feeling disenfranchised rather than increases in housing supply per se. Effective and consistent measures of community opposition, especially opposition motivated by concerns about displacement and changes to neighborhood culture, are also needed to effectively study NIMBYism (Been 2018a).

In addition, researchers should develop and refine simulation models that estimate the long-term market effects of new housing supply for people and communities. These tools could help changemakers better address opposition and engage community members in exploring the likely outcomes of changes in zoning and land use regulations, increases in density, or the development of more affordable housing options. The Turner Center's Housing Development Dashboard provides an example of this type of forecasting tool.⁶⁴ The Urban Institute is currently updating a housing market simulation model that forecasts the marketwide effects of changes in both housing demand and supply.

Priority 3: Inventory the Unsubsidized Affordable Housing Stock and Risks of Loss

To get ahead of the curve before today's stock of unsubsidized affordable housing quietly disappears, local activists and housing officials need data and tools to identify units and who owns them, assess their risk of loss, and evaluate what works to preserve them. No comprehensive databases track affordable housing properties, and no standardized criteria exist for identifying or categorizing them. Policymakers and practitioners also lack reliable tools for assessing the risk for loss of unsubsidized affordable units. Preservation strategies, particularly market-based strategies that require no public subsidy, need to be developed and evaluated.

Applying Knowledge to Accelerate Solutions

Local officials, housing providers, and financial institutions could use a reliable inventory and risk indicators to target interventions and resources, including both public subsidies and market-based tools. Risk indicators could empower community residents and activists with information needed for effective advocacy aimed at both local governments and private property owners. They could inspire more innovative and nimble financing mechanisms to preserve the stock of affordable housing, leveraging private-sector investments with nonprofit ownership or public subsidies. Analyzing the feasibility of market-based solutions could improve the speed and ease with which housing can be preserved by avoiding the time and effort it takes to secure public subsidies.

Approaches to Knowledge-Building

Multiple data sources could be leveraged to build inventories and develop risk profiles for unsubsidized affordable properties. Potential sources include publicly available property data assembled by national sources like Zillow and local administrative databases like tax assessor data and housing code and vacancy data. These data could be applied to develop and test a variety of potential risk indicators, such as property age, last sale date and price, owner, housing code violations, vacancy filings, and outstanding liens against the property. Linked data on neighborhood and market trends, such as surrounding property sale frequencies and prices, could also inform risk assessments. These indicators could be used to develop an index of loss risk for individual properties or clusters of properties with similar features.

To support the development of preservation strategies, researchers should monitor existing and emerging tools, including new sources of capital and financing and policies that constrain or incentivize

actions by property owners. Impacts on the short- and long-term physical and financial sustainability of the property for both owners and residents should be evaluated. An accurate account of the preservation process from the perspective of all stakeholders is critical to understanding timelines, barriers, and successes. Residents should be asked about their perceptions of changes in management leadership and practices as well as real changes to their housing costs, including utilities. Important financial characteristics to examine include a property's debt, equity, reserves, and operating subsidies, including property tax reductions and other project-based public subsidies. Operating costs such as maintenance, which could reflect a property's physical condition, should also be determined.

Priority 4: Develop Early-Warning Indicators of Neighborhood Displacement and Evaluate Prevention Strategies

One of the biggest challenges for both local leaders and community activists is identifying neighborhood displacement early, when there is still time to take action. Researchers have identified indicators that accompany displacement, but none that effectively predict displacement. The second significant gap in knowledge is which tools work most effectively to prevent displacement at both individual and community levels. Local policymakers and community advocates need robust, longitudinal evaluation of the design, implementation, and outcomes of preventive displacement tools. New knowledge will include how to replicate and scale such tools. Finally, most existing analyses focus on changes within the neighborhood experiencing displacement. Because the individuals and families displaced by gentrification or other market pressures are hard to track, their long-term outcomes are a matter of conjecture. This lack of information undermines the ability of community members to advocate for effective antidisplacement policies.

“Housing market trends are always one step ahead of the bureaucracy. That’s why mayors and governments need expert researchers to signal a loud warning that the market is heating up, so we can fight displacement, and protect affordable housing, before it’s too late.”

-Libby Schaaf, Mayor, Oakland, California

Applying Knowledge to Accelerate Solutions

Filling these knowledge gaps would help local governments, advocates, and community leaders prepare for accelerating market pressures and implement policies and investments to preserve neighborhood diversity and protect residents from displacement. Better predictors of displacement would allow local leaders to funnel their limited financial and political capital toward the most vulnerable neighborhoods and residents. Policymakers who understand which policies work best to buffer market pressures and protect individual households can knowledgeably choose and adapt effective tools. Finally, solid qualitative and quantitative evidence about outcomes for those forced to move would help elevate the voices of people experiencing displacement and make a stronger case for policy development and preventive political action.

Approaches to Knowledge-Building

To identify the best early-warning indicators, research should assemble data from diverse sources about neighborhoods that have experienced displacement over the past decade. Conventional data sources like the American Communities Survey (population growth and demographic change) and local administrative data (property sales, rehab permits, infrastructure upgrades) could be linked with more nimble sources (Google mentions, Twitter volumes, bike share usage, or Starbucks locations).

An additional approach to building knowledge is to evaluate the effectiveness of policies and investments aimed at prevention to assess their efficacy in different contexts. A fine line may divide positive investments that benefit a neighborhood and negative ones that displace current residents. Identifying this line and techniques for encouraging positive reinvestment and stopping negative displacement would take the guesswork out of selecting the most effective policy solutions. To do this requires combining policy implementation data with data on neighborhoods and catalysts to develop longitudinal causal models of displacement outcomes.

Finally, advocating against displacement without an evidence-based narrative of what happens to displaced residents is extremely difficult. Compelling narratives require longitudinal research on the effects of displacement on displaced households' income, housing stability, school mobility, transportation and employment access, physical and mental health, social networks, and other quality-of-life indicators.

Priority 5: Forecast the Full Costs and Benefits of Alternative Models for Expanding Housing Assistance

Despite worsening affordability challenges in markets across the country, debates about expanding housing assistance typically focus on near-term costs to the public sector and result in only incremental action at best. Much attention has been devoted to battles over marginal increases in funding or the relative merits of demand-side versus supply-side subsidies. Consequently, neither policymakers nor advocates are well equipped to debate the potential costs and benefits of alternative models for filling the gap between what very low-income people can afford and what it costs to deliver housing in the market place. They cannot assess the long-term effects of different approaches under differing market conditions. And they cannot estimate the combined effects of regulatory reforms and cost-saving design innovations with different models for expanding housing assistance.

Applying Knowledge to Accelerate Solutions

In the 1970s, the Experimental Housing Allowance Program, which included both demonstrations and economic analysis, provided the foundational knowledge for the design of what is now the federal Housing Choice Voucher Program. This ambitious research program was recognized by policymakers and practitioners for delivering the evidence they needed to assess alternative program designs, address concerns about the distribution of benefits and costs, and prove the feasibility of an innovative solution to the affordable housing challenge. We believe that a comparably ambitious program of rigorous knowledge-building, sustained over several years and addressing the diversity of market conditions across the United States, could transform the debate about housing assistance. Instead of continuing to bicker about incremental adjustments to current policy and marginal increases in public spending, advocates and policymakers could build support for a substantially expanded commitment to making decent stable housing affordable for everyone.

Approaches to Knowledge-Building

We recommend a program of future-focused, crosscutting tool development and rigorous demonstrations to spur productive debate and policy development. This research program would develop and apply tools to look beyond the short-term costs to the public sector and incorporate potential public savings (e.g., reduced homelessness). It would capitalize on rigorous evidence from the experience of countries with universal or expanded housing assistance. It would design and evaluate

demonstrations to empirically test the marketwide effects of different assistance models. And it would hone and apply market forecasting models to explore alternative futures, including changes in household characteristics and demands, housing production technologies and costs, and housing market regulations. More specifically, such a program would

- forecast the public-sector costs for providing universal housing assistance under alternative assumptions about household characteristics and incomes, land use regulations, construction technologies, and financing tools;
- quantify the broader costs and benefits of substantially expanded housing assistance, including effects on housing quality, property values, and community economic vitality and the potential public savings from reduced homelessness and improved health and child well-being; and
- assess the capacity of housing markets to absorb expanded assistance, including issues of landlord acceptance and the effects of expanded assistance on market rents.

Priority 6: Disentangle Drivers of the Racial Homeownership Gap and Assess Tools and Strategies for Narrowing It

A central challenge for efforts aimed at expanding access to secure homeownership is how to narrow racial and ethnic gaps in homeownership. Although overt discrimination in the housing market has declined over time, stark racial and ethnical disparities in homeownership persist. People of color were especially hard hit by the Great Recession because they were more likely to have received subprime and predatory mortgages, even when they qualified for prime loans (Farber 2013). Although considerable research has explored the racial and ethnic homeownership gap, a large proportion of the gap remains unexplained. Efforts to close the gap have achieved little progress because it is rooted in our country's legacy of racial discrimination, redlining, segregation, and disinvestment. This legacy has left many people of color at a severe disadvantage with respect to employment, income, credit history, and, perhaps most important, individual and family wealth. Analyses and policy development that address only one dimension of this legacy or that focus only on the choices and behaviors of individual homebuyers, rather than on the web of barriers they face, seldom yield effective answers.

Applying Knowledge to Accelerate Solutions

A high-profile program of rigorous knowledge-building and knowledge-sharing explicitly focused on the racial and ethnic homeownership gap could raise public awareness about its persistence and severity and maintain focus over an extended period. It could empower civil rights and racial justice leaders to hold financial institutions, regulators, and policymakers accountable for the impact of new policies and practices on homebuyers of color and help them test new ideas for solutions. It could help inform solutions that bridge the domains of work, financial well-being, and homeownership by equipping policymakers across these domains with actionable information. And it could support mayors and other local leaders committed to tackling the homeownership gap in their communities with the latest evidence about what works.

“New developments at the federal level and new housing finance players have changed the market. More lenders are willing to incorporate non-traditional or alternative data to evaluate credit worthiness. Fintech firms are incorporating innovative approaches and legacy institutions are exploring how to make use of these innovations. All these industry players have proprietary data, so you need to have collaboration if you want to move forward.”

-Lisa Rice, National Fair Housing Alliance

Approaches to Knowledge-Building

Rigorous knowledge-building about the homeownership gap would start by assembling and maintaining current and historical data from multiple sources, linking observations when feasible, and constructing time series for people and places. Data sources include national surveys on population, market, and community characteristics as well as proprietary datasets on mortgage lending, loan performance, and credit scores. As technology expands, new data on cash flow transactions could be added. Once assembled, these data would support innovative analyses of the dynamics of homeownership by race and ethnicity over time and across markets. This analysis could shed new light on how and why households move in and out of homeownership and gain and lose home equity. It could also reveal significant variations across markets and across different types of neighborhoods within markets. Building on these analyses, researchers could forecast the likely effects of proposed policies and market

practices, including innovations in fintech, on people of color and on the homeownership gap. For example, they could conduct analysis to assess the accuracy of new data (such as transaction flows) for predicting credit worthiness and whether incorporating these data into the mortgage underwriting process could enhance access to homeownership for people of color, who are more likely to have no or thin traditional credit profiles.

This program would develop a concise set of metrics that could be updated regularly and reported locally and nationally. These metrics would quantify both the gap in the homeownership rate and in home equity for specific racial and ethnic populations, including African American and Latinx households. Like the Urban Institute's Housing Credit Availability Index,⁶⁵ these homeownership equity metrics could be reported quarterly and applied to monitor progress over time and across places. These metrics could also be used to develop forecasting tools that estimate the impact on home equity gaps of changes in underwriting criteria or financing terms, as well as changes in employment, income, savings, or house prices.

Finally, the program could support a peer learning network of local communities committed to narrowing the homeownership gap. Network members would receive tailored data and analytic support, share insights and ideas for action, and participate in rigorous evaluation of new models and strategies.

Notes

- ¹ Note that these four solution sets do not address the consequences (e.g., homelessness, evictions, or foreclosures) of today's mismatch between housing needs and housing supply. Instead, we focus on solutions with the long-term potential to address the causes of these problems.
- ² Changemakers will tailor these solution sets to fit local circumstances. The right strategy for a big, fast-growth metro area would not make sense for a small town or rural community or a city experiencing slow or no economic growth.
- ³ Although many communities across the United States face shortfalls in housing supply, others do not. Some struggle instead with population decline, abandonment, and disinvestment. These weaker markets do not need more housing production, but they do need housing preservation and protection, expanded assistance, and expanded homeownership opportunities.
- ⁴ Leigh Franke, "The link between land-use restriction and growing inequality," *Urban Wire* (blog), Urban Institute, November 23, 2015, <https://www.urban.org/urban-wire/link-between-land-use-restriction-and-growing-inequality>.
- ⁵ "Miami 21," Form-Based Codes Institute (FBCI), accessed February 12, 2019, <http://formbasedcodes.org/codes/miami-21/>; Jen Kinney, "Buffalo's New Zoning Code Promotes Density, but Is It for Everyone?," *Next City* (blog), January 6, 2017, <https://nextcity.org/daily/entry/buffalo-green-code-zoning-density>.
- ⁶ Henry Grabar, "Minneapolis Confronts Its History of Housing Segregation," *Slate* (blog), December 7, 2018, <https://slate.com/business/2018/12/minneapolis-single-family-zoning-housing-racism.html>.
- ⁷ "Inclusionary Housing Program for Developers," Community Development Department, City of Cambridge, Massachusetts, accessed February 12, 2019, <https://www.cambridgema.gov/CDD/housing/fordevelopersandpropmanagers/inclusionarydevelopers>.
- ⁸ "Land Use & Zoning Tools," Arlington County Government, accessed February 12, 2019, <https://housing.arlingtonva.us/development/land-use-zoning-tools/>.
- ⁹ "Affordable Housing Requirements and Expedite Program," City of San Diego, accessed February 12, 2019, <https://www.sandiego.gov/development-services/news-programs/ahrep>.
- ¹⁰ "Massachusetts law about zoning," Commonwealth of Massachusetts, accessed February 12, 2019, <https://www.mass.gov/info-details/massachusetts-law-about-zoning>.
- ¹¹ Liam Dillon, "Gov. Brown Just Signed 15 Housing Bills. Here's How They're Supposed to Help the Affordability Crisis," *Los Angeles Times*, September 29, 2017, <http://www.latimes.com/politics/la-pol-ca-housing-legislation-signed-20170929-htlstory.html>; Rachel Dovey, "A New Calif. Housing Law Is Being Put to the Test in Berkeley," *Next City* (blog), March 13, 2018, <https://nextcity.org/daily/entry/a-new-calif-housing-law-is-being-put-to-the-test-in-berkeley>.
- ¹² "Policy Minute: The Potential for Small Unit Housing," NYU Furman Center, April 12, 2018, <http://furmancenter.org/thestoop/entry/policy-minute-the-potential-for-small-unit-housing>.
- ¹³ "About," Panoramic Interests, accessed February 12, 2019, <https://www.panoramic.com/about/>.
- ¹⁴ "Ausbauhaus Neukölln," urbanNext, accessed February 12, 2019, <https://urbannext.net/ausbauhaus-neuko%CC%88ln/>.

- ¹⁵ “Manufactured Homes,” Neighborhood Housing Services of the Inland Empire (NHSIE), accessed February 12, 2019, <http://www.nhsie.org/purchase-a-home/manufactured-homes>.
- ¹⁶ “Our Solution,” Blokable, accessed February 12, 2019, <https://blokable.com/solution/>.
- ¹⁷ “Off Site Construction,” Factory_OS, accessed February 12, 2019, <https://factoryos.com/off-site-construction/>.
- ¹⁸ “Our Vision,” Katterra, accessed February 12, 2019, <https://www.katterra.com/en/about-katterra/the-vision.html>.
- ¹⁹ Amanda Kolson Hurley, “Can Silicon Valley Disrupt How We Build?” *CityLab* blog, June 25, 2018, <https://www.citylab.com/design/2018/06/can-silicon-valley-disrupt-how-we-build/562334/>; Hillary Louise Johnson, “A Welcome Home,” *Sactown* magazine, June–July 2017, <http://www.sactownmag.com/June-July-2017/A-Welcome-Home/>; Conor Dougherty, “Piece by Piece, a Factory-Made Answer for a Housing Squeeze,” *New York Times*, June 7, 2018, https://www.nytimes.com/2018/06/07/business/economy/modular-housing.html?rref=collection%2Fbyline%2Fconor-dougherty&action=click&contentCollection=undefined®ion=stream&module=stream_unit&version=latest&contentPlacement=1&pgtype=collection.
- ²⁰ Sarina Trangle, “NYC micro-apartments: Success of Kips Bay’s tiny studios could lead to more, developer says,” *AM New York*, August 1, 2017, <https://www.amny.com/real-estate/nyc-micro-apartments-success-of-kips-bay-s-tiny-studios-could-lead-to-more-developer-says-1.13896100>.
- ²¹ Rolf Pendall and Vanessa Brown Calder, “Finding common ground for land-use regulation reform,” *Urban Wire* (blog), Urban Institute, August 1, 2017, <https://www.urban.org/urban-wire/finding-common-ground-land-use-regulation-reform>.
- ²² Alan Altshuler, “The Ideologies of Urban Land Use Politics,” *Land Lines* (article), Lincoln Institute of Land Policy, November 1996, <https://www.lincolnst.edu/publications/articles/ideologies-urban-land-use-politics>.
- ²³ Christine Brun, “Sometimes building codes stifle worthy innovation,” *San Diego Union-Tribune*, July 8, 2016, <http://www.sandiegouniontribune.com/lifestyle/home-and-garden/sdut-sometimes-building-codes-stifle-worthy-innovation-2016jul08-story.html>.
- ²⁴ Dougherty, “Piece by Piece,” https://www.nytimes.com/2018/06/07/business/economy/modular-housing.html?rref=collection%2Fbyline%2Fconor-dougherty&action=click&contentCollection=undefined®ion=stream&module=stream_unit&version=latest&contentPlacement=1&pgtype=collection.
- ²⁵ Murrye Bernard, “When Less Space Invites More Regulations,” *Architect Magazine*, February 22, 2018, https://www.architectmagazine.com/practice/when-less-space-invites-more-regulations_o.
- ²⁶ A related preservation challenge involves properties developed with federal subsidies that are expiring. Here we focus on the larger and less well-understood challenge of preserving unsubsidized affordable housing stock. We anticipate that if we significantly expand housing assistance (our fourth solution set), some of these resources could be used to replace or extend expiring subsidies.
- ²⁷ Sam J. Miller, “Housing, Not Warehousing—A Victory 10 Years in the Making,” *Shelterforce*, May 7, 2018, <https://shelterforce.org/2018/05/07/housing-not-warehousing-a-victory-10-years-in-the-making/>.
- ²⁸ “Miami Housing Policy Toolkit,” University of Miami, accessed February 13, 2019, <http://cdn.miami.edu/wda/cce/Documents/Miami-Housing-Solutions-Lab/PolicyToolkit/subpages-folder/noah.html>.
- ²⁹ “Small Sites Program: Program Guidelines,” San Francisco, CA, Mayor’s Office of Housing & Community Development, December 1, 2017.

- ³⁰ “Mayor Schaaf Boosts Budget to Fight Homelessness, Invests \$185 Million to Address Crisis, June 9, 2017, <https://www.oaklandca.gov/news/2017/mayor-schaaf-boosts-budget-to-fight-homelessness-invests-185-million-to-address-crisis>.
- ³¹ “NOAH Impact Fund Makes Initial Investment,” NOAH Impact Fund, October 31, 2017, <https://noahimpactfund.com/2017/10/31/noah-impact-fund-makes-initial-investment/>.
- ³² “NOAH Preservation Loan,” Freddie Mac Multifamily, January 2019, https://mf.freddiemac.com/docs/product/noah_mf_term_sheet.pdf.
- ³³ “Home,” Community Investment Corporation, accessed February 13, 2019, <http://www.cicchicago.com/>.
- ³⁴ Tanvi Misra, “Using Algorithms To Predict Gentrification,” *CityLab* (blog), February 17, 2017, <https://www.citylab.com/solutions/2017/02/algorithms-that-predict-gentrification/516945/>; and Rachael Bishop, “How social media images can predict gentrification in cities,” World Economic Forum, January 7, 2019, <https://www.weforum.org/agenda/2019/01/social-media-images-of-culture-can-predict-economic-trends-in-cities/>.
- ³⁵ Emily Thaden, Kim Graziani, and Annie Stup, “Land Banks and Community Land Trusts: Not Synonyms or Antonyms. Complements,” *Shelterforce*, November 9, 2016, <https://shelterforce.org/2016/11/09/land-banks-community-land-trusts-not-synonyms-or-antonyms-complements/>.
- ³⁶ “Read the Just Cause for Eviction Ordinance,” City of Oakland, accessed February 13, 2019, <https://www.oaklandca.gov/resources/read-the-just-cause-for-eviction-ordinance>.
- ³⁷ “Rental Registration & Inspection Code,” Seattle Department of Construction & Inspections (SDCI), accessed February 13, 2019, [http://www.seattle.gov/sdci/codes/codes-we-enforce-\(a-z\)/rental-registration%2%a0and-inspection-code](http://www.seattle.gov/sdci/codes/codes-we-enforce-(a-z)/rental-registration%2%a0and-inspection-code).
- ³⁸ “The Anti-Displacement Policy Toolkit: Certificate of No Harassment,” Association for Neighborhood & Housing Development (ANHD), accessed February 13, 2019, https://docs.wixstatic.com/ugd/555352_f1e5e289101b4b32a35d3afde4b41e8f.pdf.
- ³⁹ Carolyn Gallaher, “DC’s TOPA law lets tenants buy their buildings before anyone else can, but it also helps renters stay put,” Greater Washington, September 15, 2016, <https://ggwash.org/view/43788/a-dc-law-lets-tenants-buy-their-buildings-before-anyone-else-can-but-it-also-helps-renters-stay-put>.
- ⁴⁰ “Right 2 Root,” accessed February 13, 2019, <http://right2root.com/>.
- ⁴¹ These and other strategies that boost income can also help households save and accumulate a down payment to make homeownership accessible.
- ⁴² “Universal Credit,” GOV.UK, accessed February 13, 2019, <https://www.gov.uk/universal-credit>.
- ⁴³ May Bulman, “Universal credit: Rent arrears more than double for benefit claimants, new figures show,” *Independent*, November 12, 2018, <https://www.independent.co.uk/news/uk/home-news/universal-credit-rent-arrears-housing-benefit-welfare-wales-dwp-a8629526.html>.
- ⁴⁴ “Nonrefundable Renter’s Credit,” ca.gov, accessed February 13, 2019, <https://www.ftb.ca.gov/individuals/faq/ivr/203.shtml>; “Renters’ Tax Credits,” maryland.gov, accessed February 13, 2019, <https://dat.maryland.gov/realproperty/Pages/Renters'-Tax-Credits.aspx>.
- ⁴⁵ Jeff Stein, “‘Housing for All’: Democrats push for big government response to soaring rents,” *Washington Post*, July 19, 2018, https://www.washingtonpost.com/business/2018/07/19/rents-soar-democrats-push-new-policies-affordable-housing/?noredirect=on&utm_term=.6f6b07b25c7e.

- ⁴⁶ Mary K. Cunningham, "Using cash transfers to expand housing choice," *Urban Wire* (blog), Urban Institute, October 19, 2016, <https://www.urban.org/urban-wire/using-cash-transfers-expand-housing-choice/>.
- ⁴⁷ "About Us," Housing Europe, accessed February 13, 2019, <http://www.housingeurope.eu/section-37/about-us>.
- ⁴⁸ Dao Harrison, "Why Disruptive Technologies Matter for Affordable Housing: The Case of Indonesia," The World Bank, November 4, 2018, <https://blogs.worldbank.org/category/tags/affordable-housing>.
- ⁴⁹ Laurie Goodman and Christopher Mayer, "Homeownership is still financially better than renting," *Urban Wire* (blog), Urban Institute, February 21, 2018, <https://www.urban.org/urban-wire/homeownership-still-financially-better-renting>.
- ⁵⁰ Jung Hyun Choi and Laurie Goodman, "What explains the homeownership gap between black and white young adults?," *Urban Wire* (blog), Urban Institute, November 20, 2018, <https://www.urban.org/urban-wire/what-explains-homeownership-gap-between-black-and-white-young-adults>.
- ⁵¹ Laurie Goodman, Jun Zhu, and Rolf Pendall, "Are gains in black homeownership history?," *Urban Wire* (blog), Urban Institute, February 14, 2017, <https://www.urban.org/urban-wire/are-gains-black-homeownership-history>.
- ⁵² Beth Sorce and Neha Bhatt, "Community Land Trusts," Smart Growth America, accessed February 13, 2019, https://smartgrowthamerica.org/app/legacy/documents/CLT_Burlington_Ordinance.pdf.
- ⁵³ Lillian M. Ortiz, "Will Limited-Equity Cooperatives Make a Comeback," *Shelterforce*, April 25, 2017, <https://shelterforce.org/2017/04/25/will-limited-equity-co-ops-make-comeback/>.
- ⁵⁴ Hannah Rounds, "Buying a Home with a Shared-Equity Mortgage," LendingTree, July 6, 2018, <https://www.lendingtree.com/home/mortgage/buying-a-home-with-a-shared-equity-mortgage/>.
- ⁵⁵ "City First Homes," Housing Association of Nonprofit Developers (HAND), accessed February 13, 2019, <https://www.handhousing.org/hand-member-directory/city-first-homes/>.
- ⁵⁶ The Housing Fund, accessed February 13, 2019, <https://thehousingfund.org/>.
- ⁵⁷ Laurie Goodman and Jun Zhu, "Rental pay history should be used to assess the creditworthiness of mortgage borrowers," *Urban Wire* (blog), Urban Institute, April 17, 2018, <https://www.urban.org/urban-wire/rental-pay-history-should-be-used-assess-creditworthiness-mortgage-borrowers>.
- ⁵⁸ John Kiernan, "What to Know about VantageScore 4.0," *US News and World Report*, September 1, 2017, <https://money.usnews.com/money/personal-finance/banking-and-credit/articles/2017-09-01/what-to-know-about-vantagescore-40>.
- ⁵⁹ Sarah Stochak, "Including new types of data in credit files could significantly expand credit access," *Urban Wire* (blog), Urban Institute, September 11, 2018, <https://www.urban.org/urban-wire/including-new-types-data-credit-files-could-significantly-expand-credit-access>.
- ⁶⁰ Graham MacDonald, Solomon Greene, and Emma Nechamkin, "We need better zoning data to address pressing housing and development issues," *Urban Wire* (blog), Urban Institute, January 15, 2019, <https://www.urban.org/urban-wire/we-need-better-zoning-data-address-pressing-housing-and-development-issues>.
- ⁶¹ "Local Housing Solutions," Abt Associates and NYU Furman Center, accessed February 13, 2019, <https://www.localhousingolutions.org/>.
- ⁶² Dan Brekke, "It's SB 827, the Sequel: Wiener Introduces Revamped Bill to Spur Housing Near Transit," KQED News, December 4, 2018, <https://www.kqed.org/news/11709817/its-sb-827-take-2-wiener-introduces-revamped-bill-to-require-more-housing-near-transit>; "Bill to Increase Transit-Oriented Development at BART Stations Signed by Governor, California State Assembly Democratic Caucus, September 30, 2018, <https://a17.asmdc.org/press-releases/bill-increase-transit-oriented-development-bart-stations-signed>

governor; Henry Grabar, "Minneapolis Confronts Its History of Housing Segregation," *Slate*, December 7, 2018, <https://slate.com/business/2018/12/minneapolis-single-family-zoning-housing-racism.html>.

⁶³ Richard Walker, "Why Is There a Housing Crisis?," *East Bay Express*, March 26, 2016, <https://www.eastbayexpress.com/oakland/why-is-there-a-housing-crisis/Content?oid=4722242>.

⁶⁴ Carol Galante, "Launching the Housing Development Dashboard," Turner Center for Housing Innovation, May 31, 2016, <https://turnercenter.berkeley.edu/blog/housing-development-dashboard>.

⁶⁵ "Housing Credit Availability Index," Urban Institute, January 17, 2019, <https://www.urban.org/policy-centers/housing-finance-policy-center/projects/housing-credit-availability-index>.

References

- Bartlett, Robert, Adair Morse, Richard Stanton, and Nancy Wallace. 2018. "Consumer-Lending Discrimination in the FinTech Era." SSRN.
- Been, Vicki. 2018a. "City NIMBYS." *Journal of Land Use* 33 (2): 217–50.
- . 2018b. "What More Do We Need to Know About How to Prevent and Mitigate Displacement of Low- and Moderate-Income Households from Gentrifying Neighborhoods." In *A Shared Future: Fostering Communities of Inclusion in an Era of Inequality*, edited by Christopher Herbert, Jonathan Spader, Jennifer Molinsky, and Shannon Rieger, 368–85. Cambridge, MA: Joint Center for Housing Studies at Harvard University.
- Been, Vicki, Benjamin Gross, and John Infranca. 2014. "Responding to Changing Households: Regulatory Challenges for Micro-Units and Accessory Dwelling Units." New York: NYU Furman Center.
- Been, Vicki, Ingrid Gould Ellen, and Katherine O'Regan. 2019. "Supply Skepticism: Housing Supply and Affordability." *Housing Policy Debate* 29 (1): 25–40.
- Bousquet, Chris. 2017. "Where Is Gentrification Happening in Your City? Using Mapping to Understand Gentrification and Prevent Displacement." Cambridge, MA: Data-Smart City Solutions.
- BPC (Bipartisan Policy Center). 2013. *Housing America's Future: New Directions for National Policy*. Washington, DC: BPC.
- Brennan, Maya, and Solomon Greene. 2018. "Why Isn't There Enough Affordable Housing for the Families Who Need It Most?" Washington, DC: Urban Institute.
- Buchak, Greg, Gregor Matvos, Tomasz Piskorski, and Amit Seru. 2017. "Fintech, Regulatory Arbitrage, and the Rise of Shadow Banks." Working Paper 23288. Cambridge, MA: National Bureau of Economic Research.
- Calder, Vanessa Brown. 2017. "Zoning, Land-Use Planning, and Housing Affordability." Washington, DC: Cato Institute.
- Chapple, Karen, and Miriam Zuk. 2016. "Forewarned: The Use of Neighborhood Early Warning Systems for Gentrification and Displacement." *Cityscape* 18 (3): 109–30.
- City of Seattle Department of Planning & Development. 2015. "Growth and Equity: Analyzing Impacts on Displacement and Opportunity Related to Seattle's Growth Strategy." Seattle, WA: City of Seattle Department of Planning & Development.
- CoStar Realty Information. 2016. *Naturally Occurring Affordable Housing*. Washington, DC: CoStar Realty Information.
- Dey, Jaya, and Lariece M. Brown. 2019. "Role of Credit Attributes in Explaining Homeownership Gap in the Post-Crisis Period, 2012–2016." Available at SSRN: <https://ssrn.com/abstract=3327483>.
- Di Maggio, Marco, and Vincent W. Yao. 2018. "Fintech Borrowers: Lax-Screening or Cream-Skimming?" Working paper. SSRN.
- Eckerd, Adam, Yushim Kim, and Heather Campbell. 2018. "Gentrification and Displacement: Modeling a Complex Urban Process." *Housing Policy Debate*: 1-24.
- Elliott, Diana, Tanaya Srini, Carl Hedman, Shiva Kooragayala, and Cary Lou. 2017. *Denver and the State of Low- and Middle-Income Housing*. Washington, DC: Urban Institute.
- Faber, Jacob W. 2013. "Racial Dynamics of Subprime Mortgage Lending at the Peak." *Housing Policy Debate* 23 (2): 328–49.
- Family Housing Fund. 2013. *The Space Between: Realities and Possibilities in Preserving Unsubsidized Affordable Rental Housing*. Minneapolis, MN: Family Housing Fund.

- Fischel, William A. 2005. *The Homevoter Hypothesis: How Home Values Influence Local Government Taxation, School Finance, and Land-Use Policies*. Cambridge, MA: Harvard University Press.
- . 2015. *Zoning Rules! The Economics of Land Use Regulation*. Cambridge, MA: Lincoln Institute of Land Policy.
- Fullilove, Mindy Thompson. 2016. *Root Shock: How Tearing Up City Neighborhoods Hurts America, And What We Can Do About It*. New York: Random House.
- Fuster, Andreas, Matthew Plosser, Philipp Schnabl, and James Vickery. 2018. *The Role of Technology in Mortgage Lending*. New York: Federal Reserve Bank of New York.
- Galante, Carol, Carolina Reid, and Rocio Sanchez-Moyano. 2017. *Expanding Access to Homeownership through Lease-Purchase*. Berkeley, CA: Terner Center for Housing Innovation.
- Galvez, Martha, Maya Brennan, Brady Meixell, and Rolf Pendall. 2017. *Housing as a Safety Net: Ensuring Housing Security for the Most Vulnerable*. Washington, DC: Urban Institute.
- Getsinger, Liza, Lily Posey, Graham MacDonald, Josh Leopold, and Katya Abazajian. 2017. *The Housing Affordability Gap for Extremely Low-Income Renters in 2014*. Washington, DC: Urban Institute.
- Glaeser, Edward, and Joseph Gyourko. 2018. "The Economic Implications of Housing Supply." *Journal of Economic Perspectives* 32 (1): 3–30.
- Greene, Solomon J. 2019. "Sticky Preferences: Racial Exclusion's Staying Power." In *Dream Revisited: Contemporary Debates about Housing, Segregation and Opportunity*, edited by Ingrid Gould Ellen and Justin Steil. New York: Columbia University Press.
- Greene, Solomon, and Kathryn L.S. Pettit. 2016. "What if Cities Used Data to Drive Inclusive Neighborhood Change?" Washington, DC: Urban Institute.
- Gyourko, Joseph, and Raven Molloy. 2015. "Regulation and Housing Supply." In *Handbook of Regional and Urban Economics*, volume 5, edited by Gilles Duranton, J. Vernon Henderson, William C. Strange, 1289–37. Oxford: Elsevier B.V.
- Hankinson, Michael. 2018. "When Do Renters Behave Like Homeowners? High Rent, Price Anxiety, and NIMBYism." *American Political Science Review* 112 (3): 473–93.
- Hedman, Carl, Diana Elliot, Tanaya Srini, and Shiva Kooragayala. 2017. *Austin and the State of Low- and Middle-Income Housing*. Washington, DC: Urban Institute.
- Hills, Roderick M. 2016. "Saving Mount Laurel?" *Fordham Urban Law Journal* 40 (5): 1611–43.
- Hills, Roderick M. Jr., and David N. Schleicher. 2011. "Balancing the 'Zoning Budget.'" *Case Western Reserve Law Review* 62 (1): 81–133.
- Hsieh, Chang-Tai, and Enrico Moretti. 2019. "Housing Constraints and Spatial Misallocation." *American Economic Journal: Macroeconomics* 11 (2): 1–61.
- HUD (US Department of Housing and Urban Development). 2012. "Shared Equity Models Offer Sustainable Homeownership." Washington, DC: HUD.
- . 2018. "Regulatory Barriers and Affordable Housing: Problems and Solutions Exploring the Current State of Knowledge on the Impact of Regulations on Housing Supply States Reduce Regulatory Barriers for Affordable Housing." Washington, DC: HUD.
- Ikeda, Sanford, and Emily Hamilton. 2015. "How Land-Use Regulation Undermines Affordable Housing." Arlington, VA: Mercatus Center.
- Jacobus, Rick, and John Emmeus Davis. 2010. "The Asset Building Potential of Shared Equity Home Ownership." Washington, DC: New America Foundation.

- Katz, Bruce, and Margery Austin Turner. 2007. *Rethinking U.S. Rental Housing Policy: Build on State and Local Innovations*. Washington, DC: Brookings Institution.
- Kingsley, G. Thomas. 2017. "Trends in Housing Problems and Federal Housing Assistance." Washington, DC: Urban Institute.
- McCargo, Alanna, Bing Bai, Taz George, and Sarah Stochak. 2018. *Family Residential Properties*. Washington, DC: Urban Institute.
- McElroy, Erin, and Andrew Szeto. 2017. "The Racial Contours of YIMBY/NIMBY Bay Area Gentrification." *Berkeley Planning Journal* 29 (1): 7–45.
- Morris, Marya. 2009. *Smart Codes: Model Land-Development Regulations*. Chicago: American Planning Association.
- Nelson, Arthur C., Rolf Pendall, Casey J. Dawkins, Gerrit J. Knaap. 2002. "The Link between Growth Management and Housing Affordability: The Academic Evidence." Discussion paper. Washington, DC: Brookings Institution.
- Newman, Kathe, and Elvin K. Wyly. 2006. "The Right to Stay Put, Revisited: Gentrification and Resistance to Displacement in New York City." *Urban Studies* 43 (1): 23–57.
- NYU Furman Center. 2016. *Gentrification Response: A Survey of Strategies to Maintain Neighborhood Economic Diversity*. New York: NYU Furman Center.
- . 2018. "Implementing New York City's Universal Access to Counsel Program: Lessons for Other Jurisdictions." New York: NYU Furman Center.
- Olsen, Edgar O. 2010. "Fundamental Housing Policy Reforms to End Homelessness." In *How to House the Homeless*, edited by Ingrid Gould Ellen and Brendan O'Flaherty, 89–109. New York: Russell Sage.
- Ramakrishnan, Kriti, Mark Trekson, and Solomon Greene. 2019. "Inclusionary Zoning: What Does the Research Tell Us about the Effectiveness of Local Action?" Washington, DC: Urban Institute.
- Reed, Jenny. 2013. "DC's First Right Purchase Program Helps to Preserve Affordable Housing and Is One of DC's Key Anti-Displacement Tools." Washington, DC: Fiscal Policy Institute.
- Reynolds, Kathryn. 2018. "Creating Permanent Housing Affordability: Lessons from German Cooperative Housing Models." *Cityscape* 20 (2): 263–76.
- Sard, Barbara, and Will Fischer. 2013. *Renters' Tax Credit Would Promote Equity and Advance Balanced Housing Policy*. Washington, DC: Center on Budget and Policy Priorities.
- Sally, Corianne Payton. 2013. "The Nuances of NIMBY: Context and Perceptions of Affordable Rental Housing Development." *Urban Affairs Review* 49 (5): 718–47. <https://doi.org/10.1177/1078087412469341>
- Stegman, Michael A. 2017. "Toward a Scalable Capital Markets Funded Lease-Purchase Strategy for Low- and Moderate-Income Families." *Journal of Structured Finance* 23 (3): 70–81.
- Thaden, Emily, and Kevin McQueen. 2018. *Assessing the Feasibility of a Shared Appreciation Loan Fund Designed for Long-Term Sustainable Affordable Homeownership*. Portland, OR: Grounded Solutions Network in partnership with Freddie Mac.
- Theodos, Brett, Kenneth Temkin, Rob Pitingolo, and Dina Emam. 2015. *Homeownership for a New Era: Baseline Report on the Cornerstone Homeownership Innovation Program*. Washington, DC: Urban Institute.
- Tomer, Adie, and Ranjitha Shivaram. 2017. *Modernizing Government's Approach to Transportation + Land Use Data: Challenges and Opportunities*. Washington, DC: Brookings Institution.
- Turner, Margery Austin, Solomon Greene, Anthony B. Iton, Ruth Gourevitch. 2018. "Opportunity Neighborhoods: Building the Foundation for Economic Mobility in America's Metros." Washington, DC: Urban Institute.
- White House. *Housing Development Toolkit*. 2016. Washington, DC: White House.

Williams, Stockton, Lisa Sturtevant, and Rosemarie Hepner. 2017. *Yes in My Backyard: How States and Local Communities Can Find Common Ground in Expanding Housing Choice and Opportunity*. Washington, DC: Urban Land Institute.

Woetzel, Jonathan, Sangeeth Ram, Jan Mischke, Nicklas Garemo, and Shirish Sankhe. 2014. *Tackling the World's Affordable Housing Challenge*. New York: McKinsey & Company.

About the Authors

Margery Austin Turner is senior vice president for program planning and management at the Urban Institute, where she leads efforts to frame and conduct a forward-looking agenda of policy research. A nationally recognized expert on urban policy and neighborhood issues, Turner has analyzed issues of residential location, racial and ethnic discrimination and its contribution to neighborhood segregation and inequality, and the role of housing policies in promoting residential mobility and location choice.

Solomon Greene is a senior fellow in the Research to Action Lab and the Metropolitan Housing and Communities Policy Center at the Urban Institute. His research focuses on how land use law, housing policy and regional planning can reduce racial and economic segregation and how cities can use data and technology to promote more inclusive development. Before joining Urban, Greene was a senior adviser at the US Department of Housing and Urban Development and a senior program officer at the Open Society Foundations. Greene serves on the board of the National Housing Law Project. He received his BA from Stanford University, his MCP from the University of California, Berkeley, and his JD from Yale Law School.

Corianne Payton Scally is a principal research associate in the Metropolitan Housing and Communities Policy Center, where she explores the complexities of cross-sector implementation of affordable housing and community development policy and practice. Her work evaluates how well these systems work to serve vulnerable populations, including low-income families, people with disabilities, older adults, and individuals suffering from poor health and/or trauma. Scally is a former associate professor in urban planning, as well as a former affordable housing developer. She received her PhD in urban planning and policy development from Rutgers University.

Kathryn Reynolds is a policy program manager in the Research to Action Lab at the Urban Institute, where her work focuses on equitable economic development and inclusive growth. Previously, Reynolds was a Robert Bosch Foundation fellow in Berlin and Leipzig, Germany, and deputy director of the White House Council for Strong Cities, Strong Communities. Reynolds holds a master's degree in public administration from New York University's Wagner Graduate School of Public Service, where she focused on public policy and urban development.

Jung Choi is a research associate with the Housing Finance Policy Center at the Urban Institute. She studies urban inequality, focusing on housing, urban economics, real estate finance, and disadvantaged

populations in the housing market. Before joining Urban, Choi was a postdoctoral scholar at the University of Southern California Price Center for Social Innovation, where her research examined innovative housing and social policies to enhance quality of life for low-income households. Choi holds a PhD in public policy and management from the Price School of Public Policy at the University of Southern California.

STATEMENT OF INDEPENDENCE

The Urban Institute strives to meet the highest standards of integrity and quality in its research and analyses and in the evidence-based policy recommendations offered by its researchers and experts. We believe that operating consistent with the values of independence, rigor, and transparency is essential to maintaining those standards. As an organization, the Urban Institute does not take positions on issues, but it does empower and support its experts in sharing their own evidence-based views and policy recommendations that have been shaped by scholarship. Funders do not determine our research findings or the insights and recommendations of our experts. Urban scholars and experts are expected to be objective and follow the evidence wherever it may lead.



2100 M Street NW
Washington, DC 20037

www.urban.org