McKinsey Institute for Black Economic Mobility

Appendix

Investing in housing: Unlocking economic mobility for Black families and all Americans



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Impact model: Estimating community and social impact from closing the housing gap in the United States

Methodology

- Estimate the housing gap: We calculate housing units needed to address the housing gap¹ by type of housing unit (for both single-family and multifamily) from 2023 through 2035. We assume the housing needed includes both single-family and multifamily units (in line with housing permit distribution), and units needed include both rent-subsidized and market-rent units (no assumed distribution).
- Estimate housing construction costs: We
 calculate average housing construction costs by
 type (single family and multifamily) and location,
 considering both the cost of acquiring land and
 the labor and material cost associated with
 building a unit.
- Estimate required investment: We calculate final investment to address the housing gap by multiplying housing units needed by estimated average construction. We assume equal distribution of investment across years.
- Estimate broad economic impact: We calculate GDP and employment impact by applying location-specific multipliers to required investment by type of effect (initial, direct, indirect). Our analysis excludes induced effects to focus on impacts across the construction value chain. We also exclude potential impacts from land sales or acquisitions but include real estate agent and broker commissions on land sales. We break down the jobs impact by occupation (SOC) by leveraging proprietary industry-occupation employment matrices.
- Estimate impact on household income: We calculate change in household income explained by jobs created across occupations. We assume jobs will be sourced from current worker pool; workers taking up new jobs either are unemployed or belong to households in which income falls below about \$75,000 (national median household income).
- Estimate final impact to cost-burdened households: We estimate the final change in total cost-burdened households by comparing expected income growth against price growth scenarios. For price growth scenarios, we first calculate price elasticity through a panel regression analysis of real home prices

(dependent variable) versus vacancy rates and household growth (independent variables). Then, we consider two home price growth scenarios: a) if the housing gap is addressed (9.6 million units in excess of expected construction), and b) if no additional housing units to address the gap are built.

Key sources

- "Square foot cost estimate data for 1, 1–3, and 4–7 story buildings," RSMeans, accessed January 27, 2025.
- "New private housing units authorized by building permits: 1-unit structures and new private housing structures authorized by building permits for United States, Atlanta-Sandy Springs-Alpharetta, GA (MSA), Washington-Arlington-Alexandria, DC-VA-MD-WV (MSA), Chicago-Naperville-Elgin, IL-IN-WI (MSA), Los Angeles-Long Beach-Anaheim, CA (MSA) and New York-Newark-Jersey City, NY-NJ-PA (MSA)," Building Permits Survey, US Census Bureau, retrieved from Federal Reserve Bank of St. Louis, January 27, 2025.
- US Census Bureau:
 - Table DP04: Selected Housing Characteristics from 2010, 2015, and 2022, 5-year estimates, accessed January 27, 2025.
 - B25021 Median number of rooms by tenure from 2022, 5-year estimates, accessed January 27, 2025.
- Input-output regional multipliers, Lightcast, accessed January 27, 2025.
- LaborCUBE, McKinsey Global Institute, accessed January 27, 2025.
- Bureau of Labor Statistics, US Department of Labor, Occupational Employment and Wage Statistics, accessed January 27, 2025.
- American Community Survey (ACS) Public
 Use Microdata Sample (PUMS) from 2022
 5-year estimates.
- Steven Ruggles et al., IPUMS USA: Version 15.0 [dataset], 2024.
- US Department of Housing and Urban Development: Point-in-Time (PIT) estimates of homelessness by Continuum of Care (CoC) geographic service area, accessed January 27, 2025.
- Zillow Home Value Index (ZHVI), accessed January 27, 2025.

Community profiles

There are 13 archetypes, of which seven have the most relevance to Black communities, where 90 percent of Black Americans live. This subset, described below, can be segmented into three groups based on common patterns and relative density: urban, suburban, and rural. The following definitions are drawn from McKinsey's 2019 *Future of work in America* report.²

Urban areas: These communities tend to have higher population density and stronger economic performance. Urban areas are marked by a younger population and workforce along with higher rates of income inequality and affordable housing shortages.

- Megacities: Some of the nation's largest cities, these areas have high GDP per capita and "superstar" industries but also inequality and high cost of living. Megacities include 75.9 million residents in 12 cities.
- High-growth hubs: Hotbeds for innovation, high-growth hubs have rapid GDP growth and employment growth but also transportation and infrastructure challenges. These hubs include 22.7 million residents in 13 cities.
- Stable cities: Established cities with postrecession GDP and population growth experiencing higher unemployment and poverty—includes 40.2 million residents in 36 cities.

Suburban areas: Typically seen as less dense than urban areas and more dense than rural areas,

suburban areas attract individuals looking for more land, usually within commuting distance of a larger city and with moderate economic activity of their own.

- Independent economies: These are smaller economies than stable cities but with similar metrics (lower GDP per capital but also lower income inequality)—includes 27.1 million residents in 94 cities.
- Urban periphery: These are counties outside
 the core of major cities with complementary
 economies. GDP per capita is low since
 populations often work in adjacent cities. The
 urban periphery includes 54.9 million residents
 in 271 counties.

Rural areas: The least dense of the three, these communities tend to be older and less educated, with lower rates of economic growth and per capita GDP.

- Stable rural counties: Rural counties with lower economic performance than neighboring cities and suburbs, but more stable than trailing rural counties—includes 44.3 million residents and 1.118 counties.
- Trailing rural counties: These remote rural areas are experiencing population decline, low educational attainment, and high unemployment—includes 17.8 million residents and 972 counties.

More information can be found about each of these community archetypes in our *State of Black residents* report.

Compendium of potential affordable housing ideas, based on an initial landscape

Unlocking land through creative incentives and partnerships

- Create community incentives (for example, state-level funding available to cities that enact zoning reform) to accelerate up-zoning of singlefamily areas
- Create individual incentives (that is, household dividend payments based on incremental tax revenues from new affordable housing development) to enable zoning reform
- Form public-private partnerships to reallocate underutilized assets to housing development, and use proceeds from land sales to fund additional housing
- Create a national database of vacant land suitable for residential development in urban areas
- Expand programs that waive fees, and fasttrack approval processes for multifamily housing projects
- Design rules that ensure that new multifamily development is "by right" instead of "by discretion" (that is, subject to discretionary review process)
- Allow accessory dwelling units (ADUs) by right in single-family zones
- Relax owner occupancy requirements for ADUs
- Scale ADU pilots that cover up-front costs for homeowners that rent ADUs to lowincome tenants
- Relax maximum height requirements for multifamily construction and ADUs
- Relax minimum parking requirements for multifamily construction and ADUs
- Relax minimum set-back requirements for multifamily construction and ADUs
- Scale local efforts to advocate for new multifamily housing development, and support land-use reform

Augmenting programs to unleash private capital

 Partner with retail banks to increase assets under management at community development financial institutions (CDFIs) that make loans for affordable multifamily housing

- development and underwrite mortgages for lowincome homebuyers
- Relax collateral requirements for non-depository CDFIs to allow CDFIs to earn Federal Home Loan Bank (FHLB) membership and receive advance balances from the Federal Housing Finance Agency (FHFA)
- Streamline overall processes for depository and non-depository CDFIs to earn FHLB membership
- Expand Community Reinvestment Act– compliant loan portfolios to provide incentives for small and medium-size banks to invest in affordable housing and to create a larger secondary loan market for CDFI loans
- Scale housing trust funds that make low-interest rate loans available to developers for building affordable housing
- Scale impact investing funds that allow philanthropies and mission-oriented investors to make concessionary investments in affordable housing
- Streamline Low Income Housing Tax Credit (LIHTC) applications at the state level
- Consider refinements to the cap on tax-exempt private activity bonds for 4 percent LIHTCs
- Lower the private activity bond test for automatic 4 percent LIHTCs
- Designate tribal and rural communities as "Difficult to Develop Areas (DDAs)" to make housing developments in these areas automatically eligible for a 30 percent LIHTC basis boost, which increases the maximum LIHTC subsidy for a project
- Create incentives for investors and developers to invest profits from LIHTC development back into affordable housing
- Strengthen protections for low-income tenants in LIHTC properties (for example, anti-eviction protections, standardized lease provisions, limits on rent increases)
- Build more robust data collection into the LIHTC program at the federal level
- Extend the minimum LIHTC affordability covenant beyond 30 years at the federal level (note some states have already extended affordability covenants)

 Innovate and refine state and local level "as of right" tax abatements that encourage traditional investors to finance affordable housing construction

Scaling off-site home construction

- Standardize state and local codes for modular housing
- Develop tailored financing and lender education on the benefits of modular construction
- Explore long-term partnerships between construction companies and the public sector to address barriers to financing and scalability for prefabricated or off-site construction companies
- Create revolving loan funds that pool public and private dollars to finance modular construction (inspired by the Modular Housing Fund)
- Create low-interest loan programs to build new off-site home construction factories, which require significant up-front capital investment
- Allow manufactured homes "by right" in singlefamily areas where manufactured housing may be excluded

Lowering costs of construction

- Streamline construction permitting processes to reduce project times and lower up-front costs
- Expand use of mass timber, a lower-cost alternative to traditional construction materials, by adopting universal building codes
- Reinvesting in public housing and sharedequity models
- Expand Public Housing Authority (PHA)
 capacity for Rental Assistance Demonstration
 (RAD) conversions
- Lift the LIHTC funding cap for RAD conversions with permanent affordability covenants to provide incentives for additional private sector participation in RAD
- Strengthen tenant protections post–RAD conversion, and better monitor use of resident safeguards
- Create larger subsidies for Section 8 Project-Based Rental Assistance post RAD conversion
- Increase funding for the Capital Fund, which helps develop, finance, and modernize Section 8 Public Housing
- Support sufficiency programs that fund PHAs to provide optional supportive services and employment counseling to residents

- Expand philanthropic funding for community land trusts, which often rely on private capital to acquire land and homes and maintain them for low-income residents
- Encourage local governments to transfer land (for example, at below-market rates) to nonprofit community land trusts
- Provide incentives for large developers to donate a portion of revenue from new development to community land trusts
- Explore opportunities for the US Department of Agriculture's Rural Housing Service to work more closely with local PHAs, and increase capacity for serving rural communities

Revamping Housing Choice Vouchers

- Scale pilot experiments that provide direct rental assistance to families
- Improve landlord collaboration (for example, streamline Housing Choice Voucher [HCV] approval process for landlords, guarantee on-time rental payments from local public housing authorities, and offer flexible cash assistance for security deposits and other needs)
- Increase access to high-opportunity neighborhoods by adopting small-area fair market rents in more jurisdictions and scaling comprehensive housing search programs (or "housing navigators")
- Ease HUD inspection requirements for units receiving HCVs on recently renovated buildings
- Allow HCV Housing Assistance Payment (HAP) funding to be used for short-term financial assistance (for example, security deposits, application fees)
- Extend maximum search periods for HCV holders
- Scale landlord education programs to increase awareness and understanding of HCVs
- Expand source of income discrimination laws that protect voucher holders from being treated differently because of their source of income
- Allow rental payment standards that are up to 120 percent of fair market rents in highcost cities
- Explore options to transition the HCV program from a discretionary program, where funding is set each year by Congress, to a mandatory

program that adjusts funding each year to serve all eligible households who apply

Improving other supports for renters

- Explore a federal renter tax credit (renter tax credits exist in some states)
- Provide robust supportive services to families at risk of eviction to help them stay in their homes (for example, aid with future rent or rent arrears to prevent eviction)
- Offer incentives for property owners to report on-time rental payments to credit bureaus to help residents establish and build credit
- Increase occupancy in owner-occupied homes with vacant rooms by expanding programs that match interested owner-occupants to potential tenants
- Increase occupancy in owner-occupied homes with vacant rooms by lowering taxes on rental income (in owner- and tenant-occupied shared units)

Creating sustainable homeownership pathways

- Create mandatory "first look" periods that guarantee owner-occupants the first opportunity to bid on homes
- Scale down payment assistance programs for first-time homebuyers
- Scale low-interest loan programs for firsttime homebuyers
- Expand programs that help first-time buyers navigate the home-buying process
- Expand programs that provide housing counseling and emergency mortgage payment assistance to households at risk of foreclosure
- Expand programs that help low- and moderate-income homebuyers apply for Federal
 Housing Finance Agency (FHFA)—backed
 mortgage loans, particularly for "small-dollar"
 homes valued at less than \$150,000, to
 prevent predatory lending and discriminatory
 lending practices

- Expand legal protections for renters in leasepurchase/rent-to-own home agreements to match rights and protections of traditional mortgage borrowers
- Invest in start-ups providing equitable rentto-own programs for low-income buyers via inclusive credit score minimums, financial education, and down payment assistance
- Scale pro-bono legal counseling programs that assist families in navigating deed and title transfers and ensure that housing wealth is formally passed down over generations
- Scale programs that allow manufactured or "mobile home" owners to buy and own land that they often otherwise rent
- Protecting existing supply of homes vulnerable to climate, disrepair, and other shocks
- Cap annual rate increases on flood insurance via reforms to the National Flood Insurance Program
- Partner with insurers to offer discounts on selfprotection investments (for example, climate resiliency upgrades) by households
- Provide comprehensive means-tested vouchers for low- and middle-income homeowners if their home insurance premiums become prohibitively expensive
- Scale programs that help households understand and apply for the Department of Energy's Weatherization Assistance Program, which provides subsidies to low-income families to make energy efficiency upgrades and weatherization improvements on their homes
- Encourage cities to connect seniors and low-income residents to home rehabilitation programs before issuing code violations
- Scale provider networks that vet general contractors and negotiate lower rehabilitation and renovation rates for seniors and lowincome residents

Expanded methodology into sizing the impact of affordable housing solutions

The impact sizing included in this report is intended to serve as a direction estimate to begin painting the picture of what impact, in the form of housing units accessed or constructed, could be across each solution. Our approach asserts several assumptions and acknowledges the limitations in preventing the double counting of households that may be affected by multiple solutions or strategies.

Theme 1, Example 1–2: Unlock land through state and community-level incentives

*Methodology*³

- Baseline scenario: We use projections for singlefamily (SF) and multifamily (MF) housing starts from Moody's Analytics to estimate housing starts from 2025 to 2034.⁴
- Impact scenario: We apply the same Moody's projections for housing starts but assume that 3 to 4 percent of SF starts become MF starts each year. Three to 4 percent is the difference between the maximum share of MF units Moody's projects and the minimum Moody's projects in any year from 2025 to 2034. We assume that each multifamily start has an additional 2.4 units per property, based on research from the Federal Reserve Bank of Boston that finds that the average number of housing units per property increases by 2.4 units when density restrictions are relaxed.
- Impact on Black households: We assume that 22 percent of new multifamily units will be occupied by Black households based on data from the 2023 American Housing Survey.⁷

Theme 1, Example 3: Leverage public-private partnerships to reallocate underutilized assets to residential development

Methodology

- Publicly owned urban land: USDA data suggests that there are 74.3 million acres of urban land (densely populated areas with at least 2,500 people).⁸ We apply ownership data from Headwaters Economics and assume that the share of urban land owned by state and local governments equals the share of all land owned by state and local governments (8.5 percent of land).⁹
- Adoption of solution: In both scenarios, we assume that only 20 percent of local

- governments (in control of 20 percent of land) inventory and reallocate publicly available land since doing so requires significant technical capacity and time.
- Density of new housing: We assume that land rezoned for residential development requires a minimum density of ten units per acre using MRSC's "Visualizing Compatible Density" tool.¹⁰
- Baseline scenario: Local governments rezone 1 percent of publicly owned land over ten years (0.1 percent per year).
- Impact scenario: We assume that 20 percent of local governments rezone 5 to 6 percent of publicly owned land over ten years (0.5 to 0.6 percent of land per year) based on the City of Boston's efforts to rezone 5.4 percent of publicly owned land for affordable housing. We anchor on Boston because we found limited examples of other cities that did as robust an inventory.
- Impact on Black households: We assume that 22 percent of new MF units will be occupied by Black households based on data from the 2023 American Housing Survey.

Theme 2, Example 2: Lift the private activity bond cap for LIHTC

Methodology

- Multifamily PAB allocation for new LIHTC construction: We use data on total PAB dollars issued for multifamily housing from 2005 to 2020 (the most recent year for which data is available) from the Council of Development Finance Agencies¹² and assume that 53 percent of LIHTC PAB allocation is used for new construction based on estimates from Novogradac.¹³
- States that reached volume cap in recent years: The Federation of American Scientists reports that California, Georgia, Kansas, Maryland, Massachusetts, Minnesota, Nebraska, New York, New Mexico, Nevada, North Dakota, Oregon, Rhode Island, Texas, Tennessee, Utah, Washington, and Washington, DC, have met their PAB cap in recent years. 14 These places collectively represent about 75 percent of total multifamily PAB issuance from 2005 to 2020 and are home to about 75 percent of total LIHTC units with 4 percent credits and PAB financing placed into service from 2005 to 2015.
- Increase in PAB allocation: We calculate that total PAB allocation for all states increased by

- 8 percent per year on average from 2005 to 2020. We use national PAB amounts instead of state-level amounts in states that met the cap because state-level data is missing in some years.
- Average PAB dollars per LIHTC unit completed: We multiply total PAB dollars by 53 percent (share of PAB dollars used for new construction) and divide by the number of new LIHTC units completed (using data from the Urban Institute¹⁵) to calculate an average PAB allocation per LIHTC completion for each year from 2005 to 2019. We calculate that average PAB dollars per LIHTC unit grew 12 percent each year from 2005 to 2019.
- Baseline scenario: We assume that total PAB allocation continues growing at 8 percent per year in states that met the cap, while average PAB dollars per LIHTC unit continue to grow at 12 percent per year.
- Impact scenario: We assume that total PAB
 allocation grows at 14 percent to 16 percent per
 year in states that have recently met the cap,
 while average PAB dollars per LIHTC unit grow
 at 12 percent per year.
- Impact on Black households: We assume 22 percent of households affected are Black, based on LIHTC occupancy data from the Urban Institute.¹⁶

Theme 2, Example 4: Create loan portfolios to unlock lending and create a larger secondary loan pool for CDFI loans

Methodology

- CDFI loan volume for multifamily housing: We use data from the Federal Reserve Bank of New York to find the total CDFI loan origination volume for multifamily housing and to calculate the share of total CDFI loan originations for all collateral types that were sold from 2018 to 2022.¹⁷ We assume that the share of loan originations sold for multifamily collateral is equivalent to the share sold across all collateral types.
- Volume of multifamily loan originations (both baseline and modeled): We assume that multifamily loan originations (\$8 billion) in 2022 stay constant in both scenarios.
- Cost of multifamily unit: We assume each multifamily unit costs \$350,000 to build, based on data from Janover Multifamily Loans.

- Baseline scenario: We assume that the share of loans sold each year equals the average share sold from 2018 to 2022 (28 percent).
- Modeled scenario: We assume that the share
 of loans sold each year equals, or is three to
 four percentage points higher than, the fiveyear high of sales volume (39 percent in 2022),
 and 100 percent of additional sales volume is
 channeled back into new multifamily loans.
- Impact on Black households: We assume that 22 percent of new multifamily units will be occupied by Black households, based on data from the 2023 American Housing Survey.¹⁹

Theme 3, overall: Standardize state and local codes for modular housing; tailor financing for modular construction; expand partnerships between municipalities and construction firms

Methodology

- Multifamily (MF) housing projections: We use projections for MF housing completions based on data from Moody's Projected New Residential Construction.²⁰
- Baseline scenario: We assume that modular MF completions will continue to represent 3 percent of total MF units based on the average share of MF completions that used modular construction, based on data from the Urban Institute.²¹
- Impact scenario: We assume modular MF completions will represent 7 percent of total MF completions, an all-time high from 2008 to 2023, based on data from the Urban Institute.²²
- Impact on Black households: We assume 22 percent of modular multifamily households will be occupied by Black households, based on data from the 2023 American Housing Survey that suggests that 22 percent of multifamily units are occupied by Black households.²³

Theme 4, Example 1: Increase philanthropic capital to scale social housing solutions

Methodology

- Community Land Trusts (CLTs): We assume there are currently 314 CLTs, growing annually at a 2 percent rate based on data from the Lincoln Institute of Land Policy.²⁴
- Current philanthropic capital: We assume that baseline donation for each CLT is \$1,375,583 based on data from Lincoln Institute of Land Policy.²⁵

- Donations (baseline scenario): We assume annual donations per CLT grow at 5.9 percent, the ten-year average annualized giving growth rate, based on Indiana University Philanthropy Outlook.²⁶
- Donations (impact scenario): We assume annual donations per CLT grow at 10.3 percent, the 2024 projected giving growth rate, based on Indiana University Philanthropy Outlook.²⁷
- Housing units: We assume the acquisition cost for a CLT is equivalent to the average acquisition cost for existing structures of \$404,504, per recent Bank Rate figures.²⁸
- Black household units: We assume Black households occupy 23 percent of CLT units based on the weighted average provided by the Lincoln Institute of Land Policy.²⁹
- David McMillin, "Median home prices in every state," Bankrate, November 19, 2024.

Theme 4, Example 2: Expand technical assistance resulting in increased investor capital for RAD conversions

Methodology

- Current RAD conversions: We assume a baseline of 163,973 RAD conversions currently, based on data from the National Low-Income Housing Coalition.³⁰
- Investor capital (baseline scenario): We assume that investor capital stays the same and there is a linear increase of 15,176 units converted each year.
- Investor capital (impact scenario): We assume investor capital increases to reach the annual growth rate of 10.7 percent required to hit the conversion cap of 455,000 units.
- Black household units: We assume that public housing for Black residents remains at 44 percent using data from Center on Budget and Policy Priorities.³¹

Theme 5, overall: Provide flexible up-front payments and streamline rental payments; use housing counseling to enable access to high-opportunity neighborhoods

Methodology

- Number of voucher recipients looking for units each year: We assume that about 262,000 vouchers are issued to households each year using research from HUD.³²
- Baseline for all households: We assume that 60 percent of households successfully lease up, based on data from the Journal of Housing Economics.³³
- Impact scenario for all households: We assume that an additional 1.5 percent of households lease up each year with 75 to 80 percent of households ultimately leasing up by 2035 if landlord incentives and housing counseling are scaled.
- Baseline for Black households: We assume that about 54 percent of Black households lease up, based on Journal of Housing Economics research that suggests that Black households are 8.5 percentage points less likely to lease up than other households in 60 days and 4.0 percentage points less likely to lease up than other households in 180 days.³⁴
- Impact scenario for Black households: We assume that an incremental 2.1 percent of Black households lease up each year, with 75 to 80 percent of Black households ultimately leasing up by 2035 if landlord incentives and housing counseling are scaled.
- Overall impact for Black households: We assume that about 49 percent of voucher recipients are Black based on 2023 data from the American Housing Survey.³⁵

Endnotes

- Calculations are based on three complementary, sequential methods: overcrowding (calculates the number of units needed to relieve overcrowding; that is, more than one occupant per room), vacancy rate method (compares the difference between historical rates and units needed to reach 2012 US vacancy rates; gap after 2012 is extended by looking at the relative difference between households and housing stock), and homelessness (accounts for housing units needed to house 2023 homeless population).
- 2 "The future of work in America: People and places, today and tomorrow," McKinsey Global Institute, July 11, 2019.
- 3 Lower and upper bounds are found using the same underlying assumptions with an adjustment of +/- 1 basis point.
- Moody's Analytics data on projected county level housing starts, 2025–34.
- Moody's Analytics data on projected county level housing starts, 2025–34.
- Nicholas Chiumenti and Aradhya Sood, "Local zoning laws and the supply of multifamily housing in Greater Boston," Federal Reserve Bank of Boston, October 2022.
- 7 "American Housing Survey (AHS) table creator," US Census Bureau, accessed January 14, 2025.
- 8 Clayton P. Winters-Michaud et al., Major uses of land in the United States, 2017, USDA Economic Research Service, September 11, 2024.
- 9 "Public land ownership in the United States," Headwaters Economics, June 17, 2019.
- Bob Benford, "Visualizing compatible density," MRSC, April 10, 2017.
- "Public land for public good: Citywide land audit," City of Boston, October 16, 2023.
- "Volume cap resource center," Council of Development Finance Agencies, accessed January 14, 2025.

- "Analyzing the impact of lowering the 50% test for 4% tax-exempt bond financed properties," Novogradac, April 2020.
- "Exempt affordable housing from private activity bond volume cap," Federation of American Scientists, February 23, 2024.
- Yonah Freemark and Corianne Payton Scally, "LIHTC provides much-needed affordable housing, but not enough to address today's market demands," Urban Institute, July 11, 2023.
- Nicole DuBois, Amanda Gold, and Corianne Payton Scally, The Low-Income Housing Tax Credit: How it works and who it serves, Urban Institute, July 2018.
- Jonathan Kivell, Maria Carmelita Recto, and Jacob Scott, Examining the origination and sale of loans by community development financial institutions, Federal Reserve Bank of New York, May 2024.
- Jeff Harmann, "Apartment construction costs in 2024: Calculator & investor guide," Janover Multifamily Loans, November 7, 2024.
- "American Housing Survey (AHS) table creator," US Census Bureau, accessed January 14, 2025.
- Moody's Analytics data on projected new residential construction.
- Laurie Goodman and Matthew Pruitt, "Encouraging modular construction could help address the housing shortage," Urban Institute, September 19, 2024.
- Laurie Goodman and Matthew Pruitt, "Encouraging modular construction could help address the housing shortage," Urban Institute, September 19, 2024.
- 23 "American Housing Survey (AHS) table creator," US Census Bureau, accessed January 14, 2025.
- The 2022 Census of community land trusts and shared equity entities in the United States: Prevalence, practice, and impact, Lincoln Institute of Land Policy working paper, June 2023.

- The 2022 Census of community land trusts and shared equity entities in the United States: Prevalence, practice, and impact, Lincoln Institute of Land Policy working paper, June 2023.
- The philanthropy outlook 2024 & 2025, Indiana University Lilly Family School of Philanthropy, March 2024.
- The philanthropy outlook 2024 & 2025, Indiana University Lilly Family School of Philanthropy, March 2024.
- David McMillin, "Median home prices in every state," Bankrate, November 19, 2024.
- The 2022 Census of community land trusts and shared equity entities in the United States: Prevalence, practice, and impact, Lincoln Institute of Land Policy working paper, June 2023.
- 30 Ed Gramlich, "Rental Assistance Demonstration," National Low Income Housing Coalition, March 2023.
- 81 "Policy basics: Public housing," Center on Budget and Policy Priorities, updated September 30, 2024.
- 32 Using HUD administrative data to estimate success rates and search durations for new voucher recipients, HUD, December 2021.
- ³³ Ingrid Gould Ellen, Katherine O'Regan, and Sarah Strochak, "Race, space, and take up: Explaining housing voucher lease-up rates," Journal of Housing Economics, March 2024, Volume 63.
- ³⁴ Ingrid Gould Ellen, Katherine O'Regan, and Sarah Strochak, "Race, space, and take up: Explaining housing voucher lease-up rates," *Journal of Housing Economics*, March 2024, Volume 63.
- 35 "American Housing Survey (AHS) table creator," US Census Bureau, accessed January 14, 2025.