Affordable housing: A prerequisite for resilient cities

A shortage of affordable housing is taking a toll in every geography and on every segment of society. Several strategies can help governments free up supply of land, resources, and productivity.

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Affordable housing is crucial to future-proofing our communities. Worldwide, the McKinsey Global Institute has estimated that some 330 million urban households currently live in substandard housing or stretch to pay housing costs that exceed 30 percent of their incomes.[1] This lack of affordable housing constitutes a significant risk for cities and needs to be addressed to make them more resilient to increasing migration flows and societal divisions that arise in many geographies. Income polarization can be exacerbated if lower-income households cannot find a decent place to live. In today's globalized world, migration can be highly successful when people on the move are well integrated into their chosen destination—which requires education, housing, and jobs. But a lack of these inputs can also backfire and lead to divisions that can manifest in everything from social unrest to extreme poverty.

National and local governments around the world often address housing gaps by focusing on demand and financing. Housing subsidies, privileged financing, or various forms of rent control offer much-needed relief to low-income households. But these strategies are expensive and difficult to sustain—and they do not address the core issue of an underlying housing shortfall.

It will take a dramatic increase in the number of available housing units to achieve greater affordability. Of course, the simplicity of this statement belies the complexity of executing on it. Supply-side solutions can help address three challenges that all cities have in common: finding available land, removing barriers, and making the construction sector more productive.

Find the land

Access to well-serviced land near centers of employment is typically the biggest constraint on housing development and one of the major drivers of cost. In places such as Rio de Janeiro and Auckland, the cost of land often exceeds 40 percent of total property prices. In extreme cases such as San Francisco, land is so scarce that it can account for as much as 80 percent of a home's price. Globally, we estimate that unlocking land to its fullest extent could reduce the cost of owning a standard housing unit by up to 20 percent. Based on our work in urban environments, we have identified several places to focus.

The most crucial area to prioritize is transit-oriented development. It is critical for congested cities to promote density around transit rather than encouraging sprawl and longer commutes. Transit-oriented development may involve redeveloping existing residential structures or encouraging new builds by permitting higher floor-space ratios, loosening height restrictions, or allowing greater density in specific target zones. Hong Kong's Mass Transit Railway has a long track record in using transit-oriented development to finance infrastructure and provide housing. Auckland is upgrading its infrastructure with the City Rail Link, cofinanced by value-uplift taxes, and developing high-rise buildings around new and current transit hubs.

Other actions that can help cities unlock land include getting more out of underutilized sites, putting vacant urban parcels to work, making public land available, transforming industrial sites, going greenfield, and encouraging single-family-home owners to add accessory dwelling units.

Remove the barriers

Cities have to develop governance structures that represent all stakeholders (not just the most entrenched, powerful, or vocal) and streamline the actual execution. Several approaches can help.

1. **Engage more stakeholders and overcome NIMBYism.** Stakeholder opposition and the not-in-my-backyard phenomenon (NIMBYism) are often roadblocks to housing development. Although most people agree in the abstract that

more affordable housing is a good thing, the voices of existing homeowners who want to preserve the status quo often drown out those of newcomers, young adults, low-income service workers, and renters who need more housing. Instead of public hearings and ballot initiatives that carry veto power, cities can mount affordable housing bodies specifically chosen to represent a broader set of stakeholders; mandate a larger role for employers in the community input process; and use widely distributed surveys and analytics tools to track citizen sentiment and real-world use patterns. One city, for example, builds support by proactively educating citizens, stressing the need for new housing and the effect it will have on the children and grandchildren of residents. These strategies can help communicate how housing decisions are in tune with the needs of the community and lessen the influence of entrenched interest groups.

2. **Align for better delivery: Delivery labs and integrated housing agencies.** Housing strategies are enormously complex, involving initiatives and policies across financing, urban planning, infrastructure development, land-use regulation, building codes, delivery and contracting approaches, and more. Several cities have found success with the "delivery lab" model, which addresses this lack of coordination by bringing together 30 to 40 people across these specialties for fast-paced, intensive working events. Labs are designed to translate high-level housing strategies into detailed initiatives and implementation plans—and to set key performance indicators. The outcomes from successful labs are a good foundation, but actual implementation is crucial. A city government can accelerate progress by empowering an agency or unit with a mandate to guide housing delivery from end to end.

3. **Speed up.** A maze of regulation is typically associated with land acquisition, zoning, and building codes. Cities can streamline their processes to fast-track land-use approval and permitting, creating a more predictable and less burdensome process. Establishing "single-window" clearance (that is, consolidating approvals from multiple agencies into one clear interface) and digitizing permit applications and status tracking are clear places to start. Cities can also establish "by-right" special development zones in select areas where deviations from city zoning and land-use codes are permitted with minimal review.

4. **Scale up and create incentives for efficiency and innovation.** Cities can support construction industry innovation by providing the land and infrastructure that allow for scale, tendering out city-scale developments, and consolidating high-volume demand. Where cities themselves invest in housing or supporting infrastructure, they can employ value-based tendering (which places greater emphasis on the quality and past performance of suppliers), add contractor and owner incentives to traditional contracts, and make provisions to improve transparency and collaboration.[2] An even bolder approach involves contracts with an integrated project delivery model.[3] Finally, by mandating use of efficient technologies and innovations in their procurement contracts, cities can hasten private-sector adoption and investment in cost-saving tools.

Evolve the construction industry
Productivity within the construction sector is consistently poor around the world. Labor productivity growth averaged 1.0 percent a year over the past two decades, compared with 2.8 percent for the total world economy and 3.6 percent for manufacturing. Some of this outcome is due to external factors such as regulation as well

as cyclical swings in public and private demand. Informality and corruption sometimes distort the market. At the industry level, construction is highly fragmented, contracts have misaligned incentives, and inexperienced owners and buyers find it hard to navigate an opaque marketplace. At the firm level, we often see poor project management, inadequate design processes, and a lack of investment in technology, R&D, and workforce skills.

Across the board, stakeholders should focus on two methods to evolve the construction industry.

- **Push forward with best practices to boost productivity.** Several approaches can improve on-site execution, starting with a rigorous planning process and the completion of all prework before starting on-site. To ensure that key activities are achieved on time and on budget, companies should agree on key performance indicators, particularly for subcontractors, and hold regular performance meetings to monitor progress and solve issues. The construction industry also needs to accelerate digital adoption. This includes the use of building information modeling tools for design as well as analytics and the Internet of Things for onsite monitoring of materials, labor, and equipment productivity.[4]

- **Transition to a production-system approach.** Construction is almost always approached as a series of discrete and bespoke projects. But the biggest boost in productivity comes with the concept of a manufacturing-inspired mass-production system. Such a system involves more standardized elements, panels manufactured and assembled offsite, and limited finishing work conducted on-site. Modular construction has been around for decades but has developed to scale in only a few countries. Indeed, a new breed of players and approaches could help it conquer more geographies. A range of start-ups are replacing "a site under a roof" production

approaches with robotic production, digital customization, and supply-chain management, while also replacing concrete with lightweight materials to alleviate logistics. They also carefully optimize engineering to balance plant production efficiency and assembly on-site with material and transport cost implications. Some governments provide incentives for new methods of construction, such as prefabrication and modularization, by clarifying upcoming volumes and reducing permitting times. Saudi Arabia, for example, is working closely with local and international industrial construction suppliers, providing offtake agreements and incentives conditional on meeting required volumes and rates, and to ensure quality, developing quality rating systems for buildings.

To safeguard a resilient future, cities urgently need to ramp up home building to improve residents' quality of life, remain inclusive, and ensure that housing shortages do not become a drag on economic growth and social cohesion. The tools and strategies outlined here can be pursued in parallel—and given the extent of unmet demand today, there is no time to lose. ◼

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[1] For more, see "Tackling the world's affordable housing challenge," McKinsey Global Institute, October 2014, on McKinsey.com.

[2] For more, see "Rewiring contracts for collaboration," September 2017, McKinsey.com.

[3] For more on integrated project delivery, see Lukasz Abramowicz, Jim Banaszak, TG Jayanth, and Homayoun Karrinkoub, "Collaborative contracting: Making it happen," July 2018, McKinsey.com.

[4] For more, see *Voices on Infrastructure: Harnessing the promise of digital*, March 2018, McKinsey.com.