MILKEN INSTITUTE

Financing Urban Resiliency

Investing in Complete Communities in the London City Region

Project Background

By 2050, 68 percent of the world's population will be living in cities, more than double the percentage reported in 1950.[1] Urban growth has risen sharply since 2000, and many cities, London among them, are under extreme pressure to improve their long-term resilience. Metropolitan London's population is expected to hit 9.84 million in 2031 and 10.11 million in 2036,[2] giving it official designation as a megacity. The immediate challenge is to prepare not only for environmental shocks attendant with population and industrial growth and global climate change but also for the increasing infrastructure and social stresses that accompany population density. Chief among them is a lack of housing and particularly affordable housing.

The United Kingdom has some of the highest housing prices among countries in the Organization for Economic Co-operation and Development, a factor that exacerbates the housing shortfall.[3] The need in England alone now totals 4 million residential units, according to the National Housing Federation; if that need is to be met by 2031, it will require the delivery of 340,000 units annually,[4] and of those, 145,000 will have to be affordable housing units. This is a herculean task; at its peak in the 1970s, England's annual housing starts reached 300,000. Since the late 1980s, the yearly total has failed to rise above 200,000, and in 2018, housing starts were down to around 163,000.[5]

In the "London city region," an area beyond Greater London that is economically, functionally, and culturally connected to the capital, not only is housing expensive but also land for new development is scarce. The London mayor has set an ambitious plan to add thousands of new affordable homes, but the market is volatile, and developers remain wary. The supply of developable sites is limited to strategic opportunities requiring more advanced infrastructure to unlock the potential. More Londoners increasingly live further away from their jobs, driving up population growth in the city's outskirts and beyond the city limits in the surrounding counties of the London city region.

Broadly a concentric area, extending out in a 55-mile (90 km) radius from central London (see figure 1 below), the London city region falls within many different administrative authorities. This city region reflects the real scale of the capital city's influence, with connected communities and business districts that fuel this area. Commute time within the radius to London proper is about an hour. But there is a race against time and competition for resources. Other cities in the London city region, such as Oxford and Cambridge, are experiencing high housing demand along with economic growth. Notably, the wider city region lacks the infrastructure, in every sense of the word, to facilitate economic growth opportunities and allow people to live closer (in distance or time) to where they work.

Housing policy has changed in the past four decades as well, with troubling consequences for the affordable housing market. Beginning in 1979, the UK government cut public funds for housing, gradually shifted support away from local authority delivery toward the more independent housing associations, and eliminated some funding channels as incentives for the councils to transfer their housing stocks to the associations. The BBC reports that, 40 years ago, local authorities provided some 40 percent of new-builds in England, but in 2017, their share was under 2 percent.[6] The 1988 Housing Act formalized this shift, which made it possible for the private sector to engage directly with housing associations in transactions to build affordable and subsidized housing.

This is why complete settlements, a series of new towns, are critical to meet housing demand. As the London city region grows and pressure on the limited supply of developable land intensifies, local and national governments must increasingly look to designing complete settlements, high-quality communities with a full range of housing tenures and robust social infrastructure, including schools, hospitals, etc. In other words, development should be consistent with the latest National Planning Policy Framework (NPPF) and as recommended by Sir Oliver Letwin's 2018 build-out housing report.[7] Complete settlement development considers affordability as well as connectivity to an economic hub; the new community cannot be a lone commuter hub disconnected from the broader economy.

Figure 1: London City Region

Source: AECOM.

Development of complete communities will also require new financing solutions to bridge current funding gaps. Both developers and local community representatives identify infrastructure financing as one of their biggest challenges. Now, more than ever, a mix of public and private capital is needed to support housing delivery and infrastructure to create sustainable and high-quality new communities. The UK government has prioritized housing and set aside significant funds to meet targets.

To address London's affordability crisis, the Milken Institute, in collaboration with AECOM, examined opportunities for innovative public financing and private-market partnership as a means to enhance future development. On December 3, 2018, the Milken Institute convened a Financial Innovations Lab in London to discuss policy and financing strategies to accelerate the delivery of complete settlement development in the London city region.

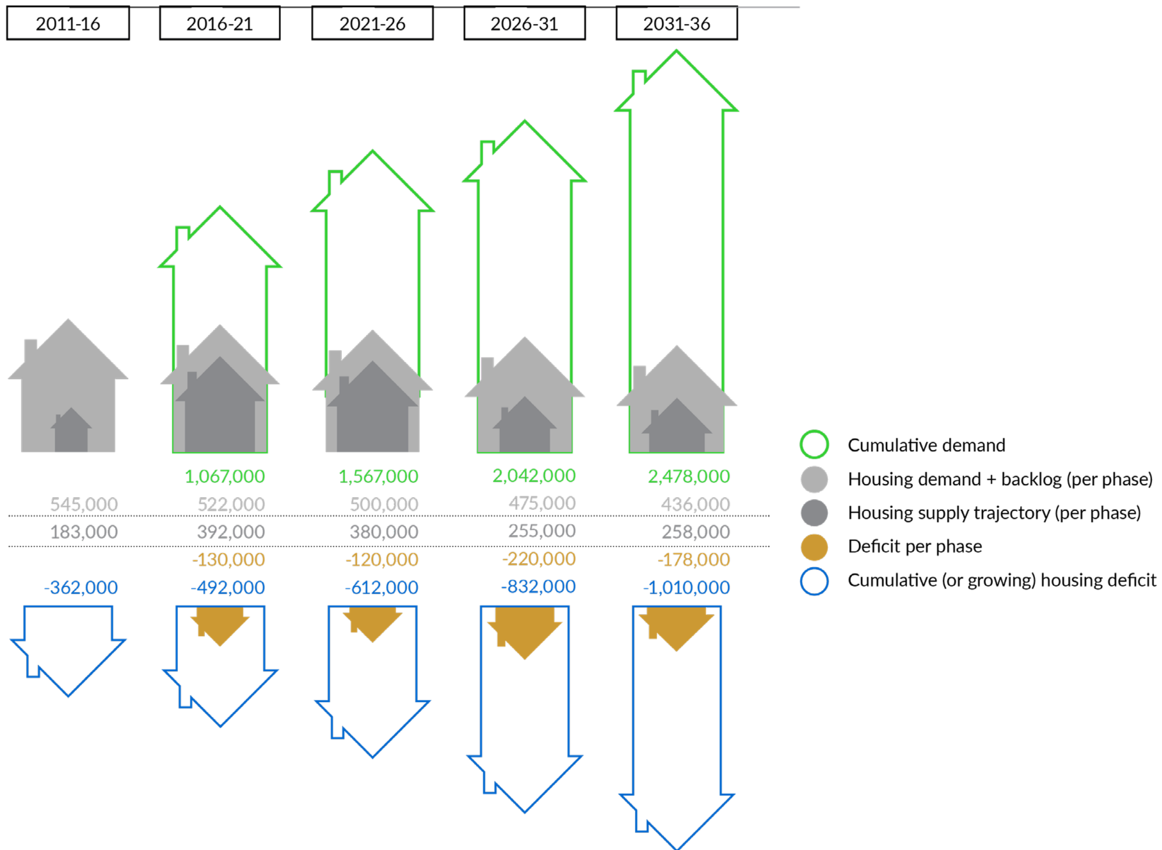
Resilience and Housing Development in the London City Region

The London city region continues to rank low on new housing starts relative to the other areas of England.[8] At the same time, the strong economic growth in Greater London and the London city region continues to attract talent, many of whom are willing to pay increasingly higher prices for housing. The gap between supply and demand accounts for a large part of the rise in property and rental costs.

Public-private collaboration could be used to help narrow the gap, much as it did for the creation of new settlements after World War II when private developers collaborated with local authorities, the new town development corporations, and philanthropists. When the government introduced its first Right to Buy program in 1980, which allowed tenants in public-sector housing to purchase their homes at heavily discounted rates, it ushered in a pivotal moment for England's public housing sector. Incentives made it possible for tenants in local council housing to buy their homes at significant discounts. The existing public housing stock became monetized. The local councils also lost several revenue-collecting advantages that previously helped them to underwrite new-builds, and almost all building activity shifted to the private sector. The government established housing associations, which operated with greater independence than the elected councils, and gave them the mandate to deliver affordable and subsidized housing, using some government grants and contributions made by private developers in exchange for planning permits. But housing associations/private-sector delivery has slowed. In 2018, out of approximately 160,000 new homes built, private developers built 82 percent, housing associations built 17 percent, and local councils built just 1 percent, representative of the shift in homebuilding across the UK.[9] Of new homes built across England last year, only 20 percent were deemed affordable for purchase or rent, and the construction of social housing rentals is at a 70-year low.[10]

In recent years, perhaps driven by the lack of supply of affordable homes, there has also been increasing demand for diversification in tenure and type of units offered to the market. One format relatively new for the UK is professionally managed rental units, termed the "Private Rented Sector"[11] or "build to rent." Private rental units, either market rate or subsidized by housing benefits, are developed by the same sets of stakeholders as traditional homes. As of 2017, 28 percent (1.5 million units) of private rented households received housing benefits.[12] However, as shown below in figure 2, this has only made a dent in the growing housing shortage. Acknowledging the importance of this sector in reaching national affordable housing targets, the level and mix of affordable housing are set out in planning permissions at the onset of new developments.

Figure 2: London City Region Housing Deficit, 2014-2015



Source: AECOM, London 2065 - Big Bold Global Connected.

Funding for complete settlements, meaning for new residential construction, infrastructure, and services, comes from a variety of sources. Local councils can borrow from either the public or private debt markets; yet, this option has not manifested itself in a significant way. In October 2018, the prime minister announced the removal of a cap on borrowing limits, known as Housing Revenue Accounts (HRA), paving the way for councils to take on more debt to deliver homes. It is too early in the process to make determinations of its real potential given reluctance to make full use of the relaxed measure.[13]

The majority of funding for onsite and offsite infrastructure is available through fees and levies on development. Introduced in 1990, the Section 106 (s106) agreements are part of the town planning legislation that establish legal obligations between local authorities and developers for property and ensure that the development makes a positive contribution to the local community and mitigates its impact (e.g., by providing more public transit if necessary to minimize the effects of the scheme they are developing).[14] Part of this contributes to the delivery of affordable housing. In 2018, s106 agreements funded 47 percent of affordable housing.[15]

Additionally, councils can share the cost of providing strategic infrastructure with developers in other ways, including the Community Infrastructure Levy (CIL), which operates as a pre-determined "roof tax," to fund specific physical and social infrastructure requirements. The CIL was instituted in 2010 to help close the estimated £500 billion funding gap required to meet the UK's current and future infrastructure demands.[16] In the UK, strategic infrastructure is mostly built by the central government or private entities.[17] Of publicly financed infrastructure, the UK government shares funding (roughly a 70-30 split) with local authorities.[18] Also, housing associations and private developers can access investment both from the capital markets, in the form of debt and equity, and government agencies, in the form of grants and low-cost loans.

The government has initiated steps to diversify funding routes, but so far these models have been piecemeal and scheme-specific. Options like tax increment financing (TIF) and land value capture, both of which tax in the present the expected future hike in property value, have proved to be important revenue sources, particularly for necessary infrastructure investments on complex and otherwise prohibitively expensive schemes. For example, land cost is one of the most insurmountable barriers to initiating large-scale development. Thus, recent conversations have included ways to capture the increased land value from infrastructure investment and later profitability and to increase available funding.[19]

But financing is not the only critical component of housing development. Public-private partnerships are essential for strategic infrastructure investment. Public-private delivery structures can take many forms and offer a variety of benefits. Local Housing Companies (LHCs), independent commercial companies owned in whole or in part by the councils to buy or develop properties without being subject to HRA and other housing restrictions, are creative partnerships in this sector. As of 2017, 42 percent of local councils had set up LHCs (for a total of 150), and by 2020, some 50 percent of local councils are expected to have set up LHCs (200 companies), with most of them building on council-owned or other public land.[20] Models of unlocking funding for such projects is now becoming commonplace, but funding for complete settlements is complex, and the LHCs so far have targeted modest projects.

Despite the headway made to finance and coordinate small and large projects alike, gaps remain to facilitate better the development of complete settlements at the scale needed to meet the London city region's need. To bridge the gap, in early 2018, the government replaced the Homes and Communities Agency with two rebranded entities to separate the agency's former regulatory activities from its investment, land acquisition, and funding roles. As a result, the new regulatory body with oversight of social housing providers is called the Regulator of Social Housing. The investment body—whose mandate as a "housing accelerator" is to facilitate, fund, and finance a faster pace, scale, and quality of housing delivery—is now called Homes England.[21] (Public investment in housing across the wider London city region and rest of England falls under Homes England, but Greater London itself is the responsibility of the Mayor of London in collaboration with central government.) Homes England is already working with agencies in the region on the issue of complete settlement construction that will sustain the quality of life locally as well as the economic and population interdependencies between Greater London and the wider London city region.

Lab Highlights

The developers, policy makers, and investors at the Lab agreed that addressing the shortage of affordable housing in Greater London and the wider city region is crucial to the country's continued economic growth and expressed many viewpoints. Several vital challenges emerged from the discussion:

1. **Complete settlement projects can provide the density and critical mass required to develop transit-oriented communities but are multilayered and complex:** Development of complete settlements requires a high level of coordination and trust among all participants to achieve the full range of socio-economic benefits successfully.
2. **There is a lack of coordination for land assembly:** Land is too expensive and scarce, and local authorities are reluctant to support compulsory purchase (eminent domain) to assemble the valuable land necessary for larger settlement schemes. There is no easy way to value land for fair pricing.
3. **Infrastructure and housing development can be misaligned:** Strategic transport and utility infrastructure must support and reflect the needs of the economic region around London and other urban centers experiencing large-scale growth; yet, there is no strategic planning of these two inter-related elements.

4. **Permitting and procurement processes present challenges:** The political navigation, permitting, and procurement processes must become more transparent and accessible.
5. **There is limited community engagement:** Authorities must engage early and often with local residents and other communities that will be affected by the significant growth of new settlements.
6. **Project financing is hard to access:** There are limited sources of financing aligned with large-scale and complete development; this is reflective of its current risk profile where not all elements of the scheme (notably strategic infrastructure) are in the control of the developer or investor. These also require patient investment as the returns can be slow. Moreover, small and medium-sized enterprises (SMEs) that want to participate in housing construction find barriers to entry.

Participants developed recommendations to address each challenge:

1. **Create a regional spatial strategy:** Recognize that the problem is not a series of local issues but requires a regional solution. Thus, devise strategies that connect the Greater London Plan into a broader framework that covers a more expansive area, using technology to simulate the business case for infrastructure investment.
2. **Facilitate appropriate land assembly:** Facilitate land assembly by creating a pipeline of government-owned projects using innovative financial models. Consider new land valuation and capture mechanisms, innovative sites, and financial incentives.
3. **Improve infrastructure development and coordination:** Maximize the value of both existing infrastructure and future planned commitments of transportation and utility providers to ensure that investment helps facilitate housing-led community development.
4. **Establish a pilot governance body to ensure agency coordination and execution:** First, this body will serve to streamline the procurement and permitting processes, reduce unnecessary costs and delays, and increase transparency. Second, the body will create a pilot governance body to ensure agency coordination and be responsible for the administration and reinvestment of value capture proceeds.
5. **Strengthen community engagement:** De-risk projects and facilitate demand-side market absorption by improving early and ongoing engagement with affected communities, as well as articulating the benefits of embracing responsible growth, such as fulfilling affordability targets, a higher level of transit provision, increased jobs provision, and lower overall development costs.
6. **Establish new models of project financing:** Concentrate existing public funding where it will have the most significant impact and catalyze other sources of finance. Introduce innovative public and private financing solutions that will stimulate complete community development and support new participants in the market.

Main Challenges

1. Complete settlement projects are multilayered and complex

The metric for success in the housing crisis has typically been how many housing units are delivered and increasingly about reducing the affordability gap. But this measure does not reflect other aspects of development—the attendant physical and social infrastructure—that are essential for community sustainability, economic competitiveness, and high quality of life for residents. It has also been more comfortable to pursue smaller schemes (of 3,000-5,000 homes) in lieu of more visionary complete settlements capable of more substantial regional impact, encompassing a diversity of tenures (e.g., homeownership, shared-ownership, and rental occupancy) and supportive of more holistic resilience metrics.

Lab participants noted that while complete settlements can improve quality of life and increase social value for communities, there is a lack of political appetite to build, as they require a long-term approach, and called for a departure from short-term thinking that aligns with political cycles rather than focusing on resilience and place-making. They cited an example of this narrow policy focus in the May 2013 bill (and subsequent amendments) that granted permitted development rights for owners of office buildings who want to convert them to residential housing. The policy did increase more housing units, and while researchers found well-executed conversions, they also found that the plan "produced a higher number of poor-quality housing than those governed through full planning permission," meaning they found conversions with "no amenity space, low-quality design, and were poor locations for residential amenity."[22] The lack of input from local governments in the conversions, particularly concerning long-term planning for local economic development or provision of social infrastructure, was a challenge. In contrast, a complete settlement development process includes stakeholders from multiple localities, instills trust, and reduces uncertainty in regional planning.

2. There is a lack of coordination for land assembly

Assembling property for complete settlements is especially complicated due to fragmented land ownership, uncertainty about specific plans, and unrealistic pricing expectations. While "lack of land" is often cited as an obstacle to delivering more housing, only 8.8 percent of England's land is built on (i.e., holds urban construction), demonstrating quite a gap between land allocated and available for development and areas still not politically viable for use. This also means that just a fraction of England's arable, agricultural land would be needed to meet government housing targets, according to Homes England.[23] However, there has been resistance to developing in the "green belts," introduced around London and other urban centers starting in the late 1930s, as a means to ring in urban sprawl and meant to be kept as undeveloped.[24]

Around Greater London and deep into the wider city region, the Metropolitan Green Belt, shown in figure 3, comprises 516,000 hectares, which in some places is 35 miles (56 km) deep and of very mixed environmental quality. With the variety of radial tube and rail lines running through the green belt, these areas are some of the best connected parts of the country—with over 63,800 hectares of potentially developable land within

Milton Keynes: Integrated Master Planning—with a Long-Term Horizon

Key Lesson: The UK's largest complete settlement to date delivered homes and jobs over a 50-year period through a coordinated effort.

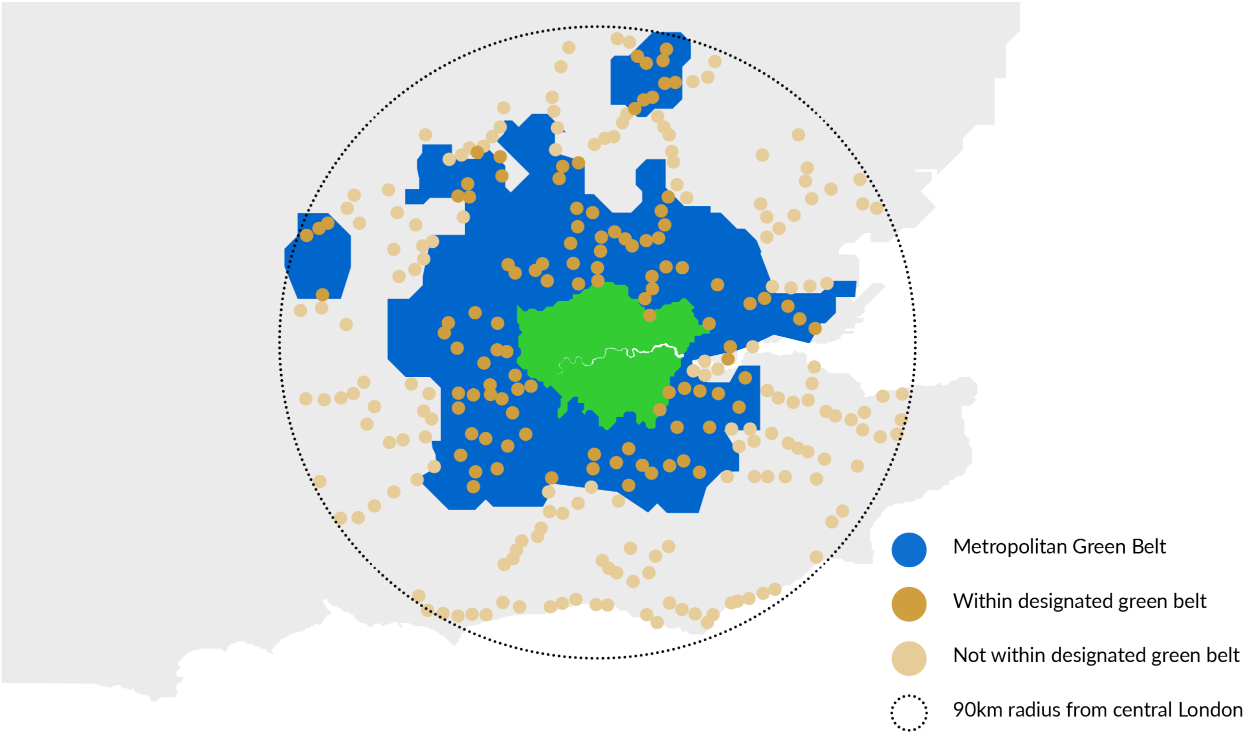
In 1967, the UK government established the Milton Keynes Development Corporation to create a New Town for 250,000 people about midway between London and Birmingham. The corporation oversaw the coordination of investments, strove for value capture, and controlled planning.

The development corporation was able to acquire land within the designated area at its current use value, which was at the time mostly valued for agricultural use. It received significant capital financial support from the UK government to fund infrastructure and facilities, as well as revenue support for a range of activities, including inward investment. Its duties were gradually taken over by the borough council, which is now discussing proposals to increase the population to over 500,000 by 2050.

The master plan is well known for its grid road system, roundabouts, and pedestrian and bike paths within a healthy landscape environment, and is considered one of the most successful of the New Town developments in terms of employment growth and housing delivery. During the late 1970s and mid-1980s, it achieved annual net job growth of about 4,000 and annual housing completions of up to 2,500.

Milton Keynes now has a population of over 255,000, with approximately 150,000 jobs and over 90,000 housing units. The community is expected to grow, given its location and fast rail and road connections to London and Birmingham, the conditions for future economic growth, and its strategic location at the mid-point of the Oxford to Cambridge Arc.

Figure 3: Undeveloped Station Catchments Outside Greater London



Source: AECOM, London 2065—Big Bold Global Connected.

one mile of existing stations.[25] While the current political climate is against developing the green belts, participants highlighted the clear need for investment that capitalizes on the best ways to meet national housing delivery goals. For example, more than 2.5 million homes could, theoretically, be accommodated in already connected locations (representing the London city region's entire housing need to 2036), and leaving 88 percent of the Metropolitan Green Belt untouched. London and UK plc have already invested in the infrastructure in these locations and, as part of a more comprehensive review of the green belt, there should be serious consideration given to creating expanded or new communities at some of these nodes.[26]

Government entities that sell their land holdings or other assets are generally required to sell to the highest bidder without much consideration of the wider public benefits or needs (i.e., addressing existing infrastructure shortfalls, strategic landscape infrastructure, affordable housing, or other local infrastructure).[27] They may be focused on government budget priorities and their mandates, such as health care or defense and not on the role they could play in unlocking land for broader community value.

On the other hand, based on the Land Compensation Act of 1961, if the government entity buys land, it must pay "hope value" to compensate landowners for what they would stand to lose from the potential future value of their land.[28] It has been argued that hope value "serves to distort land values, encourage land speculation, and reduce revenues for affordable housing, infrastructure, and local services."[29] In essence, the hope value, or land value uplift, places the benefits of the increase with the landowner who sells, and not with the developer who takes on the risk of building affordable housing or infrastructure. Critics suggest that the law be reformed to recognize greater proportionality, so that landowners would still receive a fair proportion of potential profit but protect the government from paying exorbitant amounts and channel the difference into community infrastructure.

Recent government programs, such as One Public Estate and several Homes England-led initiatives, seek to facilitate the release of public land for use as housing.[30] But pricing guidance and regional coordination with the landholding entities remain areas for reform, especially in terms of complete community development.[31]

3. Infrastructure and housing development can be misaligned

The inaugural National Infrastructure Assessment, published in July 2018 by the National Infrastructure Commission (NIC), lays out a plan of action for the country's infrastructure over the next 10 to 30 years.[32] Its findings are recommendations, not policy, but the NIC is a respected advisor. Its assessment acknowledges that infrastructure plays an important role instilling investor confidence in long-term projects, and it calls for the central government to take a more decisive role to build coordination among stakeholders so that infrastructure, utilities, and planned housing go hand in hand.

Participants noted that it would take cross-departmental coordination and potentially new, combined authorities or jurisdictions similar to city regions, to deliver on the NIC's recommendations. For instance, if the Department for Transport is not willing to upgrade road infrastructure to accommodate land released by the Ministry of Defense, residents likely will not support a development project projected to increase traffic. In this example, the central government's political support underpins everything, from public-sector infrastructure funding and financing to the allocation of land release proceeds.

Participants broadened the infrastructure discussion to include public utilities (i.e., water, gas, electricity, and communications) and called for better planning to ensure that utilities meet future demand. They warned that because utility pricing is regulated and locked for five- to seven-year timeframes, the private utility companies have little incentive to invest in build-outs to accommodate increasing demand. Participants called for an examination of this issue.

4. Permitting and procurement processes present challenges

The permitting and general procurement processes for local councils' project partners and the funding obligation requirements of s106 are known to be lengthy and opaque and add significant risk for developers. According to the Royal Town Planning Institute (RTPI), developers generally add an extra 15–20 percent to their budgets to account for land and planning risk,[33] and those costs get passed on to consumers, contributing to the inflation in housing prices. The RTPI cites research asserting that as much as 35 percent of the price of a house in England can be directly attributed to the regulatory restrictiveness of land use planning.[34]

Central government support is needed to coordinate the various administrative areas that would be part of the site identification, permitting, and planning of complete settlements. There is currently no formal cross-authority planning process or regional spatial planning. Administrative boundaries currently influence how local areas function, with decisive implications for planning, development, and growth. Developers and their advisers report that it can be challenging to know which departments and people to approach when trying to work across administrative boundaries. Ultimately, these become political conversations, and these are difficult to broker and coordinate. The different entities have different working practices, political leadership, and sometimes even conflicting planning priorities. Policies are in place to mitigate this, including the "duty to cooperate," which is a step in the right direction but has mostly been ineffective, and thus there is room for improvement.[35] Also, there is a move for voluntary joint plans prepared by aligned neighboring authorities; however, at the moment, these are often self-selecting and for small areas. For complete settlement planning to occur on a regional scale, effective cross-boundary coordination and strategic leadership will be necessary.

5. Limited community engagement

Development risks increase when stakeholder engagement is suboptimal, for instance, if residents feel the tradeoffs have been poorly articulated. Communities may not understand the benefits of new development, especially affordable housing and infrastructure, which can be seen as adding density and further strain on existing resources. The lack of early, consistent engagement can thwart the political consensus and groundswell support needed to advance complete settlement planning, permitting, delivery, and eventual market absorption. Lab participants agreed that lack of effective community engagement could slow the overall process—what should take a year to get sign-off might take three. To date, there are best practices from master developers, some of whom presented during the Lab with their recommendations incorporated later in this summary, but more needs to be done to encourage community engagement.

6. Project financing is hard to access

Participants expressed concern that financing is missing at various stages of any residential construction project, but particularly for complete settlements where the up-front infrastructure costs are often higher. Funding gaps at both the housing and infrastructure levels result in longer timelines and permitting uncertainty, making it challenging to attract private investment. Traditional financing mechanisms are not sufficient, nor are they often available to smaller developers. Private investment favors the larger players in the space and, therefore, does not maximize the supply of new homes from builders and developers across the market. Identifying sources of equity capital or lower-cost debt will be critical to encouraging further market participation.

Because housing is built by private companies, housing associations, local councils, and some combinations thereof, the current business model is developer-driven. Delivery is limited to a scale at which developers can bear the financial risks. Long project timelines that tie up capital make attracting institutional financing difficult. Also, the costs associated with permitting uncertainty are burdensome to all developers, no matter how large they may be.[36] England will need as many builders as possible to participate in delivery to achieve diversity and innovation in the market and meet its housing needs; it will likely need investor-driven models as well.

Key Recommendations

Lab participants broke into groups to design the next steps for building complete settlements in an expedited time frame. The groups agreed on the following areas of focus for policy programs and financing models:

1. Create a regional spatial strategy

A new spatial planning strategy for the London city region would work with local authorities and help them make, implement, and administer policy; develop an economic plan; consider options for existing assets, transportation, social infrastructure needs, and environmental impacts; determine an appropriate location, mix, and tenure of housing; and help integrate master-planned complete communities in the region that are connected to existing or planned infrastructure—and create the conditions to attract private development investment. The UK has a successful history of master planning, and Lab participants agreed that lessons could be learned from that history to reduce development risk. The London Stansted Cambridge Consortium (LSCC), for example, was created in 2013 to coordinate development along a 60-mile (96 km) stretch between London and Cambridge, running on either side of the M11 and main rail route. The consortium is a voluntary partnership of public and private organizations and entities involved in the region; the Innovation Corridor, as the region has been named, includes 16 local authorities, London, three counties, and four local enterprise partnership areas, and works with the central government, agencies, the Greater London Authority, and businesses.[37]

Coordination around large settlement development succeeds with political buy-in, both at the level of affected community governments and within the central government. Each new settlement in the London city region must demonstrate the business case to local elected officials and their communities, and then gain support from the central government for regional cooperation, which would bring in financing incentives. Participants discussed how to best make the business case, as well as demonstrate the social, economic, and environmental returns on the housing and infrastructure investment. It is now possible to use animated interactive programs to build virtual sites and depict regional growth projections on traffic and buildout (for example, an interactive time series animation). These tools could be incorporated into a public platform for use by developers and communities to review master plans and get a better sense of the underlying business case.

Next Steps:

- Encourage central government support for and coordination of local authorities to consolidate planning activities into a broader regional strategy, amplifying the current "bottom-up" approach with an element of "top-down" coordination.
- Establish a cross-regional body (or bodies), building on the model of cooperation of the LSCC, to help advocate for and create strategies around settlement development.
- Encourage industry groups to compile best practices for complete settlement planning that incorporate "livability metrics," as well as social infrastructure and resilience considerations, and is balanced by developer concerns for market absorption.
- Create a technology platform for use by developers, government and local authorities, and the community to share the business case for new settlements, including the social and environmental benefits and growth projections.

2. Facilitate appropriate land assembly

Participants called for more significant central government support in the land assembly process to accelerate the pace of development by taking out one of the most significant risks to private developers and reducing costs of bringing forward large-scale projects. Participants also stressed the need for guidance and government support on land pricing and structures to reduce simultaneously upfront developer capital needs and allow landowners to participate in a proportional value uplift, to balance better the costs and benefits of large-scale land development. Finally, it will require new land policy, coordination guidance, and collaboration between national and local stakeholders and decision makers to scale up from the neighborhood or district planning level to that of a new regional framework/strategy.

Additionally, clear policy support from the UK government is needed to ensure that public land utilization is at the highest and best social value, reflecting local community needs, as well as a regional spatial framework. Strategic land assembly, coordinated across public and private entities, including the UK Ministry of Defence (MoD) and National Health Service (NHS), may require the government to accelerate coordination of cornerstone landholders to assist in building a critical land mass. This would help accelerate and broaden project scope. There is a precedent for this, including work done by Homes England in acquiring government land to facilitate housebuilding at Alconbury Weald in Cambridgeshire. Participants also highlighted the value of bundling repaired brownfield sites, (i.e., pairing the development of low-quality land with higher-quality opportunities to help de-risk projects and spur investment). There are 26,000 hectares of brownfield sites available for cleanup, with capacity for 1 million homes.[38]

Freiburg, Germany, is a useful model for successful and innovative land assembly, with lessons learned for the UK. Its land assembly and pricing falls under the Urban Development Measure and makes land in a designated urban development area available for purchase at its current value, not inflated by the new development potential. After acquisition and reorganization of the area, the plots are sold at market value to any person or company who commits to conduct the plot development per the permitted plans. The original owners are granted first refusal rights. Lab participants acknowledged that the UK could benefit by examining the land value assessment of the German model, but they also recognized the challenges in shifting existing government policy without strong political will.

Next Steps:

- Design a pilot settlement that would utilize existing MoD or NHS land, demonstrating how a new property valuation process can be implemented on public and private land alike and would facilitate the development process for the government entities and the private partners.
- Explore any long-term policy programs or legislation that would need to shift after designing the pilot project.
- Create a program for bundling brownfield sites with incentives for expedited and de-risked development.

3. Improve infrastructure development and coordination

A regional spatial strategy would maximize the value of existing infrastructure. Thus, any new plan should identify established transit connections and potential stations and hubs that could be added to create meaningful economic opportunity. The government has begun to recognize this importance, as demonstrated by the 2016 National Infrastructure Development Plan, which integrates the central government's five-year strategic infrastructure plans with housing delivery and social infrastructure goals, but more can be done to commit to the NIC's recommendations thoroughly.[39]

Additionally, participants suggested that public regulators offer utility companies incentives to increase their investments beyond the typical five- to seven-year lock-in programs, either by allowing them more flexible price increases or by facilitating new public or private financing to support the additional investments.
The government could also provide funding guarantees around early infrastructure planning to help de-risk the beginning stages of development. Whether the design of a bridge or the location of a roadway, Lab participants agreed, the public sector could drive additional private investment with better planning and coordinating of infrastructure within complete settlements to avoid delays or project cancelation.

Next Steps:

- Encourage all regional coordinating bodies to assess existing infrastructure assets and then work with communities to design the best mix of new infrastructure to maximize local social and economic value.
- Create a new policy to allow utilities more flexibility in planning their pricing increases to facilitate larger utility infrastructure investment for large settlement developments.
- Establish government guarantees for new infrastructure assets, whether within a regional plan or through a utility, to give more confidence to developers and investors that a project will move forward because the infrastructure will be delivered as planned.

4. Establish a pilot government body to ensure agency coordination and execution

First, participants called for government and local authorities to improve the procurement process by reducing unnecessary costs and delays for both large and small developers who want to take part in projects. Second, they noted the need for expedited permitting (i.e., streamlining the planning process and bringing in additional skilled professional resources to local authorities who can support a developer through the planning requirements). It is understood that many local councils are already short-staffed or inexperienced at handling large-scale, complex planning applications.

Lab participants also debated the ideal governance structures for new settlements. Successful development corporations, as an example, have significant landownership and coordinate with other public agencies to focus infrastructure spending priorities, which they can use as a lever to stimulate the pace and quality of large-scale development. Participants agreed that development corporations and other public-private partnerships like these have been useful in organizing the disparate parties behind a common growth agenda and could be models upon which to build a regional entity across cities, not just individual local authorities.

Participants called for the establishment of a new "pilot" governance body—covering an area wider than a single new community—with development corporation powers to bring forward new complete settlements, which work within an agreed-upon regional spatial framework, possibly under a regional consortium, and an agreed-upon infrastructure plan that is conferred at ministerial-level leadership and advocacy.

This structure would ensure agency coordination and be responsible for the administration and reinvestment of value capture proceeds. With clearly designated authority, it would serve as a project champion to facilitate permitting and coordination, and to help overcome constraints in local capacity. This pilot body would improve the transparency of the s106 and viability process, or administer a purpose-specific mechanism. It would also be expected to facilitate best practices, working between developers and local authorities and communities, and aiding navigation of the various resources and political entities. The governance body could be authorized to collect rooftop levies, CILs, and use this revenue in innovative ways. For example, a model similar to tax increment financing would allow for bond issuance pledged to the future levies raised. Finally, this pilot governing body could adopt International Financial Reporting Standards for affiliated local authorities to enable council property to be used as security for project debt, rather than the current accounting guidance in the Local Government Act 2003 Section 13.

Old Oak Common: Leveraging Government Land Assets

Key Lesson: Development corporations succeed when they invest in the land and maintain control over planning for its uses.

Old Oak Common (OOC) in West London is a brownfield site that lies at the intersection between HS2 and the Elizabeth Line (Crossrail), two of the most significant transport infrastructure projects in the UK.

Currently industrial and railway land, OOC forms part of the Old Oak and Park Royal Opportunity Area and is under the control of the Old Oak and Park Royal Development Corporation (OPDC), which was created as a mayoral development corporation in 2015 to lead the regeneration of the Old Oak and Park Royal Area. OPDC is a functional body of the Greater London Authority, with powers of planning, including the plan-making phase, as well as setting and collecting a Community Infrastructure Levy.

The Old Oak Common site was seen as a strategic opportunity to link rail infrastructure investment with a master planned, high-quality urban transit-oriented quarter in the city, offering significant housing (some 25,000 units), jobs growth, and public amenities. OPDC has worked to put in place a local plan for the area—which covers parts of three different London boroughs and interfaces with the HS2 project, which is permitted by a separate act of Parliament. They have also negotiated an agreement across all the public landowners with land on the site that non-operational land will be available for the regeneration program and not sold off separately. Discussions are ongoing with private owners of other sites in the area. The corporation has also secured £250 million from the UK government's Housing Infrastructure Fund for the first stages of strategic enabling infrastructure to unlock the potential of the site.

Without a significant level of public-sector investment and coordination, the OOC site would be seen as a series of individual sites, and the opportunity of leveraging the investment in a high-speed rail station to unlock economic and housing growth would not be optimized. The corporation's work is also creating a clear opportunity and addressing the highest development risks. Without this public focus, the project would likely not attract a private-sector developer to deliver the program across the corporation's area.

Next Steps:

- Encourage the UK government to provide additional resources for local authorities to hire and retain talent at all levels from experienced practitioners to apprentices.
- Create new policies for procurement and permitting that are subject to industry and government peer review.
- Design a pilot governance structure that expands upon a development corporation, promoting regional cooperation and testing new standards for procurement and reporting.
- Create and issue a guide for best practices that includes greater transparency and efficiency in the procurement and s106 process.

5. Strengthen community engagement

Local residents will push back against a proposed development if they feel it will strain existing infrastructure or alter the area's overall character or dynamics. Will their quiet town become a bustling suburb, and will the existing infrastructure cope with growth? Whether this is a real or perceived risk, community engagement can help ensure that projects are well matched with their locales, have community buy-in, and are thus less prone to permitting risk. This could mean allaying residents' fears about diversified housing and real estate offerings and assuring them of the potential these bring to increased end-market absorption. Developers at the Lab highlighted the need to demonstrate examples of past success and kept promises. Community engagement, they said, was key to a project's ongoing success because it was a way to enable residents to visualize the site and align their expectations with the plans. Here again, participants suggested putting technology to use as learning tools, with 3D schematics, for example, and interactive time series for projected growth and tradeoffs. The technology could also assist in the collection of big data on resident preferences.

Ebbsfleet: Kickstarting Development with a New Governance Structure

Key Lesson: A strong government commitment, in coordination with financial investment, stimulates growth in the wake of failure.

Ebbsfleet Garden City is located in the Northfleet and Swanscombe areas of North Kent, to the east of Greater London and next to the international and domestic high-speed rail connecting London St. Pancras with France. A former quarry brownfield site, Ebbsfleet was first given outline planning consent for a mixed-use development in 1996, but little progress of note occurred until the government established a streamlined and focused delivery vehicle, Ebbsfleet Development Corporation (EDC), in 2014. As part of the corporation's activities of aligning government policy to this strategic project, in early 2015, NHS England awarded the city status as a Healthy New Town.

EDC oversees a £250 million infrastructure investment from the UK government to catalyze development and unlock short-term housing growth and longer-term economic growth. Although EDC has no significant land holdings or plan-making authority, it leverages the infrastructure funding and planning powers over its designated area to accelerate development. This allows it to implement the shared vision across all six strategic sites supported by its implementation framework. EDC is targeting delivery of 15,000 units by 2035.[40]

The project relies on the private sector to deliver housing, with support from the government through a variety of other initiatives and investments. The main driver for the corporation's work in the next phase of growth is to leverage the site's connectivity via HS1 to London's newest economic hub around Kings Cross station. EDC is tasked with bringing forward a commercial center through private investment in one of the UK's new garden cities.

Next Steps

- Publish guidelines on essential elements of the local strategy that take into account local concerns and needs, especially about design proposals, to ensure that site selection and infrastructure suit the communities within the scheme.
- Use a technology platform to allow developers to show best practices for new settlements and the overall social benefits for the community.
- Design a new simulation accessible through the technology platform that gives a real-time demonstration of a new complete community.

6. Establish new models of project financing

Lab participants discussed and designed models that could better leverage land assets, provide patient equity and lower cost debt, utilize tax credits, and yield enhancements to attract private investment.

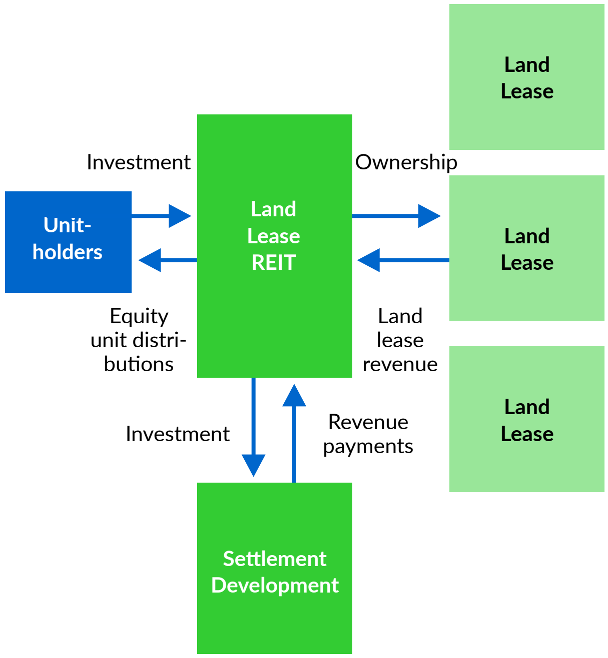
LEVERAGING LAND ASSETS

Land-Lease Models

Participants debated the options to acquire and develop land more efficiently while also accounting for land value in financing the broader settlement. If the direct land purchase is not an option for the local authority or a developer, then a land-lease model could work around the challenges of ownership to enable development. A land lease would allow the government to gain rights for home or infrastructure construction but would allow the landowner to retain ownership through a contract that functions as a traditional home lease. The landowner would receive regular payments from the government and establish project milestones, such as phases of construction, which could trigger a reassessment of land value, at which the owner could sell or continue to lease. If a region had enough land-lease agreements, owners could potentially put their revenue into a fund, rather than merely holding the capital, similar to a real estate investment trust (REIT). The REIT would use the value of the land lease to issue equity that could, in turn, be used to help finance new projects that would benefit the region and owners' land value.

As seen in figure 4, the fund could include multiple properties, and the value of the vehicle could be sold as shares that would earn a return as the various projects are developed and generate revenue and increase the overall value of the land. The fund could work in coordination with the regional entity or commission to allow for the aggregation of properties across jurisdictions. Lease-linked REITs have been established over the past few years, including on the New York Stock Exchange as a portfolio of ground leases of commercial real estate, but participants agreed that further exploration is needed, given the complexity of the model, its various revenue sources, and potential owners.

Figure 4: Land-Lease REIT



Source: Milken Institute.

Tax Increment Financing

Tax increment financing (TIF) could play an enhanced role in capturing land value uplift. Participants discussed the lost opportunity of past projects, such as Crossrail, to make use of the improved land value and potential revenue collection to issue debt that would provide immediate funding and be repaid over time.[41] The central government could allow TIF by enabling local authorities to borrow against future CIL and roof tax revenues, not just at business rates. TIF was used in the Vauxhall Nine Elms Battersea development, which includes housing alongside the London Underground Northern Line transit expansion. The project was financed through s106 and CIL payments by the developer and complemented with TIF funds coming through an enterprise zone the central government established to allow the Greater London Authority to retain future tax revenues based on the increased value of the business properties in the area.[42] However, thus far, this type of financing has been project-based and "one-off." There is no standard governmental policy that would ease the use of the model. Participants debated its benefits, given its lack of consistency in application across projects and what legislation would be needed to help move its usage forward.

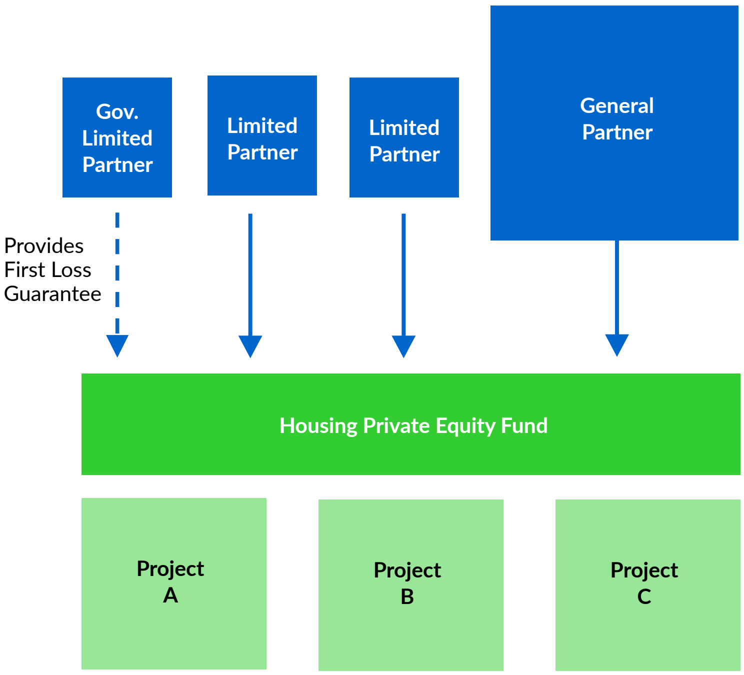
PATIENT EQUITY AND LOWER COST DEBT

Public-Private Equity Fund/Government First Loss

Equity financing is often a difficult layer of the capital structure to acquire. It is traditionally more tolerant of risk but more time-constrained and thus more expensive than debt (which is more risk-averse and requires regular payments). Government agencies have provided project financing in the form of equity, but it is often limited. Other countries use government financing not as direct equity but as an investment into an equity fund; the government takes a subordinated position to the other partners in the fund, allowing them to take returns first. This model has been used by the European Investment Fund, part of the European Investment Bank, and by the government of the Netherlands. As seen in figure 5, in these types of funds, the public sector participates as a limited partner (LP) in the structure but agrees to take first losses, thereby making the return profile more amenable to the other LPs.

This de-risking can attract new investors to the fund. While this strategy has been more successful in higher-return industries like biotech, long-term investors (pension funds, for example) might look for returns that match those of an infrastructure project, and impact investors might be interested in the financial and social returns.

Figure 5: First Loss Equity Public-Private Fund



Source: Milken Institute.

Infrastructure Revolving Loan Fund

Government agencies, including Homes England, currently provide one-time grants to support infrastructure development around new housing developments. The Housing Infrastructure Fund, administered by Homes England, has committed £5 billion to support infrastructure around home developments.[43] If funds were distributed as low- or no-cost loans rather than as non-recoverable grants (as they currently are), then the repayments could be recycled back into a revolving fund managed by Homes England. Shifting to a no-cost loan would not affect the price of the financing and would be recoverable, which could allow the budget to support subsequent projects as money returns to the fund.

The London Housing Bank is an effort by the Greater London Authority to provide a recoverable investment fund that offers "tailored financial support" to allow for a quicker pace of residential construction. Rates are as low as 1 percent for the first eight years, with 0.25 percent per annum interest rate hikes after that. The loans came with restrictions: homes must be rented at no more than 80 percent of market rates for at least seven years.[44] These rates are close to one-third of those offered by the former government housing finance's guaranteed bond program.[45] There is a pressing need for easy access to low- or no-cost financing, which will ease some of the difficulty of finding infrastructure finance.

Infrastructure Development Bank

Because efficient financing is crucial, participants debated various models to aggregate capital from private investors and fund a pipeline of projects that the public sector could help support and maintain in the long term. Investors look for deals that meet their risk/return profiles, and governments seek to bridge funding gaps to meet housing demand where it is most significant. But rarely is there a single platform for these stakeholders to come together. The European Investment Bank, a prime example of public-private finance, provides first-loss portfolio guarantees, issues bonds to attract private investment, and accepts capital and projects from member countries. The bank has financing and access to projects, which can better streamline the development process. Participants discussed how the UK could create something similar, like a National Infrastructure Bank, for local authorities or cities to facilitate deals and investment in a "one-stop shop." An infrastructure bank could provide low-cost loans with flexible terms, including a longer repayment period. The bank could also offer credit or yield enhancements, especially for riskier developments.

TAX CREDITS AND YIELD ENHANCEMENTS

Tax Credit Models

Much of the Lab was focused on how to acquire lower cost financing. However, there are other methods through which housing and infrastructure deals can become more economical and attractive to investors, regardless of the returns generated. It could be possible, for instance, to design tax-incentive programs that support small- and medium-size enterprise (SME) developers. The government offers tax credits—via the Enterprise Investment Scheme, which allows for a reduction in income or capital gains taxes, and the Venture Capital Trusts (i.e., tax-advantaged private equity investment funds)—to facilitate investment into small businesses. Building on this, the UK could create a similar scheme to allow for credit for investors of complete settlements or specific affordable housing schemes.

SME Developer Loan Guarantee Program

Large and complete settlements are traditionally developed and financed by large institutions. However, SME developers are eager to participate in the market. Unfortunately, they have a much harder time accessing commercial bank loans because they are generally considered riskier and less creditworthy than their larger, more established counterparts. Over the past decade, a market of alternative lenders has developed and flourished, providing access to capital for smaller builders. But, unlike banks, these alternative lenders are not eligible for depositor insurance from the Financial Services Compensation Scheme.[46] This raises their cost of capital, which they must pass along to borrowers, and again puts SME developers at a competitive disadvantage.

Lab participants discussed tapping into Homes England's pool of credit guarantee funds to set up a program to provide an insurance-like product for alternative lenders to ease their capital constraints. Providing them with credit guarantees would expand the capital available as well as lower the cost to SME developers.

Next Steps:

- Determine the financing or funding potential for each new model, including the scale at which it could generate investment and how this capital would bridge current funding gaps.

Next Steps Continued

- Create a Homes England pilot program that would take existing infrastructure development grant funding to capitalize a revolving loan fund. The fund would support a specific set of projects to demonstrate that the model can better utilize existing funds and meet project needs.
- Design a tax scheme, similar to those in effect now for SME investment, to include investment into builders and developers that traditionally have trouble attracting private financing at a reasonable cost of capital.

Conclusion

The Financial Innovations Lab furthered an ongoing discussion to address the need to design, build, and finance more affordable housing in the London city region. It brought together key stakeholders from government agencies, public and private developers, public and private investors, and local communities, and sparked innovative proposals to scale and accelerate housing delivery. The follow-up to this event could include additional working groups and research to develop the recommendations. Meeting housing targets will require continued collaboration among these parties, as well as continued financing and policy innovation.

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