

Chartered Institute of Building – Written evidence (UKH0034)

Summary

1. The Chartered Institute of Building (CIOB) is the world's largest and most influential professional body for construction management and leadership. We have a Royal Charter to promote the science and practice of building and construction for the benefit of society, and we have been doing this since 1834.
2. CIOB works with other professions such as the Royal Institute of British Architects (RIBA), Royal Institution of Chartered Surveyors (RICS) and the Royal Town Planning Institute (RTPI), to ensure that the built environment works in the best interest of those using it.
3. The Government has set a target of building 300,000 new homes per year in the UK to meet increasing housing demands. In 2017/18, the total housing stock in England increased by around 222,000 homes. This was 2% higher than the year before – and the amount of new homes supplied annually has been growing for several years – but is still lower than estimated need.
4. Overall, CIOB agrees that there is a need for more affordable housing in the UK. However, there are several key issues that we feel must be addressed to ensure that this target is feasible. These include:
 - a. Providing good quality homes in the right places, as opposed to simply focusing on quantity.
 - b. Ensuring that housebuilders are held to account and are delivering for the consumer.
 - c. Improving the safety of new residential buildings to protect the lives of renters and homeowners.
 - d. Creating new homes that can adapt to climate change and that focus on sustainability to create places for the future.
 - e. Providing support to the construction industry to increase and bolster productivity in delivering new homes.
 - f. Ensuring access to materials for SME housebuilders as well as improved access to the market for SME housebuilders.
5. The issues highlighted above point to the complex nature of housing development in the UK. This is further highlighted by the current progress of the Government's Building Safety Bill which looks to provide a greater level of scrutiny on the quality of medium and high-rise residential developments.
6. Alongside this, the Government is also considering measures to ensure that new residential developments promote green infrastructure and sustainability at their heart. When taking the current hurdles to housing

development alongside those that will likely be implemented in the coming years, the construction industry will need considerable assistance from Government to exceed the current rate of residential development that, since 2005/06, has not surpassed 225,000 new homes per year.

7. We recommend that Government:
 - a. Plays a direct role in addressing the cyclical nature of the construction industry by providing a clear, long-term pipeline of construction projects for both the private sector and in the local authority housing sector to directly address cyclical nature and concurrently meet the scale of the housing supply shortfall.
 - b. Supports access to lower cost bank lending by a Central Government guarantee to encourage SMEs involvement in the market.
 - c. Pursues initiatives that support a long-term pipeline of talent moving into the construction industry through training programmes like the Construction Industry Training Board's (CITB) GoConstruct portal.
 - d. Builds on the progress of the Green Homes Grant and other schemes and work with the Construction Leadership Council to implement a long-term national retrofit strategy as a core element of its Industrial Strategy.
 - e. Announces details of when the New Homes Ombudsman is intended to come into force, thus helping developers prepare for regulatory changes in advance.

Does the Government's target of 300,000 new homes per year accurately reflect housing demand? Is this target achievable?

8. We agree on the need for more affordable housing. However, we are not best placed to inform on the numbers required to meet demand. Our position is clear on the need for quality homes, as opposed to simply focusing on quantity. Ensuring housebuilders are held to account and are delivering for the consumer remains paramount. If we can build more homes that are higher quality, we are ensuring a stable pipeline of construction activity whilst improving trust in the sector.
9. Alongside quality, affordability must be a central aim of housing policy. We would therefore like to see an assessment of the impact of any annual housing target on the affordability of housing, rather than the Government simply proposing targets in isolation. Accordingly, we would like to see a balance of tenures and affordability delivered. We would also like clarity on the relationship any annual housing target has to quality and affordability.
10. The Government has yet to meet its target of 300,000 new homes per year. In 2018-19, the Government came close to reaching this target, with net new dwellings (gain between homes built and demolished) in England and Wales reaching 247,000.¹ The Covid-19 pandemic has

¹ BBC, [Housing crisis: Where are the most new homes being built?](#), 25 February 2020

undoubtedly stalled growth, despite construction activity remaining open for the majority of this period. With this in mind, we believe the target of 300,000 new homes will be difficult to achieve, primarily due to the lack of availability of labour and materials over the coming years. Additionally, the ever-present threat of future lockdowns and restrictions are likely damaging the ability of SMEs, in particular, to survive.

**Is the construction sector able to deliver the UK's housing demand?
What barriers are facing the sector?**

11. The construction sector can meet the UK's housing demand. However, several areas need to be addressed to facilitate this.

Economic cyclicalities

12. Cyclicalities is the root cause of many of the issues in the construction sector: productivity; the pool of labour and the ability to attract new talent; job stability; and working conditions all suffer as a direct result of the construction sector's perpetual boom-bust cycle. Cyclicalities also negatively impacts the sector's ability to meet housing and infrastructure need during an economic downturn, as well as the sector's ability to respond and meet demand during an upturn.
13. Government can play a direct role in addressing this cyclicalities by providing a clear, long-term pipeline of construction projects. To directly address cyclicalities and concurrently meet the scale of the housing supply shortfall, Government needs to resuscitate the missing agent of public housing delivery that has ebbed away since the 1980s.
14. As part of its housing policy planning, Government should assemble and publish a stand-alone, comprehensive pipeline of projects in the local authority building and housing sector. This should be along the same lines as the National Infrastructure Strategy. However, rather than relying on developer contributions, leasing, or acquisition of housing from the open market, the strategy should create local development corporations with land management resources and specific targets for directly constructed social and affordable housing.

Labour Market Trends

15. Over the next decade we should expect to see a big loss of construction workers as a cluster in their late 40s and early 50s reach retirement age, which for many in manual trades is before the state pension age. Their immediate successors are fewer in number.
16. There is apparent encouragement in the bulge among those in the late 20s and 30s, but this group has been swelled by recruitment in London, which has a remarkably different age profile. It is important to note the

number of migrant workers in London, where there is the highest concentration of construction workers born outside the UK. About half of London's construction workforce is non-UK born, with 37% of the workforce hailing from other EU countries.

17. This has been a major source of new recruits to the industry in recent years. This presents a triple problem for the industry if it wishes to maintain its workforce at near current levels. Firstly: how can it hold on to older workers longer? Secondly: how many of the current workforce from overseas will leave the UK post Brexit? Thirdly: where will recruits come from if not from Europe?
18. Evidence is emerging that the number of European Union-born workers in the UK construction industry dropped by more than a quarter in 12 months. In the third quarter of 2020, there were 127,000 EU-born workers in the industry, down from 176,000 recorded in the same period in 2019. The exodus of EU-born workers has been greatest in London, where the decline was 30%, from 76,000 to 53,000 in the period. The capital has historically had a greater proportion of foreign-born workers than other areas.² This recruitment issue will likely lead to building costs rising and projects taking longer – both of which will have a negative impact on those procuring construction or buying homes.
19. Across the built environment, huge recruitment efforts are being made to diversify the workforce and encourage talent from other sectors into construction. But in the face of a serious and imminent labour crisis for the industry, firms are working to reduce the need for labour. This in part is fuelling an appetite for increased use of factory-based prefabrication – offsite construction.

Skills and Attainment

20. Improving the quality of – and access to – education and training is crucial to ensuring a sufficient pipeline of qualified, professional workers who are passionate about careers in the built environment. However, the poor image of construction has continued to have a detrimental impact on businesses' ability to recruit and retain people with the right skills.
21. The Government's *skills for jobs* white paper,³ announced in January 2021, sets out reforms to post-16 technical education and training to support people to develop the skills needed to get good jobs and improve national productivity. We welcome this move to enhance accessibility and visibility of technical roles which for many years has been publicly viewed as a pathway of last resort.

² Construction News, [UK construction loses a quarter of its EU-born workforce](#), 22 January 2021

³ Department for Education (DfE), [Skills for jobs: lifelong learning for opportunity and growth](#), 21 January 2021

22. The Construction Leadership Council's (CLC) Industry Skills Plan for the UK Construction Sector 2021-25,⁴ which is backed by industry and Government, sets out the key skills challenges facing construction and how they will be tackled. We are supportive of the ambitions of the plan and agree the need for a consistent and collaborative approach at a root and branch level.
23. To ensure that there is consistent recruitment into the construction industry actions must be taken to provide education and training opportunities for young people. The industry has introduced several initiatives to engage and inspire young people to enter a career within construction. We endorse the Construction Industry Training Board's (CITB) GoConstruct portal,⁵ which informs children and parents about the array of careers and opportunities in construction and the wider built environment, from trade-based opportunities through to professional careers in construction management, architecture and surveying. Additionally, CIOB's Craft Your Future⁶ initiative is a construction game aimed at 12-14-year olds that takes place in Minecraft and presents students with a variety of problems focussing on the challenges faced by city-based communities. It is designed to help young learners explore the methods and skills required to become a construction manager, including those central to the new technologies that will define the future construction industry.
24. Ultimately, a sustainable recovery and long-term pipeline of talent must be supported by a shift in the content of built environment courses to reflect the skills needs of the future. Employers have often cited outdated curricula and skills as a barrier to the employment of Further Education (FE) students, and a challenge at FE level is ensuring that the best people are teaching the right skills. Incentivising experts to enter teaching and ensuring that they are not forced to leave the industry to take up less lucrative teaching roles will be vital to skilling and upskilling a workforce that is equipped with modern, low carbon skills.

SME-specific challenges: access to land and finance

25. Volume housebuilders are crucial to a successful housing delivery system and will continue to provide a significant proportion of the new homes in nationally. However, in recent decades they have come to dominate housing supply output as SMEs have struggled to recover from the financial crisis, and the state has largely withdrawn from housebuilding. Recent data indicates that SMEs built 40% of new homes in 1980s, 23% in 2008, but now build only 12%. The Housing, Communities and Local

⁴ Construction Leadership Council (CLC), [Industry Skills Plan for the Construction Sector 2021 – 2025](#), 11 March 2021

⁵ GoConstruct, www.goconstruct.org

⁶ Craft Your Future, www.minecraft.ciob.org

Government Committee's recent inquiry into the future of the planning system suggests '...that the planning process was often harder for smaller developers, due to their lack of sites, equipment and specialist teams...the process was too onerous on small and self-builders'.⁷

26. This over-reliance means that the private development finance model of volume housebuilders has a significant impact on national housing supply. The absorption rate, whereby houses are built out only at the rate at which the market can absorb them, is acting as a brake on build out rates nationally. The staggered release of new build homes to prevent prices being driven down in the local market has seen build out rates drop despite a very sharp increase in volume builders' levels of profits. The impact of the absorption rate on housing delivery is one of the fundamental drivers of the slow rate of build out, and the high cost of the final product.
27. Banks in England are significantly less involved in funding new building than they were pre-Global Financial Crisis (GFC). Hence developers have turned to alternate sources of finance such as private equity or venture capital companies. The higher cost of this finance has pushed up the cost of development and the price of new build homes. These non-traditional sources of finance are proving to be a major issue for those development companies which are not cash-rich, i.e. SMEs., which has led to further consolidation of the housebuilding industry into fewer, bigger players.
28. Access to finance is clearly crucial for any firm but has become especially important since the GFC for SMEs competing against other potential borrowers for limited bank lending. Since 2011, Government has provided guarantees for lending to some businesses, which has reduced the lenders' risk and the borrowers' costs. However, guarantees generally have not been available for house building. The Construction Playbook,⁸ published in December 2020, highlights early supply chain involvement for SMEs, encouraging joint ventures and consortium bids where SMEs work together to deliver a complete package for the procuring organisation. This recommendation would help drive cost down, improve innovation and design on projects in addition to providing SMEs with opportunities to scale-up further down the line. Government should take this further to enable SME house builders to access lower cost bank lending supported by a central Government guarantee. In our view this should be available for the purposes of both site acquisition and working capital.
29. In reference to land banking, the Letwin inquiry⁹ found that the build out rate and the end housing product would be significantly improved if SMEs

⁷ Housing, Communities and Local Government Committee, [The future of the planning system in England](#), 27 May 2021

⁸ Cabinet Office, [The Construction Industry Playbook](#), 8 December 2020

⁹ Ministry of Housing, Communities & Local Government (MHCLG) & HM Treasury, [Independent review of build out](#), 29 October 2018

had access to land, and we believe this would be a sensible area for Government intervention. In terms of policy recommendations, parcelling up public land for SMEs, giving priority to self and community builds on public land, a state investment bank to give SMEs access to cheap finance and distributing public land with a wider criteria of value than the financial bottom line would benefit SME builders.

30. Diversification of the housing market is crucial to providing opportunities for growth amongst existing and new communities, including self-build and custom-build. Richard Bacon's independent review into scaling up self-build and custom housebuilding, made six recommendations on how the market can be adjusted to accommodate greater levels of support for alternative methods of housing delivery. We are supportive of new avenues for constructing homes, as these could widen the scope of development options available; at present, consumers do not turn to alternatives because those alternatives are not currently available to them.
31. Custom and self-build homes often make use of modern methods of construction (MMC) to create innovative and sustainable dwellings. They also promote the use of SMEs to provide the materials and skills necessary to complete these projects. Therefore, the diversification provided by promoting custom- and self-build homes can help encourage the market to support SMEs at all stages of residential development. However, we are clear that custom- and self-build and MMC are not the panacea to the housing deficit, but greater support and use could lead them to making significant contributions to tackling the chronic housing shortages across the country.
32. It must be noted that any use of new technologies or new forms of housebuilding must be under strict quality control systems. Without due diligence or professionalism, custom- and self-build homes as well as the use of MMC could be sub-standard with limited protections for consumers as well as risk reputational damage that could undermine confidence of new housebuilding routes.

Productivity and Innovation

33. Perpetual volatility in demand for construction has led firms, particularly SMEs, to curb capital investment; spending on research and development (R&D) brings high fixed costs that are difficult to cut in an economic downturn.
34. Creating an Innovation Fund to channel low cost, long-term loans to SMEs for investment in formal R&D would address this, and lead to sector wide improvements in productivity. A similar fund exists in Holland, where the MKB+ (Innovation Fund for SMEs) gives construction firms access to

finance to embed innovative new products, services and processes in their business.

Net Zero and adaption of the built environment

35. The construction industry is ideally placed to help to kick start the economy following the Covid-19 pandemic, and thought must be given to how it can facilitate a clean, fair and sustainable recovery. Previously, there has been a tendency for Government to focus on large-scale civil engineering projects which garner public attention, but do not support high levels of labour or a stable pipeline of work for the industry. In planning future construction, we recommend that the Government pull forward long-term socially valuable projects that are labour intensive.
36. We believe that upgrading the energy efficiency of existing homes through repair, maintenance and improvement (RMI) work is an example of a socially valuable project that will support the economy, while providing an unprecedented opportunity to address the health and wellbeing of residents and make progress on the decarbonisation of existing homes as a key strategy to meet our net zero obligations. This type of work is labour intensive and grounded within local supply chains, making it an ideal project to maximise employment within the construction sector, support regional growth and provide opportunities for training and retraining in low-carbon construction skills. The danger in ignoring the potential of RMI is that it will lead to a lower standard of housing that is not fit for occupation within future homes standards.
37. Retrofitting existing homes to meet newer standards of energy efficiency will also go a long way in helping the UK to reduce its overall carbon footprint and achieving net-zero targets whilst also providing residents with reduced monthly energy costs. This, in turn, will free up disposable income to be spent within local economies further stimulating growth across the country.
38. We welcome the Government's focus on stimulating the retrofit market, notably through the recent Green Homes Grant (GHG). However, these short-term measures often fall short of what is required to bring homes up to standard. CIOB are one of the supporters of the CLC's National Retrofit Strategy¹⁰ which provides a twenty-year blueprint for how the construction industry can work with Government to retrofit the UK's 28 million existing homes. We urge the Government to build on this progress of the GHG and other schemes and work with the CLC to implement a long-term national retrofit strategy as a core element of its Industrial Strategy. This will provide a clear direction of travel for the construction industry and the certainty that businesses need to create stable, green jobs beyond 2021.

¹⁰CLC, [National Retrofit Strategy](#), 24 June 2021

The Government has published its proposals for reform of the planning system. How can the planning system be shaped to meet housing demand?

What role should permitted development rights (PDR) play in this?

39. We understand the motivation behind PDRs and agree that there is a need to have flexibility in buildings, rejuvenate town centres, and deliver more housing in the right locations. The High Street Report notes the changing nature of retail behaviour and increase in vacant shops seen across the country.¹¹ However, flexibility should not extend to the quality of residential buildings.
40. While there are issues that need to be addressed on PDR from planning, design and architecture perspectives, CIOB's focus is on the quality of buildings that PDRs produce. We are concerned that Class MA¹² - allowing properties within Class E to change to residential without planning permissions - if implemented without significant safeguards will lock in sub-standard development.
41. If success or failure is measured based on the numbers of residential units being delivered without concurrently assessing the quality of what is being produced, there is the risk of creating societal burdens through planning policy. For example, research from the Building Research Establishment (BRE) has indicated that poor housing incurs significant health related costs. Investment to improve some of the worst quality homes could save the NHS £1.4bn in first year treatment costs alone.¹³
42. Analysis by insurer Zurich UK has revealed applications for office-to-residential conversions are up 28% in the quarter up to March 2021. CIOB and Zurich have both warned of the risks associated with overheating due to poor design, ventilation and shading as well as broader quality issues.¹⁴
43. MHCLG funded research into the quality standard of homes delivered through change of use permitted development rights finds that '...permitted development conversions do seem to be more likely to create worse quality residential environments than planning permission conversions in relation to a number of factors vital to the health, wellbeing and quality of life of future occupiers. These aspects are primarily related to the internal configuration and immediate neighbouring uses of schemes...'.¹⁵

¹¹ MHCLG, [The High Street Report](#), December 2018

¹² The new use Class E Covering retail, food, financial services, gyms, healthcare, nurseries, offices and light industry

¹³ Building Research Establishment (BRE), [The cost of poor housing to the NHS](#), May 2016

¹⁴ Zurich UK, [Office to flat conversions are at increased risk of serious overheating](#), 11 August 2021

¹⁵ Clifford, B, Canelas, P. Ferm, J. Livingstone, N. Lord, A. Dunning, R., [Research into the quality](#)

44. We welcome the announcement from the MHCLG in September 2020¹⁶ that confirms all office-to-residential conversions built under PDR will have to meet the Nationally Described Space Standard and natural light requirements. While these measures do go some way to addressing these issues, we remain concerned that units coming through PDR have few checks for other markers of quality such as EPC ratings, building aspect, building safety measures including Gateway One checks, and access to amenity space. These recommendations for tighter PDR quality controls have been issued to MHCLG through a joint CIOB, RIBA, RICS and RTPI letter.¹⁷ Furthermore, the concerns highlighted in the letter, such as the concern that PDR developments are accountable to key elements of Gateway One and are well ventilated, need to be addressed as a matter of urgency.
45. Post Occupancy Evaluation (POE) methods associated with regulated predicted performance requirements could be used to assess the quality of housing delivered through use Class MA. POE of units delivered in the initial phase of use class MA could create a positive feedback loop whereby information gathered could inform any changes that need to be made to the policy to ensure quality output in perpetuity. Without checking how units delivered through PDR perform, the policy is relying on unverified predictions of performance.
46. Regarding the future of town centres, we understand the need for a flexible built environment. A long term, sustainable solution should consider looking at interventions earlier in the build process as opposed to retrofitting commercial units that are not suitable for housing. For instance, 'Seed Planning'¹⁸ - a planning and design approach offering minimum specification of how form relates to function - allows a building to fulfil multiple uses over the course of its life without sacrificing quality as it changes.
47. Seed Planning has been used by the Amsterdam Municipal Government in its transformation of Amsterdam's Port-City area from a mono-functional work area around the Sloterdijk node to a mixed urban living-working environment. The success of this project relies on urban, morphological and functional principles, linked to different typologies for buildings and public spaces relating to density, mixed use, flexibility, and adaptability for many different types of initiatives. The plan provides for buildings that, from the point of construction, would leave sufficient scope for change as the local economy develops and needs change. Given the fluidity we are witnessing in terms of how people utilise the built environment due to the

[standard of homes delivered through change of use permitted development rights](#), July 2020

¹⁶ MHCLG, "[Permitted development" homes to meet space standards](#), September 2020

¹⁷ CIOB, RIBA, RICS, RTPI, [Joint Letter to Housing Minister Calling For Tighter PDR Controls](#). November 2020

¹⁸ Sennett, Richard, [Building and Dwelling: Ethics for the City](#), 2018

pandemic, particularly office space, seed planning is a proactive type of intervention we could implement now, that will give new buildings the ability to continually adapt to the changing world.

48. Modern methods of construction (MMC), particularly modular, off-site solutions, are well placed to facilitate the adaption involved in a seed planning approach. Modular off-site buildings can be built to be re-configured through their lifetime, adapting to different needs as they evolve. This is particularly pertinent in the context of large swathes of office space which could potentially become obsolete given changing working practices resulting from the Covid-19 pandemic.

How might changes to Section 106 agreements shape the provision of social housing?

49. While developer contributions funding affordable housing and infrastructure is a sensible mechanism, it works most effectively when it is part of a range of affordable housing and infrastructure delivery mechanisms. However, due to the reliance on private housebuilding, in many parts of England, developer contributions are the only means of delivery.
50. This reliance also makes affordable housing and local infrastructure subject to the whims of economic cycles. Counter cyclical measures, such as direct delivery by national, regional, or local government would buck this trend and ensure a consistent stream of housing and infrastructure, while also providing a predictable pipeline of activity for the construction sector.
51. We are also concerned about the move to suspended Community Infrastructure Levy (CIL) payments for First Homes. Delivering adequate infrastructure alongside housing is a fundamental principle of planning and development and is critical to residents' quality of life. We do not believe that there is an exception to this, unless an alternative method of funding for community infrastructure provision is put in place.

How should communities be engaged in the planning process?

52. We welcome any intention to support local planning authorities to use digital tools to support a new civic engagement process for Local Plans and decision-making. More public participation in the plan making stage of the process is welcome as it enables communities a say in the strategic direction their locality takes. However, public participation is not a zero-sum game. Consultation at the plan making stage need not come at the cost of public participation later in the process when an application is made and the detail of what is being delivered becomes clear.

53. CIOB and other stakeholders across the built environment have collaborated with the Construction Innovation Hub (CIH) to develop a Value Toolkit¹⁹ to improve the way that decisions are made for both public and private projects. The toolkit advocates the use of public consultation throughout the journey of projects to ensure all parties remain informed and can feed into it at each stage. The aim of the toolkit is to embed a transparent, consistent, and customisable approach to construction projects. We recommend the Government utilises the learnings from the toolkit and incorporates the need for social value in delivering housing projects.
54. The Government's recent planning white paper rightly points out the role digital technology can play in making public consultation more efficient. Digital technology should complement existing democratic processes rather than usher in an era of fewer opportunities for communities to make observations on new development.
55. Furthermore, if the intention is to embrace the use of digital tools to enhance public participation, this will need to be supported by resourcing at the Local Authority level. Local Government planning departments have received significant cuts in funding over the last decade and any additional duties for Local Planning Authorities will need to be accompanied by a comprehensive resourcing strategy, specifically – in the context of community engagement – dedicated community liaison officers.
56. It will also be important to ensure a 'blended learning' style approach to consultation as a significant proportion of the stakeholders impacted by planning decisions are not digitally literate. Furthermore, the consultation process needs to operate with an appropriately wide conception of 'the community'. The working assumption is that the community is existing property-owning residents. However, renters, future residents, students, and people who work in an area are also fundamental to the functioning of place and, as such, should be consulted in its future development.

What can be done to improve the quality of new homes? How can the design and aesthetics of new homes be improved?

57. We have welcomed the Government's publication of its Building Safety Bill, which outlines the first comprehensive reform of building safety regulations since their introduction under the 1984 Building Act.
58. Part 5 of the Bill establishes powers to require developers to become members of the New Homes Ombudsman (NHO), enforcing higher standards in new build homes and placing sanctions on developers should they breach these requirements. With the Bill still undergoing scrutiny in Parliament, we urge the Government to announce details of when the

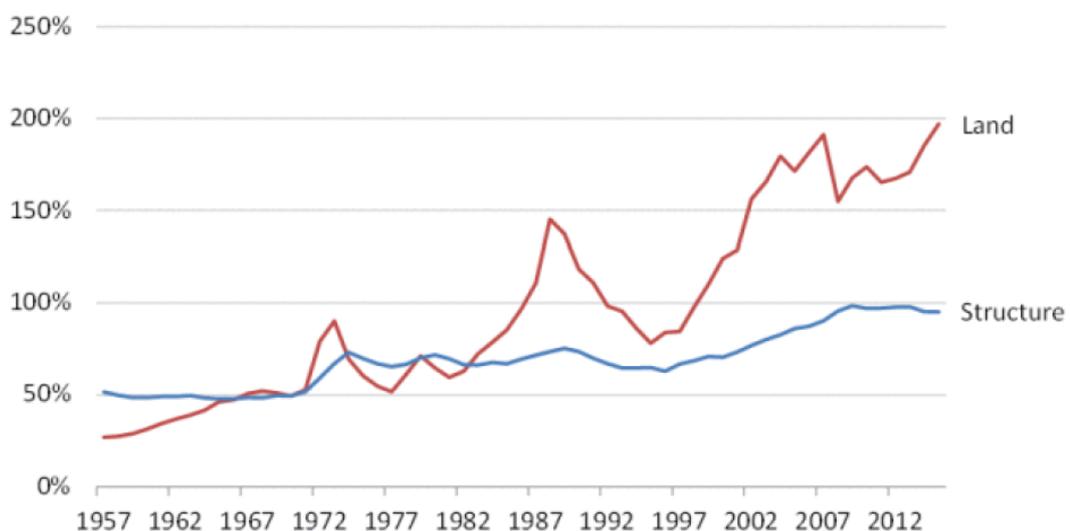
¹⁹ Construction Innovation Hub (CIH), [Value Toolkit](#), May 2021

NHO is intended to come into force, thus helping developers prepare for regulatory changes in advance.

59. Land Values are also a fundamental barrier to quality rooted in the private development model of housebuilding. Builders of all sizes – SMEs and larger developers – are clear that the most significant constraint on design and quality is not the absence of local design codes, but the high cost of land. The inflated land market means costs must be driven down in the latter stages of the housebuilding process for housebuilders to fund the initial land purchase. This results in poorly designed housing.
60. The high cost of land means housebuilders are required to dedicate a disproportionate amount of their budget to fund the initial land purchase in a highly competitive market. To fund this purchase, developers must drive down costs elsewhere in the process, typically on design and quality, thus negatively impacting the final product.
61. This process, known as the residual method of valuation for land, bakes in poor quality outcomes for housing. The equation for the residual method of valuation in its simplest form is as follows:

$$\text{Land/Property} = \text{Gross Development Value} - (\text{Construction} + \text{Fees} + \text{Profit})$$

Value of land and dwellings as % of annual UK GDP, 1957-2015



Source: [James Gleeson Wordpress.com](http://JamesGleeson.wordpress.com)

62. If land were available at a more reasonable rate – for example, existing use value plus a 25% premium – developers would be incentivised to compete on the design and quality of the final product, rather than their ability to fund the initial land purchase.

63. From a Local Authority housebuilding perspective, the problem lies in the 1961 Land Compensation Act, which determines that the price paid for land must reflect any prospective use to which it could be put, colloquially known as 'hope value'. This leads to a significant increase of the price for land intended for housing and limits the ability for strategic land assembly and management. If land prices were capped at 125% of existing use value, this would allow money sent on land purchase to be re-routed to quality and design of the final product.
64. A more proactive approach to the land market could capture the gains from development for the benefit of the community, and harness competitive forces, which are currently focused on the land market, to delivering better quality and design for consumers. This means shifting the focus of market competition in the development process downstream to the construction phase and away from the land purchase phase.
65. Another aspect to consider when debating what can be done to improve the quality, design and aesthetics of new homes is the upcoming implementation of the Future Homes Standard. These proposed changes to Buildings Regulations would see tighter restrictions put in place on the energy efficiency of new homes in line with the Government's intention of delivering zero-carbon housing. Whilst these regulations will not necessarily increase the quality of new homes, they will ensure that any homes built after the 2025 meet stricter standards of energy efficiency.
66. A greater emphasis on energy efficiency will result in lower costs to consumer's monthly energy bill outputs through reduced heating and water costs, as well as eliminating the need for retrofitting to take place further down the line as the homes would be equipped to account for climate change. Questions remain as to how the increased production costs will affect future house prices and how these costs will be accounted for in the development process. However, the result will be a better, more climate friendly built environment. We are aware a full technical specification for the Future Homes Standard will not be consulted on until 2023 and we recommend Government brings forward its proposals so the industry can implement changes as soon as possible.
67. We must also consider how the impact of the Covid-19 pandemic has changed the requirements for new homes. As many organisations no longer require employees to travel into work each day, there is a greater emphasis on new homes providing the space necessary for residents to have a work-space separate to traditional living areas. Alongside this, there will be a need for new homes to account for the increased amount of time residents will be spending inside during the working week. This includes a greater emphasis on private outdoor spaces as those living in flats or houses without outdoor space could have a negative effect on user's mental health.

68. New homes will also need to ensure that there is an available fast-fibre connection to each home to meet the broadband requirements of working from home as well as access to options for flexible living. Flexible homes provide an opportunity for potential buyers to utilise MMCs to choose from a range of floorplans to suit their housing requirements. Progress is slow in rolling flexible housing out on a mass scale, but steps are being taken in the industry to provide options to homeowners.²⁰

How does the Government interact with Local Authorities to deliver more homes? How can this relationship be improved?

69. A reimagining of the funding relationship between central Government and local authorities would allow financial headroom for councils to proactively deliver housing. In 2017, the Government removed the borrowing cap on local authorities for housebuilding, and since then the country has seen a resurgence in local authority housebuilding.
70. Another consistent pattern in housebuilding local authorities is land management capacity. Where councils have well-resourced land management teams, the inherent value of their landbanks or compulsorily purchased land can be leveraged to deliver housing and infrastructure. In England, few councils have land management resources, and this is a big factor in their deciding to sell council owned land directly to private developers to deliver housing. With added land management capacity, councils could maintain control of their land and have more control over the type and tenure of housing delivered on site.

What are the main opportunities and areas of innovation for meeting the UK's housing demand?

71. The Covid-19 pandemic has provided the construction sector with the opportunity to modernise. This opportunity is being embraced, with lessons being learned from pockets of innovation during the crisis rolled out across the sector. In a world where supply chains are put under pressure and labour is not as freely available, technology and advanced manufacturing provide tools that can be used to address the construction industry's productivity issue.
72. From the construction sector's perspective, seed planning and MMC provide a real opportunity to ensure a steady stream of high-quality housing in perpetuity. An emphasis on seed planning and modular building also chimes with the regional rebalancing policy goals of the levelling up agenda, with the North of England being an ideal testbed for greater modular integration. For example, The Laing O'Rourke Explore Industrial Park near Worksop, Nottinghamshire and the Legal & General Modular

²⁰ Evening Standard, [New Homes Awards: Shapeshifting, factory-built family homes to suit the post-Covid need for flexibility](#), September 2021

Homes project is just east of Leeds. Ilke Homes, which aims to build 2,000 new homes annually, has a factory in Knaresborough.

73. For project locations which cannot feasibly rely on MMC and offsite technology, latest advancements in onsite technology is helping to improve efficiency, productivity and quality on a large scale. CIOB recently attended a live demonstration from Construction Automation Ltd which showcased their automated brick laying robot for houses. These types of innovations will allow for improved efficiency, outputs and timing, and as a result, potential cost savings.
74. However, it is not just striking on-site uses of technology that can improve productivity and allow firms to do more with fewer people. The use of digital information sharing platforms in the business process stage of a development can speed up projects at their genesis. Traditionally, it takes 2-3 years to produce an outline business case and strategic assessment for a large construction project. Digital platforms can advance projects through the business case phase quickly and get the supply chain involved earlier, thereby saving time and reducing cost.
75. As is the case in most sectors, establishing a single location for project documents using cloud-based technologies can keep everyone on task and working productively. Team members can work from the same documents in real time, with version tracking to manage the information, while on-page comments enable rapid communication. Importantly, this approach can also improve collaboration with clients and partners in other organisations to better manage all relationships in the supply chain.
76. We are pleased to see the Building Safety Bill includes provisions to require the creation and maintenance of a golden thread of information throughout the life cycle of high-risk residential buildings. We believe that the golden thread concept can be used on housebuilding and other construction projects with cloud-based technologies will further help to improve remediation work throughout the lifecycle of a building until end-of-life.

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