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Reimagining Place Building: Advancing Sustainable, Inclusive, and Locally Anchored Developments in the UK

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Professor Graeme Larsen

Professor Graeme Larsen is an award winning academic, with over 35 years' experience in the built environment spanning practice and academia. He is a Chartered Construction Manager, Fellow of the Chartered Institute of Building and Fellow of the Higher Education Academy. Professor Larsen's career path has followed four distinct phases. Initially working for large international contracting companies as site and then project manager, mainly in London and southeast England. Thereafter, he returned to academia undertaking a PhD in innovation diffusion in the Construction Sector. A research fellowship followed on the EPSRC *Big Ideas* project looking into sustained competitiveness of firms. The third phase saw independent research, leadership and teaching. During this phase he held key roles including the Director of the PhD programme, Research Group Lead, and Director of MSc programmes. As Associate Dean (Sustainability) for the University of the Built Environment, Professor Larsen's work focusses upon balancing relevance and rigour, developing strategic and operational capabilities for sustainability, research and programme creation. Internationally, Professor Larsen holds a key strategic role within the prestigious International Council for Research and Innovation in Building and Construction (CIB), as coordinator for 'Working Commission 65 – Organization and Management in Construction', a Visiting Professorship at RMIT, Melbourne, Australia, repeatedly acts as an expert referee and has over 70 peer-reviewed academic journal, book chapters and conference publications.

Professor Angela Lee

Professor Angela Lee has over 25 years of experience in higher education. She completed her PhD in 2002 with no corrections and currently serves as Associate Dean (Research) at the University of the Built Environment where she is responsible for driving the institution's research strategy, culture, and doctoral development; and is also currently an Honorary Research Professor at the University of Salford. Over the course of her career, Professor Lee has held multiple senior leadership positions, including Associate Dean roles in Research, International, Enterprise, and Equality, Diversity & Inclusion (EDI), as well as Head of Department posts at the Universities of Salford and Huddersfield. Professor Lee is an internationally recognised scholar with a portfolio of over 300 peer-reviewed journal and conference publications, alongside six authored or edited books. She has successfully led and delivered numerous externally funded research projects, working with industry, government, and international partners. Her work continues to contribute to advancements in the built environment, higher education practice, and inclusive research leadership.

Megi Zala

Megi Zala is a research associate in sustainable urbanisation, an architectural designer, and urban planner with over 10 years' international experience across academia, the public sector, and professional practice. Her work spans planning and policy, architectural and urban design, and place-based strategies, supported by spatial, vulnerability, and microclimate analysis, enabling an interdisciplinary approach to sustainable urbanisation and place-based development. She holds an MSc in Architecture and an Erasmus Mundus Triple Master's degree in Urban Climate and Sustainability, awarded with distinction. Through the Knowledge Transfer Partnership, Megi led the development of the system architecture for the Regional Building Foundation and the Place Building System. Prior to this, she undertook EU-funded research with Politecnico di Milano focused on microclimate analysis and conservation guidance for historic landmark buildings in Italy. Across her wider practice, she has worked from city scale to building scale, integrating urban design, spatial, and climate analysis into applied research and delivery frameworks.

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The team would also like to acknowledge Space Syntax for their analytical input and for providing the walkability modelling and methodological guidance that informed the spatial analysis within this report. Their expertise has been instrumental in strengthening the evidence base underpinning the walkability assessment.

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Poundbury photos courtesy of Ben McCammick-Copley and Megi Zala

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Foreword – The King’s Foundation

Over the thirty-five years in which The King’s Foundation and its partners have worked to understand how to create genuinely good places, the journey has been one of continual discovery. Throughout this period, one insight has become increasingly and unavoidably clear: the dominant model of the UK’s new-build housing industry is one of house building, while the dominant model of planning remains zoning.

For the past seventy to eighty years, zoning has shaped the physical, social and economic structure of towns and cities across the United Kingdom. This approach has systematically separated each function of urban life into isolated components - business parks, retail areas, schools, and housing estates. In effect, we continue to construct the constituent parts of a town while too often failing to build the town itself.

More challenging still is that each of these zones has evolved into its own self-contained world. Each carries with it distinct investment patterns, professional cultures, regulatory frameworks, and specialist actors - housing specialists, business-park developers, school-building experts, and many others. As a result, when projects attempt, as ours have, to design and deliver integrated places at multiple scales, the difficulty is rarely a lack of vision. Rather, the fundamental obstacle is delivery.

The financial systems, planning processes, professional competencies, and construction practices embedded within the zoned model are simply not familiar with integrated urbanism. Mixed-use, walkable, socially cohesive, environmentally responsive places are viewed as complex; and in the development industry, complexity is too often synonymous with risk. Increased perceived risk leads to higher cost, slower progress, and, ultimately, resistance to change.

This report interrogates both the aspiration and the necessity of moving beyond this fragmented paradigm. We focus on Place Building not because it is fashionable, but because it aligns profoundly with what people want from the places they call home - yet is largely absent from the current new-build market.

The benefits of Place Building are now well understood. Environmentally, it supports the restoration of nature and reduces carbon impact. Socially, it strengthens community, improves safety, and supports wellbeing. In public-health terms, it encourages activity and reduces isolation. Economically, it fosters resilient local economies and the circulation of regional value.

To accept the status quo - of zoning, fragmentation, and excessive specialisation - is to accept failure on a generational scale. The stakes are too high, especially as the next generation prepares to shoulder unprecedented public expenditure alongside the pressures of an ageing population.

What is now required is a shift in narrative, a strengthening of the evidence base, and a coherent framework that brings together all the component parts needed to deliver great places. This report contributes to that effort. It highlights why Place Building must form the foundation of future development, and how - through case studies, partnerships, and a practical delivery model - we can chart a path toward a built environment that serves people, nature, and local economies for decades to come.

Ben Bolgar

Executive Director – Projects, The King’s Foundation

Foreword – University of the Built Environment

As the Vice Chancellor of University of the Built Environment, an institution with a clear mission to make a more sustainable Built Environment, I am especially pleased to see the publication of this final, independent report. It represents the culmination of two years of very important partnership with the King's Foundation in developing an evidence-based and deep understanding of the requirements for a Place Building system, and importantly, how that might be best deployed in practice to influence and enable improved outcomes for people, for nature and for our communities. Our informed understanding of the challenges, and the well-researched solutions and benefits, have all advanced and developed considerably over the lifespan of this project. This report now provides a comprehensive model for future success, and a way forward which can overcome the challenges of outdated, entrenched thinking and the consequent lacklustre outcomes.

I recognise and appreciate the important role that Innovate UK plays as a vehicle for this partnership-led approach to knowledge exchange within practice-based disciplines, and I am immensely grateful for their guidance and assistance as this work has been carried out, evolved and refined over time. Equally, I have welcomed their willingness to support a bold and innovative approach, allowing the team to think beyond the institutional logics that have historically shaped our approach. It is equally important to note that disrupting and challenging those established, historic norms and practices will be important if we are to deliver lasting and meaningful change. That is where the true value of this work will be measured over the longer term.

As we contemplate the considerable volume of new homes, and new towns, which are due to be developed over the coming decades, this work feels particularly timely, apposite and indeed essential. It's hugely heartening to see the wide range and sheer number of experts and industry stakeholders who have willingly engaged with us across the distinct spokes of the model, and perhaps this also shows the high degree to which this work has relevance to their specific areas of practice. None of us should be in any doubt that Place Building touches everyone over the long term, and by establishing the best principles, understanding and guidance for how to enable better community-oriented development we can have far-reaching impact and benefits for people and their communities, as well as the wider population.

My sincerest thanks go to everyone involved in this important work, and in particular the many experts who gave their time voluntarily to participate during the process, without whom we would not have been able to deliver such a useful and comprehensive set of outcomes. I would also like to make a special mention to Ben Bolgar from the King's Foundation, as well as Professor Ange Lee and Professor Graeme Larsen from the University of the Built Environment and thank them all for their tireless and expert work on this project.

Professor Ashley Wheaton

Vice Chancellor, University of the Built Environment

Supporting Statements

“I warmly congratulate the King’s Foundation and the University of the Built Environment on achieving this important milestone. As a Steering Group member on planning, I am delighted to have been part of this significant project over the past three years, helping to shape a new, systems-based approach to place-building that recognises the sophisticated ecosystem required to deliver and steward truly sustainable and inclusive places. I look forward to contributing to the next stage through the Regional Building Foundation and wish it every success in advancing this vital work.”

Dr Wei Yang OBE

CEO Digital Task Force for Planning

Executive Summary

This report outlines a system architecture for a Place Building System - an approach championed by the King's Foundation to support the creation of thriving, inclusive, healthy and sustainable places. It is the outcome of a Knowledge Transfer Partnership (KTP) project funded by Innovate UK, led collaboratively by the King's Foundation and the University of the Built Environment.

The Place Building System is supported by the Regional Building Foundation, an organisation established specifically to provide the infrastructure necessary for the wide-scale adoption of the approach. This infrastructure is structured around four key pillars, which are briefly noted but fall outside the scope of this report:

- Regional Forums - convening stakeholders to foster collaboration and shared learning at the regional level.
- Digital Knowledge Hub - offering CPD learning modules and a centralised platform for knowledge sharing.
- Enabling Services - providing practical guidance and support to SME builders, including access to land, finance, and delivery pathways.
- Innovation - driving systematic change across supply chains, construction methods, and design quality.

The focus of this report is to critically examine the concept of place building and demonstrate how the Place Building System offers a practical, evidence-informed framework for guiding equitable and sustainable development. It highlights the value of a place-based approach as a robust response to the UK's housing and spatial challenges, balancing social, economic, and environmental priorities.

To illustrate the application of these principles, the report draws on five case studies as a comparator where empirical data is available, including Poundbury - a pioneering mixed-use community that has integrated planning, design, and social cohesion principles to create a highly regarded urban environment. Poundbury demonstrates how the Place Building System has informed inclusive housing, mixed-use development, community participation, and sustainable infrastructure delivery. It highlights the potential of the system to transform neighbourhoods, enhance community wellbeing, and foster long-term resilience. While many new developments claim that they incorporate elements of place building (such as walkability, sustainability, and mixed-use planning) this remains open to interpretation, and they do not necessarily realise the full potential of place building principles or start with those principles from the outset as a driving vision.

By combining strategic frameworks, evidence-based guidance, and practical tools, the Place Building System provides stakeholders with a coherent capability for delivering high-quality, inclusive places - ensuring that development is not only physically well-designed but socially equitable, environmentally sustainable, and economically viable.

Much of the content of this report emerged through sustained engagement with the Steering Group. Comprised of senior representatives from across the UK's development ecosystem, the Steering Group was conceived not as a conventional advisory panel but as an active, transdisciplinary co-creation body. It served as a critical mechanism through which the design, interrogation, and refinement of the Place Building System unfolded. This approach aligns with the broader methodological foundations of the study, which recognise that complex systems - such as housing, planning, and community development - cannot be understood or transformed through linear or discipline-bounded methods alone. Instead, they require iterative, participatory, and reflexive processes that mobilise multiple forms of expertise. A detailed account of this methodology, including the Steering Group interrogation framework is provided in this report's Appendix.

Keywords: place building system, mixed-use developments, health and wellbeing, UK housebuilding, walkability, environmental sustainability, social cohesion, regional identity

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1.0 Introduction and problem setting

Imagine a blank canvas: a place unconstrained by existing financial models, regulatory frameworks, or entrenched planning paradigms, where the primary objective is to design environments in which people and nature can genuinely thrive socially, environmentally, economically, and psychologically. Such a vision is rooted in *strong* sustainability, an *ecocentric* perspective, and a deep sense of belonging and collective well-being. Achieving this, however, requires not only a new vision of place, but also new ways of thinking about how that future might be realised.

A central challenge in shaping the built environment is that planning practice is typically dominated by forecasting, projecting future development based on present-day trends, constraints, and institutional norms. While valuable for managing continuity, it risks reinforcing existing shortcomings by operating within the same paradigms that generated those shortcomings in the first place (Robinson, 2003; Inayatullah, 2008). As a result, change often remains incremental rather than transformative.

By contrast, backcasting offers a more aspirational and systemic approach. It begins by articulating a desirable future state and then works backwards to identify the strategic, technological, and governance shifts required to reach it (Dreborg, 1996; Quist & Vergragt, 2006). By temporarily suspending the constraints of the present, backcasting enables more values-led, imaginative, and transformative pathways to place making. This report adopts a backcasting perspective to explore how place building can provide a transformative response to the UK's housing and spatial challenges.

The sections that follow first outline the structure of the problem across demand, supply, and community, before examining how alternative place-based approaches may offer a more resilient and inclusive model for future development and how that might be adopted and scaled.

1.1 UK housing shortfall – supply and demand

Although the UK housing crisis is often framed as a problem of insufficient supply, evidence increasingly suggests that it is better understood as a structural and distributive crisis. Persistent under-delivery interacts with affordability pressures, spatial inequality, and market concentration, producing outcomes that cannot be resolved through volume delivery alone. This section examines these dynamics by unpacking the causes, consequences, and systemic constraints shaping housing provision in England.



England needs 300,000 new homes a year, but building has consistently fallen short worsening the housing shortage and driving up pressure on rents and affordability.

(HOMES ENGLAND, 2024)

Homes England (2024) estimates that approximately 300,000 new homes are needed annually to meet current and projected demand, yet completions have consistently fallen short of this benchmark over the past decade (see Table 1). Addressing the housing shortfall has become an urgent national priority, as the United Kingdom continues to grapple with a deepening housing crisis in which demand for new homes persistently exceeds supply. This chronic under-delivery has generated a substantial cumulative deficit, intensifying affordability pressures and stretching capacity across both private and social rental sectors. To reverse this trajectory, it is increasingly acknowledged that housing policy must go beyond simply meeting numerical targets. Rather, integrated, place-based strategies are needed, strategies that address not only quantity, but also the structural, spatial, regulatory, and community dimensions of housing provision. This entails reforms to planning systems, incentives for diverse delivery models, and significant investment in infrastructure and social amenities that support sustainable, liveable communities. The recently published *New Towns Taskforce Report to Government* (MHCLG, 2025) underscores exactly this shift in thinking. The Taskforce argues that scalable, large-scale developments (new towns) can help unlock housing supply while delivering broader economic and community benefits. According to its framework, new towns have the potential to integrate housing, employment, transport, and social infrastructure from the outset, thereby avoiding

the piecemeal, fragmented growth patterns that characterise much of modern suburban expansion. Moreover, the Taskforce emphasises that these developments must be rooted in a strong place-making agenda (with locally tailored vision, coordinated delivery, and long-term planning) to ensure that they are more than simple housing factories (MHCLG, 2025). The Taskforce also identifies a set of critical lessons from past new town programmes and more recent garden-city initiatives, many of which resonate with the principles of place building. These include the necessity of early social infrastructure (schools, health, community facilities), embedding a clear local vision, and ensuring that housing delivery is closely coordinated with infrastructure, amenities and the natural environment. Such features are vital not only for liveability, but also for unlocking market confidence, accelerating absorption, and anchoring long-term value-elements integral to the economic logic of place-based development. This report aims to provide a solution to the UK housing crisis through the Place Building System; whilst the benefits are articulated here, adoption support for industry in will be provided by the Regional Building Foundation – an organisation established to provide the infrastructure necessary for the wide-scale adoption of the approach.

Table 1: Net Additional dwellings in England (MHCLG, 2024)

Financial Year	Net Additional Dwellings	% change from previous year
2000-01	132,000	-11%
2001-02	146,700	11%
2002-03	159,880	9%
2003-04	170,970	7%
2004-05	185,550	9%
2005-06	202,650	9%
2006-07	214,940	6%
2007-08	223,530	4%
2008-09	182,770	-18%
2009-10	144,870	-21%
2010-11	137,390	-5%
2011-12	140,780	2%
2012-13	130,610	-7%
2013-14	142,490	9%
2014-15	176,580	24%
2015-16	195,530	11%
2016-17	223,230	14%
2017-18	228,170	2%
2018-19	247,770	9%
2019-20	248,590	0%
2020-21	217,750	-12%
2021-22	234,460	8%
2022-23	234,290	0%
2023-24	221,070	-6%
2024-25	208,600	-6%

1.1.2 Affordability, insecurity and social consequences

The consequences of this housing shortage extend beyond mere supply and demand dynamics. Affordability has become a critical issue, with median house prices now exceeding nine times gross median earnings in many areas, leaving homeownership out of reach for a significant proportion of the population (ONS, 2024; Shelter, 2023). Consequently, more households are pushed into the private rental sector, which is often characterised by short-term tenancies, inconsistent quality, and insecurity. While policy and public discourse frequently frame these challenges as a cost-of-living crisis, more critical commentators - such as Professor Kevin Anderson through his [Climate Uncensored](#) organisation - argue that the underlying issue is more accurately understood as an equity crisis, reflecting entrenched patterns in UK financial structures that systematically shape where resources flow.



Overcrowded and insecure housing isn't just uncomfortable - it's harming children's health, sleep, and education - and locking families into cycles of disadvantage.

(KRIEGER & HIGGINS, 2002)

These conditions have been linked to increased risks of stress, anxiety, and poor mental health outcomes (Marmot & Wilkinson, 2006); notably, between March 2021 and 2023, approximately one in seven households in England were residing in 'non-decent homes' - dwellings that failed to meet minimum standards due to the absence of modern facilities, inadequate heating, or significant disrepair (Gov.UK, 2025). Overcrowding, too, has become increasingly prevalent, contributing to respiratory illnesses, sleep disturbances, and poor educational performance among children (Krieger & Higgins, 2002; Hock et al., 2024). Housing insecurity can also disrupt educational continuity, undermining long-term social mobility and perpetuating cycles of disadvantage (Bentley et al., 2016).

1.1.3 Socio-spatial inequalities

Spatial inequalities have become particularly pronounced, with London and the Southeast experiencing the most acute affordability pressures. Lower-income households are increasingly forced into peripheral areas with poorer access to employment opportunities, healthcare services, and quality education, thereby reinforcing existing social inequities (Clarke & Willis, 2020). Addressing the housing crisis in a holistic manner therefore requires both a quantitative and qualitative response.

Housing insecurity frequently disrupts educational continuity and weakens social networks, undermining long-term social mobility (Bentley et al., 2016). Current housing strategies continue to encourage relocations that uproot individuals and families from their established communities. Rather than addressing need in place, homes are often delivered in areas of land availability, not where people live, work, or maintain vital social ties. This approach undermines community stability and has long-term impacts on wellbeing. As noted in the *Crisis, Annual Report* (Shelter 2023, 2024), being moved away from one's local area can result in extreme isolation, disruption to children's education and the breakdown of family and community ties. These consequences highlight the urgent need to shift focus from headline housing numbers to place-based delivery that supports continuity, cohesion, and long-term resilience.

1.1.4 Market distortion

Compounding the housing supply gap is the inefficient distribution and underutilisation of existing housing stock, often being left empty or requiring re-development following years of under investment. In England and Wales, around 3% of households (approximately 772,000) own a second home, reflecting a growing trend toward property ownership for investment, leisure, or future use (ONS, 2023).

This distorts the fundamentals of demand and supply in the housing market, through withdrawing dwellings from the primary residential supply. Houses now serve not just as homes, but as a key tool for certain stakeholders to accumulate wealth through capital growth or rental incomes. This raises questions around understanding demand and supply, for example is demand by an investor to have a second home the same as the demand for a key worker to get on to the housing ladder in their regional, local area?

The statistics further support such concerns, notably, 5.4% of people in England reported staying at their second address for 30 days or more, with 0.7% using these properties specifically as holiday homes. This pattern is particularly pronounced in rural and coastal areas, where second-home ownership inflates local house prices, reduces availability for permanent local residents, thus undermining community cohesion and long-term sustainability. Communities are being re-shaped, creating new pressures and challenging a sense of place or belonging.

Addressing the housing crisis therefore requires not only increasing the supply of new homes but also ensuring that existing stock is used more equitably and efficiently. Policy interventions that discourage speculative ownership and encourage the release of underused homes into the primary market, especially in areas of acute housing need, are essential to improving accessibility and affordability.

1.1.5 Planning patterns and systemic misalignment

At the same time, the spatial dynamics of housing development further complicate supply-side responses. Brownfield land (defined as previously developed land) makes up just 8.7% of England's territory yet accounted for 54% of all new homes built in 2021/22 (Homes England, 2023a). This reflects planning policies that prioritise urban regeneration and the reuse of existing infrastructure. In contrast, greenfield land, which comprises roughly 91.1% of England's total area, still accounted for 46% of new housing in the same year, reflecting continued pressure from housing demand, regional land scarcity, and market-led viability considerations.



We need a functioning planning system that builds the right homes in the right places.

(SHELTER, 2024)

These patterns illustrate deeper structural problems across the sector and society; homes are often built where land is most available or most profitable, not where homes are most needed. The Brick by Brick Report produced by the homeless charity Shelter (2024) critiques how the current housing system prioritises land availability and market return over and above community needs and social value. As a result, homes are too often built in rather odd locations where land is available but not where homes are actually needed. The current planning system and institutionalised norms are geared more to serve the markets (those seeking to financially reward), and less to serve communities.

Too often, housing development is oriented towards speculative markets - particularly second-home purchasers, investors, and higher-income households - rather than responding to demonstrable local housing needs, reinforcing concerns, articulated by commentators such as Professor Kevin Anderson through his [Climate Uncensored](#) organisation, that equity lies at the heart of the issue. This misalignment exacerbates spatial and social inequalities, driving up prices, displacing lower-income residents, and eroding the fabric of communities. A genuinely sustainable housing strategy must move beyond numeric delivery and land-use efficiency to consider where homes are built, whom they serve, and how they contribute to place building. Priority should be given to development in areas with unmet housing need, strong community infrastructure, and access to employment. In this way, housing can support vibrant, inclusive, and resilient communities rather than simply expanding the urban footprint. Ultimately, this requires a more integrated, place-based approach to development, grounded in long-term spatial and social sustainability.

1.2 The need to build communities

The structural, spatial, and distributive failures outlined above expose the limitations of the conventional house-building model and underline the need for a fundamentally different approach to housing delivery.

Hitting national housing targets demands more than just building houses - it requires place building. The Place Building System offers a strategic chance to reshape the UK's future, turning developments into engines of wellbeing, equity, and belonging.

Whilst questionable in terms of detail and terms, the vision of achieving the Governments' national housing targets of 1.5 million homes requires a fundamental shift from the conventional house-building model. Part of that shift must draw upon a place building approach with a rethinking of quality and delivery models. Unlike the former, which prioritises volume delivery of relatively uniform housing estates, place building emphasises the creation of socially, economically, and environmentally sustainable communities (Carmona, 2021; DCLG, 2017). Two key reasons underpin the necessity of this shift: market differentiation and scalability through small and medium-sized enterprise (SME) regional builders.

Firstly, the traditional speculative house-building model appears to be approaching the limits of market absorption and, in several respects, has become increasingly unfit for purpose. With house prices routinely reaching eight to nine times median earnings, substantial segments of the population are effectively excluded from homeownership. Rather than responding to this affordability crisis, empirical evidence indicates that the UK's largest volume housebuilders have extracted historically high levels of profit from the housing system over the past two decades. In 2022 alone, the eight largest UK housebuilders distributed £1.8 billion in dividends - almost three times the level recorded in 2005 - equivalent to 47 per cent of profits before tax (Archer & Cole, 2023). On average, each dwelling completed that year carried over £22,000 in dividend value, representing a substantial opportunity cost that could otherwise have been reinvested in increasing housing supply, improving design quality, or supporting local infrastructure and community outcomes (Archer & Cole, 2023). Separate research by Sheffield Hallam University (2023), shows that the eight largest UK housebuilders distributed approximately £16 billion in dividends to shareholders over an 18-year period, with dividend payments increasing at a far greater rate than housing completions. This evidence suggests that a significant proportion of returns has been extracted from the housing system rather than reinvested in expanding supply, improving housing quality, or supporting wider social outcomes.



Over the past two decades, the UK's largest housebuilders have prioritised shareholder dividends over housing delivery, extracting billions from the housing system while affordability, supply, and quality continue to deteriorate.

(ARCHER & COLE, 2023)

This pattern reflects what Archer and Cole (2023) describe as the 'invisible hand of the shareholder' not the benign market mechanism, but a process of systematic value extraction that diverts capital flows away from productive reinvestment and toward global institutional investors - an interpretation that closely aligns with the arguments advanced by Professor Kevin Anderson through his [Climate Uncensored](#) organisation. Large-scale estates characterised by car dependence, homogeneity, and limited community infrastructure appeal only to a narrow segment of the housing market (Letwin, 2018; TCPA, 2014). Yet, such large-scale estates are tolerated as there remains little awareness of what might be possible instead, little alternative or obvious choice. The cumulative outcome is a financialised housing system in which speculative profit and shareholder value have eclipsed the broader social purpose of housing provision. Publicly funded schemes such as Help to Buy have further amplified these dynamics, effectively transferring wealth from taxpayers to developers and their investors (Manlangit et al., 2022).

Ultimately, as Archer and Cole (2023) conclude, the invisible hand that "keeps on taking" has enriched investors while eroding affordability, diversity, and community value in new development. This evidence underscores why the current model

is increasingly unsustainable and why a shift toward place-based, stakeholder-oriented models of housing delivery is needed - models that reinvest value locally and prioritise long-term community wellbeing through place building.

Thus, place building seeks to shift the discourse from national house builders and the narratives they choose to mobilise. Instead, place building introduces a differentiated offer: walkable, mixed-use, mixed-income, and locally distinctive communities. Such environments are highly sought after but currently available almost exclusively in the second-hand housing market (URBED, 2014). By offering new developments that integrate these qualities, place building directly addresses unmet demand for high-quality, energy-efficient, and community-oriented living. This not only diversifies the housing offer but also accelerates sales by appealing to a broader demographic base (Jacobs, 1961; Rogers & Power, 2000).

Moreover, the cost of housing continues to rise significantly, driven by a combination of escalating material and labour expenses. In particular, the increasing cost of energy has had a direct impact on the production of essential building materials such as bricks, cement, and steel, thereby amplifying overall construction costs. These pressures contribute not only to the growing unaffordability of housing but also to the financial and infrastructural challenges associated with developing new residential areas. Consequently, both developers and prospective homeowners face mounting economic barriers, which in turn exacerbate existing inequalities in housing accessibility and urban development.

In addition, constraints on absorption rates have been repeatedly identified as a structural barrier to housing supply (Letwin, 2018). Empirical studies confirm that this is not primarily a question of land or planning capacity, but of a market structure and product diversity. Lichfields' Start to Finish report (2020) found that the number of sales outlets (a proxy for housing type and tenure variety) is one of the strongest predictors of build-out speed. Sites with multiple builders or tenures consistently deliver faster, validating Letwin's argument that diversity broadens the purchaser base and raises absorption. Further evidence supports that self-build and custom housing diversify supply and help meet unmet demand segments ignored by volume housebuilders (Ehwi et al. 2022), while areas with greater provider and tenure diversity contributes to stronger social mix and neighbourhood stability (Górczyńska-Angiulli, 2023).

Yet, once again the current market structure – dominated by a handful of large volume housebuilders – limits the potential for such diversity. Those large volume housebuilders are already operating close to capacity and are unlikely to expand output significantly within existing business models (Ball, 2003). In 2025, little has changed, they large volume housebuilders cannot solve the housing crisis or meet the Governments 1.5 million new home targets.

Conversely, SME regional builders - who currently deliver between 15 and 25 homes per year - hold considerable untapped potential. While not all firms will wish to grow, nor should growth be assumed as the default trajectory, those that *do* seek to expand could, with appropriate support, significantly increase their output. Evidence from the Federation of Master Builders (2020) suggests that willing and well-supported SMEs could scale to delivering up to 450 homes annually within a 5–10 year period. Such SME regional builders can be conceptualised as being *embedded* in their localised region, and with that embeddedness comes *regional localised learning*, SME's become the very fabric of the regional setting and the benefits are well document (Malmberg & Maskell; 1997; 2002). Importantly, this decentralised model of delivery aligns with place building principles: it supports local distinctiveness, strengthens regional economies, and encourages greater community engagement in the design and delivery of housing developments (Carmona et al., 2010; TCPA, 2014). This dual focus ensures that housing growth is sustainable, resilient, and capable of generating long-term social and economic value (Carmona, 2021; Letwin, 2018).

Finally, the housing crisis presents not only a challenge of supply, but an opportunity to rethink how communities are conceived, delivered, and sustained over the long term. A place building approach reframes housing growth as a means to support health, wellbeing, economic resilience, and social cohesion, rather than as an end in itself. When developments are designed to be inclusive, walkable, energy-efficient, and locally distinctive, they can reduce inequalities, strengthen local identity, and foster a sense of belonging among residents. In this context, place building is not simply an alternative design philosophy, but a delivery model that aligns economic viability with long-term community value. By supporting diversity in tenure, form, and delivery actors, particularly SME regional builders, place building offers a more resilient and socially productive pathway for meeting housing need.

2.0 Place building

This report critically examines the concept of place building and introduces the Place Building System as a practical and evidence-informed approach for guiding equitable, sustainable development. In doing so, it demonstrates why a place-based approach represents a viable and necessary response to the UK's housing and spatial challenges.

Seeking an objective, universally accepted definition of place building would be a fruitless task, yet for the purpose of this report, place building is defined as the creation of communities that are walkable, diverse, locally distinctive, integrated, and delivered by regional builders using local materials. This approach prioritises community, sustainability, and regional identity, moving beyond the functional provision of housing to foster thriving neighbourhoods and long-term resilience. Effective place building also requires a clear long-term vision. Developments must be conceived not only as housing schemes but as evolving communities that will grow and adapt over decades. Proof-of-concept projects demonstrate the value of sustained visioning, revealing how early decisions about mixed-use planning, infrastructure, stewardship, and design quality shape outcomes many years later. Embedding long-term thinking into planning and delivery therefore ensures that developments remain resilient, sustainable, and socially cohesive across generations.

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In contrast, house building is typically understood as the delivery of housing; housing in car-dependent, zoned developments by national builders using standardised materials and layouts. Housing building understood through the rhetoric and metric of 'units'. This model, dominant in the UK since the mid-twentieth century, has facilitated large-scale housing delivery (Monk & Whitehead, 1999). However, it often prioritises volume over quality, with limited regard for local distinctiveness, accessibility, or community-building.

Rather than framing house building as inherently deficient, this report emphasises the comparative value of place building. By embedding health, environmental, and social objectives into the design and delivery of new neighbourhoods, place building aligns with both public aspirations and national policy imperatives for sustainable development (MHCLG, 2021). It represents not only an architectural or planning philosophy but a cultural shift in how we conceive the relationship between people and place. More too, it is also important to delineate place building against that of placemaking, urban regeneration and urban development as they are both fundamental concepts in contemporary urbanism and planning but refer to distinct, albeit overlapping, processes that shape the experience and function of urban environments.

Placemaking is often conceptualised as a community-centred approach that focuses on the design, activation, and management of public spaces to foster social interaction, cultural identity, and a sense of belonging (Project for Public Spaces, 2016; Wyckoff, 2014). It is rooted in the belief that the people who use a space are best equipped to shape its character and use, hence participatory processes are emphasised. Placemaking typically operates at a small to medium scale – including but not limited to streetscapes, squares, parks, and community facilities – and it prioritises iterative, flexible, and often temporary interventions (Silberberg et al., 2013).

Place building, by contrast to house building and placemaking, refers to the broader, more strategic process of planning and developing urban areas at a larger scale, encompassing the integration of housing, infrastructure, transport systems, economic development, and environmental sustainability (Healey, 1997; Carmona et al., 2010). It is a relatively newer concept in urban studies compared to placemaking. Place building seeks to create holistic and sustainable urban environments by considering the long-term spatial, social, and economic functions of a place (Bishop & Williams, 2012). It often involves formal planning instruments, master planning, and public-private partnerships, and while community participation is increasingly incorporated, it is typically initiated through top-down frameworks. Place building is particularly relevant to urban extensions, regeneration schemes, and new settlements where the emphasis is on shaping the overall urban fabric and social infrastructure (Adams & Tiesdell, 2012). In practice, place building aligns with goals like climate adaptation (Beatley, 2011),

sustainable urban design (Gehl, 2010), and inclusive governance (Healey, 1997). It encompasses both the physical construction of spaces and the development of social, cultural, and economic systems that sustain them.

The work of Place Alliance, founded by Prof. Carmona at University College London (UCL), has significantly contributed to the discourse on place quality and elevating it as a critical policy and design concern. Through studies such as *Place Matters* and *From Inequality to Quality*, the Place Alliance has demonstrated how better design governance and cross-sector collaboration can significantly improve the social, economic, and environmental outcomes of built environments. Carmona's research on urban design governance (Carmona, 2016; Carmona, 2021) underlines that the quality of place is not simply a matter of aesthetics but is deeply linked to democratic accountability, long-term public value, and the capacity of institutions to shape better places over time. The ten parameters identified for effective place building, including design quality, governance, environmental resilience, and place-based economy resonate strongly with Place Alliance's findings that "place quality is a matter of social justice," especially in deprived areas where design neglect exacerbates inequality (Place Alliance, 2023).

In summary, while placemaking foregrounds the social life of public spaces and is often driven by bottom-up, participatory practices, place building is more concerned with the structural and strategic dimensions of urban development, operating at a larger scale and often governed through formal planning processes. Place building is about laying the foundations, literally and figuratively, for the long-term success and quality of urban places, shaping how they grow and evolve to meet current and future needs.

Similarly urban development refers primarily to the physical, economic, and policy-driven transformation of land and infrastructure in cities and towns. It often focuses on quantitative aspects (such as housing provision, transportation networks, zoning, and economic growth) and is typically driven by government policies, planning regulations, and private-sector investment (Healey, 1997; Hall & Pfeiffer, 2000). Urban development includes large-scale infrastructure projects, housing developments, commercial centres, and transport systems that aim to support population growth and economic activity. Its success is often measured by metrics like housing units delivered, GDP contribution, or infrastructure capacity (Cullingworth & Nadin, 2014). In contrast, urban regeneration is typically oriented towards the revitalisation of existing urban areas that have experienced decline or obsolescence. Rooted in the legacies of post-industrial and deindustrialising cities, urban regeneration interventions aim to address problems of physical decay, economic disinvestment, and social marginalisation through targeted redevelopment initiatives (Roberts & Sykes, 2000). These interventions often include the repurposing of brownfield sites, upgrading of infrastructure, enhancement of public amenities, and incentivisation of private investment. Urban regeneration is frequently policy-driven and may prioritise economic growth and competitiveness as key outcomes, sometimes at the expense of social equity or long-term sustainability (Turok, 1992).

Whilst stakeholders looking to enact place building, are seeking to *build* places from an integrative and proactive perspective, embedding resilience and adaptability from the outset, urban regeneration is more reactive, focusing on *renewing* or *repairing* places that have fallen into decline (Couch et al., 2011). Place building is thus pre-emptive and generative, while urban regeneration is often remedial and interventionist. Importantly, both concepts overlap in practice, as successful regeneration can incorporate place building principles, and place building initiatives may emerge as part of broader regeneration strategies. However, maintaining a conceptual distinction is valuable for clarifying the different logics, priorities, and temporalities that shape each approach and for ensuring that interventions align with the desired social, economic, and environmental outcomes.

A comprehensive review of the literature has identified four key components that form the 'Place Building System,' which seeks to define and shape effective place building. While each component offers a distinct lens, they are closely interrelated, with significant areas of overlap and mutual reinforcement. These parameters, along with supporting evidence, will be discussed and critically analysed in the sections that follow:

- Health and wellbeing outcomes: Walkable, mixed-use neighbourhoods are consistently associated with lower rates of obesity, improved cardiovascular health, and enhanced mental wellbeing, reflecting the positive impacts of active travel and access to green space (Sallis et al., 2016; Giles-Corti et al., 2012).
- Economic value: Place Building contributes to higher property values, increased housing demand, and the stimulation of local economies through footfall and small business activity (URBED, 2020).
- Environmental sustainability: By reducing car dependency, compact and well-connected communities lower carbon emissions, decrease energy use, and reduce infrastructure costs associated with dispersed development (Banister, 2008; Transport for New Homes, 2018).

- Social cohesion: Locally distinctive design, mixed-use spaces, integrated public spaces, and opportunities for everyday interaction strengthen community pride, belonging, identity, interaction across diverse groups and social capital (Jacobs, 1961; Gehl, 2010).

It is important to recognise that while the individual components of place building may not be entirely novel, their strategic integration remains crucial. In response to public demand, many new developments increasingly incorporate desirable features such as walkability and accessible green spaces. While these are undoubtedly positive steps, they often not integrated, do not deliver due to the method of execution and reflect a selective application of place-based principles rather than a truly comprehensive approach. Thus, the success and sustainability of a place depend upon a broad set of interconnected factors - ranging from social infrastructure and economic resilience to local governance and environmental design. A narrow focus on a limited subset of attributes risks neglecting these critical dimensions and missing the synergies that arise when elements are planned in relation to one another. This underscores the need for a more holistic and systemic architecture, such as the Place Building System, which enables practitioners and policymakers to address the full complexity of place. By doing so, developments are better positioned to align with both current community needs and long-term aspirations for sustainable, inclusive, and resilient living environments.

3.0 Theoretical touchpoints

From the outset, it is important to set out a clear framework to keep the work focused, rigorous, and reflective. This means being clear about what the work prioritises and why. Many official reports and publications, especially those produced by government or semi-government organisations, often overlook the basic assumptions that shape their analysis. By “assumptions,” we mean the underlying perspective or way of thinking that influences how a topic is approached and understood. Although these ideas might not be obvious at first, they are central to good social science research at the very highest level. Being explicit about four key positions - axiology (study of beliefs and values) ontological (what we believe exists), epistemological (what we consider that can be understood knowledge), and methodological (how we gather and interpret that knowledge) creates a strong and transparent foundation for the knowledge and understanding we seek to create.

It is from this foundation that appropriately strong theories, methods, and forms of agency can be meaningfully mobilised. In the absence of this reflexivity, arguments risk lacking the coherence, transparency, and legitimacy required for critical scrutiny, both within the academic and in wider societal discourse. Any critique of practice or the industry, grey and academic literatures begins with ascribed value, what is privileged and what is perhaps not and how we engaged with the space. Everyone brings with them the own axiological position, their own beliefs and values to the empirical space. Claims of leaving ‘one’s baggage’ at the door and entering a subject area theory free have long been changed, even seen as naive (cf. Orton 1997). As an example, attempting to review literature, or even understand an empirical space of any sort without knowing one’s own paradigm, or theoretical position (consciously or sub-consciously) is a falsehood.

It is difficult to imagine how we might enter or study any empirical space, be it planning, housing, community development or place building, atheoretically. In placing the theoretical touchpoints front and centre for all to see, and critique where appropriate, we seek to offer a stronger, transparent and more rigorous outcome yet seen across the planning, housing, community development or place building space.

Enacting planning, housing, community development or place building in practice are conceptualised here as messy or rather as *wicked problems* (cf. Ankoﬀ, 1979). Meaning, they are a complex open system, dynamic, and by their very nature have no end solution. As such, the ‘*problem-solving*’ perspective (and associated themes and language) that has traditionally been mobilised to tackle these themes remains somewhat unsuccessful in delivering the desired outcomes. Rather, the position mobilised here is instead aligned with themes and language from a ‘*problem-structuring*’ perspective (hence the outcome of this KTP being ‘a system architecture’, a structuring of the situation). This perspective is thus grounded in a critical theoretical framework that adopts a pluralist approach, avoiding the shortcoming of reductionism touched upon earlier, and drawing heavily on the traditions of the critical perspective, as outlined by Alvesson and Deetz (1996). Such a stance is traced back through philosophy to the existentialist school (giants of philosophical thinking like Jean-Paul Sartre and Friedrich Nietzsche).

Today, the critical perspective is often misunderstood. It is sometimes incorrectly presented as merely a middle ground between the objectivist (positivist) and subjectivist (interpretivist) perspectives. Through such a misconception, authors often refer to it as *'being the best of world's*, but in reality, that is not the case. Fundamentally, critical perspectives seem to accept the ontology of positivism, in that there is an objective 'real world' out there. Yet, that acceptance is tensioned against an epistemological alignment with interpretivism, whereby humans and their methods are a filter to that 'real world'. That's important, because it means knowing the real world outside of that human filter is not possible. This means that while there is a belief in the existence of an objective reality, 'a real world out there', our understanding of it is always subjective and mediated by human experience, perception, methods and temporal institutional and societal norms. Humans by their very nature and by the tools available to them (tools they have created, and are thus imperfect), will always operate as a sort 'filter' when seeking to access and understand that 'real world out there'.

Built upon the above, the critical perspective is traditionally associated with challenge. Challenging the current norms, current institutional logics, those stakeholders that claim obsolesces and use those to control, set agendas and champion certain interests. It seeks to understand agency and its location and enactment. We only need to look at the fascinating work of the broadcaster, author and academic Prof Peter Frankopan, and his work on re-telling our histories, to see how more pluralistic thinking offers a far richer understanding associated with all things' sustainability, in essence from egocentric toward a more ecocentric approach. Those mobilising this critical perspective critique what is seen as the norm, as the status quo, the way things just are or have always been. They do this because of course, because things have not always been a certain way, and they currently favour particular stakeholders and their interests and agendas. The critical perspective seeks to challenge this, therefore recognising where and how agency is mobilised and by whom. It goes further still, looking then at how to disrupt power dynamics that marginalise or oppress certain stakeholder groups. Hence the term "critical." In essence, a critical perspective focuses on understanding how agency manifests and explores different forms of agency that might exist in contrast to mainstream narratives. Rather than accepting what "should" happen according to dominant discourses, critical perspectives seek to expose and understand alternative realities, often amplifying the voices of those who are typically excluded or underrepresented (Jackson, 1985).

These theoretical underpinnings are particularly relevant and potentially extremely insightful in examining issues related to housing development in the UK, moving beyond and offering an alternative discourse to the national volume house builders whilst giving SMEs more of a voice. Understanding what has become the 'norm' and why, where and why the power structures in the sector often prioritise certain interests and agendas such as national volume developers, where and how the financial structures in place shape the discourse, how and why local communities or strong sustainable development practices seem to be constantly sidelined. Critical perspectives support a deeper understanding of how these power dynamics and their agency shape housing policy, development practices and ideas around place building, and they offer a robust theoretical touchstone from which to challenge established structures.

4.0 Method

For the purpose of this report, five cases have been selected to demonstrate the value and variation of building new developments, urban extensions or new towns as they have been more recently referred to, in the UK (see Table 2). They have been selected for their similarity in size and the period in which they were developed, allowing for direct comparison with Poundbury, which was designed following the principles of place building and is perceived as a benchmark for the movement informing the next generation of developments such as Nansledan in Cornwall.

While many new developments (including many others not selected here) claim that they incorporate elements of place building (such as walkability, sustainability, and mixed-use planning) this remains open to interpretation, and they do not necessarily realise the full potential of place building principles or start with those principles from the outset as a driving vision. As such, these five selected sites are not intended to highlight differences, but rather to illustrate how a holistic approach to place building can deliver improved levels of social, economic, and environmental value when applied in practice. Wherever possible, analysis presented draws on grounded and robust evidence, triangulated through credible secondary sources, published evaluations, and/ or available empirical data.

Table 2: Profile of the 5 case study sites

Name of development	Location	Construction period	Number of domestic dwellings	Details
Poundbury	Dorset, England	1993 - 2028 estimated	2,750	400 acres (160 hectares) integrated community of shops, businesses, and private and social housing (no zoning)
Elvetham Heath	Hampshire, England	1999 - 2008	1900+	158 acres (64 hectares) of residential development plus ancillary services including a school, village centre, large retail outlet, park and ride and sports pitches.
Northstowe (Phase 1)	Cambridgeshire, England	2014 – 2026 estimated	Phase 1: 1500 Total to build in all phases 10,000	Phase 1 of the development covers 103.8 acres (42 hectares), within a wider 1334 acres (540-hectare) area to include parks, lakes, a town centre, schools, and sports facilities for all phases
Cambourne	Cambridgeshire, England	2008 - present	6,600	990 acres (400 hectares) designed as 3 connected villages with supporting amenities
Alconbury Weald	Cambridgeshire, England	2014 - 2016	5,000	1,425 acres (577 hectares) of employment floorspace, 5,000 homes, with supporting infrastructure and facilities, including shops, 5 schools, health and leisure facilities and open spaces

4.1 Poundbury

For the purposes of this report, the development of Poundbury will serve as an illustrative touchpoint to continually refer back to. While not a perfect example, it sets a tone and establishes an aspirational standard for how the principles of the Place Building System can be enacted in practice. Poundbury is used to serve not only as illustration of place building principles but also as a vital learning tool and proof of concept (see Fig. 1). By examining both successes and challenges, it provides evidence that can refine standards for future UK towns. Learning systematically from such proof-of-concept environments is critical for improving national delivery models and avoiding repeated mistakes.

Figure 1: Queen Mother Square, Poundbury



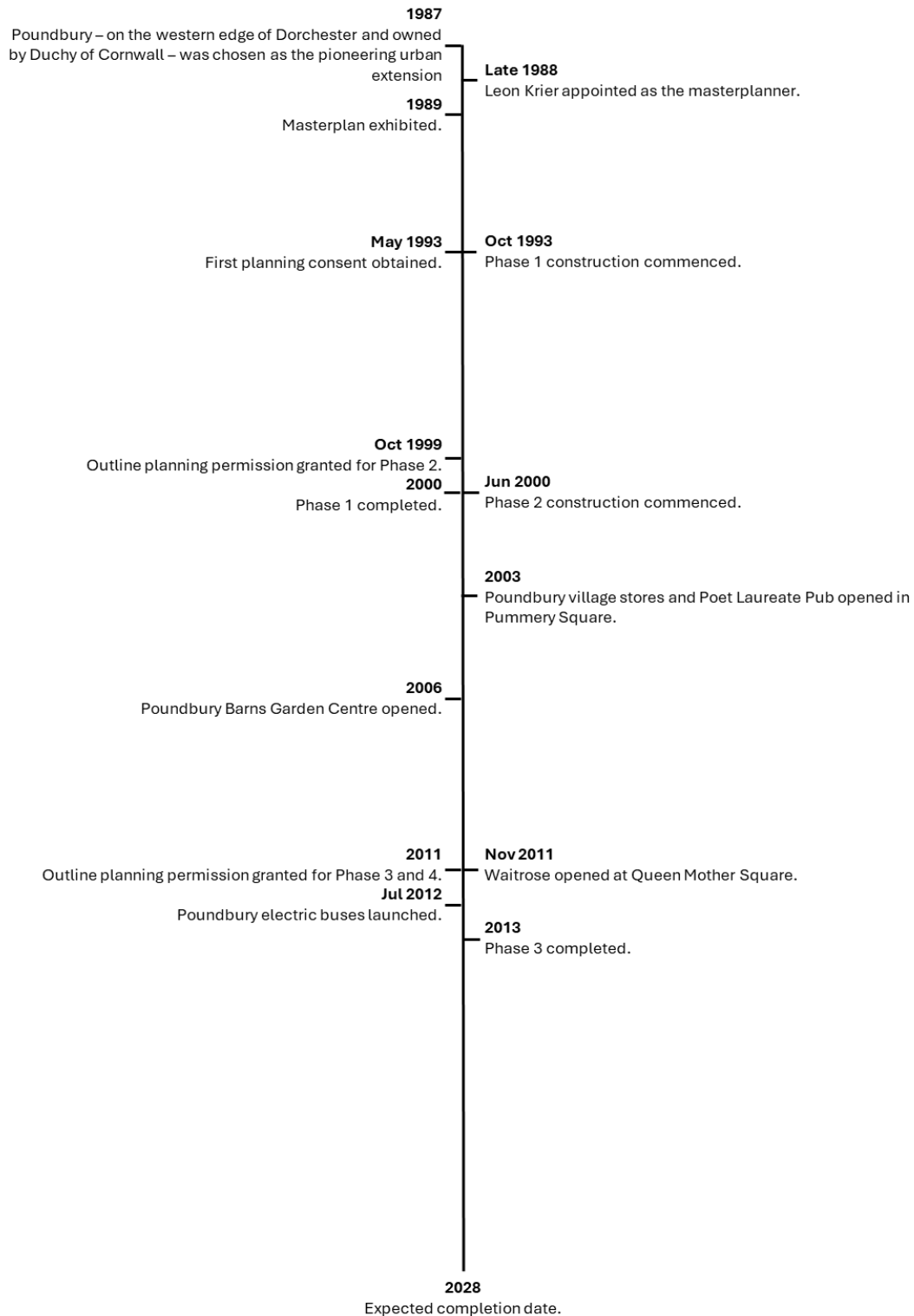
In 1987, Poundbury was chosen to be an urban extension (Hardy, 2006) to the town of Dorchester in Dorset, England, on land owned by the Duchy of Cornwall (the Duchy is a private estate established by Edward III in 1337 to provide an income for the heir to the throne). Conceived as a demonstration project for alternative urban design, Poundbury reflects the vision of King Charles III (the former Prince of Wales), who sought to challenge prevailing trends in post-war British housing development, particularly suburban sprawl and car-dependent planning (Poundbury, 2025; see Fig. 2).

Hardy (2006) describes the early negotiations between West Dorset District Council and the Duchy of Cornwall over Poundbury's development. Both parties entered discussions with distinct priorities: the Council sought new housing, including affordable options, while the Duchy insisted on creating an urban extension to Dorchester that combined living and working spaces, rather than a typical suburban expansion. Although the Duchy could have bypassed planning regulations and lengthy public consultations under Crown exemption rights, it engaged with the formal planning process to set a precedent for similar projects elsewhere (Lei, 2014), and, to gain wider community support for such a development. As such, the development faced significant challenges, including regulatory hurdles and public scrutiny, but eventually gained political support from MPs, allowing the Duchy to advance the vision for a mixed-use, integrated community.

The project was developed under the master planning of architect and urbanist Léon Krier, a prominent advocate of New Urbanism and traditional town planning. Although Krier is frequently portrayed as a central intellectual force behind the revival of traditional urbanism, he was not the formal founder of the New Urbanism movement. Krier's seminal critiques of post-war modernist planning (Krier 1984; 1998) and his advocacy for compact, mixed-use, human-scaled settlements provided much of the theoretical groundwork that later informed the movement's principles. His writings - particularly his arguments against functional zoning and his promotion of traditional European urban morphology - were influential in shaping the discourse adopted by New Urbanist practitioners (Hall 2014; Marshall 2012). The *formal* establishment of New Urbanism, however, is attributed to architects and planners such as Andrés Duany and Elizabeth Plater-Zyberk, whose designs for Seaside in Florida (Duany & Plater-Zyberk, 1982) became an early prototype for the movement, and to Peter Calthorpe, whose work on transit-oriented development contributed a sustainability dimension (Calthorpe 1993). These figures, alongside others, founded the Congress for the New Urbanism (CNU) in 1993, marking the institutional birth of the movement (CNU, 1996). Thus, Poundbury embodies 4 key principles of human-scale urbanism (Duchy of Cornwall, 2025):

- Architecture of place: creating beauty using natural materials (where possible) reflecting local character and identity. Its architectural styles draw from local Dorset vernacular and classical traditions, aiming to reinforce a sense of place and continuity with historic townscapes (see Fig. 3-6). Sustainability considerations, though framed differently from contemporary environmental metrics, were embedded in its emphasis on durable materials, energy efficiency, and reduced infrastructure sprawl.
- Integrated affordable housing: 35% of the homes being built are affordable, delivered to the same high quality and integrated throughout the development.
- Mix of uses: homes sit alongside retail, office, industrial, health, educational and community uses, creating jobs and reducing car dependency.
- Walkable community: Designed around people rather than cars, inter-connecting neighbourhoods with greenspaces ranging from parks and woodlands to allotments and orchards. Car dependency is reduced by creating a development with accessible services and public spaces, while prioritising pedestrian movement.

Figure 2: Timeline of the development of Poundbury



In its plan, it rejects zoning separation in favour of integrating residential, commercial, and light industrial uses within walkable neighbourhoods. Construction began in 1993 and evolved in phases, with completion expected in 2028 to accommodate approximately 5,000 residents in a mix of 2,750 private and - what is classified as - affordable homes, as well as providing employment for 2,730 people working in more than 250 commercial properties, offices and factories – this equates to around one local employment per home built (Duchy of Cornwall, 2025). However, independent studies that support such claims are more difficult to identify.

Figure 3-6: Four architectural typologies demonstrating the planned traditionalist design principles characteristic of homes in Poundbury.





Poundbury takes its name from an adjacent Iron Age hill fort and one of the original farms upon which the new development was to be built (Neal, 2003). Since its inception, Poundbury has been promoted as a model for addressing the deficiencies of modernist planning, aiming to re-establish a sense of community, aesthetic coherence, and environmental stewardship. However, it has also generated debate, particularly regarding its aesthetics, social inclusivity, and scalability as a model for wider urban development.

Poundbury also utilises sustainable technology. Notably, the UK Government's *Energy White Paper* (2003) established a target to source 20% of electricity from renewable resources by 2020 (DT and DEFRA, 2003). As part of Poundbury's development plan, it was mandated that 20% of its energy be derived from renewable sources (Mason, 2013). Rather than purchasing green energy credits from wind power, the Duchy of Cornwall chose to support local sustainability and employment. Consequently, Rainbarrow Farm was developed to process green crops and local food waste sourced within a 20-mile radius - including potato waste from Weymouth and chocolate and cereal waste from Poundbury - into biogas. Thus,

Rainbarrow Farm is the UK's first commercial biomethane-to-grid plant, capable of supplying gas to approximately 4,000 homes in winter and up to 56,000 in summer (noting, Poundbury has 2,750 homes). It also represents the first UK development to utilize "green" methane produced from farm and food waste (Duchy of Cornwall, 2011).

Other sustainable technologies adopted in Poundbury include a communal biomass boiler, photovoltaic panels, and solar water heating systems. While the environmental benefits of photovoltaic and solar thermal technologies are well recognised, their use at Poundbury has been shaped by design guidance that prioritise visual coherence. As a result, these technologies are generally permitted on rear elevations but not encouraged on principal or street facing facades (Cornibear, 2013).

Importantly, this experience illustrates, a process of continuous learning and refinement rather than a fixed position. Advances in building-integrated photovoltaic (BIPV) solutions, such as PV roof slates tiles and integrated glazing and increasingly enabling renewable technologies to be incorporated in ways that are compatible with traditional architectural character. This evolution is reflected in more recent Duchy-led developments, such as Nansledan (see Fig. 7), where BIPV and low-carbon technologies have been more deliberately integrated from the outset. Taken together, these examples demonstrate how design codes, technological capability, and delivery models can progressively adapt, allowing sustainability ambitions to be strengthened over time while maintaining a strong commitment to design quality.

Figure 7: Nansledan: identical building design and roof typology showing (a) conventional roofing and (b) building-integrated photovoltaic (BIPV) roofing



In summary, the architects of Poundbury sought to establish it as a model of sustainable urbanism by incorporating a variety of environmentally responsible strategies, including high-efficiency Eco-Homes, local biogas production, electric public transport, biomass heating, and selectively implemented solar technologies. These initiatives are designed to minimize environmental impact while reinforcing local character and aligning with the principles of traditional urban development, as exemplified by the neighbouring town of Dorchester.

Taken together, Poundbury demonstrates an early and deliberate attempt to integrate sustainability within a tightly controlled design framework. While certain technologies were applied cautiously, the development provides valuable lessons on how environmental performance, architectural coherence, and long-term stewardship can be balanced in practice. Importantly, these lessons have informed subsequent Duchy-led projects, where advances in technology and procurement have enabled a more integrated approach to low-carbon design. In this sense, Poundbury can be understood not as a static end-point, but as part of an evolving trajectory of place-based sustainability, with later developments such as Nansledan reflecting the refinement and progression of these principles over time.

In 2018, Dorset Council completed an economic impact assessment of Poundbury (Poundbury, 2025), which concluded that as at 2018, the Poundbury development had permanently increased the local GVA (Gross Value Added) by £98 million per annum (predicted to be £105m per annum when completed in c2025) and established 1,630 full time equivalent jobs (1,760). In addition, by 2025 the construction phases will have contributed GVA of some £236 million and 4,950 person-years of employment to the local economy.

Thus, the success of Poundbury is recognised far beyond Dorset and many of the founding principles have been incorporated into national and local planning policy. Poundbury is also proving to be increasingly influential with an international audience, attracting interest and generating many organised visits every year from architects, town planners, academics and developers from across the globe – almost as a tourist attraction, simply for being the ‘King’s town. However, despite its influence, Poundbury has attracted considerable criticism and generated debate within academic and professional discourse. Critics argue that its design principles, rooted in New Urbanism and traditionalist aesthetics, risk creating an idealised but artificial sense of community that may not fully reflect contemporary social and economic realities (Jacobson, 2017; Parker & Doak, 2012). Some suggest that Poundbury’s strict design codes limit architectural innovation and result in an environment perceived as “pastiche” or overly curated. Others highlight concerns about affordability and social diversity, noting that although the development aspires to be mixed tenure, it has been critiqued for insufficient provision of genuinely affordable housing and limited socio-economic integration. Moreover, its low-density urban form has been questioned in the context of sustainability, with some arguing that such models may be incompatible with the pressing need for higher-density, transit-oriented development (Rogers, 2015). These critiques emphasise that while Poundbury has achieved considerable influence, it remains a contested model within debates on sustainable, inclusive, and contextually appropriate urbanism.

Figure 8: Peverell Avenue West, Poundbury.



5.0 Place Building System

Building on the preceding discussion, the current discourse strongly reinforces the view that effective place making extends far beyond physical design, encompassing social, economic, environmental, and health-related dimensions. A well-designed place functions as an interconnected system in which spatial form, community life, and sustainability outcomes are mutually reinforcing. Indeed, there is much to consider in terms of what *place* might mean or rather how it might be experienced, Vogl (2016) focuses upon themes that make up a sense of *belonging* as a useful touchpoint for this.

To capture this multidimensionality, the *Place Building System* identifies four interdependent benefits that collectively underpin successful place making. These benefits - health and wellbeing, economic value, environmental sustainability, and social cohesion - represent the key pathways through which place making contributes to individual and collective quality of life. Each benefit is supported by robust empirical evidence and provides a distinct yet complementary perspective on how places

can be designed, managed, and sustained for long-term resilience and inclusivity. The following sections examine each of these benefits in turn, drawing on the academic and policy literature to critically evaluate how they operate in practice and how their integration can enhance overall place quality.

5.1 Health and wellbeing outcomes

The overarching objective of any community development project should be to enhance the health and wellbeing outcomes of its residents, with shelter and security forming the primary components of that. Whilst acknowledging that these outcomes are shaped by an array of social determinants of health - including income, education, social status, social support networks, genetics, and the physical environment, as extensively documented by the World Health Organisation (WHO, 2024) - the role of the built environment, and specifically the design and planning of new housing developments, is pivotal in shaping these outcomes (Barton & Grant, 2006; Marmot et al., 2010). Too often, the way we design our environments inadvertently “designs in” poor health for the future, contributing to rising inactivity levels and escalating costs to the NHS.

In response to this challenge, there is a growing recognition of the need to design in active lifestyles, embedding principles that promote everyday movement, social connection, and healthier living as integral elements of place-making. This approach is strongly articulated in the work of Dr William Bird (2022), whose research and advocacy have been instrumental in reframing physical activity as a design-led, preventative health intervention, rather than solely an individual behavioural choice. Bird’s work emphasises how walkable neighbourhoods, access to green and blue infrastructure, and everyday opportunities for incidental physical activity can significantly improve population health outcomes while reducing long-term healthcare demand (Van den Bosch & Bird, 2018; Bird, 2022). This perspective aligns with a growing body of evidence that situates urban design at the critical intersection of public health, environmental sustainability, and long-term healthcare resilience.

Within this context, walkability has emerged as a central consideration, directly linking urban form to physical activity, social interaction, environmental quality, and ultimately improved public health outcomes. Research consistently demonstrates that well-designed places can foster social cohesion, promote regular physical activity, and mitigate environmental stressors such as noise and air pollution, thereby contributing significantly to residents’ overall health and wellbeing (Dannenberg et al., 2011; Giles-Corti et al., 2016). Bird’s recent empirical work further reinforces this relationship, demonstrating measurable associations between neighbourhood walkability, access to natural environments, and reduced prevalence of inactivity-related conditions, including cardiovascular disease and poor mental health (Harris & Bird, 2020; Bird et al., 2022).

For instance, accessible green spaces and community facilities can encourage physical exercise and social interaction, which are critical determinants of mental and physical health (Maas et al., 2006). Furthermore, the quality of housing - considering factors such as ventilation, natural light, and thermal comfort - can profoundly influence both physical health (e.g., respiratory conditions) and cognitive development in children (Krieger & Higgins, 2002). In the UK context, new housing developments are often evaluated through frameworks such as the Building for a Healthy Life (BHL) toolkit (Homes England, 2020) and the National Design Guide (Ministry of Housing, Communities & Local Government, 2019), which emphasise the integration of health-promoting design principles. These frameworks advocate for mixed-use developments, walkable neighbourhoods, and the provision of community facilities, all of which are aligned with WHO’s holistic definition of health as a state of complete physical, mental and social wellbeing (WHO, 1948). As such, developers, urban planners, and policymakers share a collective responsibility to prioritise health-promoting design and community infrastructure in the planning and delivery of new housing in the UK, shifting from reactive healthcare responses towards proactive, place-based prevention embedded within the built environment.



In urban areas of England, 84% of new homes can reach a public hospital within 45 minutes by public transport - compared to just 26% in rural areas - revealing a stark access gap.

(RTPI & LANDTECH, 2024)

Access to essential health services varies significantly between urban and rural areas in England, particularly in relation to new housing developments. According to data from the *Location of Development 4* report (RTPI & LandTech, 2024), 84% of new residential developments in urban areas are located within a 45-minute journey to a public hospital via public transport. In contrast, only 26% of developments in rural areas meet this same accessibility threshold. This disparity underscores a broader issue in spatial planning, where rural communities often face reduced access to critical infrastructure and services, contributing to health inequalities and limiting the effectiveness of place-based development strategies (Marmot et al., 2020; Crisp et al., 2018). Ensuring equitable access to healthcare through integrated transport and land use planning is essential for creating inclusive, resilient communities, particularly as the population ages and demand for health services increases (RTPI & LandTech, 2024). Moreso, as life expectancy has stalled since 2011 between the richest and poorest areas, with a gap of 9.4 years for males and 7.4 years for females (Public Health England, 2021). These disparities are closely linked to unequal access to employment, quality housing, green space, walkable environments, and essential services - factors that place building directly influences.



Life expectancy in England has stalled since 2011 between the richest and poorest areas - with a gap of 9.4 years for males and 7.4 years for females.

(PUBLIC HEALTH ENGLAND, 2021)

Unlike conventional development models that often concentrate capital investment in already affluent areas (in essence feeding off that affluence), place building emphasises the creation of inclusive, mixed-use neighbourhoods that integrate housing, employment, public services, and green infrastructure. By embedding opportunities for local enterprise, skills development, and accessible amenities within disadvantaged or underinvested areas, place building can help retain and circulate wealth locally, reducing spatial inequalities. Furthermore, when co-produced with residents and guided by inclusive governance structures, place building empowers communities to influence investment decisions, enabling more equitable outcomes. Well-designed places that prioritise accessibility, social infrastructure, and active travel can support healthier lifestyles, reduce chronic disease risks, and improve mental well-being. In this way, place building is not simply a tool for urban development but a strategic lever for addressing structural health and economic inequalities at their root. Over time, such approaches can shift patterns of economic exclusion by attracting sustainable employment, increasing land and property values in a controlled and inclusive way, and enhancing access to education, health, and cultural capital - key determinants of long-term social mobility and intergenerational wealth redistribution.

5.1.1 Designing for improved education

Place building should be intentionally structured to support improved educational outcomes, recognising that education functions both as a catalyst for, and an outcome of, sustainable and equitable communities. Designing places with education at their core is not merely a question of service delivery, but a strategic imperative that aligns spatial development with long-term social mobility and community resilience.

As such, opportunity in Britain is profoundly uneven, shaped not only by individual socio-economic background but also by stark geographic disparities (Sutton Trust, 2025b). A young person's access to education, employment, and broader life chances is deeply influenced by structural factors such as household income, parental education, and intergenerational wealth. These determinants affect the quality of schooling available, the strength of social and professional networks, and the accessibility of resources necessary for academic and career success. However, beyond household-level disadvantage, there is increasing evidence that *place* plays a critical - and often underacknowledged - role in shaping outcomes. The geographical context in which a young person grows up can be as significant, if not more so, than their family's socio-economic status. Regional imbalances in public investment, labour markets, infrastructure, and service provision have led to entrenched inequalities between communities. This spatial injustice reinforces cycles of deprivation, with young people in under-resourced areas facing compounded barriers that limit mobility, aspiration, and long-term opportunity. The Opportunity Index Map (Sutton Trust, 2025a) serves as a spatial analytical tool for assessing the relative life chances of disadvantaged young people across parliamentary constituencies in England. Based on a composite Opportunity Index, it ranks constituencies using a multidimensional set of indicators, including secondary school attainment, progression to higher education, youth employment rates, and average earnings of individuals previously eligible for free school meals (FSM). By aggregating these measures at the constituency level, the Index offers a nuanced picture of place-based disadvantage and the geography of opportunity. The findings point toward significant disparities across the UK, highlighting persistent structural inequalities that shape the educational and economic trajectories of young people.



Stark attainment gap: Free-school-meal (FSM) pupils in East Ham are 30% more likely to achieve a grade 5 or above in English and maths GCSEs than those in Newcastle upon Tyne Central and West.

Higher education divide: Disadvantaged young people in East Ham are over three times more likely to hold a degree by age 22 (35%) than those in Newcastle upon Tyne Central and West (10%).

Earnings inequality by region: Only 7% of FSM pupils from the Northeast, Northwest, and Yorkshire and the Humber are among the UK's top 20% of earners at age 28 - compared to 18% from London.

Wealth trajectory split: FSM pupils in Ruislip, Northwood and Pinner are six times more likely to become top earners (25%) than their peers in Leeds East (4%).

(SUTTON TRUST, 2025)

Crucially, the Opportunity Index Map enables researchers, policymakers, and practitioners to identify areas where targeted interventions are most needed, thus supporting a more evidence-informed and spatially sensitive approach to reducing intergenerational disadvantage. It underscores the importance of local context - such as school quality, labour market conditions, and access to post-secondary education - in shaping life outcomes for disadvantaged youth. This reinforces the growing consensus that place-based strategies are vital for promoting inclusive growth and social mobility.

The spatial configuration of neighbourhoods, encompassing accessibility, environmental quality, safety, and proximity to essential services, directly influences children's educational experiences. According to the OECD (2006), these factors affect school attendance, academic achievement, and broader developmental outcomes. Poorly coordinated development that fails to integrate educational infrastructure can lead to overcrowded schools, lengthy commutes, and increased social segregation, exacerbating pre-existing inequalities (Andrews et al., 2017). In contrast, place building that prioritises high-quality early years provision, well-connected schools, and equitable access to lifelong learning fosters more inclusive educational environments.

Integrated planning approaches are therefore essential. Aligning housing development with investment in schools, ensuring safe walking and cycling routes, enhancing digital connectivity for remote learning, and creating multifunctional community spaces can collectively support both formal and informal educational pathways (CABE, 2010). Moreover, embedding schools

as civic anchors within the urban fabric helps to cultivate a strong sense of place, identity, and local aspiration-critical ingredients for educational success and community cohesion.

In this context, education should be understood not merely as a sectoral consideration or a reluctantly negotiated condition of Section 106 agreements, but as a core pillar of strategic place-building. Designing the built environment in ways that enable and enhance educational opportunity is fundamental to creating inclusive, resilient, and future-ready communities.

5.1.2 Walkability

The long-term decline in walking as a mode of transport in England can be attributed to a complex interplay of structural, cultural, and behavioural factors. A significant contributor has been the transformation of daily life, particularly the reduction in occupational and incidental physical activity. It is estimated that the cumulative physical exertion involved in daily routines 50 years ago - such as walking to work, shopping locally, or engaging in manual labour - was equivalent to running a marathon each week (NAO, 2001). In contrast, the widespread adoption of private vehicles has reduced the need for active travel, particularly in suburban and rural areas where car dependency is high. This shift has been reinforced by urban planning models favouring low-density development, segregated land uses, and car-centric infrastructure, all of which reduce the attractiveness and feasibility of walking (Cervero & Kockelman, 1997).



While 96% of new homes in England are within a 20-minute drive of a town centre, only 66% can get there by public transport, and just 47% on foot.

(RTPI & LANDTECH, 2024)

Recent evidence suggests that this decline is not simply a matter of individual preference, but the outcome of structural spatial conditions. The *'Location of Development'* report by the Royal Town Planning Institute (RTPI) and LandTech (2024) highlights a decade of missed opportunities in achieving sustainable housing from a physical connectivity perspective. It highlights that recent patterns of housing development in England continue to prioritise car-dependent infrastructure, with only marginal improvements in accessibility to essential services via walking, cycling, or public transport. Whilst the RTPI are a stakeholder and have agency, this lack of improvement further demonstrates the complexities and challenge in making change happen in such a complex system. An analysis of housing approvals between 2012 and 2021 - under the previous National Planning Policy Framework (NPPF) - indicates that, despite the framework's stated emphasis on sustainable development, there has been little measurable progress in enhancing non-car access to key destinations. Public transport remains notably less efficient than private vehicle use, with average journey times estimated to be approximately 1.5 times longer than by car. Furthermore, while 96% of newly constructed homes are located within a 20-minute drive of a town centre, only 66% of these homes have equivalent access by public transport, and a mere 47% are accessible within a 20-minute walking distance. These findings suggest a persistent misalignment between planning policy objectives and the actual spatial outcomes of development, particularly in terms of promoting modal shift and reducing car dependency. Notwithstanding, however, some individuals may actively choose to live further from town centres due to a preference for quieter, more rural environments, greater privacy, or a desire for larger plots of land, factors that often outweigh the convenience of proximity to urban amenities for these residents.



Just 30 minutes of moderate exercise, 5 days a week, can cut the risk of major health issues - by up to 40% for type 2 diabetes, 35% for heart disease, and 30% for falls, depression, and dementia. It also slashes joint pain by 25% and some cancers by 20%.

(PUBLIC HEALTH ENGLAND, 2017)

Thus, walkability has emerged as a pivotal concept in place building, reflecting the capacity of neighbourhoods to support pedestrian movement and foster community well-being. Despite its extensive benefits, walkability often remains a marginal concern in planning frameworks, overshadowed by car-centric infrastructure priorities (Forsyth, 2015). Defined by features such as mixed land use, safe and connected pathways, and proximity to amenities, walkable environments are instrumental in enhancing public health, reducing carbon emissions, and strengthening social cohesion (Baobeid et al., 2021; Westenhöfer et al., 2023). Empirical evidence from the Scottish Longitudinal Study affirms that pedestrian commuting significantly lowers risks of hospitalisation, cardiovascular disease, and prescriptions for mental health problems (Friel et al., 2024). Socially, walkability contributes to higher social capital and trust within communities, as shown by Leyden et al. (2024), who found that walkable neighbourhoods are associated with greater happiness and interpersonal trust among residents.

A growing body of literature highlights that walkability should not be treated as a static design outcome, rather as a dynamic and relational process embedded within broader spatial and social systems. Recent empirical work reinforces this systemic perspective. *The But can I walk to work?* study by Space Syntax (Parham et al., 2022) integrates spatial modelling, Census travel-to-work data, and public health evidence to demonstrate that walking behaviour is strongly shaped by the built environment, including configuration of settlements, the integration of movement networks, land-use patterns, access to employment and services as well as demographic characteristics. The study shows that even where distances are short, walking is often constrained by fragmented networks, segregated land uses, and weak integration within wider urban systems.

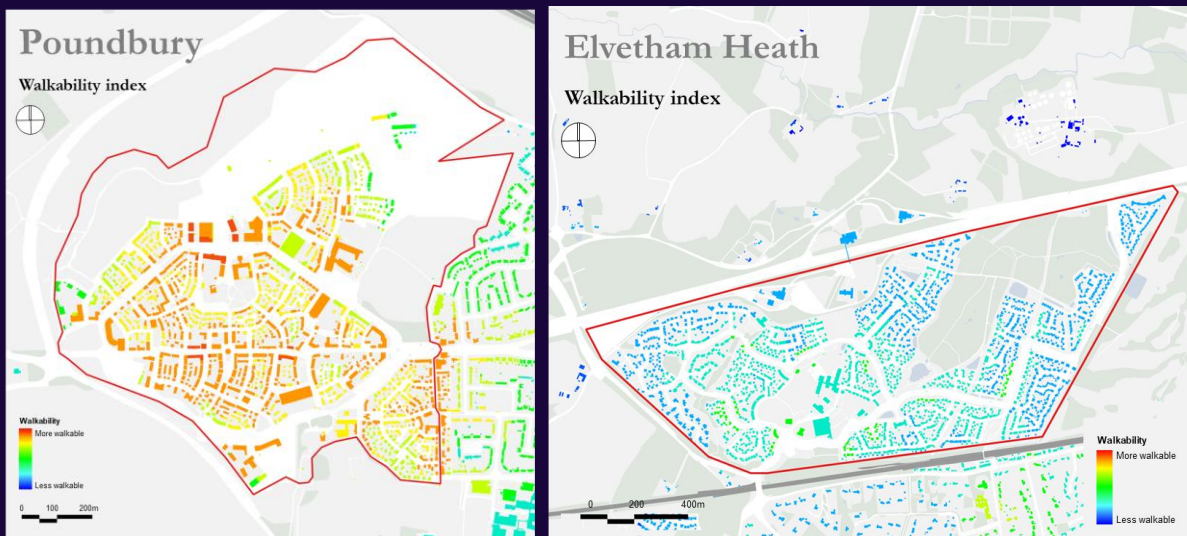
Zuniga-Teran et al., (2017) argue that planning and design frameworks should widen their focus to consider often overlooked social, environmental, and experiential dimensions that shape how walking is actually perceived and practiced. As Rogers et al., (2013) assert, “the positive correlation between aspects of the built environment, specifically walkability, and social capital suggests that measuring a social aspect of sustainability may be feasible”. This calls for a redefinition of walkability not merely as an infrastructural feature but as a multidimensional urban asset central to health, liveability and social resilience.”

Case study comparison - Walkability

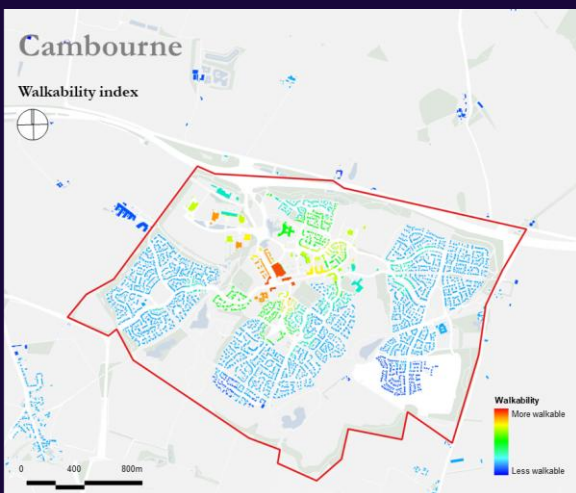
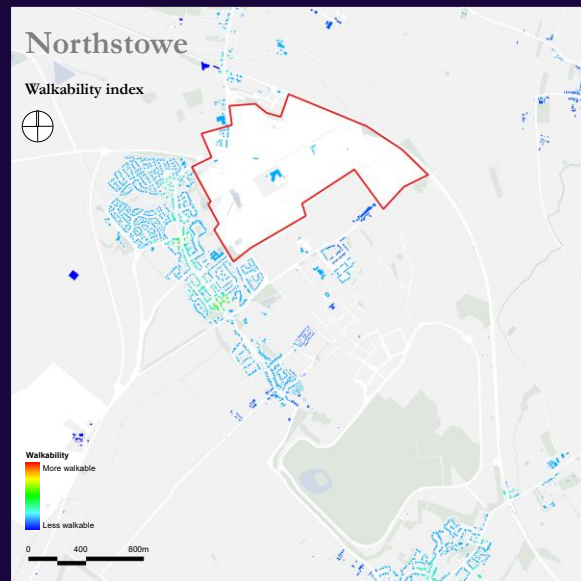
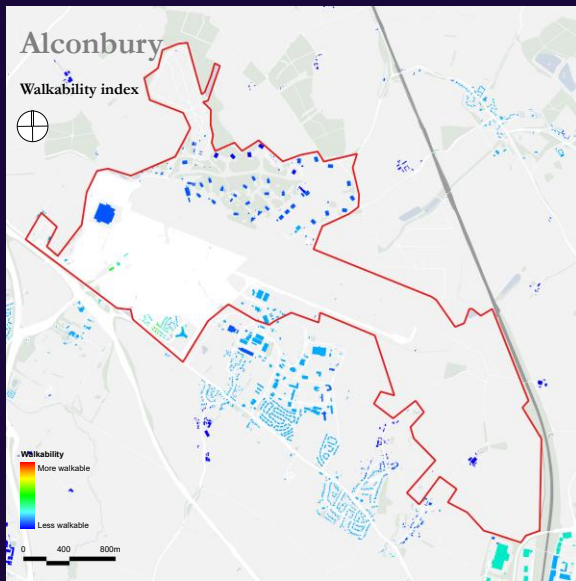
A major study, *Walkability and Mixed Use: Making Valuable and Healthy Communities* (The Prince's Foundation, Space Syntax, Knight Frank & Smart Growth Associates, 2020), examined walkability and car dependency in UK residential developments using spatial metrics and observational methods by assessing nine case studies with a walkability index based on access to workplaces, shops, schools, parks, and community services. Results showed wide variation: some developments scored as low as 4/100, while Poundbury achieved 88/100. Poundbury's success was attributed to its mixed land uses, short block lengths, and interconnected street design, which embedded services within residential areas rather than on peripheral plots. This integration was found to encourage walking and reduce reliance on private cars for short trips.

Building on the walkability methodology outlined in this chapter, a comparative analysis of the five case studies was undertaken using Space Syntax modelling (see Fig. 9-13). The analysis applies a consistent spatial framework to examine how these case studies support or constrain walkability, focusing on the relationship between movement networks, land-use distribution, and the location of everyday services. Using the Space Syntax Walkability Index, based on a 15-minute walking threshold, the comparison enables an assessment of walkability *as a systemic place-based outcome* rather than by street structure alone, highlighting how masterplanning decisions, service provision, and development phasing shape pedestrian accessibility across each site.

Figure 9-13: Heat maps of the spatial distribution of walkability across the case studies (Space Syntax, 2022)



Attribution: Space Syntax Walkability Index, © Space Syntax (2022).



Attribution: Space Syntax Walkability Index, © Space Syntax (2022).

Poundbury demonstrates a settlement-wide walkability pattern, reflecting the deliberate embedding of services, employment, and civic uses within the residential fabric. In contrast, Elvetham Heath and Cambourne exhibit more constrained and uneven walkability, shaped by the clustering and segregation of services into discrete centres that limit everyday walking beyond short internal trips. Alconbury Weald shows localised pockets of walkability within individual clusters, but limited settlement-wide accessibility due to its scale and dispersed land-use pattern. Northstowe presents a highly uneven walkability structure, reflecting phased delivery and the concentration of services in emerging centres, with walkability currently dependent on proximity rather than embedded across the site. Collectively, the case studies demonstrate that achieving walkability at the 15-minute neighbourhood scale depends not only on connected street networks, but on the early and spatially distributed provision of services and employment. However, it is important to note that Alconbury and Northstowe’s datasets do not include complete schemes, and so are difficult to compare directly to other cases.

The analysis demonstrates that walkability is a systemic spatial outcome, shaped by the relationship between movement networks and the distribution of services and employment, rather than by street design alone. Developments that integrate services within the residential fabric achieve more consistent settlement-wide walkability, while those characterised by clustered or segregated service provision exhibit fragmented and proximity-dependent walking patterns. The findings also emphasise the importance of early, spatially distributed service delivery, particularly in large or phased developments, to avoid the long-term entrenchment of car dependency.

Despite growing recognition of the benefits of active travel, a substantial proportion of the population continues to rely on private vehicles due to limited alternatives. The *Walking and Cycling Index* conducted across 23 cities and urban areas in the UK and Ireland provides a comprehensive overview of public attitudes and behaviours around active travel (Sustrans, 2023). Notably, 36% of respondents reported using a car frequently because they felt they had **no other choice**, highlighting that car dependency is often the outcome of constrained mobility options rather than personal preference.

However, it is also important to recognise that cars themselves - and the infrastructure built to accommodate them - consume significant physical space and material resources. This not only limits opportunities to prioritise walking, cycling, and public transport but also embeds unsustainable patterns of land use and mobility. Reducing car dominance, therefore, is not solely a matter of transport choice but a fundamental step toward creating more sustainable, equitable, and health-supportive environments. The findings point to systemic challenges such as inadequate public transport, poor active travel infrastructure, and spatial disconnection - structural deficiencies that compel residents to adopt car-reliant lifestyles, reinforcing transport inequalities and undermining efforts to decarbonise urban mobility.



18% of households in Poundbury have no access to a car or van - higher than the Dorset average of 15.6% and England's average of 23.5%. This is unusual for an urban extension, where car-free living is typically rare.

(OFFICE FOR NATIONAL STATISTICS, 2021)

This perception of limited choice is further substantiated by spatial and planning data which show how new development actively reproduce conditions of car dependency. The *Building Car Dependency* report published by Transport for New Homes (2022) adopted a different methodological approach, focusing on site visits to over 20 housing developments and drawing on direct observation, interviews, and qualitative assessments of how built form shapes transport behaviours. The authors examined the extent to which developments promoted or constrained walking, cycling, and public transport use, as well as whether local services were accessible without a car, recognising that such accessibility is shaped by individual experiences and perceptions (factors that limit active travel for a 70-year-old, such as steep gradients or uneven pavements, may not pose the same challenges for a healthy 20-year-old). As inclusive environments research highlights, accessibility must be considered in relation to diverse needs and abilities across the population. Most developments were characterised as car-dependent, often due to their peripheral siting, limited local amenities, and layouts dominated by distributor roads and parking infrastructure. This reliance on private vehicles overlooks the reality that not everyone is able to drive, whether for medical reasons, financial constraints, or personal choice, thereby exacerbating social exclusion and reducing the accessibility of these places for a broader population. However, three developments: Poundbury (Dorchester), Derwenthorpe (York), and Hampton Park (Peterborough) were identified as outliers. In these cases, residents were generally able to meet daily needs through active travel, supported by a mix of local uses, walkable street patterns, and integration with existing urban areas. Poundbury, in particular, was noted for its emphasis on mixed-use development, civic amenities within walking distance, and a design strategy that prioritised street permeability and active frontages over vehicle access.

The report *Trapped Behind the Wheel*, published by the New Economics Foundation (2024), presents a national-scale analysis of car dependency in new housing developments across England. Unlike site-based assessments, this study introduces a Car Dependency Index (CDI), combining data on car ownership, commuting patterns, transport accessibility gaps, and population density. The findings show a clear trend: homes built after 2009 are more likely to be located in areas with high levels of car dependency. These developments are often sited on greenfield land at the edge of towns, with low densities and poor access to public transport or essential services. While these locations may reduce upfront development costs, they generate long-term social and environmental burdens, including higher transport spending and increased emissions. The report identifies three core drivers of this pattern: remote locations, limited provision of sustainable transport, and car-oriented design. It further attributes these outcomes to speculative land practices, fragmented governance, and the weak regulatory capacity of local planning authorities. Section 106 agreements often fail to deliver walkable, mixed-use neighbourhoods, while national housing targets incentivise poorly connected sites. Overall, the report concludes that car dependency is shaped not by choice, but by planning decisions that fail to support sustainable, accessible alternatives.

Social and psychological barriers have further exacerbated the decline in walking. Heightened concerns about personal safety - particularly among women, children, and older adults - have diminished public willingness to walk, especially in inner-city environments. This fear is often compounded by concerns about crime, traffic danger, and inadequate pedestrian infrastructure (Pain, 2001). Technological developments have also played a role, with the proliferation of energy-saving

devices such as lifts, escalators, and automatic doors reducing opportunities for incidental movement in both public and private spaces. For young people, a reduction in physical education provision within some schools, combined with increasing parental concerns over unsupervised outdoor play, has led to fewer opportunities for physical activity in formative years (Sport England, 2020).

Perhaps most notably, active forms of leisure have increasingly been displaced by sedentary pursuits such as television viewing, gaming, and internet use, trends that have been accelerated by the digitalisation of everyday life (Twenge et al., 2019). These changes are not uniformly experienced: cultural norms and fear of racial harassment may further restrict access to physical activity for individuals from certain ethnic minority communities, indicating the need for more inclusive, culturally sensitive interventions (Karlsen & Nazroo, 2002). As such, addressing the decline in walking requires not only infrastructure and policy reform but also broader shifts in social norms, urban design, and public health strategies.



Surface transport is now the UK's biggest source of carbon emissions – over 52% comes from cars and taxis alone.

(DEPARTMENT FOR TRANSPORT, 2023)

Figure 14: Example of urban form and walkability in Poundbury



5.1.2 The economic value of walkability

The economic benefits of walkability are increasingly acknowledged in urban policy, supported by a growing body of literature that quantifies its value in terms of land use efficiency, public health savings, and commercial vitality (Litman, 2003; Cavill et al., 2008; Mulley et al., 2013; WHO, 2014; Roper et al., 2021; Telega et al., 2021). Research consistently shows that properties in walkable areas command higher prices due to their proximity to amenities, access to public transit, and vibrant, interconnected street networks. For instance, a study of over 14,000 housing transactions in Stockholm found that walkability indicators, such as population density, street-level retail, transit accessibility, and street connectivity; explained up to 90% of variations in residential and office property values, while car access had a negligible effect (UN-Habitat, 2018). Litman (2023) similarly notes that walkability supports efficient land use, enhances local economies through increased foot traffic and consumer spending, and reduces public costs related to congestion, infrastructure maintenance, and healthcare. Moreover,

walkable urban environments promote compact, mixed-use development, generating long-term fiscal savings for municipalities. Walkable areas also attract business investment and skilled talent, particularly in high-growth, innovation-driven sectors, while supporting retail activity and vitality in town centres (Arup, 2016).



13:1 is the average ‘benefit cost ratio’ for walking and cycling projects. This means, for every £1 spent on walking and cycling, £13 of benefits are returned to the economy.

(DEPARTMENT FOR TRANSPORT, 2015)

The *Building Better, Building Beautiful Commission* (2020) further highlights that well-designed, walkable developments are more likely to retain long-term value and enjoy sustained public support. In the U.S., studies have found that each additional point on the Walk Score index can increase property values by \$500 to \$3,000, depending on location and context (Zolnik, 2024; VTPI, 2023). Yet despite these clear returns, conventional transport planning continues to undervalue walking, focusing primarily on vehicle miles travelled and often ignoring short, non-motorised trips, ultimately underestimating the benefits of pedestrian infrastructure investment.

Case study comparison – Distance travel to work

The travel-to-work patterns across the five case studies using data from the 2021 Census (ONS 2021) reveal marked differences in the degree to which settlement form supports local employment, walkability, and everyday accessibility (see Fig. 15). Poundbury records the highest proportion of residents commuting less than 2 km, indicating strong proximity between homes, jobs, and services and reflecting its mixed-use, walkable urban structure. This suggests a higher likelihood of active travel and reduced reliance on private vehicles for daily commuting.

In contrast, Elvetham Heath and Northstowe display exceptionally high levels of home working (over 50% and approximately 45% respectively). While this may partly reflect strong digital connectivity and post-pandemic working patterns, it may also indicate more limited access to local employment opportunities within walking or cycling distance, reinforcing the importance of employment integration in new settlements.

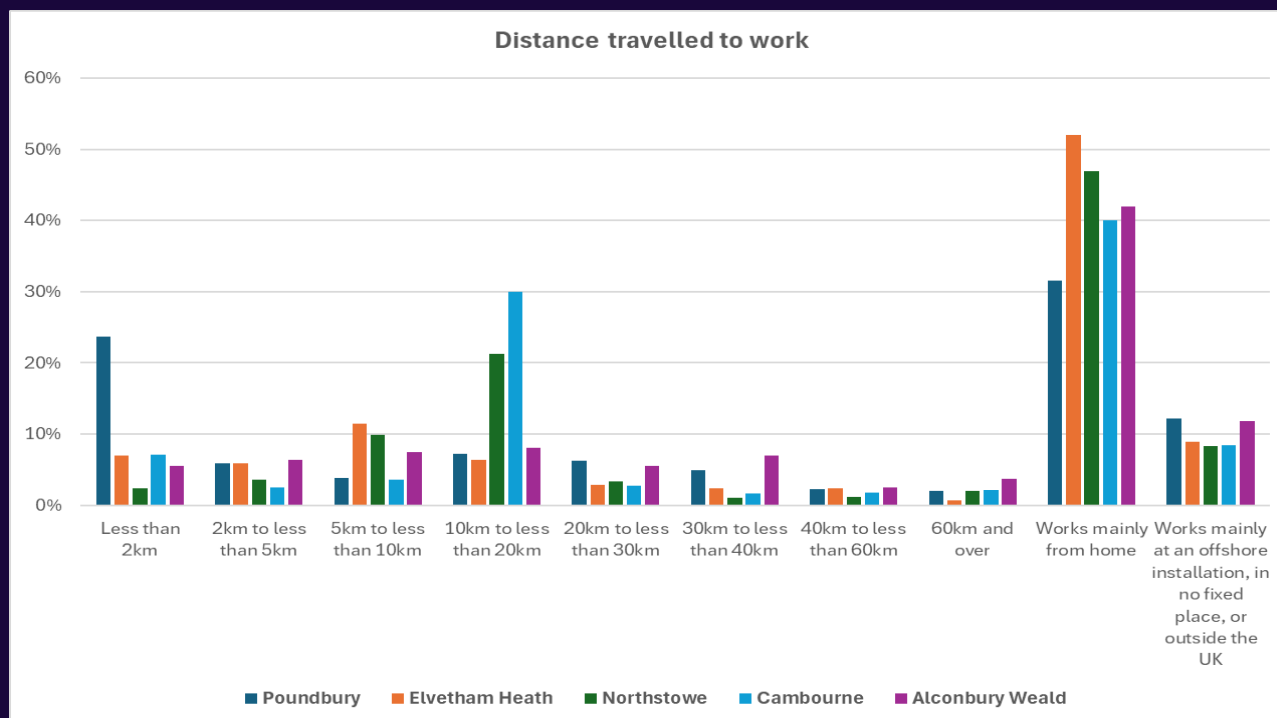
Cambourne exhibits a distinct commuting profile, with a notably high share of residents (30%) travelling between 10 and 20 km to work. This pattern suggests a greater dependence on external employment centres and longer-distance travel, consistent with more dispersed land-use planning and weaker job–housing balance. Alconbury Weald presents a more distributed commuting pattern, with moderate levels of both remote working and longer-distance commuting, reflecting its transitional development stage and evolving employment offer.

These variations underscore the role of settlement form in shaping travel behaviour and the viability of walkable, self-sufficient communities. Developments that integrate housing with employment, services, and amenities at a neighbourhood scale are more likely to support shorter commutes, active travel, and walkability, reinforcing the wider economic, health, and environmental benefits associated with well-designed, self-sufficient communities.

However, it is important to note that the ONS (2021) Census data used were collected in the post-COVID period, during which home working remained widespread, and therefore may not reflect typical or pre-pandemic patterns.

Overall, the comparison highlights that settlement form influences commuting distance, but proximity alone is insufficient to shift travel behaviour. Developments that integrate housing, employment, and services at neighbourhood scale are more likely to enable shorter journeys and support walkability, yet without stronger employment integration and transport alternatives, car dependency remains embedded. These findings underline the importance of aligning land-use planning, employment provision, and transport strategy to support genuinely

Figure 15: Distance travelled to work across selected case study developments (%), Source: 2021 Census for England and Wales (ONS 2021)



Case study comparison – Method of travel to work

Method to travel to work patterns reveal high car dependency across all 5 case studies, with driving remaining the dominant mode (see Figure 9). Poundbury is the only development with a notable share of walking commuters (17%), reflecting its more walkable, mixed-use layout.

Short commuting distances do not automatically translate into active travel

While Poundbury records the highest proportion of residents commuting less than 2 km, the mode share data show that private car use remains dominant even for short trips. However, Poundbury is distinctive in having a materially higher share of residents walking to work (around 17%), suggesting that proximity between homes, employment, and services creates the conditions for active travel, even if it does not eliminate car use entirely. This indicates partial success in supporting walkable commuting, rather than a wholesale shift away from driving.

Remote working significantly shapes observed travel patterns

High levels of home working in Elvetham Heath, Northstowe, Cambourne, and Alconbury Weald reduce overall commuting demand and partially obscure the relationship between settlement form and travel behaviour. In these locations, the lower share of short-distance commuting does not necessarily indicate long daily journeys for most residents but rather reflects a bifurcated pattern: a large proportion not commuting at all, and those who do commuting longer distances, typically by car.

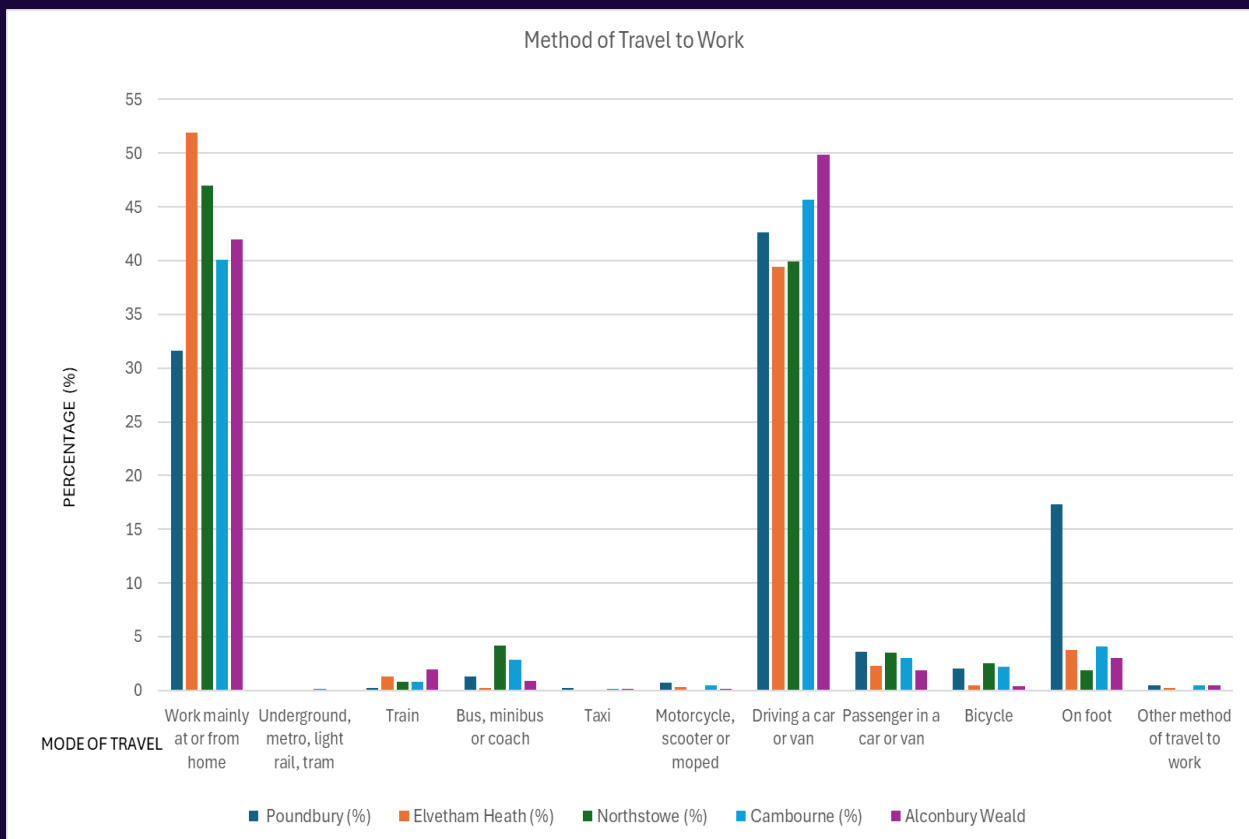
Longer-distance commuting reinforces car dependency

Cambourne stands out for its high proportion of residents travelling 10–20 km to work, which aligns closely with its strong reliance on car travel. This suggests limited access to nearby employment and reinforces a pattern of outward commuting to larger employment centres. Alconbury Weald shows a similarly car-dependent profile, with a more even spread across distance bands reflecting its evolving employment base and phased development.

Public transport remains marginal across all case studies

Across all developments, public transport accounts for a very small share of commuting journeys, regardless of distance travelled. This highlights structural challenges in providing competitive public transport in new settlements, particularly where densities, phasing, and employment patterns do not support frequent or direct services. As a result, even medium-distance trips that could theoretically be served by public transport continue to default to private car use.

Figure 16: Methods to travel to work across selected case study developments (%), Source: 2021 Census for England and Wales (ONS 2021)



Source data: 2021 Census for England and Wales (ONS 2021)

Travel to work modes: Poundbury in comparison with Dorset and England (see Table 3).

- Walk to work: Poundbury leads the way with 17.3% of residents commuting on foot, nearly double the national average of 7.6%, and 9.2% in Dorset¹.
- Car-lite living: Only 42.6% of Poundbury workers drive to work, well below Dorset's 53.9%¹.
- Design matters: Poundbury's walkable layout and mixed-use planning reduces car dependency, proof that urban form shapes travel behaviour.
- Built-in walkability: When walkable, mixed-use principles are embedded from the start, communities like Poundbury show it's possible to shift away from car-centric norms. Smarter urban design can halve car reliance and double walking rates compared to national trends.

Table 3: Travel to work modes in Poundbury comparison to Dorset and England, Source: 2021 Census for England and Wales (ONS 2021)

	Dorchester Poundbury Ward (as of 2022)		Dorset (Local Authority)		England (Country)	
	Count	%	Count	%	Count	%
Residents aged 16 years and over in employment the week before the census	1,594	100.0	167,777	100.0	26,405,214	100.0
Work mainly at, or from, home	503	31.6	47,397	28.2	8,321,252	31.5
Underground, metro, light rail, tram	0	0.0	103	0.1	504,716	1.9
Train	3	0.2	731	0.4	517,902	2.0
Bus, minibus or coach	21	1.3	1,888	1.1	1,129,539	4.3
Taxi	3	0.2	373	0.2	192,884	0.7
Motorcycle, scooter or moped	11	0.7	1,009	0.6	124,207	0.5
Driving a car or van	679	42.6	90,473	53.9	11,751,945	44.5
Passenger in a car or van	58	3.6	5,656	3.4	1,017,402	3.9
Bicycle	32	2.0	2,973	1.8	554,215	2.1
On foot	276	17.3	15,429	9.2	2,016,981	7.6
Other method of travel to work	8	0.5	1,745	1.0	274,171	1.0

4.1.3 The health value of walking

The relationship between walkability and health outcomes is robust and well-documented. Walkable environments promote physical activity as part of daily routines, reducing sedentary behaviour and associated chronic conditions such as obesity, cardiovascular disease, type 2 diabetes, and some cancers. A systematic review of Health Impact Assessments found strong evidence that walkability improvements reduce all-cause mortality and improve quality-adjusted life years (Westenhöfer et al., 2023). Likewise, studies by Baobeid et al. (2021) and Arup (2016) emphasise that better street design and walkable access to amenities increase regular walking, which is one of the most accessible and cost-effective health interventions.



In a study of 23 UK cities and urban areas, walking is estimated to prevent 4,444 early deaths annually, generating an economic benefit valued at £16.1 billion.

(Sustrans, 2023)

Mental wellbeing is also positively impacted by walkable environments, as they foster social interaction, reduce stress, and improve feelings of safety and belonging. Walkable public spaces, when combined with green infrastructure and active frontages, contribute to improved community cohesion and lower anxiety levels (Litman, 2023; Arup, 2016). Quantifying this, the Sustrans Walking and Cycling Index (2023) estimated that across 23 UK cities, walking prevents approximately 4,444 early deaths annually, a benefit valued at £16.1 billion. Moreover, inclusive walkability improves access for socioeconomically disadvantaged groups and supports equitable health outcomes. As walking is the most affordable form of mobility, improving walkable infrastructure directly supports social equity objectives, allowing all demographic groups, including children, the elderly, and those with disabilities to participate fully in community life (Litman, 2003; Cisneros, 2015). In essence, walkable environments should not be viewed as merely lifestyle enhancers or a luxury, they offer investment in the health of future generations, offering real health resilience and wellbeing.

Walkability, however, must be understood in relation to prevailing societal norms and behaviours. For many individuals, walking is perceived variously as a leisure activity, an inconvenient or time-consuming option, or simply an impractical mode of travel due to lifestyle pressures. Encouraging modal shift therefore requires more than infrastructural provision: it necessitates a sustained effort to shift attitudes, routines, and cultural expectations.

Moreover, walkability must be approached holistically and with empathy for the diverse ways in which people experience movement through space. Creating genuinely inclusive walking environments involves recognising variation in physical ability, sensory experience, confidence, and personal safety, as demonstrated in the extensive work of scholars such as Dr Geoff Cook. Designing for walkability is thus not solely a technical challenge but a socio-cultural one, requiring environments that are accessible, comfortable, and meaningful for all users.



Encouraging 1 in 10 mid-life adults in lower socioeconomic groups to incorporate just 10 minutes of brisk walking a day could prevent ~251 deaths annually and save £310 million per year.

5.2 Economic value

The economic value of place building should not be viewed as a secondary concern but as intrinsic to sustainable development. As an economic strategy, place building generates both tangible and intangible value that underpins growth, diversification, and resilience. By investing in place building, governments and institutions can leverage social and cultural capital to create long-term economic advantages at both national and regional levels. Whilst still in its infancy, there is thinking emerging around how place building, and more broadly sustainability, might be conceptualised as a *second currency* beyond current monetary products used.

At its core, place building enhances the attractiveness, functionality, and competitiveness of regions. This, in turn, influences patterns of investment, labour mobility, and innovation, while shaping the long-term trajectory of economic growth. In this sense, place building is not merely about physical design or cultural identity but about embedding economic vitality and resilience into the very fabric of communities and societies:

- **Attracting Investment and Talent:** Well-designed and vibrant places are magnets for both capital and people. Cities and towns that invest in inclusive public spaces, cultural institutions, and sustainable infrastructure tend to attract private investment and skilled labour. This is particularly relevant in the knowledge economy, where highly mobile workers prioritise quality of life, accessibility, and social amenities when deciding where to live and work. Evidence from urban economics shows that place quality is directly correlated with higher rates of inward investment, innovation, and entrepreneurship.
- **Enhancing Productivity and Innovation:** Place building also contributes to productivity gains by fostering proximity and interaction. Clusters of firms, research institutions, and cultural assets thrive in well-structured environments that encourage collaboration, knowledge exchange, and innovation. High-quality public spaces and transport

systems reduce transaction costs, facilitate mobility, and enhance the efficiency of economic networks. In this sense, place building is a form of “soft infrastructure” that supports hard economic outcomes.

- **Strengthening Local Economies and Tourism:** At a local level, investments in placemaking can revitalise underperforming districts, support small and medium-sized enterprises (SMEs), and boost cultural and creative industries. Distinctive places with strong identities also contribute to tourism revenues, as visitors are drawn not only to attractions but also to the overall experience of place. For smaller economies, such as Brunei, positioning through place building can help diversify economic activity and reduce dependency on resource-based sectors.
- **Generating Social and Fiscal Returns:** The economic value of place building extends to fiscal sustainability. Attractive and functional environments increase land and property values, broaden the local tax base, and reduce long-term public expenditure by mitigating social problems such as crime, poor health, or disengagement. Importantly, inclusive place building ensures that economic returns are distributed broadly across communities, reducing inequality and strengthening social cohesion—both prerequisites for sustained economic growth.
- **Long-Term Competitiveness and Resilience:** Finally, place building contributes to resilience by creating adaptable, sustainable environments. Investments in green infrastructure, walkable neighbourhoods, and inclusive community spaces help cities and regions respond to global challenges such as climate change, demographic shifts, and economic shocks. The capacity of a place to retain talent, attract investment, and support innovation in uncertain contexts is increasingly seen as a central measure of competitiveness.

At the heart of such strategies is the need to deliver affordable housing, ensuring that economic growth remains inclusive and that communities retain the workforce necessary for sustainable development.

5.2.1 Place-based economy

Place-based economy refers to an approach that anchors economic development strategies in the specific social, cultural, and environmental contexts of a given locality (Barca et al., 2012; Beer et al., 2020). Rather than relying on generic, one-size-fits-all growth models, place-based economies emphasise the unique assets, skills, and challenges of each place - whether a city, town, or rural community - and seek to harness these in ways that foster inclusive and sustainable development (Rodríguez-Pose, 2013). Within the framework of place building, this concept underscores the importance of aligning economic interventions with local priorities, governance structures, and identities to enhance resilience, social cohesion, and wellbeing (Pike et al., 2017). Place-based economies thus integrate economic development with spatial, cultural, and environmental considerations, enabling communities to leverage their distinctive characteristics to shape growth trajectories that are both equitable and contextually grounded. Such an approach challenges top-down economic planning by prioritising locally driven solutions, participatory governance, and cross-sector collaboration, ultimately contributing to the creation of more meaningful, prosperous, and inclusive places (Tomaney, 2014).



The average job density across Great Britain in 2022 was 0.86, indicating that many places do not provide enough employment opportunities for their resident populations - fuelling commuting and economic imbalance.

(OFFICE FOR NATIONAL STATISTICS, 2023)

A key expression of this philosophy is the promotion of local employment, ensuring that people have access to jobs within or close to their communities. Local employment strengthens place-based economies by reducing the need for long commutes, supporting local services, and reinforcing the social fabric of communities. According to the 2021 Census (ONS, 2021), the majority of people in England and Wales commute less than 10 km to work; with areas such as Barrow-in-Furness reporting that 76% of working-age residents are employed within a 5 km radius - well above the national average of 54%. This reflects the potential for stronger localised labour markets in certain regions. Job density, defined as the number of jobs per working-age resident, is frequently used to assess local employment capacity. The average job density across Great Britain in 2022 was 0.86, indicating that many places do not provide enough employment opportunities for their resident populations (ONS, 2023). Disparities are pronounced: urban centres such as Manchester (1.23) and Glasgow (1.03) operate as employment hubs with net in-commuting; while more peripheral or post-industrial locations, such as Rossendale (0.55)

and East Dunbartonshire (0.46), show significant deficits (ONS, 2023; Lancashire County Council, 2023). Such spatial imbalances in employment density undermine the goals of place-based development by exacerbating economic dependency, commuting stress, and inequality. In response, national strategies like the UK’s Levelling Up agenda have called for targeted interventions to stimulate job creation in underperforming areas, particularly through support for small and medium-sized enterprises (SMEs), local service economies, and investment in social infrastructure (DLUHC, 2022). Fostering local employment not only improves economic equity but also enhances the liveability, sustainability, and long-term resilience of communities by anchoring economic opportunity within the places people call home.

Case study comparison - Jobs and Business Provision

By 2028, Poundbury aims to accommodate 5,000 residents in 2,750 mixed-tenure homes, while supporting around 2,730 jobs across 250 businesses - delivering roughly one local job for every home built (Duchy of Cornwall, 2025).

Table 4 summarises the scale and form of employment provision across the five case study developments, highlighting variation in job numbers, business density and the spatial integration of employment uses. It shows how some schemes operate mainly as residential communities with limited local jobs, while others deliver substantial employment through mixed-use layouts, business parks or enterprise campuses. Poundbury provides a relatively high level of on-site jobs in a walkable, mixed-use format, with employment spaces woven through the settlement rather than concentrated in a single park.

Elvetham Heath and Northstowe Phase 1 function largely as residential communities, with small local centres and limited to no local employment, so many residents are likely to commute elsewhere for work. Cambourne, supported by Cambourne Park Science and Technology Campus, and Alconbury Weald both demonstrate how business and enterprise parks can deliver substantial job numbers as part of a wider growth strategy. However, employment is delivered through a zoned approach, with commercial activity concentrated in dedicated, spatially distinct areas rather than integrated within the residential fabric.

Taken together, the five case studies show that the quantum and character of employment provision varies significantly, from modest local-service jobs to strategic employment-led campuses. Mixed-use and employment-led models tend to support higher levels of on-site jobs than residential-led schemes, with implications for commuting patterns, local services and the overall sustainability of each development.

Table 4: comparative employment provision across the five case studies

Development	Estimated jobs (delivered / committed)	Businesses / units (approx.)	Employment provision summary
Poundbury¹	~2,730 jobs on site; c.200 construction jobs during build-out	>260 shops, cafés, offices, factories	Established mixed-use employment integrated across the settlement
Elvetham Heath²	Not publicly quantified	~10 small commercial units (estimate)	Primarily residential with limited neighbourhood retail and services
Northstowe (Phase 1)³	No dedicated employment area for Phase 1	Few local-centre units	Phase 1 largely residential; Enterprise Zone proposed in Phase 3
Cambourne⁴	around 1000 jobs from Cambourne Park Science and Technology Campus	over 40 companies across office/R&D/other from the business parks	Established business parks, potential to grow
Alconbury Weald⁵	~3,000 jobs planned / in delivery across commercial zones	~10 major occupiers on Enterprise Campus, coffee shop, supermarket (business park)	Strategic employment-led settlement with large-scale commercial space

¹[Poundbury economic impact and business numbers – Dorset Council / Duchy of Cornwall Economic Impact Assessment and web summaries.](#)

²[Elvetham Heath local centre business listings, mapping and associated planning / neighbourhood documents.](#)

³[Greater Cambridge Shared Planning information on Northstowe new town and associated Enterprise Zone.](#)

⁴[Greater Cambridge “Cambourne Growth Strategy Programme” economic study and South Cambridgeshire Cambourne retail and employment studies. Cambourne Park Science & Technology Campus – Life Science REIT case study and Cambourne Park website; “already home to over 40 companies, employing over 1,000 people”.](#)

⁵[Invest in Huntingdonshire and Alconbury Weald commercial / Enterprise Campus economic reports.](#)

Figure 17-20: Four examples of the urban form of commercial properties in Poundbury





5.2.2 Affordable housing

Affordable housing is a fundamental component of effective place building within a governance context because it directly influences social inclusion, economic diversity, and community stability. The very concept of what is meant by ‘affordable homes’ can be debated from a number of perspectives. The need to place a boundary, or create a category of homes that are affordable, by very definition translates into the homes outside that surely being unaffordable. This indicates deeper challenges regarding the market mechanisms created and mobilised to deliver housing and how sustainable that is.

Without access to homes that are affordable many individuals and families are priced out of areas with good jobs, services, and amenities, leading to spatial segregation and undermining the social cohesion that underpins vibrant places (Tsenkova, 2009). Likewise, the key workers, which society actually need in order to function but are often poorly paid, seem to be priced out of areas, with little voice or representation.

Moreover, affordable housing can support the long-term sustainability of communities by enabling residents to establish roots, participate actively in local governance, and contribute to the stewardship of their environment (Bramley & Karley, 2007). Integrating affordable housing within place-based governance frameworks ensures that visions for development are equitable and reflect the needs of diverse populations, thereby fostering shared ownership and resilience. Consequently, addressing housing affordability is not merely a matter of meeting demand but a strategic priority that shapes the inclusivity and liveability of places over time.

Affordable housing is a term used in the UK to describe housing that is provided at a cost deemed affordable to those whose needs are not met by the open market, typically households on low to moderate incomes (yet, often key workers such as teachers, carers, nurses and such). For the purpose of this report, this definition will be adopted. The definition encompasses various tenures and models of provision, and it is primarily shaped by government policy. According to the UK Government’s National Planning Policy Framework (NPPF), it is defined as ‘...housing for sale or rent, for those whose needs are not met by the market (including housing that provides a subsidised route to home ownership and/or is for essential local workers); and which complies with one or more of the following definitions’ and include (MHCLG, 2021, p.65):

- Social rent – typically set by local authorities and housing associations, at around 50% below market rates.
- Affordable or immediate rent – let at least 20% below local market rents (affordable rental properties) or let at rates set between market rents and social rents (intermediate rental properties).
- Shared ownership – a part-buy, part-rent scheme at least 20% below local market value to assist lower-income buyers.
- Rent to buy – tenants pay below-market rent with the option to buy later.

In academic literature, housing affordability is increasingly framed within broader discourses of accessibility, equity, and spatial justice. Gallent et al. (2018) argue that housing affordability should not be measured solely in terms of price levels or market benchmarks. Rather, it must be understood relative to household incomes, local housing costs, and the wider socio-economic and policy environment. This perspective highlights the importance of situating affordability within a framework that considers structural inequalities and varying capacities to access adequate housing. Building on this, Stone (2006) offers a more people-centred and needs-based definition of affordability. He asserts that, ‘a household is considered to have affordable housing if it can occupy adequate housing by spending no more than 30% of its income and still be able to meet other essential expenses.’ While this 30% threshold is widely cited in policy and academic literature, its applicability is contingent upon local contexts. Variations in housing tenure, household composition, and regional income disparities mean that affordability cannot be universally standardised. As such, the residual income approach, which focuses on what remains after housing costs are met, is increasingly advocated as a more nuanced measure.

Thus, in the UK, housing affordability remains a persistent and complex challenge. The crisis is underpinned by a combination of rising house prices, stagnating real wages, and an acute shortage of genuinely affordable social housing. Although affordable housing is now commonly delivered through planning obligations - specifically through Section 106 agreements - critics argue that such mechanisms are insufficient in both scale and scope to address the depth of housing need. Furthermore, the definition of ‘affordable rent’ as up to 80% of market rent has sparked significant debate, particularly when considering high-demand urban areas and associated costs. Research by Whitehead and Scanlon (2007) and more recently by Wilson and Barton (2023) argue that these rents remain unaffordable for many low-income households (many being key workers that enable our society to function), thus undermining the very purpose of affordability initiatives.

According to Homes England (2023), the median gross annual salary in England in 2002 was £20,739, while the median house price stood at £102,000, resulting in a house price-to-earnings ratio of approximately 4.92. Two decades later, in 2022, the median salary had risen to £33,208, while the median house price had reached £275,000, increasing the affordability ratio to 8.28. This widening gap illustrates the growing disconnect between household incomes and housing costs, making homeownership increasingly inaccessible to average earners in England. Financial products, e.g. mortgages, have not kept pace with this widening gap, but held in the region of mortgage value being a maximum of 4-5 times salary. This widening gap keeps home buyers in debt for longer, leaving less money to spend elsewhere across the economy.



In England, the house price-to-earnings ratio jumped from 4.9 in 2002 to 8.3 in 2022 - showing that homeownership has become much less affordable for the average earner over the past two decades.

(HOMES ENGLAND, 2023)

Compounding these pressures is the additional cost burden associated with the provision of infrastructure in the development of new towns and large-scale settlements. Transport networks, utilities, schools, healthcare facilities, and social infrastructure all require substantial upfront investment, which often inflates overall development costs and, in turn, the price of new homes. Without dedicated and equitable funding mechanisms, these infrastructure requirements risk being passed on to residents through higher housing costs, thereby further exacerbating affordability challenges. These tensions underscore the need for a more rigorous and context-sensitive approach to defining and delivering affordable housing. By grounding affordability in localised socio-economic conditions and explicitly accounting for infrastructure demands, planners and policymakers can move toward more equitable and sustainable models of urban growth that better align with principles of spatial justice.

Thus, the provision of affordable housing remains a central objective of national planning policy in England, particularly in the context of widening housing inequality and unmet demand. According to the National Planning Policy Framework (NPPF), local planning authorities are required to set policies for meeting identified affordable housing needs through development plans that are informed by robust evidence of local housing markets (Department for Levelling Up, Housing and Communities [DLUHC], 2023). While the NPPF mandates that at least 10% of homes on major residential developments (equating to 10 or more dwellings, or on land for housing 0.5 hectares or greater) be made available for affordable home ownership (e.g. shared ownership or discounted market sale), this is positioned as a minimum benchmark rather than a comprehensive requirement for all forms of affordable housing (NPPF, para. 65). In practice, many local planning authorities adopt higher thresholds - typically in the range of 20–40% of total dwellings - based on local need, land values, and viability assessments (Monk et al., 2020). However, these targets are frequently subject to negotiation, and in areas with high land or development costs, developers often cite viability constraints to reduce affordable housing obligations (Whitehead & Williams, 2018). As such, while the policy framework provides flexibility for context-sensitive planning, the actual delivery of affordable homes often falls short of need, contributing to continued housing affordability pressures across England (Wilson & Barton, 2023). This concern is underscored by the recent findings of Savills (2025), who conducted a comprehensive study of 71 large-scale residential developments across England, Wales, and Scotland. The sites were primarily situated on the outskirts of existing urban areas or within newly established settlements, each comprising a minimum of 1,000 dwellings and delivering housing over a period of at least five to ten years. The study ensured a geographically diverse sample, including both high- and low-value housing markets. However, despite the scale and longevity of these developments, the proportion of homes delivered as affordable tenures ranged from only 8% to 28%, with an average of 18%. This figure falls significantly short of the expectations outlined in the *National Planning Policy Framework* (NPPF; MHCLG, 2021) and is also well below that of Poundbury, where the proportion of affordable housing stands at 35% (Duchy of Cornwall, 2025).

Case study comparison – Affordability rate

Savills' 2025 study of 71 major housing developments across the UK reveals a stark shortfall in affordable housing - averaging just 18% (Savills, 2025). In contrast, Poundbury delivers nearly double that, at 35% (Duchy of Cornwall, 2025)

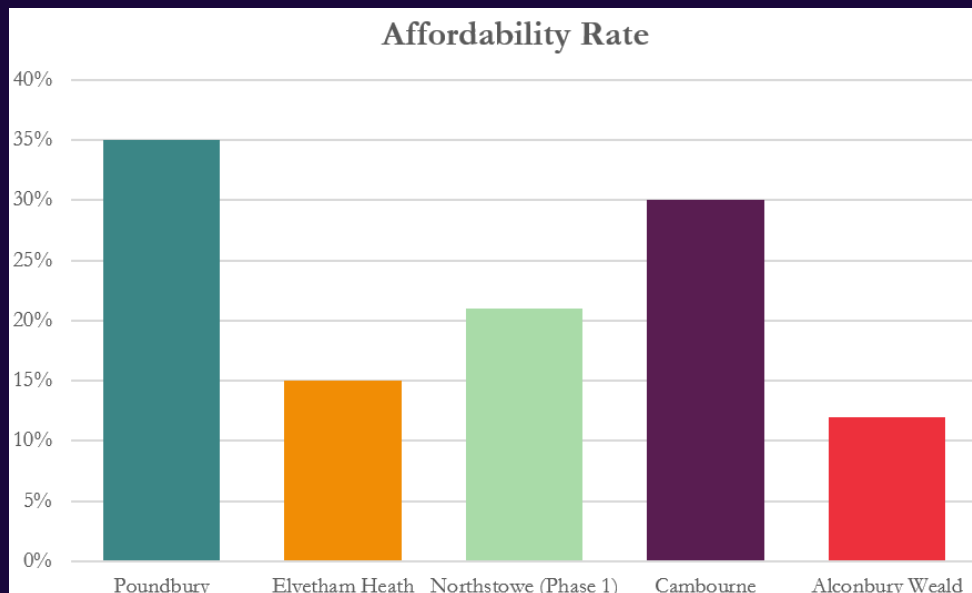
Building on this, the bar chart below highlights the variation in affordable housing delivery across the five case studies, using figures drawn from planning documents and available public data. Chosen for their similarity in size and the period in which it was developed, allowing for direct comparison with Poundbury, Poundbury significantly outperforms its counterparts and aligning closely with broader policy targets.

Figure 21 compares the proportion of affordable housing secured or delivered across the five case studies drawing on planning applications, Section 106 agreements, and official monitoring reports²⁻⁶.

The figure highlights a wide variation in delivery levels. Elvetham Heath³ and Alconbury Weald⁴ sit at the lower end, securing approximately 15% and 12% affordable housing respectively, reflecting the policy context and viability-led approach prevalent at the time of their approval. Northstowe (Phase 1)⁵, despite its designation as a new town, delivers only around 20–21% affordable housing, indicating that early phases were shaped by cautious viability negotiations rather than a strong place-led ambition. While later phases at Northstowe have sought to raise affordable housing targets, supported by Homes England's role as master developer, these ambitions are not yet reflected in completed delivery and therefore sit outside the scope of this comparison.

Cambourne⁶ performs more strongly at around 30% affordable housing, but still falls short of contemporary expectations for strategic developments. Poundbury² delivers approximately 35% affordable housing. Importantly, this level of provision was achieved without a fixed national policy requirement, instead reflecting a long-term stewardship-led development model that embedded mixed tenure as a core place-making principle.

Figure 21: Proportion of affordable housing across the 5 case studies



When benchmarked against the recent New Towns Taskforce recommendation (MHCLG (2025) for a minimum of 40% affordable housing, none of the case studies fully meet emerging policy ambition. However, Poundbury comes closest, illustrating that higher levels of affordable housing are achievable where land ownership, governance, and delivery models prioritise long-term community outcomes over short-term viability constraints.

¹Savills Report, 2025

²Poundbury

³ Elvetham Heath, Hart District Council (1999). Planning application ref. 99/01174/ADV

⁴Alconbury Weald

⁵Northstowe (Phase 1): South Cambridgeshire planning register (2014). Planning application ref. S/0388/12/OL

⁶Cambourne a, Cambourne b

5.2.3 Design quality

Design quality is a critical dimension of the economic value of place building, shaping not only the physical and social aspects of urban environments but also their long-term market performance and competitiveness. It reflects the extent to which the built form successfully integrates aesthetic, functional, social, and environmental considerations to create places that are attractive, resilient, and meaningful to users (Carmona, 2010; CABE, 2006). Attributes such as urban form, architectural character, permeability, and landscape integration collectively influence liveability and distinctiveness, which in turn drive demand, enhance property values, and support the local economy (Gehl, 2010; Lynch, 1960).

Beyond immediate financial returns, design quality generates broader and more diffuse forms of value that extend well beyond traditional development appraisals. High-quality places can yield what might be termed ‘secondary’ financial returns: the societal, environmental, and long-term economic benefits that arise when people live in healthier, more equitable, and more resilient environments. In the context of net-zero thinking - where impacts are understood across Scope 1, 2, and 3 emissions – thus, well-designed places contribute to reduced carbon footprints, lower energy demands, and more sustainable patterns of consumption and mobility. Living in a better ‘place’ ultimately supports a better society: one in which wellbeing improves, public services face reduced pressures, and wealth is distributed more equitably through strengthened local economies. These wider impacts reinforce the more conventional economic benefits of design quality. High-quality environments attract inward investment, stimulate tourism, and support diverse business activity. Walkable, mixed-use neighbourhoods generate agglomeration effects by boosting footfall and consumer spending, helping local shops and services to thrive (Montgomery, 1998). They also reduce long-term infrastructure and healthcare costs by enabling low-carbon lifestyles, active mobility, and the integration of green infrastructure (Beatley, 2000; Dempsey et al., 2011).

Importantly, design quality is not simply an aesthetic concern but a process of aligning spatial outcomes with user needs through participatory governance, interdisciplinary collaboration, and iterative design (Healey, 1997; Sandercock, 2003). Embedding design quality within governance frameworks -such as urban design codes or review panels - ensures accountability and consistency, which further reduces market risk for developers and investors (CABE, 2009).

However, the economic value of design quality is often under-recognised, partly because of its subjective and contested nature. Without robust evaluative frameworks that balance technical criteria with lived experience and cultural context, design quality risks being reduced to superficial aesthetics rather than a driver of long-term economic, social, and environmental returns (Carmona et al., 2010). Properly understood, design quality is not a cost but an investment that underpins the economic resilience and sustainability of place building.

Figure 22: Woodlands Cress, Poundbury



5.2.4 Place identity

Figure 23: Examples of the architectural style of Poundbury drawing heavily on traditional British styles, including Georgian, Regency, and local Dorset vernacular



Place identity is too a critical dimension of place building that carries not only social and cultural significance but also substantial economic value. It refers to the ways in which individuals and communities develop a sense of belonging, attachment, ownership and meaning in relation to their built and natural environments (Proshansky et al., 1983; Relph, 1976). Emerging from the interplay of physical form, cultural narratives, and lived experiences (Lynch, 1960; Massey, 1994), place identity shapes how people perceive and value their surroundings. This in turn influences demand for housing, visitor behaviour, and investment patterns, thereby contributing directly to local and regional economic performance.



Developments with a strong place identity not only sell faster and hold their value longer but also command 15–30% price premiums over generic estates. Identity-led design builds pride, stability, and resilience - turning neighbourhoods into lasting economic assets.

(KNIGHT FRANK, 2021)

A strong place identity enhances market distinctiveness, setting developments apart from standardised housing estates that dominate the UK market. Studies consistently show that neighbourhoods with a distinctive character can command housing price premiums of 15–30% compared to more generic developments (CABE, 2002; Knight Frank, 2020). Similarly, research by Savills (2019) highlights that walkable, mixed-use neighbourhoods with a clear sense of identity enjoy faster sales rates and higher long-term value retention. Such evidence demonstrates how identity-led development can both accelerate market absorption and ensure lasting asset value. For residents, a strong sense of identity fosters attachment and pride, encouraging long-term settlement and reducing population churn, which enhances community stability and resilience (Lewicka, 2011).

The claims advanced by CABE and Knight Frank (see CABE, 2002; Knight Frank, 2020) highlight a fundamental tension at the heart of contemporary housing delivery. On one hand, potential buyers increasingly struggle to access home ownership, with average house prices now exceeding eight times the average national salary - a level widely regarded as unaffordable for most first-time purchasers. On the other hand, stakeholders such as developers and landowners often point to evidence that strong place identity can command price premiums of up to 30%. Thus, this juxtaposition raises an uncomfortable but necessary question: is the language of *place identity* being deployed primarily as a vehicle to maximise returns, thereby exacerbating affordability pressures and locking prospective homeowners into ever larger and longer-term mortgages? The jury, however, remains open on this given the balance of local materials and aspects of vernacular architecture.

Architectural distinctiveness is central to this economic value. In England, Georgian terraces, Victorian townscapes, and other historically distinctive environments have become enduring economic assets, generating premiums in property markets and long-term tourism revenue. Regional distinctiveness, shaped by local materials, traditions, and craftsmanship, similarly contributes to resilience by embedding developments within their cultural and environmental contexts (Homes England, 2024). Contemporary arguments for returning to local materials and skills reinforce this point: such practices not only reduce the carbon footprint of construction but also create skilled local employment and reinforce market differentiation (Global ABC, 2025; Real Homes, 2024; Farmer, 2016).

However, constructing place identity requires careful governance. When imposed superficially, it risks producing inauthentic or exclusionary outcomes, particularly in contexts of redevelopment, gentrification, or globalisation (Massey, 1994; Cresswell, 1996). Participatory design processes are therefore essential to ensure that place identity reflects lived experiences and local narratives rather than top-down branding exercises (Healey, 1997; Sandercock, 2003). Yet, the financial, legal and organisational ‘might’ of such top-down branding ‘machines’ may be hard to repel. Embedding inclusive approaches, planners and policymakers must ensure that place identity functions not only as a cultural asset but also as an economic one - driving housing demand, business vitality, and long-term community resilience.

Table 5: Architectural building styles of England

Region	Architectural building style
The Weald (covering Kent, East Sussex, West Sussex, Surrey, Hampshire)	Chalk hills in the area offered oak and clay as the main resources for traditional buildings. As iron smelting gradually depleted the forests, there was a shift towards utilising locally made brick and tile. To preserve oak resources, lath was employed between timber frames, while tiles were applied on the outer surface, resulting in ornamental tile hanging featuring recurring patterns, which became a distinctive feature of the region. Flint is also extensively utilised, often in conjunction with brick.
East Anglia (covering Essex, Suffolk, Norfolk, Cambridgeshire, Hertfordshire)	Boasting some of the most recognisable regional architectural designs, the area is adorned with numerous timber-framed buildings crafted from the plentiful oak sourced from the clay-rich surroundings. Traditional wattle and daub structures were commonly adorned with natural plaster or whitewash finishes. However, starting from the 18th century, vibrant colours began to grace the exteriors, contributing to the picturesque streetscapes. Another notable local craftsmanship is pargeting, characterised by intricate patterns delicately formed from plasterwork for decorative purposes.
West Midlands (covering Warwickshire, Herefordshire, Worcestershire, Shropshire)	The fertile, moisture-rich soils of the West Midlands nurture robust oak trees, contributing to the region's reputation for some of England's most intricately designed timber-framed buildings. Often dubbed the 'black-and-white counties' due to the distinctive appearance of these structures, they are cherished for their architectural charm. Many of these buildings are renowned for their decorative panels, often crafted from brick, which are commonly integrated into the half-timbering. However, in other areas of the region, red brick emerges as the prevailing vernacular style.
Northwest (covering Cheshire, Cumbria, Lancashire)	In contrast to the southern regions of England, the Lake District and Peak District boast abundant reserves of stone. While some red sandstone can be found in the southern areas, much of the stone in these regions tends to be dark in colour. The carboniferous stones of the Pennines and the ordovician stones and granites of Cumbria exhibit little variation in colour, with shades of grey prevailing. Moving eastward towards the Pennines, the stone exhibits slightly more diversity, with towns with pinkish-grey buildings and honey-grey hues. Historically, this region was not affluent before the industrial revolution, resulting in the construction of pragmatic, no-frills square buildings using hard stone and slate.
East Midlands (covering Derbyshire, Northamptonshire, Rutland, Lincolnshire)	The oolitic limestone found in the Cotswolds winds its way up to the East Midlands. The result is many honey-coloured buildings being built in stone. These were traditionally graced with a thatched roof. However, in later years slate began to be used for roofing.
West Country (covering Devon, Dorset, Somerset, Cornwall)	Is among the most diverse of regions in English building history. Unlike the south-east, there was plenty of building stone. The hard granite of Dartmoor was being used in modest buildings from the 1300s, while elsewhere cob (a mixture of mud, pebbles and straw) dominated. By the 17th Century, all stones in the region were being exploited – from soft red sandstones to harder yellow sandstones, blue Lias and honey-coloured oolite. Somerset is characterised by its limestone houses in a honey-brown colour. Heading further west, stone reigns supreme. Meanwhile in Cornwall, slate and granite form the main building stones of houses.
Northeast (covering Northumberland, County Durham, North Yorkshire, East Yorkshire)	Abundant in building stone, the region initially relied on earthen walls supported by slender saplings before the affordability of stone and brick in the 1600s. The sturdy carboniferous stone of the Pennines contrasts sharply with the stone found in Yorkshire, which varies from the softer limestone in the North Yorkshire Moors to the marginally porous limestone along the West side of the Vale of York and the sandstone further East. Stone-built towns characterize Yorkshire, showcasing the region's diverse stone resources. The contrast in stone across the region is striking.
The Cotswolds (covering Gloucestershire and Oxfordshire)	Defined by Jurassic limestone bedrock, evident in the warm golden hue of traditional carved buildings. Cotswold limestone, known for its versatility and ease of use, is found in a variety of structures, from sleek stately homes to rustic barns and cottages, showcasing its adaptability in construction.

The historical relationship between regional geology, material availability and vernacular building traditions across England is summarised in Table 5, illustrating how place identity has long been embedded in construction practices (Brunskill, 2000; Pevsner, 1974).

Conversely, contemporary developments in England have increasingly been criticised for their detachment from local architectural character, and thus, place identity. Unlike traditional forms that evolved in dialogue with regional materials, climatic conditions, and socio-cultural practices, much of today's new-build housing and urban infrastructure adopts a generic, homogenised aesthetic often dictated by cost-efficiency and standardised construction methods (Carmona, 2019). This has led to the proliferation of what has been termed 'placeless' architecture - developments that lack contextual sensitivity and fail to reflect the historic or vernacular language of their settings (Worpole, 2000; Farrell, 2014). The ubiquity of bland, formulaic housing estates across English towns and suburbs exemplifies a disconnection from the architectural vernacular, eroding distinctiveness and undermining a community's sense of belonging (Samuel, 2010). As critics have argued, the absence of a rooted stylistic approach contributes to environments that feel transient, disengaged, and ill-suited to fostering social and spatial cohesion (CABE, 2007).

In response, the reintroduction of *pattern books* - design guides rooted in local architectural styles and materials - is proposed as a means of re-establishing a stronger sense of place. These tools, historically used in Georgian and Victorian town planning, have re-emerged in recent policy discourse, such as in the National Model Design Code (MHCLG, 2021), to promote design that is both locally responsive and publicly supported.

Notably, the New Towns Taskforce Recommendation 4 explicitly recommends that *"Each new town recommends should have a clear long-term vision for creating a well-designed and distinctive place, supported by a town-wide strategic masterplan and design code to ensure placemaking quality."* (MHCLG, 2025). The Taskforce further emphasises the importance of meaningful community engagement in shaping design outcomes, drawing explicitly on lessons from the National Model Design Code Pilot Programme (DLUHC, 2022) to demonstrate how co-production can improve design quality and foster local ownership (Recommendation 13; MHCLG, 2025).



The New Towns Taskforce report is clear: successful new towns require a long-term placemaking vision, underpinned by strong design frameworks and meaningful community co-production to ensure quality and local ownership.

(MHCLG, 2025)

Within this framework, pattern books can operate as a complementary layer to statutory design codes, translating strategic design principles into clear, locally grounded guidance that bridges tradition and innovation. When developed collaboratively with communities and adapted to modern needs, pattern books can bridge the gap between tradition and innovation, offering a framework for delivering contextually sensitive and visually coherent developments (Boyko & Cooper, 2011). In doing so, pattern books not only enhance design quality and place identity but also offer greater clarity and predictability for developers, thereby supporting efficiencies across the construction industry as a whole.

Case study comparison

Table 6: Architectural style and material use across the case studies

	Architectural style	Materials
Poundbury¹	The architecture draws heavily on traditional British styles, including Georgian, Regency, and local Dorset vernacular, to create a cohesive and familiar aesthetic.	Use of traditional materials reflecting the Dorset vernacular like local Hamstone, Purbeck, Portland and Marnhull Quarries, handmade or stock brick in English/Flemish bond, lime-based render, natural slate and clay tiles, painted timber joinery and cast-iron/aluminium rainwater goods. With a Design and Community Code that prohibiting modern substitutes such as concrete interlocking tiles, visible uPVC, stretcher-bond brickwork and incompatible repairs.
Elvetham Heath²	Modern residential development featuring a mix of architectural styles, primarily drawing from Victorian, Edwardian, and Arts and Crafts influences, along with some modern design elements.	Predominantly red and buff brick, timber detailing, tile-hung gables, pitched slate tile roof.
Northstowe (Phase 1)³	A contemporary architectural design and layout based on perimeter blocks, a loose street grid and mixed-density neighbourhoods. Architectural expression is diverse through multi developer delivery, but controlled by the Design Code, allowing multiple typologies and some MMC/modular housing and simplified detailing.	Materials follow a simple contemporary palette, with the Design Code requiring one predominant façade material and no more than two per elevation. Typical housing uses buff and red brick, occasional light-coloured render, selective fibre-cement or metal cladding, modern roof tiles (including slate-effect), and contemporary window frames. Civic and community buildings use brick in combination with cladding and glazing.
Cambourne⁴	The development does not follow a single architectural style but instead features contemporary housing. Delivery by multiple developers has resulted in noticeable variation, with some phases adopting more standardised mass-market forms and simplified detailing.	Extensive use of red and buff brick, areas of render, tiled pitched roofs (often concrete tiles), and uPVC or painted timber windows. Some parcels incorporate more contemporary treatments, such as simplified brick bonds, occasional cladding, or reduced ornamentation, reflecting builder variation and cost considerations.
Alconbury Weald⁵	A blend of contemporary design with traditional influences, offering diverse house styles from various builders. No single architectural style; instead, a flexible mix of typologies coordinated through the masterplan	A mix of modern and traditional materials, including brick (e.g. Forticrete), aluminium or metal cladding, engineered timber, and high-performance construction standards (high insulation, underfloor heating). The enterprise campus, Civic buildings, such as The Pavilion use contemporary cladding and glazing.

Note: Qualitative observational analysis of built form and material use, informed by review of planning documents, developer material, and systematic observation of completed development phases using publicly available imagery and site records.

¹ [Poundbury Design and Community Code](#).

² [Elvetham Heath, Hart District Council \(1999\). Planning application ref. 99/01174/ADV](#)

³ [Northstowe Design Code:: Northstowe KPI Strategic Design Code](#)

⁴ [Cambourne Planning application, Cambourne doc](#)

⁵ [Urban&Civic. Alconbury Weald Masterplan and Design Codes](#)

Table 6 compares the architectural styles and material palettes reportedly implemented across the case studies. Only images of Poundbury are included in this report. Readers are therefore invited to reflect on the other case studies and consider whether they demonstrate comparable levels of architectural coherence, place identity, and overall quality - particularly in terms of whether they create places in which people would choose to live.

This evaluation is set against a backdrop of persistent and well-documented concerns regarding the declining architectural quality of housing in England (CABE, 2009; Farrell, 2014; Goodchild., 2021). Contemporary housing delivery is frequently characterised by formulaic design, weak material palettes, and limited responsiveness to local context, resulting in developments that are visually generic and poorly differentiated (CABE, 2007; Carmona et al., 2017). The dominance of volume-led delivery models, coupled with inconsistent and often weak design governance, has too often produced housing that meets minimum technical standards but fails to contribute positively to placemaking, long-term civic value, or residents' sense of belonging (Farrell, 2014; Building Better, Building Beautiful Commission, 2020). This underscores the importance of interrogating alternative approaches that demonstrably prioritise architectural quality, coherence, and place identity.

Figure 24-27: Examples of the architectural style of Northstowe showing a contemporary and diverse architectural design





Figure 28-33: Examples of the architectural variation of Cambourne







Figure 34-39: Examples of the architectural variation of Alconbury Weald







5.3 Environmental sustainability

The western world (or global north) typically enacts what is referred to as *weak sustainability*, shaped by and entrenched in a 350-year egocentric paradigm (Larsen, 2025). Environmental sustainability refers to the capacity of the built environment to minimise ecological impact, enhance climate resilience, and adapt to long-term environmental changes. It encompasses strategies aimed at reducing energy consumption (rather than seeking better energy sources), lowering carbon emissions, and preserving natural resources, while ensuring that places remain liveable, functional, and equitable. Finally, in doing so, it also considers the construction industry at large, which plays a critical role in shaping sustainable outcomes through material choices, construction methods, supply chain practices, and lifecycle thinking - recognising that meaningful progress requires systemic change across the sector (moving toward what is referred to as *strong sustainability* and a more ecocentric paradigm).

Central to the concept of environmental resistance is the integration of green design principles, such as energy-efficient systems, passive solar orientation, green roofs, sustainable drainage, and low-impact materials; which collectively mitigate environmental degradation and support ecological regeneration (Vale & Vale, 2014; Kibert, 2016). This approach promotes not only ecological balance but also long-term sustainability by embedding environmental considerations into the core of spatial and architectural design.

A critical dimension of environmental resistance is adaptability: the capacity of buildings and public spaces to accommodate changing climatic, technological, and social conditions over time without necessitating extensive reconstruction or wasteful retrofitting (Brand, 1995; Wilkins et al., 2020). This adaptive potential is particularly relevant given the increasing reliance on sustainability assessments and energy performance metrics - such as BREEAM and other environmental certification frameworks - which evaluate developments across both project-specific and regional contexts (BRE, 2021; UKGBC, 2023).

Ultimately, environmental resistance encompasses the broader ability of the built environment to absorb and respond to pressures such as climate change, resource depletion, and ecological disruption. By embedding resilience and flexibility into the physical and functional characteristics of place, this approach fosters development practices that are not only environmentally responsible but also future-oriented.

Furthermore, regional variations in *construction practices* and resource availability influence how environmental resistance is embedded in place building strategies. For instance, regions with higher flood risk may prioritise sustainable drainage systems and permeable surfaces, while urban heat island zones may incorporate more extensive green infrastructure and shading systems (Davoudi et al., 2009). The UK's net zero targets and the increasing emphasis on whole-life carbon assessments in planning policy further underscore the need to align place building with environmental resilience and long-term sustainability goals (HM Government, 2023).

In summary, environmental resistance in place building is not merely about minimising harm; it is about designing and maintaining places that can endure, adapt, and thrive within the ecological limits of their context. It demands integrated planning approaches that consider local environmental risks, energy choice and performance, material life cycles, and the broader socio-environmental impacts of development.

In addition, environmental resistance in place building also encompasses the capacity of the built environment to withstand and adapt to evolving environmental, economic, and operational pressures in a way that enhances the effectiveness and efficiency of the construction industry itself. This includes adopting resilient design and construction practices that not only reduce ecological impact but also improve long-term performance, minimise lifecycle costs, and support innovation in materials, technologies, and delivery processes. By aligning sustainability goals with industry efficiency, environmental resistance contributes to a more adaptive, responsive, and future-proof built environment.

The use of regionally sourced materials and local construction teams also plays a vital role in enhancing environmental resistance. Employing local materials - such as timber, stone, or slate - reduces embodied carbon through shorter transport distances, supports vernacular building traditions, and ensures that developments are suited to local climatic and ecological conditions (Yung et al., 2014; Larkham, 2003). Involving local construction teams fosters regional skills development, increases the likelihood of place-sensitive design, and strengthens community ties to the built environment, thereby supporting both environmental and social sustainability objectives (Manzi et al., 2010; Power, 2016).

These strategies gain further relevance in the context of regional planning and climate adaptation, where variations in geography and environmental risk (such as flood-prone lowlands or heat-vulnerable urban centres) demand context-specific construction solutions. By aligning materials, labour, and design with local environmental capacities and cultural knowledge, place building becomes more resilient, efficient, and rooted in the identity of the region.

Case study comparison

All homes in Poundbury have achieved top sustainability ratings (BREEAM EcoHomes Excellent and National Home Energy rating of 10; Duchy of Cornwall, 2011), demonstrating that highly energy efficient housing can be seamlessly integrated into traditional British architecture. Table 7 shows the comparison of the 5 cases using publicly available data.

Table 7: Environmental sustainability indicators across the case studies

Case Study	BREEAM ²	National Home Energy rating	Energy Efficiency Rating (EPC) ³	SuDS Scheme ⁴
Poundbury	BREEAM EcoHomes “Excellent” ¹ BREEAM “Excellent” and “Very good for retails	10	A - C	SuDS scheme in North West Quadrant ⁵
Elvetham Heath	-	-	C - D	Susdrain - Neighbourhood-scale SuDS scheme
Northstowe (Phase 1)	BREEAM “very good” and “good” for schools and retails	-	A - C	-
Cambourne	BREEAM “very good” and “good” for school and retails	-	B - D	Lamb Drove SuDS scheme
Alconbury Weald	BREEAM “Very Good” for School and retails	-	A - C	SuDS 'management train'

Note: BREEAM certification is primarily available for non-residential buildings; residential energy performance is therefore assessed using available EPC data.¹Duchy of Cornwall, 2011

²BREEAM Certified Projects Database

³(UK Government (2024) Energy Performance of Buildings Register, available via gov.uk EPC database.

⁴Susdrain case studies

⁵Duchy of Cornwall, 2020

The comparison demonstrates that environmental sustainability across the case studies is predominantly delivered through selective, asset-based interventions, rather than as a consistently embedded, place-wide strategy. With the exception of Poundbury, sustainability measures are applied unevenly, most commonly concentrating on non-residential buildings such as schools and retail assets through BREEAM certification, while residential development is subject to more variable and less transparent performance standards. Sustainable drainage systems emerge as the most consistently implemented environmental measure across all settlements, reflecting a strong policy focus on flood risk mitigation rather than a holistic approach to environmental resistance.

While more recent developments such as Northstowe and Alconbury Weald exhibit improved EPC outcomes aligned with contemporary regulatory expectations, the absence of comprehensive residential sustainability metrics, highlights a continued fragmentation between environmental policy ambition and place-building practice. In contrast, Poundbury illustrates a more integrated model, where energy performance, urban form, landscape infrastructure, and long-term stewardship are aligned within a coherent spatial and governance framework.

Overall, the table evidences a prevailing weak sustainability paradigm, in which environmental measures primarily seek to reduce harm or manage risk rather than transform development systems. This reinforces the argument that achieving environmental resistance in place building requires a shift toward strong sustainability, embedding energy performance, adaptability, material life cycles, and environmental infrastructure across entire settlements rather than treating sustainability as a series of discrete technical compliances.

5.3.1 SME housebuilders

The role of small and medium-sized enterprise (SME) housebuilders in the UK housing sector has declined dramatically over the past four decades. In 1988, SME builders were responsible for approximately 39% of all new homes constructed in England. By 2023, this figure had dropped to under 10%, representing an estimated 80% reduction in the number of active SME firms since the late 1980s (Home Builders Federation, 2023; House of Lords, 2022). This contraction has been driven by a combination of structural barriers including restricted access to land, limited financing options, planning delays, and regulatory complexity, which disproportionately affect smaller developers compared to larger national firms (Federation of Master Builders, 2020). The 2008 financial crisis further accelerated this trend, as credit conditions tightened and risk-averse lending practices became standard across the sector.



SME housebuilders now deliver less than 10% of new homes in England - down from 39% in 1988 - marking an 80% collapse in their numbers since the late '80s.

(HOME BUILDERS FEDERATION, 2023)

The decline of SMEs has had significant implications for housing delivery, market diversity, and local economic resilience. Smaller housebuilders have traditionally operated at a more localised scale, contributing to a more granular pattern of development and often working on infill or smaller brownfield sites that fall below the threshold of interest for volume builders. Their withdrawal has contributed to the consolidation of the housing market, where a small number of large firms dominate supply. This concentration has raised concerns about reduced competition, standardised design approaches, and slower build-out rates due to the market absorption strategies employed by major developers (Letwin, 2018). The choice between local builders and national volume housebuilders has significant implications for housing delivery, local economic development, and the long-term success of place building. The differences lie not only in scale and capacity, but also in funding models, employer relationships, and underlying intentions.

Firstly, in terms of funding models and strategic intentions, national housebuilders dominate the UK housing market and are typically funded through equity capital, retained profits, and large-scale borrowing (Letwin, 2018; Henneberry & Parris, 2013). Many are publicly listed companies accountable to shareholders, which drives a strong emphasis on profitability, land value capture, and shareholder returns (Lyons, 2014). This funding structure incentivises risk-averse development strategies that prioritise standardised products, large-scale buildouts, and economies of scale (Ball, 2010; Ball, 2011) - with little consideration of place building. As a result, the strategic intention of national firms is often aligned with financial optimisation rather than maximising long-term place value.

By contrast, local and regional builders tend to rely on bank loans, private investors, or family-owned capital structures, thus lowering the centre of gravity. With smaller financial bases and closer community ties, these firms are embedded in local economies and reputations (Federation of Master Builders, 2017). Their intentions are often more balanced between financial return and community stewardship, as their long-term viability depends on sustained trust and presence in local markets (Carmona et al., 2021).

Employer relationships and local economic impacts is another key consideration. Funding models also shape employer relationships. National housebuilders often rely on centralised procurement and national or international supply chains to maximise efficiency and reduce costs (Department for Business Innovation & Skills, 2013; Harris, 2013). While effective at scale, this approach can limit the retention of value within local economies and reduce opportunities for local subcontractors. Research on construction supply chains highlights the fragmented nature of UK housing delivery and the consequences of limited integration between contractors and subcontractors on productivity and workflow (Arashpour et al., 2014; Briscoe, Dainty & Millett, 2001). Local SMEs, however, are more likely to employ regional labour, source materials locally, and work with nearby subcontractors, generating stronger multiplier effects for the local economy (Competition and Markets Authority, 2024; Shahparvari & Fong, 2018; Mossman, 2009). This embeddedness also enables stronger relationships with training providers and apprenticeships, contributing to workforce development and resilience (Farmer, 2016).

From a Place Building perspective, these differences matter. National builders' emphasis on shareholder returns can drive land speculation and uniform development, often resulting in housing products that meet financial objectives but do not

necessarily contribute to long-term community cohesion or local economic sustainability (Carmona et al., 2021). SMEs by contrast, are more likely to align development with local needs, support skills development, and reinforce local supply chains. While their capacity to deliver at volume is more limited, they contribute to the resilience and inclusivity of the housing ecosystem.

Reinvigorating the SME sector is increasingly recognised as a policy priority to diversify the housing market, improve design quality, and accelerate delivery. Several government initiatives, including the Housing Growth Partnership and the Levelling Up and Regeneration Act 2023, have sought to address some of the systemic barriers facing smaller builders. However, evidence suggests that without more fundamental reforms - such as land market intervention, streamlined planning processes, and targeted financial support - the recovery of the SME housebuilding sector is likely to remain limited. As such, the decline of SMEs represents not just a shift in market structure, but a missed opportunity to deliver more locally responsive, sustainable, and inclusive forms of place-based development.

Policy responses should therefore aim to rebalance incentives. Encouraging national housebuilders to deliver stronger local employment, skills training, and supply-chain commitments would enhance their contribution beyond housing numbers. At the same time, supporting SMEs through better access to land, finance, and procurement systems can strengthen their capacity to compete (Federation of Master Builders, 2017). A hybrid ecosystem of both national and local actors offers the most sustainable path forward-delivering housing at scale while embedding economic, social, and cultural value in the places being built.

5.4 Social cohesion



Between October 2023 and March 2024, 7% of adults in England - around 3.1 million people said they often or always felt lonely.

(DEPARTMENT FOR CULTURE, MEDIA AND SPORT, 2024)

Social cohesion is a critical dimension of place building, referring to the strength and quality of relationships, networks, and social capital that bind individuals and communities together within a physical environment. It encompasses both formal and informal interactions, and plays a central role in fostering cohesion, resilience, and collective agency in shaping local development (Putnam, 2000; Forrest & Kearns, 2001). In a study in 2024, 7% of adults in England (around 3.1 million people) reported that they often or always felt lonely (Department for Culture, Media and Sport, 2024). In the context of place building, socially connected communities are more likely to engage in participatory planning processes, maintain shared spaces, and contribute to local wellbeing and safety (Dempsey et al., 2011). Urban design and spatial planning that prioritise walkable neighbourhoods, inclusive public spaces, mixed-use development, and community facilities can significantly enhance opportunities for interaction and relationship-building (Gehl, 2011; Manzi et al., 2010). Conversely, poorly connected environments - both socially and physically - can lead to isolation, reduced trust, and declining civic engagement (Klinenberg, 2018). As such, embedding social connectivity into place-based strategies is essential for creating vibrant, inclusive, and sustainable communities and includes the following dimensions:

- Mixed use developments
- Community participation
- Governance
- Stewardship
- Digital connectivity

Figure 40-41: Examples of integrated community facilities and spaces in Poundbury



5.4.1 Mixed use developments

Mixed-use development refers to the integration of residential, commercial, cultural, and recreational functions within a single urban area, street, or building complex (Grant, 2002; Talen, 2012). It challenges the legacy of mono-functional zoning, dominant in much of 20th-century UK planning, which tended to separate residential, commercial, and civic activities into rigidly defined areas. In contrast, mixed-use development creates multi-functional places that support diverse activities across both spatial and temporal dimensions. Such environments enhance social interaction, economic resilience, and spatial efficiency (Cilliers et al., 2011; Madanipour, 1996). This compact and multifunctional urban form is historically evident in European towns and has been revived in contemporary models such as Poundbury in the UK. By intensifying land use, supporting local economies, and fostering vibrant communities, mixed-use development provides a more dynamic and sustainable alternative to traditional zoning (Jacobs, 1961; Calthorpe, 1993).

From a spatial perspective, mixed-use design enables overlapping activities such as living, working, leisure, mobility, and ecological processes within compact and adaptable forms. Public squares, for example, may serve as marketplaces during the day and performance venues at night, while integrated neighbourhoods can combine housing, retail, and community services. These configurations reduce underutilised land, promote a sense of safety through continuous activity, and enhance engagement between diverse groups of users (Gehl, 2010). Importantly, multifunctional urban design also advances environmental objectives. Green infrastructure can, for example, provide stormwater management, recreation, and biodiversity enhancement within a single intervention, embedding ecological value alongside social and economic functions (Benedict & McMahon, 2006).

Place building, understood as the deliberate creation of urban environments that are attractive, functional, and socially cohesive (Carmona et al., 2010), is fundamentally strengthened by mixed-use approaches. People derive greater value from places that support multiple functions and activities. Mixed-use development enhances the economic, social, and environmental dimensions of place building by increasing footfall to sustain local businesses, encouraging spontaneous social interaction, and strengthening community cohesion (Ewing & Cervero, 2010; Jacobs, 1961). By locating homes, workplaces, and amenities within close proximity, mixed-use design reduces reliance on private vehicles, promotes walkability, and lowers environmental impacts (Cervero & Kockelman, 1997). Moreover, the presence of people throughout the day and evening contributes to safety, vitality, and a stronger sense of place (Jacobs, 1961; Talen, 2012).

By contrast, traditional zoning tends to generate spatial monotony, car dependency, and limited opportunities for social exchange (Calthorpe, 1993). Segregating land uses can create “dead zones” during non-business hours and restrict the diverse, layered interactions that underpin lively and resilient urban environments. While zoning offers regulatory clarity and administrative simplicity, it constrains the multifunctionality necessary to fully realise the benefits of place building.

In conclusion, mixed-use development is central to the success of place building. By integrating residential, commercial, and recreational functions, it not only supports economic growth but also fosters social interaction, environmental sustainability, and inclusivity. Multi-functionality must also be understood as socio-political: it broadens access across age, ability, culture, and income, reducing exclusion and strengthening social cohesion (Talen, 2002). However, achieving genuine multifunctionality requires more than co-locating different uses. It demands design sensitivity, participatory governance, and careful management to balance competing priorities and ensure equitable outcomes (Carmona, 2019). Without such measures, spaces risk becoming superficially mixed but functionally exclusive. Thus, multi-functionality should be viewed as both a spatial principle and a dynamic process—one that responds to evolving community needs and embeds flexibility within the physical and institutional fabric of place.

5.4.2 Community participation

Community participation is a foundational principle that emphasises the active involvement of local residents, stakeholders, and civil society in shaping the social, economic, and spatial development of their communities (Arnstein, 1969; Healey, 1997). Rather than treating communities as passive recipients of top-down development plans, place building approaches that incorporate community participation seek to empower the community to directly co-create visions for their places, thus fostering a sense of ownership, belonging, and stewardship (Innes & Booher, 2004; Forester, 1999). In England, a mere 23% of adults felt like they had a say in decisions affecting their community in 2024 (Department for Culture, Media and Sport, 2024). This disconnect highlights a critical gap between policy intentions and lived experience, underscoring the urgent need

to strengthen participatory mechanisms, build trust, and ensure that community voices are meaningfully integrated into decision-making processes at every level. Much of this thinking is embedded in and aligned with that of leading social ecologist thinkers, including the great Murrey Bookchin.

Thus, participation in place building can take diverse forms, from consultative exercises and collaborative planning workshops to community-led design and co-management arrangements. These participatory processes help ensure that place-based development initiatives align with the lived experiences, cultural identities, and aspirations of the communities they aim to serve (Sandercock, 2003; Agyeman & Evans, 2004). Moreover, by embedding community voices in decision-making, place building can address issues of social equity and justice, giving marginalised or underrepresented groups a platform to influence outcomes that affect their lives (Purcell, 2006; Cornwall, 2008).



Between October 2023 and March 2024, just 23% of adults in England felt they had a say in decisions affecting their local area.

(DEPARTMENT FOR CULTURE, MEDIA AND SPORT, 2024)

Research has shown that genuine community participation contributes to more sustainable and resilient places, as local knowledge and networks can enhance the adaptability and legitimacy of development interventions (Brenner & Schmid, 2015; Manzo & Perkins, 2006; Nabatchi & Leighninger, 2015). When residents are meaningfully involved in shaping their environments, planning processes become more reflective of lived experience, culturally grounded, and better equipped to respond to social or environmental shocks (Davoudi et al., 2009; Healey, 2010). For instance, Manzo and Perkins (2006) demonstrate how place attachment fosters long-term stewardship, while Nabatchi and Leighninger (2015) show that inclusive participation builds trust and civic capacity. These findings highlight the role of community participation not just in shaping outcomes, but in reinforcing the legitimacy, equity, and durability of place-based interventions. However, challenges remain, including the risk of tokenism, power imbalances, and the co-option of participatory processes by more powerful interests (Cooke & Kothari, 2001). Addressing these challenges requires robust participatory frameworks that prioritise inclusivity, transparency, and capacity building, thereby embedding community participation as a core component of place building rather than a peripheral add-on.

Other stakeholders/players seeking to enact change in this space include the UK Green Building Council (UKGBC). The UKGBC's Future Leaders programme is a key example, with the 2025 programme run over 6 months culminating in innovative proposal delivered in game changing fashion to change hearts and minds and make emotional decisions about place building.

5.4.3 Governance

Governance constitutes a critical foundation for effective place building, shaping how decisions about the planning, development, and long-term management of places are conceived, negotiated, and implemented. In the context of mixed-use development and the ambition to foster socially cohesive, participatory communities, governance provides the enabling framework through which diverse interests can be aligned and sustained over time. It encompasses not only the formal institutions and regulatory processes of local and national government, but also the informal networks, partnerships, and community-led structures that influence how places evolve (Healey, 2006; Pierre & Peters, 2000). Central to this is the capacity to cultivate shared ownership among stakeholders - residents, public agencies, private developers, third-sector organisations - whose collaboration is essential for building trust, reducing conflict, and ensuring that place-based interventions genuinely reflect local needs and aspirations.

A core task of governance is the articulation of a long-term strategic vision that can integrate the multiple dimensions of place making: economic vitality, social equity, environmental sustainability, and cultural identity. Such a vision serves as a stabilising narrative that can help reconcile competing priorities inherent in mixed-use development, guiding coherent decision making while supporting community participation and partnership working (Albrechts, 2004). Without this unifying

framework, new developments risk becoming fragmented, market-driven enclaves that fail to support social cohesion or to connect meaningfully with surrounding neighbourhoods.

Governance must also be understood as an inherently relational and political process - one that depends on dialogue, transparency, and inclusive participation. When communities are engaged not merely as consultees but as co-producers of knowledge and decision making, planning processes become more legitimate, responsive, and context-sensitive (Legacy, 2017). Participatory governance strengthens the social fabric of place by fostering networks of cooperation, encouraging mutual accountability, and embedding shared responsibility for outcomes.

A crucial, yet often underrecognised, dimension of this process is the degree to which individuals and communities feel a sense of ownership over their local environment. When residents perceive their neighbourhoods as places they actively shape and steward - rather than as territories subject to decisions made by distant authorities - the “centre of gravity” of governance shifts towards the community. This enhances agency, supports local problem solving, and reinforces the informal social infrastructures that underpin resilient and cohesive communities. Such embedded, locally grounded governance is essential to sustaining the vibrancy, inclusiveness, and long-term success of places shaped through mixed-use development.

Ultimately, robust governance is the connective tissue of place building. It bridges the spaces between policy and lived experience, development and community life, short-term delivery and long-term sustainability. Without transparent, participatory, and stewardship-oriented governance, efforts to create integrated, socially cohesive, and community-supported places risk becoming technocratic, fragmented, or misaligned with the lived realities of those they are intended to serve.

5.4.4 Stewardship

An important but often overlooked dimension of place building is the extent to which individuals feel a sense of ownership and accountability for the areas in which they live. When residents perceive their neighbourhoods as spaces that belong to them - rather than as territories managed or controlled by distant authorities - there is a stronger likelihood of civic engagement, local stewardship, and collective responsibility (DCMS Community Life Survey 2023/24; Community Land Trust Network, 2025; Local Trust & OCSI, 2019; Neighbourly Lab, 2024). This shift in perception effectively lowers the “centre of gravity” of urban governance to the community level, fostering a sense of embeddedness and agency. Such locally grounded accountability is essential for cultivating resilient, inclusive, and sustainable places where people are invested not only in their own wellbeing but also in the shared future of their neighbourhood.

Stewardship, however, must be understood not merely as a behavioural outcome but as a structural and financial challenge that demands new ways of thinking about how places are funded, delivered, and maintained over time. Traditional models of place delivery - particularly in the UK - rely heavily on front-loaded development finance, whereby the costs of essential social and physical infrastructure (schools, healthcare facilities, community centres, green spaces, and sometimes even public transport provision) are embedded into the cost of housing through mechanisms such as Section 106 agreements and the Community Infrastructure Levy. While this approach seeks to ensure that growth pays for growth, it inadvertently inflates house prices, exacerbates affordability pressures, and places undue expectations on individual households to shoulder the cumulative costs of long-term community infrastructure.

A more stewardship-oriented model requires decoupling the financing of shared social goods from the speculative logic of the housing market. Emerging international precedents point to alternative financing frameworks - including community land trusts, municipal development corporations, long-term social infrastructure funds, and public-private stewardship partnerships - that distribute infrastructure costs across time, sectors, and beneficiaries rather than embedding them solely in the price of new homes. Such models recognise that schools, hospitals, public spaces, and mobility infrastructure are public goods whose benefits extend far beyond the first generation of residents. Accordingly, they are better financed through collective, long-horizon investment mechanisms that reflect their intergenerational value for the whole of society beyond isolated buyers of new homes in particular geographical locations.

Adopting such approaches in the UK would not only reduce pressure on mortgage affordability but also create more stable and predictable revenue streams, enabling greater innovation in terms ongoing management and stewardship of places. This could enable local authorities and community organisations to invest in maintenance, adaptation, and social programming - the elements that sustain cohesion, belonging, and resilience long after the physical development has been completed. In

this sense, stewardship becomes a financial and governance paradigm, not simply an operational task: a means of aligning long-term public value with long-term investment.

Rethinking stewardship means recognising that place building isn't a one-off development task but a long-term, collective project. It requires a governance and finance system where responsibility is shared, value is co-produced, and the benefits of development are fairly distributed across generations.

Ultimately, rethinking stewardship requires a shift from viewing place building as a finite development event to understanding it as a sustained, collective, and evolving process, whereby we are all custodians of the built environment created. This means embedding governance, finance, and community participation into a single, coherent framework in which responsibility for place is shared, value is co-produced, and the benefits of development are distributed fairly across generations. Without such a shift, even well-designed places risk falling short of their potential; with it, place building becomes not just a matter of physical form but of social continuity, economic fairness, and democratic legitimacy.

5.4.5 Digital connection

It goes without saying that physical connectivity - the integration of new communities with roads, public transport networks, and safe, accessible routes for walking and cycling - is fundamental to effective place building, ensuring that residents can move efficiently and safely within and beyond their homes. Equally, digital connectivity has become a foundational element of contemporary place building, closely intertwined with the social, economic, and spatial dynamics that support mixed-use development, community participation, and social cohesion. As everyday life becomes increasingly mediated by digital technologies, access to reliable, high-quality connectivity shapes how people work, learn, access services, and interact within their communities. The COVID-19 pandemic accelerated this shift, highlighting that digital infrastructure is not merely a technical utility but a critical component of civic and social life (Ofcom, 2025). It enabled remote work, virtual healthcare, online education, and new forms of civic engagement - all functions now integral to the operation, inclusivity, and attractiveness of mixed-use neighbourhoods.



Lacking internet access can harm health, limit job prospects, and lead to social isolation - yet 2.8 million people in the UK (5% of the population) remain completely offline.

(OFCOM, 2025)

Despite substantial investment in broadband rollout, inequalities persist. Approximately 5% of the UK population - around 2.8 million people - still lack any form of internet access, with rural areas, peripheral estates, and deprived urban neighbourhoods disproportionately affected (Ofcom, 2025). These disparities have direct implications for place quality. Without digital access, residents are less able to participate in local governance processes, engage in community networks, or benefit from the economic and cultural opportunities associated with digitally enabled high streets and mixed-use centres (Selby & Munro, 2022). In this sense, digital infrastructure functions as a form of social and spatial capital (Townsend, 2013; Kitchin, 2014), shaping not only economic productivity but also inclusion, resilience, and the everyday social fabric of place.

For mixed-use developments in particular, digital connectivity underpins new hybrid patterns of living that combine working, dwelling, consuming, and socialising. Co-working hubs, local start-ups, flexible retail, digital public services, and community-led initiatives all depend on digital reliability. High-quality connectivity can also strengthen social cohesion by enabling local communication networks, neighbourhood forums, participatory planning platforms, and hyperlocal digital communities that support collective action. However, when connectivity is uneven - between regions, between neighbourhoods, or even within a single development - it risks deepening existing spatial inequalities and reinforcing exclusion.

Yet digital connectivity is not unambiguously beneficial. While it expands opportunities for interaction, it can also reshape social behaviours in ways that weaken physical community life. High levels of screen time, particularly among children and young adults, have been associated with reduced physical activity, increased social isolation, and negative mental health outcomes including anxiety, loneliness, and sleep disturbance (Twenge & Campbell, 2018; Przybylski & Weinstein, 2017). For place builders, this raises a critical tension: as digital infrastructure becomes more embedded within urban environments, it must not displace the role of public space as a site of encounter, belonging, and collective identity.

Therefore, integrating digital infrastructure into place-making strategies must be approached holistically. It requires coupling digital inclusion with the design of vibrant, mixed-use environments that encourage face-to-face interaction, outdoor activity, and civic participation. Effective place building will depend on creating digitally connected communities that also maintain the social, physical, and emotional benefits of embodied life within shared space. In this sense, the challenge is not merely to expand digital capacity, but to harness it in ways that reinforce - rather than dilute - the relational and communal foundations of successful places.

6.0 Evaluation tools in the UK

Whilst this report advances the Place Building System as a pathway to transforming communities, the question of whether it can truly deliver “Britain’s best place to live” remains unresolved and requires critical reflection.

The very idea of the “best place” is contested, shaped by competing values, disciplinary biases, and methodological approaches. In the UK, numerous frameworks and ranking tools - developed by government bodies, consultancies, and the media - seek to measure and compare place quality and liveability. These include the *National Design Guide* (2021), which sets out normative principles of good design for new developments; the *Place Standard* (2023), a participatory framework from Scotland for assessing lived environments; *Building for a Healthy Life* (Homes England, 2020), which links design to health and wellbeing outcomes; and consumer-oriented rankings such as *The Times’ Best Places to Live* (2025), Garrington’s (2025) consultancy-based assessments, alongside large digital property platforms such as Zoopla and Rightmove to name but a few.

Each framework privileges particular dimensions of place, whether economic (employment, income, market performance), social (health, education, cohesion), environmental (sustainability, green space), or cultural (identity, heritage, aesthetics). In privileging some factors over others, they inevitably advance distinct normative positions about what makes a “good place” (Carmona et al., 2010; Knox & Mayer, 2013). While these tools differ in scope and intent, they nonetheless shape planning practice, inform policy agendas, and influence public perceptions. They determine investment flows, steer development priorities, and reinforce cultural hierarchies of desirability.

Yet their limitations are equally clear. Policy-oriented guides such as the *National Design Guide* and *Building for a Healthy Life* remain primarily prescriptive, often reducing complex community needs into technical or design criteria. Participatory tools like the *Place Standard*, though more inclusive, risk being context-specific and less transferable at scale. Meanwhile, media-driven rankings and property platform indices (e.g. Zoopla, Rightmove) tend to conflate liveability with consumer preferences, privileging middle-class aspirations and reinforcing market-led definitions of place quality. Their lack of transparency and methodological consistency raises questions about validity, while their emphasis on convenience, amenities, and property values risks sidelining long-term sustainability, equity, and identity.

Crucially, these frameworks and rankings cannot capture the full spectrum of what makes a place meaningful, resilient, and valuable over time. Intangible but critical dimensions - such as belonging, identity, social trust, and cultural continuity - are rarely measured, despite their demonstrable role in shaping community wellbeing and long-term economic resilience. By reducing complex lived realities to scorecards and rankings, such tools risk oversimplifying, or even misrepresenting, what makes a place successful.

Insights from Rightmove’s Happy at Home Index (ITVX, 2025) reinforce this complexity. Residential happiness is shaped by a wide constellation of environmental and social factors rather than the dwelling alone. Proximity to green and natural spaces consistently emerges as a strong predictor of satisfaction, as does the presence of supportive and friendly communities. Further, it suggests that individuals value authenticity and opportunities for self-expression within their neighbourhood, indicating that social cohesion and alignment with local identity meaningfully contribute to wellbeing. Age-related patterns are also evident: residential satisfaction generally rises with age, likely due to greater financial stability and

broader housing options among older adults - individuals aged 18–24 report the lowest satisfaction levels, while those aged 65 and over express the highest.

Significantly, residents also tend to rate established and older neighbourhoods more highly than new developments. This may reflect the cumulative benefits of mature social networks, established character and identity, accessibility to amenities, and developed green infrastructure - all elements that contribute to a sense of continuity, belonging, and place attachment. Such findings raise important questions for Place Building initiatives: can newly created developments, however well-designed, replicate the layered social, cultural, and environmental attributes that evolve organically over time?

Can newly created developments, however well-designed, replicate the layered social, cultural, and environmental attributes that evolve organically over time?

In this light, place building should not be seen merely as an alternative to conventional housing development models, but as an integrative framework that addresses the fragmented and siloed perspectives embedded in current evaluative tools. Its strength lies in combining economic, social, environmental, and cultural dimensions into a holistic model of value creation. To assess whether place building can indeed create “Britain’s best places to live” therefore requires moving beyond existing frameworks and rankings, toward evaluative approaches that are rigorous yet pluralistic, capable of capturing both measurable outputs and intangible, experiential qualities such as identity, belonging, and resilience.

7.0 Transitioning toward Place Building System (*uptake and scaling*)

Importantly, the report now shifts gear. Focus moves from the challenges around understanding the problem and what could be created in terms of stakeholders and a Place Building System to look at how *uptake* and *scaling* might unfold to ensure change gains traction. Whilst creating the Place Building System has been a hugely significant endeavour with a long evolutionary history, likewise going forwards the *uptake* and *scaling* will present formidable challenges that should not be underestimated.

It is important to acknowledge the usual rhetoric in terms of the built environment’s relationship with innovation and change is generally fairly negative. The built environment sector, in its broadest sense, has a very long history of being critiqued by Government; its QUANGOs, associated consultants and many within the academic space. Such critique often takes the form of improvement reports and recommendations. Sadly, more often than not these simply *recast* previous themes, remaining entrenched within a set paradigm, often privileging efficiencies over effectiveness and failing to recognise context as an active variable. Yet the built environment sector is innovative, if only we look in the right places with the right methods. For a more detailed understanding, readers are directed toward the excellent academic work edited by Dr Mike Murray and late Prof Dave Langford that covers such reports from 1944-1998 (Murray and Langford, 2003). More recently, it is perhaps the almost forensic works of Prof Stuart Green looking beyond the often the short term, reductionistic and simplistic *we should be* stance and instead offering a more critical perspective of a holistic system and representing those with limited agency that offers us much around *what might be* (Green, 2024).

Such improvement reports often mobilise what can be described as the latest ‘*management fashion*’. We have seen these repeated numerous times, such as value management, business process re-engineering, service led procurement, agile, MMC, lean thinking and so on. All billed as panaceas to the built environment, yet typically failing to deliver. Many such reports fail to recognise the contextual setting or structural make-up of the incredibly complex built environment sector as a variable with real agency. Unsurprisingly, many of claimed outcomes from such reports have failed to materialise, with limited uptake, resulting in the built environment often miscast as traditional and slow to innovate. This must serve as a stark warning sign for us. In essence, such improvement reports traditionally not only lack a fresh way of thinking but that’s coupled with a poor understanding of uptake and scaling which invariably make them unsuccessful.

Fortunately, the Place Building System is more than an improvement report. It is a movement; a *paradigm shift* in how sustainable regional development and place building can be enacted and importantly how it can be scaled. Yet, we should be mindful of the point referenced above and that the Place Building System is an innovation and thus needs to be treated as

such when considering uptake and scaling. The Place Building System must acknowledge the challenge associated with bringing about change on such a scale within the built environment sector.



The preamble above places a critical flag firmly in the sand. This firmly recognises the immense challenge regarding the change on the scale envisaged. Ensuring the Place Building System and in particular the KTP's system architecture developed does not suffer the same fate as the improvement reports that have gone before is vital. Attention must be given to the uptake and scaling.

These next sections begin to unpack some of the antecedents associated with innovation uptake and scaling innovation (the Place Building System is the *innovation* of course- defined as something new to the adopting unit, with elements of risk and uncertainty, cf. Rogers, 2003). This focusses upon why this issue cannot be underestimated, together with useful touchpoints, concepts and finally a framework for understanding how we might transition toward a place building model.

The Place Building System is more than a framework – it is a movement and a paradigm shift, redefining how sustainable regional development is delivered and, crucially, how it can be scaled.

7.1 Beyond technological determinism

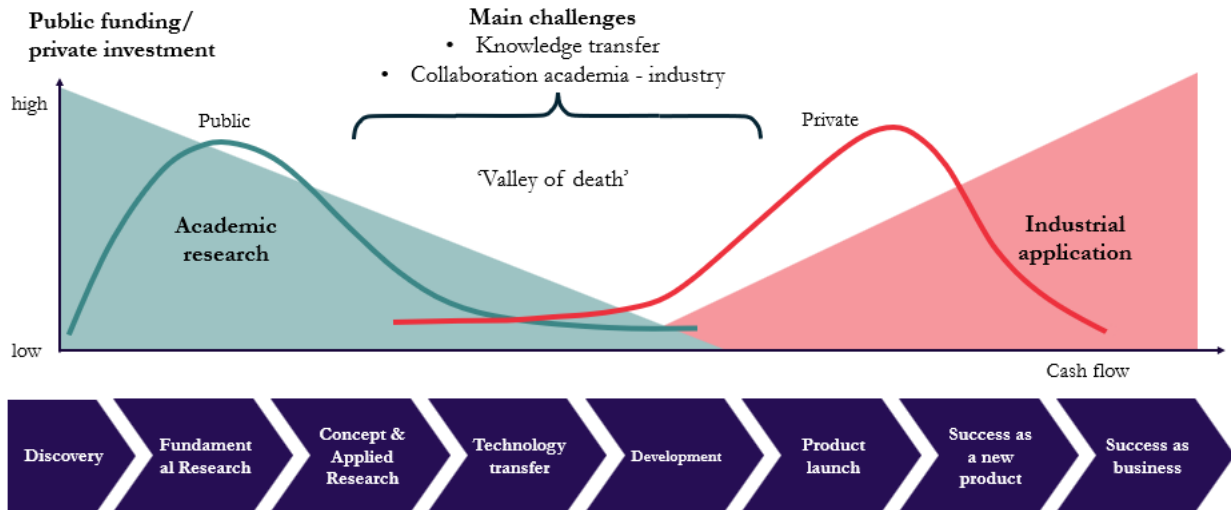
Successful uptake and scaling, at any level, is perhaps less about '*how good*' an innovation is (in this case, how good the Place Building System). The Place Building System developed from this project is technically, socially, ethically, sustainably, and even financially and economically superior in terms of performance 'on paper' than the current national house building approach to development, communities and healthy place. However, unless uptake and scaling occurs then Place Building System will not fulfil its ambition.

Cautiously, the research team that developed the Place Making System are aware that other stakeholders are also looking to offer solutions. The team is not naive to this, and recognise there is in affect 'competition in terms of approach', in terms of what a better version of delivering housing developments, communities and healthy place may look like. Other stakeholders are also working to address these challenges and influence the conversation. Notable examples include the Global Centre on Healthcare and Urbanisation (GCHU) at Oxford University and the collaborative Tackling Root Causes Upstream of Unhealthy Urban Development (TRUDD; a partnership of six Universities led by the University of Bristol) research initiative, both of which place health at the forefront in tackling the underlying drivers of unhealthy urban development that affect everyone. These alternative innovative approaches are also all seeking to gain traction, to find support from relevant stakeholders and to help re-shape how place making come be enacted better.

Having a technically superior 'innovation' (the Place Building System) is important but it is not always enough for successful uptake and scaling. For change to happen thinking needs to be structured beyond rational, reductionists ideas entrenched in technological determinism traditions. The long tradition of innovation uptake studies supports this stance, as illustrated by the failed uptake of innovative recommendations, including those from government improvement reports targeting the built environment sector.

Importantly, it's not only academics mobilising a cautious rhetoric around issues of 'uptake', the UK Government recognises the significance of this as a 'valley of death' concept and has invested widely in trying to understand it better in order that innovation and research can be adopted and scaled. The diagram below (see Fig. 42) offers a useful illustration of the valley of death concept. This resonates with the challenges tackled here and also the KTP as 'a vehicle' to bring about change through its 'system architecture'

Figure 42: The valley of death concept



We can now introduce the first of our uptake and scaling constructs, being the notion of a socio-technical system. Previous sections discussed that innovation does not occur in a vacuum, and in this example a new technology emerges (an innovation, with a technical specification superior) in the form of photovoltaics. However, in this examples these are not simply 'bolt-on' photovoltaics to the roofing slates or tiles, which would for some be a significant change for some stakeholders. Instead, the example draws upon building integrated photovoltaics (BIPV). These BIPV's are introduced (to take the place of traditional 'bolt-on' photovoltaics and roof slates or tiles) and are represented as part of a socio-technical system. BIPV's are presented as a superior replacement alternative to current approaches. The impact upon the broader system or regime is clear, and the impact is far reaching.

Figure 43: Simplified example of a socio-technical system/regime as a new innovation is introduced



As the BIPV's are initially introduced, seeking to replace traditional roofing slates or tiles and also 'bolt-on' photovoltaics, there will be huge pressures on all the other parts of the system to change. That system change is often termed *second order* innovation. The system therefore has agency in the uptake process, again, beyond any technical or performance improvement claimed by stakeholders supporting the innovation (in this example BIPV). Any reluctance by stakeholders within and across the system, its stakeholders, will be mobilised through their interests, agendas, alliance generation and agency mobilisation. As such, in this simple example all stakeholders need to be able to 'see the bigger picture' and the potential benefits of BIPV for the long term and willing to engage.

In seeing this bigger picture, the stakeholders in this example are accepting and prepared to be disrupted (all be it to differing degrees), to perhaps have to do extra work, to revisit their appetite for risk, uncertainty, their processes or training plans and so on. Furthermore, the stakeholders must work together to achieve this, whilst all the time being distracted from 'business as usual' and the associated opportunity costs. Any breakdown in the socio-technical system above will adversely affect the uptake and scaling of the innovation (in this example the BIPV). This phenomena is vital to the success of the Place Building System, and has informed the stakeholders engaged, and it raises a very important question;

We need to ask ourselves - what benefit does the uptake of the Place Building System have for other stakeholders of the housing development socio-technical system?

The Place Building System will not exist in vacuum, it will be received and socialised in a diverse sector, with diverse interests, agendas and challenges. The Place Building System will be the innovation coming into the socio-technical system. As stakeholders of that socio-technical system become aware of the Place Building System, the messaging will be interpreted, what the Place Building System 'is' will be challenged, manifest and may be locally contextualised. That will occur across a fragmented sector with a long tradition of institutionalised practices. Getting that 'right' is now the challenge. The next sections build upon this line of thinking and introduces a number of useful constructs and the transitions perspective.

7.2 Innovation uptake - *constructs* that can help

For the uninitiated in terms of the challenges associated with innovation uptake, readers are directed to some of the seminal works by the likes of Trist and Bamford, Rogers, or Nelson and Winter perhaps culminating in the more recent work Van de Ven and his colleagues (Van de Ven et al., 1999). Van de Ven charts the 17 year long detailed longitudinal research project, supported by 30 academic researchers, looking at 14 innovations as their 'journey' toward uptake unfolded in practice. The core focus of Van de Ven's work being to explain and understand *'how and why innovations develop over time from concept to implementation'*, making it is highly relevant for the Place Building System. Van de Ven's research recognised the need to go beyond the previous deterministic models of 'what should happen', whereby the receiving participant (of the innovation) was conceptualised as passive or with no agency in the process and Edmondson (2000) offers a useful, although brief, review.

With uptake and scaling become increasingly relevant for the success of the Place Building System, an awareness of a range of explanatory constructs will offer a set of handrails for the team and the broader stakeholders (we can include these somewhere, but too much detail here).

The Place Building System will, potentially, be seen by many in the built environment housing development sector (perhaps the first level of a socio-technical system/regime) as;

- being yet another *niche innovation* competing for attention
- challenging institutionalised practices (regime level)
- calling for an unlearning of practice (making experts become novices)
- calling for relearning, based upon a fresh way of thinking (again, experts become novices, and novices potentially experts)
- potentially alienating those unwilling or unable to adapt due to a lack of absorptive capacity
- privileging certain stakeholders and not others
- challenging the dominant rhetoric of the established national house building narrative of 'units' - as disruptor to the regime.

Fundamentally, many built environment stakeholders will be ‘locked-in’ to the system as it is currently structured and understood. Stakeholders are locked into a way of working, to a set of institutional norms, practices and processes, locked-in to the very structural make up of the regime or socio-technical system. Lock-in is a key theme for understanding innovation uptake and scaling (cf. Arthur, 1989). Lock-in can occur or be experienced at different levels, e.g. the now dominant sub-contracting model. The Place Building System will meet this lock-in mentality as an innovation to the development sector, to the place building sector, to how to create communities for future generations to prosper.

Furthermore, it is important to acknowledge that innovation uptake is not a ‘one way’ journey and what that will mean for uptake and scaling. Innovation uptake is more of an ‘iterative’ process, as evidenced through extensive research. What is meant by iterative is that there will be elements of what is termed *interpretive flexibility*, along with periods of *stabilization* and *closure* (cf. Pinch and Bijker, 1984). This means as an innovation (the Place Building System) is ‘enacted in practice’ by different stakeholders, it will in essence be interpreted differently, subjected to pressures around re-configuration based upon stakeholder interests that form around relevant social groups and in essence actually re-shape, manifest the innovation into something slightly different. The innovation will no doubt reach points of closure or stabilization, whereby what the innovation ‘is’ reaches a point of maturity and stability in response to stakeholders and contextual climate. The stabilization and closure occurs for a period of time but will eventually be disrupted and re-configured again. The concept of manifestation occurs in part as a response to landscape (macro level) events and also to better reflect a particular challenge, stakeholder interests or agendas, use or contextual setting. Thus, the process of being innovative, continues during the uptake and scaling process. Innovation is thus ‘ongoing’, which resonates with the *becoming ontological* perspective and processual problem structure narratives mobilised throughout the report. As uptake and scaling of the Place Building System unfolds in practice by stakeholders across regions, those responsible for the Place Building System need to accept and be prepared for its evolution.

7.3 How might sector change occur – MLP

Creating the Place Building System, reaching a point of stabilization and closure described in this report, was the first step (see section 6.2 above). That has required huge effort by all the associated stakeholders, but that is only the first step. As illustrated earlier, the socio-technical system the Place Building System occupies has ‘agency’ in terms of uptake and scaling far beyond any rationality.

There is no *off-the-shelf* solution of how best to get the desired uptake and scaling of the Place Building System.

If successful uptake and scaling materialises, then the Place Building System will, by its very nature, disrupt and re-structure elements of the housing development sector. That disruption will come through emphasising place building over house building and the rhetoric around ‘units’, whilst seeking regional models of sustainable delivery.

Arguably, if disruption and tensions associated with re-structure are not *felt* across the broader housing development sector, then the Place Building System is not having the desired uptake and scaling...

There are numerous theories describing how uptake happens, most flawed, some useful. There are also frameworks, specifically around ‘transitioning’ in response to innovation that offer retrospective explanations of how such uptake and scaling has happened and thus provide a useful touchstone.

Such frameworks (e.g. Geels, 2002) explain how an industry or society ‘transitioned’ from one state to another due to an innovation (the reader is reminded, the Place Building System is the ‘innovation’ here). These frameworks can be used to

unlock the possibility of change, allowing us to focus upon generating the right conditions for the best opportunity of success. Furthermore, such frameworks chart how industries or society (depending upon which research you look at) have transitioned in ways so fundamental that stakeholders ‘of the time’ would have thought impossible. For example, the transition from sailing ships to steamships unfolded not by technological substitution alone, but through a long, complex reconfiguration of markets, infrastructures, regulations, cultural meanings and actor networks, a systemic shift few in the early nineteenth century could have imagined. Likewise, the move from gas lighting in domestic homes to electric lighting required the restructuring of entire urban utility systems, professional practices, safety codes and user expectations, yet it ultimately replaced a deeply entrenched socio-technical regime.

History, therefore, is our friend and illustrates that huge shifts on the scale desired can and indeed do happen. This point is important and helps counter those that claim ‘*well we can’t change the whole industry*’. The fact is history offers numerous examples and explanations of precisely that, all we need to do is take a step back, look, ask the right questions and understand.

The frameworks in question fall under the term Multi-Level Perspective (MLP), being both a theory and framework, and are aligned with socio-technical-system (STS) transitions (Geels, 2002). Termed here a ‘transitions framework’, it represents the reality the Place Building System faces in terms of uptake and scaling. This transitions framework was presented and discussed at a RBH steering group workshop (Q3, 5th November 2024) with the 10 stakeholder representatives and other invited parties (see Fig. 44). The transitions framework helps explain how innovations (in this case our Place Building System) move from in effect being a niche experiment to mainstream uptake and scaling. The framework looks across three interconnected levels:



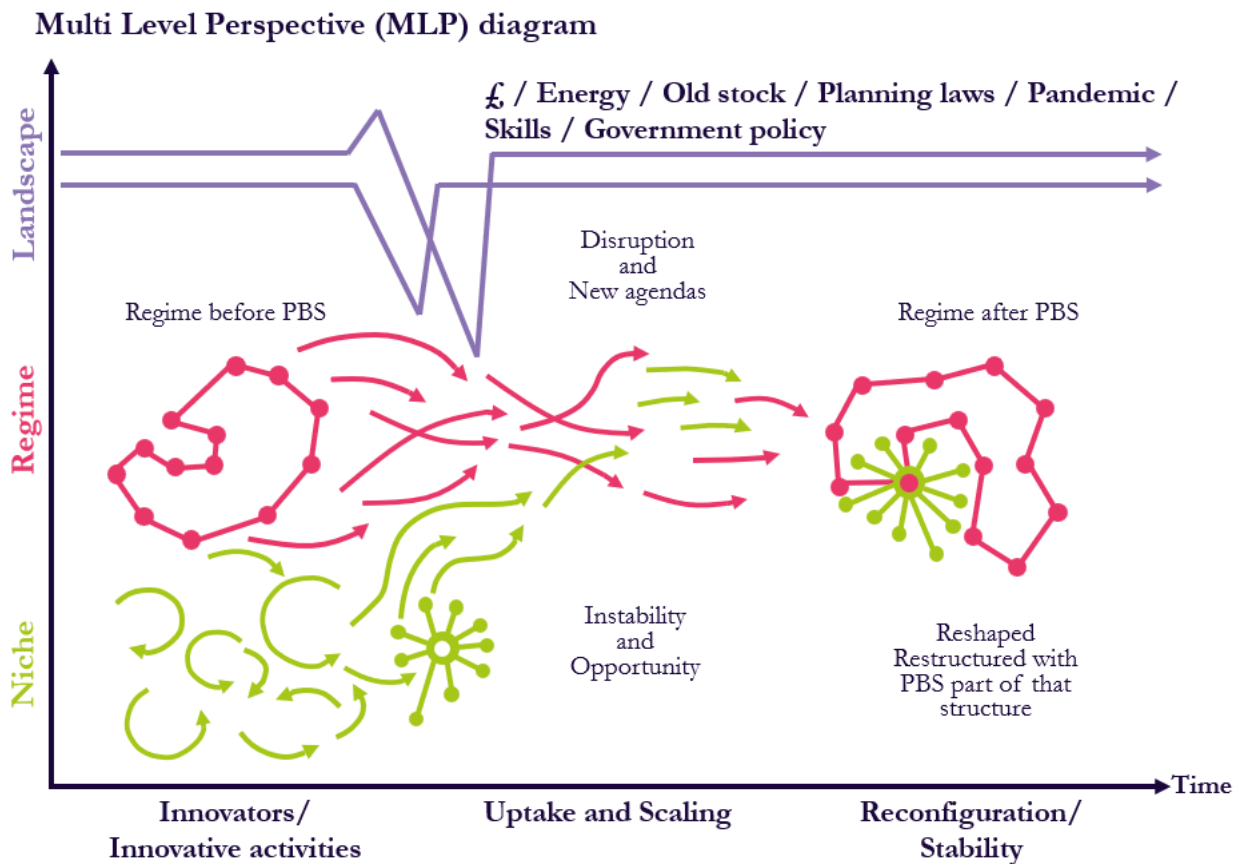
Figure 44. Key stakeholders of the Place Building System

1. **Niche Innovations** – This is where new solutions start, where they are born. They’re often small-scale, experimental, and supported by dedicated communities or early adopters. Think of it as the “innovation lab” stage.
2. **Socio-Technical Regimes** – These are the established systems, practices, and rules that dominate today (e.g., energy grids, transport systems). They tend to resist change because they’re built for stability and efficiency.
3. **Landscape Pressures** – Big external forces like climate change, economic shifts, or policy changes. These pressures can create opportunities for niche innovations to break through.

NOTE: We often see frameworks illustrated in terms of ‘level’, with the typical abstraction being micro, meso and macro. However, in the transitions framework it is where these levels ‘bump’ together that is emphasised and focussed upon, rather than conceptualising them a separate.

As a simple contemporary example that any reader can relate to consider what was the relatively ‘niche’ technology of video conferencing. The required technologies had been in place for years, whether as stable designs in niche markets (video calls) or as part of the telecommunications system and the digital landscape. Video conferencing was occupying a niche space. It had not penetrated or influenced the wider norms of dominant business structures. For video conferencing to gain traction and be taken up at scale across the business world a ‘disruption’ in the dominant regime needed to present itself. The ‘landscape’ pressures of the COVID pandemic, an external unforeseen impact, generated that disruption in the until then static regime. That regime disruption created ‘space’ for the niche innovation of video conferencing to gain momentum and rapidly emerge as possible solution to a previously unseen problem. There were winners and losers in terms of which version of video conferencing made the leap and became accepted as the ‘norm’. In turn video conferencing was able to penetrate the de-stabilized regime and reshape its structure until a new version of stability for the regime was reached that now included video conferencing, hybrid working and shifts in norms around home working. All of which would have been almost unthinkable with the mindset of ‘*we can’t change the whole industry and the way everyone works*’.

Figure 45. Transitions framework (re-imagined from Geels (2002) and contextualized for the housing development sector for the PBS (Place Building System))



Currently, the Place Building Systems firmly resides within the ‘niche’. Yet residing in the niche will not bring about uptake and scaling and the desired impact sought, instead the Place Building System would remain on the periphery of the sector, an outlier. Importantly, the Place Building System is not the only innovation occupying the niche space that is looking to offer alternatives to the housing development sector. In essence, the Place Building System has competition within the niche. As previously mentioned, different stakeholders and interest groups are also looking into how to better deliver housing, development and place for future generations – including a range of community led style projects supported by the likes of the Joseph Rowntree Trust or the recently published Homes England Strategic Plan 2025-2030 for example.

In part it is the innovations within the niche that ‘gain traction’ (for whatever reason) that will eventually go on to move upwards to the regime, whilst sadly those innovations that fail to gain such traction will fall by the wayside. The Place Building System is currently a ‘niche’ innovation, with competition. It does not fit the current ‘regime’, is not part of the current regime. Like numerous other niche innovations focussed upon place making and different approaches to developing communities it is searching for legitimacy. The challenge going forwards is therefore to enable the Place Building System to move from being a niche innovation competing for a voice, to gaining that all important traction and moving upwards toward the regime. Yet, the stability and resistance to change of the regime level cannot be underestimated. With that stability comes barriers to entry, a desire and ability to defend itself from possible innovation that might disrupt it. The Place Building System is such an innovation.

The transitions framework represents the agency associated with the landscape level. Sudden shocks, unforeseen events coming down from landscape level can and do ‘de-stabilised’ the regime. That de-stabilisation of the regime generates an opportunity for any niche level innovation (the Place Making System) to have an impact. An opportunity because, whilst the regime is de-stabilised, perhaps re-calibrating, re-setting or re-structuring in response to the shock landscape event, the niche innovation can rise up, infiltrate and shape that re-structuring (this is true uptake and scaling). The regime will be ‘re-structured’ over time to accommodate the innovation, with the innovation becoming part of the very fabric of the new

restructured regime. This shapes our thinking in terms of the recent, current or possible emerging landscape pressures, shocks or possible events that have or may de-stabilize the regime level (the national housing development regime in the UK)

When considering this, it is useful to also reflect upon the regime as ‘the housing development sector’. That regime has a structure and discourse currently dominated by national house builders, with the dominant rhetoric being ‘units’ required and little about place, community, or strong sustainability. Recent events from the landscape level impacting that regime (potentially de-stabilizing it) include the announcement from the Government’s *New Towns Task Force* (New Town Taskforce, 2024), the updated National Planning Policy Framework signalling significant planning reform (DLUHC, 2024), renewed debate on selective Green Belt release and boundary review (DLUHC, 2023, 2025), and strengthened environmental requirements such as the statutory introduction of Biodiversity Net Gain (DLUHC & DEFRA, 2024). Fiscal pressures on local authorities and increasing demand for higher-quality, well-stewarded places further contribute to this shifting context. In order to have the desired impact beyond ad-hoc, isolated developments, consideration needs to be given to how the Place Building System can affect change at the regime level. The ambition is to try and re-shape the very structure of the housing development sector, from housing building to place building.

Finally, we cannot discuss creating a Place Building System within the housing development sector without acknowledging the project-based nature of such activity and the implications that has when considering innovation, uptake and scaling. Projects and the current dominant practices of project management can be thought of as part of the ‘regime’ via which the built environment, housing development and indeed Place Building are made. The dominant *modus operandi* of project management is entrenched in a different time, simplistically seen through a lens of time, cost and quality and whereby change is demonised. Using those metrics as a default for ‘success’ offer the broader users of built assets, housing development and place little benefit. Currently the entire delivery model is geared to benefit those involved solely in the production process. Furthermore, and arguably more important is how change is conceptualised in project management practice, with every possible effort made to stop or limit change of any type, change is viewed as something bad. That conceptualisation of change is problematic because to enact a Place Building System change across the whole socio-technical system is required, which in turn impacts how projects are managed including the project management processes and practices mobilised during delivery. Change must therefore be recast, not as something to avoid at all costs, but rather as essential to enact the Place Building System. Project management practices are unlikely to change spontaneously, or without resistance although encouragingly they are being scrutinized by thought leaders across both academia and practice, highlighting the shortcomings alluded to above (cf. Chan, 2023; Davies and Larsen, 2025).

7.4 Stakeholders; interests, agendas and coalitions

Any movement toward improving how we build place better needs to be inclusive whilst also acknowledging the contextual setting as an active variable with real agency. That means considering stakeholders in the broadest sense as our starting point, not excluding any parties that wish to engage in the spirit of the endeavour, but rather seeking empathy and understanding of their interests and agendas. It also means recognising that the housing sector is not a blank canvas, it has a topography, it has characteristics, a culture of working practices and institutionalism logics - it has ‘baggage’.

The construction of new housing developments involves a complex web of stakeholders, often changing over time, each with distinct yet often competing roles, interests, agendas and levels of influence. Understanding these stakeholders, and the agency they process in terms of bringing about any change is essential and certainly in terms to enacting a new Place Building System.

At the centre of any development project sits the client - or more precisely, the landowner, at least in the early stages - and as the organisational structure evolves and contractual arrangements become more clearly defined, these roles may diverge, with the client function often transitioning to a distinct delivery body or development vehicle. Then there are those whose businesses sit fundamentally on the supply-side, the associated developers whose business is predominately housing or development. Those supply side stakeholders typically initiate, fund, and oversee the project. These may include private companies, public authorities, or joint ventures, each setting the strategic vision for the development, including its purpose, scale, and anticipated return on investment (RIBA, 2020). Developers are pivotal decision-makers whose priorities often shape the project’s financial and temporal constraints.

Design professionals, including architects, planners, and engineers, play a critical role in interpreting the client's objectives into design solutions. Architects are responsible for the spatial and aesthetic quality of developments, while engineers ensure structural and service functionality. Planners help mediate between developer aspirations and public interests, ensuring projects align with broader urban strategies and policies (Healey, 1999; Heanley 2006). Increasingly, these professionals are also expected to incorporate sustainable and inclusive design principles from the outset. However, despite this collaborative imperative, these disciplines often operate within siloed frameworks and professional cultures shaped by long-standing role boundaries and identity protectionism. Each profession tends to defend its jurisdictional authority, often at the expense of integrated approaches to place building. This fragmentation may hinder holistic solutions and limit the capacity to 'build place' in a meaningful and durable sense. In this context, the Place Building System presents a timely opportunity to challenge prevailing institutional norms and role delineations. By advocating for interdisciplinary collaboration that transcends traditional professional silos, the Place Building System could promote new governance and design practices that prioritise place quality over disciplinary control. Clearly, current role demarcations, while historically grounded, have struggled to deliver genuinely integrated, sustainable, and community-responsive places.

Depending upon contractual arrangements, the construction team, comprising contractors and subcontractors, is responsible for translating the design into physical reality. Their involvement extends from site preparation to final delivery, and their performance has a significant impact on quality, cost, and time – metrics which clearly impact on the quality of the place being constructed. Effective coordination between construction and design teams is essential to avoid delays, disputes, or inefficiencies (Winch, 2010).

Government authorities at both local and national levels act as regulators and facilitators in the development process, in essence sitting at times on both demand and supply side. Through planning legislation, building regulations, and environmental policies, these bodies ensure that new developments meet statutory standards and align with broader policy objectives. Local authorities, in particular, play a key role in approving planning applications and may also act as enablers or partners in public-interest projects (Carmona et al., 2010).

Equally important are the local communities and residents, who are directly affected by the social, economic, and environmental impacts of new developments. Community engagement is increasingly recognised as a cornerstone of sustainable development, helping to mitigate conflict and ensure developments reflect local needs and values (Arnstein, 1969). The level of participation may vary, but inclusive engagement can lead to more equitable and accepted outcomes.

Financiers and investors hold considerable influence, particularly where private capital is involved. These stakeholders assess projects based on potential returns, risk exposure, competing opportunities, which can significantly shape project scope, phasing, and even location. Their involvement often introduces an additional layer of accountability and governance (Adams & Tiesdell, 2012). The detailed structural make up within the financial support products offered can make or break a development. Key areas worthy of mention include aligning repayment terms to reflect the structural practices of construction (even playing an influential role in improving these across the whole sector), recognising the huge upfront cost incurred by SMEs before an onsite activity has even occurred.

Finally, regulators and inspectors, such as building control officers, environmental agencies, and health and safety inspectors, provide oversight to ensure compliance with legal and technical standards. Their involvement ensures that developments are safe, legally compliant, and environmentally responsible.

8.0 Next steps – delivering through practice

To support the uptake, scaling and long-term embedding of the Place Building System, the Regional Building Foundation (RBF) will be established in 2026 under the strategic guidance of the Steering Group. Informed by Steering Group insight, diagnostic analysis, and a robust understanding of the realities of trying to enact effective place-building, the delivery strategy articulates a coherent system architecture designed to enable sector-wide change.

Central to this approach, the Regional Building Foundation will provide the organisational and operational infrastructure required to support wide-scale uptake and the effective scaling of four mutually reinforcing programmes focussed upon *Networking, Educating, Enabling, and Innovating* (see Fig. 46). These four programmes are intentionally designed to operate in parallel and at scale:

1. Enabling **networking** through real cohesion, localised embeddedness and lowering the centre of gravity across regions. Initially, 14 regional forums will be established to convene networking events for aligned stakeholders and practitioners who share an interest in improving place quality, broadly aligned with the principles of the Place Building System.
2. Enabling **education** through the creation of a digital knowledge hub to host the core captured themes making up the Place Building System. This will consist of 12 core areas with how to guides and templates.
3. Develop an **enabling programme** to support the delivery across different scales of development. This will provide hands-on technical, design, planning, funding and delivery support to help projects adopt the Place Building System. The programme will be structured around the three main scales of development, with tailored support suited to the needs and complexity of each scale:
 - a. Small sites, typical delivery model with one SME builder, with support from early-stage site assessment, master planning support, planning guidance, viability reviews, access to standard templates, design quality tools and materials guidance, to funding and regional supply materials.
 - b. Neighbourhood site delivered model with 2-3 SME builders, with support from phasing strategies, infrastructure planning guidance, shared design coding, stewardship approach, facilitation between partners, funding and regional supply materials.
 - c. Village and town scale sites, delivered through a consortium-led model, with support from strategic infrastructure and master planning guidance, assistance with consortium formation, pathways for innovation integration, stewardship approaches and long-term funding through partners.

Across all scales, the enabling programme aims to build capacity, reduce delivery barriers, promote coordinated design quality and ensure that every project benefits from the tools, templates and guidance of the Place Building System.

4. Enable **innovation uptake** and scaling through examples via the creation of regional innovation hubs (one per region). These will offer sample panels and homes, with micro-plants established to demonstrate materials processing linked to skills training. For larger sites, innovation will include stewardship models that support long-term quality and community outcomes through funding, standards, and tax mechanisms.

Figure 46: The system architecture of the Regional Building Foundation, which was specifically established to enable wide-scale adoption of the Place Building System.



As the foundational architecture becomes established, the Regional Building Foundation will move into an enabling scaling phase focused on structured adaptation rather than expansion alone. This will involve expanding the network across 14 regions while maintaining a consistent national framework for quality and learning.

Alongside this, Digital Knowledge Hub and Place Building System will continue to evolve as live resources, updated in response to practice-based learning from delivery sites. The enabling programme will be progressively expanded to support a growing number of sites year on year, with increasing emphasis on structured data capture, feedback loops, and evaluation across regions. To support learning and reflection as the sector begins to engage with the Place Building System, the Foundation may introduce a proportionate approach to monitoring uptake. This could begin as a light-touch annual check-in with participating projects and, over time, inform more longitudinal assessment as adoption increases.

Once a critical mass of sites are under construction using elements of the Place Building System, the Regional Building Foundation will facilitate regional and national innovation in areas such as funding, planning, and tax, as set out in the stewardship initiative.

The stewardship model is essential to the delivery of larger sites and the overall ambitions of the Foundation, ensuring long-term quality, community benefit, and financial sustainability over the lifecycle of place. As more sites adopt to stewardship practices, the Regional Building Foundation will facilitate shared learning and influence national conversations, enabling a shift from a fragmented, unit-led system to a more resilient place-based development model.

9.0 Summarising thoughts

We cannot solve our problems with the same thinking we used when we created them. Doing so means we end up simply polishing a flawed system

While growing public interest has led to the inclusion of features such as walkability and green space in many new developments, these features often reflect a partial response to the broader and more complex dimensions that define successful place building. When treated as isolated design features rather than as part of an integrated system, they risk reinforcing fragmented approaches that fail to address the social, economic, and governance dimensions of place.

Truly effective place building requires a holistic perspective that acknowledges the interdependence of physical, social, economic, and governance factors. Narrow, siloed or piecemeal approaches restricted by the dominant *modus operandi* risk missing the synergies that arise when these elements are planned in relation to one another from a fresh perspective.

The Place Building System offers a holistic framework that unites physical, social, economic, and governance factors - ensuring developments are resilient, inclusive, and built to support thriving communities for the long term.

Fundamentally, the Place Building System draws upon alternative thinking to create a structured framework through which these interconnected aspects (physical, social, economic, and governance) can be systematically addressed, enabling future developments to not only be contextually sensitive but also resilient, inclusive, and capable of supporting long-term community well-being. Importantly, this is not a one-off solution but an ongoing process: place building is less about reaching a fixed end state and more about structuring complex problems in ways that allow for continuous learning, reflection, and refinement. By embracing this adaptive approach, the framework incorporates how successful places evolve over time and require sustained dialogue, experimentation, and adjustment to remain relevant and effective.

Within this context, Poundbury offers a distinct alternative to the volume housebuilding model that has dominated UK residential development since the late 20th century. While the major housebuilders typically operate by acquiring peripheral land parcels, delivering standardised units, and minimising upfront infrastructure investment, Poundbury was master planned to prioritise placemaking, integrated infrastructure, and long-term stewardship. Its street network is designed to discourage car dominance (e.g. Low Traffic Neighbourhoods) and promote walkability - in contrast to the cul-de-sac and distributor road layouts common in volume developments.

Architecturally, where volume housebuilders often rely on limited palettes and repetitive designs optimised for construction speed and cost, Poundbury employs a controlled but varied architectural language intended to evoke mainly traditional English townscapes. Importantly, development at Poundbury has been shaped by the Duchy of Cornwall's unique role as landowner-developer, allowing for phased delivery aligned with community-building goals rather than rapid capital turnover. This contrasts with speculative models where profit is largely realised at the point of sale, often leading to underinvestment in long-term community amenities. However, while Poundbury's approach addresses many criticisms of mainstream practice - such as poor design quality, car dependence, and infrastructure lag - it also raises questions about scalability and accessibility, particularly given the unique land ownership structures that enable its model. As such, Poundbury both challenges and illuminates the systemic barriers to achieving more sustainable and community-oriented housing development at scale in the UK.

While Poundbury has been celebrated by proponents of traditional urbanism (Barr, 2023; Lei, 2014; Rossiter, 2002) as a successful counterpoint to the fragmented and car-centric post-war developments in the UK, it has not been without critique. Supporters highlight its walkability, architectural coherence, and integration of affordable housing, noting that it has achieved relatively strong resident satisfaction and economic vitality, with a high proportion of independent businesses. However, critics argue that Poundbury's aesthetic choices, grounded in neo-traditional and classical styles, risk romanticising the past and may not reflect the cultural and architectural diversity of contemporary Britain. Questions have also been raised about its social inclusivity, demographic homogeneity, and the extent to which its planning principles can be replicated at scale in areas with different economic or landownership contexts. Furthermore, while its reduced car dependency is notable, some observers point out that broader regional connectivity still relies heavily on private transport. Today, Poundbury stands as both an influential case study and a contested model within ongoing debates about sustainable, equitable, and culturally resonant urban development in the UK. Perhaps one of Poundbury's greatest contributions will be the long-term paradigm shift it can offer in terms of how we think about place making more broadly and moving beyond simply building 'units'.

Read in this way, Poundbury is best understood not as a model to be replicated, but as a diagnostic case that illuminates how different dimensions of place interact when they are intentionally aligned over time. These same dimensions underpin the Place Building System and its six analytical lenses, which are designed to structure complex place-based challenges rather than prescribe uniform outcomes. By foregrounding relationships between lenses, rather than isolated interventions, the framework shifts attention from stylistic or formal solutions toward the underlying systems that shape long-term place performance.

A fundamental principle emerging from both practice and research is that no single development model can be universally applied across the UK. While exemplar developments offer valuable guidance, their success is dependent on local landscape, socio-economic conditions, cultural norms, and community aspirations. Developments like Milton Keynes exhibit strengths within their specific context, yet these characteristics cannot simply be transferred to regions such as Cheshire or coastal Cornwall without adaptation, they need to be contextualised. Place identity therefore requires a "regional overcoat", an

approach that respects local vernacular, materials, employment patterns, climate, and cultural narratives. This contextual sensitivity is essential to creating places that feel authentic, purposeful, and rooted in their communities.

If place is understood not as an object to be delivered but as a process to be stewarded, then the question facing housing delivery changes fundamentally. The task is no longer to replicate successful developments, but to cultivate the conditions through which different places can succeed on their own terms. A regional, systems-based approach offers a way of doing so. One that acknowledges difference, embraces complexity, and places long-term community value at the centre of development practice.

This research contends that the future of place building lies not in reproducing particular development models, but in adopting analytical and delivery frameworks capable of accommodating such difference. By structuring inquiry through multiple, interrelated lenses, the Place Building System provides a means of navigating complexity while remaining sensitive to regional identity. It is through this adaptive, place-specific calibration that housing delivery can begin to support enduring, resilient, and meaningful communities.

Appendix The Steering Group as a transdisciplinary co-creation engine

Much of the content of this report emerged through sustained engagement with the Steering Group. Comprised of senior representatives from across the UK's development ecosystem, the Steering Group was conceived not as a conventional advisory panel but as an active, transdisciplinary co-creation body. It served as a critical mechanism through which the design, interrogation, and refinement of the Place Building System unfolded. This approach aligns with the broader methodological foundations of the study, which recognise that complex systems—such as housing, planning, and community development—cannot be understood or transformed through linear or discipline-bounded methods alone. Instead, they require iterative, participatory, and reflexive processes that mobilise multiple forms of expertise (Lang et al., 2012; Brandt et al., 2013; Bernstein, 2015; Lawrence et al., 2022).

Figure 47: Steering Group, an agglomeration of key stakeholders



From the outset, the Steering Group was intentionally constituted as an “agglomeration of key stakeholders” who collectively hold material, institutional, financial, regulatory, and cultural power within the UK's built environment sector. The composition of the Group reflects the systemic nature of the problems under investigation: major landowners, SME housebuilders, planning and design specialists, funders and lenders, material suppliers and infrastructure enablers (see Fig. 47). Unlike public consultation processes, typically oriented toward participation, representation, or legitimacy, the Steering Group was assembled for a different purpose. Its role was to act as a co-creative governance platform, providing structured, critical interrogation of emerging concepts, and shaping the development of the system architecture through a combination of experience-based insight, strategic questioning, and sectoral knowledge.

This reflects a broader shift in methodological thinking toward what is often termed *transdisciplinary problem-structuring*: recognising that the “problem” of housing delivery is not singular, but constituted by a web of institutional logics, market behaviours, regulatory constraints, financial mechanisms, cultural norms, and historical path dependencies. As such, the Steering Group functioned as a space in which these diverse logics could be surfaced, scrutinised, and re-ordered into a more coherent and future-oriented system architecture. This aligns with the methodological position taken earlier in this report: that planning, housing, and place making are “messes” or “wicked problems” (Ackoff, 1979), requiring reflexive, iterative, multi-stakeholder processes rather than the false certainty of linear problem-solving approaches.

Steering Group quarterly sessions consistently demonstrated the value of cross-domain critique (see Table 8). Assumptions were challenged, blind spots revealed, feasibility tested, risks identified and opportunities reframed. This iterative interrogation was not a barrier to progress. Rather, it served as an essential mechanism for producing a system architecture that is both theoretically grounded and operationally viable. This process reflects the dynamics of what Klerkx et al., (2010) describe as *innovation platforms*. A multi-actor settings where diverse stakeholders collaboratively shape emerging solutions through cyclical learning, negotiation, adaptation, and reflexive monitoring. In such platforms, legitimacy arises not from consensus or representativeness, but from the alignment of expertise, experience, and agency. The Steering Group embodied this logic. Its deliberations provided structural feedback loops through which the system was continuously refined, aligning methodological rigour with sectoral realism.

Furthermore, the Steering Group served a crucial function in navigating institutional logics that have historically shaped and constrained the UK housing system. For example, large landowners operate under long-term stewardship models, SME builders face acute capital and land-access barriers, planners contend with regulatory ambiguity and resource scarcity, and lenders evaluate projects through risk-averse financial instruments. These divergent logics often operate in parallel, rarely intersecting in practice. The Steering Group brought them together in a shared discursive space, enabling the articulation of cross-sector dependencies and the identification of systemic levers for change.

Crucially, the Steering Group’s role in co-creation should not be confused with the participatory or community-based co-production frameworks often described in public sector literature (e.g., Arnstein, 1969). The Steering Group, by contrast, represents a form of strategic co-creation rooted in industry governance and system design. It operates within a paradigm closer to network governance (Ansell & Gash, 2008) and transdisciplinary sustainability science (Jahn et al., 2012). This distinction is important, for it recognises that the kind of systemic transformation envisaged by the Place Building System requires the mobilisation of actors with the capacity to enact structural change.

In this way, the Steering Group embodies the methodological stance adopted throughout this report: reflexive, critical, pluralistic, and committed to the structuring, rather than simplification of systemic problems. It is the mechanism through which the ambition of the place building system was translated into an actionable programme, grounded in theory yet forged through practice, and shaped by those with the agency to operationalise it. The table below synthesises the cumulative learning from Workshops, linking the interrogations, findings, and strategic responses to the Place Building System and its emerging system architecture design.

Table 8: Summary of Steering Group workshops

Quarter / workshop	Core interrogation themes	Outcomes
Q1 Workshop March 2024	What problems is the place building system trying to solve? What defines the “regional” element?	Early articulation of regional value proposition and how regions should be defined from different stakeholders’ perspective.
Q2 Workshop June 2024	What does a functioning regional ecosystem require from activities to services?	Identification of a proactive approach: matchmaker, accelerator, innovator. Recognition of core vs supporting spokes.
Q3 Workshop November 2024	What mechanisms protect design and delivery integrity? How do we define a great place?	Recognition of planning risk, viability pressures, and missing enablers (mentors, materials, manuals). Enabling mechanisms to reduce SME risk and increase quality.
Q4 Workshop February 2025	What operational model supports scaling?	Need for phased implementation (Beta to Launch). Phase trajectory agreed. Digital learning is required to educate and enable stakeholders to familiarise and understand Place Building. A new funding to be put in place for the delivery of the Digital Knowledge Hub.
Q5 Workshop June 2025	What governance and funding structure is viable? What are the immediate priorities?	Consensus around organisational model, mixed funding, and need for early demonstrator sites. Pilot sites to be prioritise.
Q6 Workshop October 2025	How does the place building concept support the move from concept to delivery?	Phased delivery plan adopted; a double track approach proposed.

References

- Adams, D. & Tiesdell, S. (2012) *Shaping places: Urban planning, design and development*. London & New York: Routledge. doi:10.4324/9780203105665.
- Agyeman, J. & Evans, B. (2004). 'Just sustainability': The emerging discourse of environmental justice in Britain? *Geographical Journal*, 170(2), pp.155–164.
- Albrechts, L. (2004). Strategic (spatial) planning re-examined. *Environment and Planning B: Planning and Design*, 31(5), pp.743–758.
- Andrews, R., Duncombe, W., & Yinger, J. (2017). *School Finance*. In: Handbook of Research in Education Finance and Policy, 2nd ed.
- Ansell, C. and Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, 18(4), pp. 543–571. doi.org/10.1093/jopart/mum032
- Arashpour, M., Wakefield, R., Blismas, N. & Lee, E.W.M. (2014) Analysis of disruptions caused by construction field rework on productivity in residential projects. *Journal of Construction Engineering and Management*, 140 (2): 4013053. doi:10.1061/(ASCE)CO.1943-7862.0000804.
- Archer, T. & Cole, I. (2023) *The Invisible Hand that Keeps on Taking: Value extraction from large housebuilders and its impact on the UK housing system*. Sheffield: Centre for Regional Economic and Social Research (CRESR), Sheffield Hallam University. doi: 10.7190/cresr.2023.0182285580
- Arnstein, S.R. (1969) 'A Ladder of Citizen Participation', *Journal of the American Institute of Planners*, 35(4), pp. 216–224.
- Arthur, W B (1989), 'Competing technologies, increasing returns, and lock-in by historical events', *The Economic Journal* 99, pp. 116–131.
- Arup (2016). *Cities Alive: Towards a Walking World*. London: Arup. Available at: <https://www.arup.com/perspectives/publications/research/section/cities-alive-towards-a-walking-world>.
- Ball, M. (2003). Markets and the structure of the housebuilding industry: An international perspective. *Urban Studies*, 40(5-6), pp. 897–916.
- Ball, M. (2010) *The housebuilding industry: Promoting recovery in housing supply*. London: Department for Communities and Local Government.
- Ball, M. (2011) 'Planning delay and the responsiveness of English housing supply', *Urban Studies*, 48: pp. 349– 362.
- Banister, D. (2005). *Unsustainable Transport: City Transport in the New Century*. Routledge.
- Banister, D. (2008). The sustainable mobility paradigm. *Transport Policy*, 15(2), 73–80.
- Baobeid, A., Koç, M. & Al-Ghamdi, S. G. (2021). Walkability and Its Relationships with Health, Sustainability, and Livability: Elements of Physical Environment and Evaluation Frameworks. *Frontiers in Built Environment*, 7, Article 721218. doi.org/10.3389/fbuil.2021.721218
- Barca, F., McCann, P. & Rodríguez-Pose, A. (2012). The case for regional development intervention: Place-based versus place-neutral approaches. *Journal of Regional Science*, 52(1), pp. 134-152.
- Barr, A. (2023). "Behind the Façade." RSA Journal. Issue I, 2023.
- Barton, H., & Grant, M. (2006). A health map for the local human habitat. *Journal of the Royal Society for the Promotion of Health*, 126(6), pp. 252–253.
- Beatley, T. (2000) *Green Urbanism: Learning from European Cities*. Washington, DC: Island Press. ISBN-13 978-155963682
- Beatley, T. (2011) *Biophilic Cities: Integrating Nature into Urban Design and Planning*. Washington, DC: Island Press. doi:10.5822/978-1-59726-986-5.
- Beer, A., Ayres, S., Clower, T., Faller, F., Sancino, A., & Sotarauta, M. (2020). Place leadership and regional economic development: a framework for cross-regional analysis. *Regional Studies*, 54(2), pp. 171-182.
- Benedict, M. A. & McMahon, E. T. (2006). *Green infrastructure: Linking landscapes and communities*. Washington, D.C.: Island Press.
- Bentley, R.J., Pevalin, D., Baker, E., Mason, K., Reeves, A. & Beer, A. (2016) Housing affordability, tenure and mental health in Australia and the United Kingdom: a comparative panel analysis. *Housing Studies*, Vol. 31 (2): pp. 208–222. doi:10.1080/02673037.2015.1070796.
- Bernstein, J.H. (2015). Transdisciplinarity: A review of its origins, development, and current issues. *J. Res. Pract.* 11 (1), 1–2
- Bertolini, L. & Dijst, M. (2003). Mobility Environments and Network Cities. *Journal of Urban Design*, 8(1), pp.27–43.
- Bertolini, L. (2017). *Planning the Mobile Metropolis: Transport for People, Places and the Planet*. Routledge.
- Bishop, P. & Williams, L. (2012) *The Temporary City*. London: Taylor & Francis. Routledge. ISBN 9780415670562.
- Boyko, C.T., Cooper, R. & Rosenberg, L. (2022). *Design codes and pattern books: tools for contextual place-making?* *Urban Design International*, 27(2), pp.151–167.
- Bramley, G. & Karley, N. K. (2007). *Social Sustainability and Urban Form: Evidence from Five British Cities*. *Environment and Planning A*, 39(9), pp. 2374-2391.
- Brand, S. (1995) *How Buildings Learn: What Happens After They're Built*. New York: Viking.
- Brandt, P., Ernst, A., Gralla, F., Luederitz, C., Lang, D.J., Newig, J., Reinert, F., Abson, D. J., & von Wehrden, H. (2013). A review of transdisciplinary sustainability research: Emerging trends and methodological challenges. *Ecological Economics*, 92, pp. 1–15. doi.org/10.1016/j.ecolecon.2013.04.008
- BRE (2021) *BREEAM UK New Construction Technical Manual*. Watford: Building Research Establishment.
- Brenner, N. & Schmid, C. (2015). Towards a new epistemology of the urban? *City*, 19(2–3), pp. 151–182.
- Boyko, C.T. & Cooper, R. (2011) Clarifying and re-conceptualising density: towards a social, sustainable and place-based approach. *Progress in Planning*, 76 (1): pp. 1–61. doi:10.1016/j.progress.2011.07.001.
- Brunskill, R.W. (2000) *Traditional Buildings of Britain: An Introduction to Vernacular Architecture*. London: Cassell.
- Building Better, Building Beautiful Commission (2020). *Living with Beauty: Promoting health, well-being and sustainable growth*. London: *Ministry of Housing, Communities & Local Government*. Available at: [Building Better, Building Beautiful Commission - GOV.UK](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/434443/Building_Better_Building_Beautiful_Commission_-_GOV.UK.pdf).
- Briscoe, G., Dainty, A.R.J. & Millett, S. (2001) Construction supply chain partnerships: Skills, knowledge and attitudinal requirements. *European Journal of Purchasing & Supply Management*, 7 (4): pp. 243-255.
- Commission for Architecture and the Built Environment CABE (2002) *The value of good design*. London: CABE/MORI poll. Available at: <https://www.designcouncil.org.uk/fileadmin/uploads/dc/Documents/the-value-of-good-design.pdf>
- CABE (2007). *Housing audit: Assessing the design quality of new housing in the East Midlands, West Midlands and the South West*. London: Commission for Architecture and the Built Environment.
- CABE (2009). Commission for Architecture and the Built Environment (2009) *Design review: principles and practice*. London: CABE. ISBN: 978-1-84633-024-7.
- CABE (2010). *Building Schools for the Future: The Role of the Built Environment in Raising Educational Standards*. London: CABE.
- Callcutt, J. (2007). *The Callcutt Review of Housebuilding Delivery*. London: *Department for Communities and Local Government (DCLG)*.
- Calthorpe, P. (1993) *The Next American Metropolis: Ecology, Community, and the American Dream*. Princeton: Princeton Architectural Press.
- Carmona, M. (2010) 'Contemporary public space: Critique and classification, part one: Critique', *Journal of Urban Design*, 13(1), pp. 123–148.
- Carmona, M. (2014). *The Place-shaping Continuum: A Theory of Urban Design Process*. *Journal of Urban Design*, 19(1), pp. 2–36.
- Carmona, M. (2019). *Place value: Place quality and its impact on health, social, economic and environmental outcomes*. *Journal of Urban Design*, 24(1), pp.1–48.
- Carmona, M. (2021). Principles for public space design, planning to do better. *Urban Design International*, 26, pp. 2–18.
- Carmona, M., Heath, T., Oc, T. & Tiesdell, S. (2010) *Public Places, Urban Spaces: The Dimensions of Urban Design*. 2nd edn. London: Routledge.

- Cavill, N., Kahlmeier, S., Rutter, H., Racioppi, F., & Oja, P. (2008). Economic analyses of transport infrastructure and policies including health effects related to cycling and walking: A systematic review. *Transport Policy*, 15(5), pp. 291–304. Available at: <http://bit.ly/1mitpUX>
- Cervero, R. (1998). *The Transit Metropolis: A Global Inquiry*. Island Press.
- Cervero, R., & Kockelman, K. (1997). Travel demand and the 3Ds: Density, diversity, and design. *Transportation Research Part D: Transport and Environment*, 2(3), pp. 199–219.
- Chan, P. W. (2023). Beyond the boundary and scale of the construction project. In R. Leiringer, & A. Dainty (Eds.), *A Research Agenda for Construction Management*. pp. 117–140. Edward Elgar Publishing.
- Cilliers, E. J., Diemont, E., Stobbelaar, D. J. & Timmermans, W. (2011). *Sustainable landscape planning: tools for revitalising rural areas*. *Progress in Planning*, 76(4), pp.127–199.
- Cisneros, C. (2015). Value of Walkable Communities (Thesis, Department of Public Policy and Administration, California State University, Sacramento). Available at: <https://scholars.csus.edu/esploro/outputs/graduate/Value-of-walkable-communities/99257831113901671>
- Clarke, S., & Willis, M. (2020). Spatial inequalities and housing in the UK. *Resolution Foundation*.
- Community Land Trust Network (2025) *Community-Led Place Stewardship: Evidence, Practice and Policy Recommendations*. London: CLT Network.
- Competition and Markets Authority (2024) *Housebuilding market study: Final report*. London: CMA. Available at: <https://www.gov.uk/government/publications/housebuilding-market-study-final-report>
- Congress for the New Urbanism (CNU). (1996) *Charter of the New Urbanism*. Chicago: CNU.
- Cooke, B. & Kothari, U. (2001). *Participation: The New Tyranny?* London: Zed Books.
- Cornwall, A. (2008). Unpacking ‘participation’: Models, meanings and practices. *Community Development Journal*, 43(3), pp. 269–283.
- Cresswell, T. (1996). *In Place/Out of Place: Geography, Ideology, and Transgression*. Minneapolis: University of Minnesota Press.
- Crisp, R., Ferrari, E., Gore, T., Green, S., McCarthy, L., Rae, A., Reeve, K. & Stevens, M. (2018) *Tackling transport-related barriers to employment in low-income neighbourhoods*. York: Joseph Rowntree Foundation. Available at: <https://www.shu.ac.uk/-/media/home/research/cresr/reports/t/tackling-transport-related-barriers-low-income-neighbourhoods.pdf>
- Cullingworth, J. B., & Nadin, V. (2014). *Town and Country Planning in the UK*. Routledge.
- Dannenberg, A. L., Frumkin, H., & Jackson, R. J. (Eds.). (2011). *Making Healthy Places: Designing and Building for Health, Well-being, and Sustainability*. Island Press.
- Davoudi, S., Crawford, J., & Mehmood, A. (2009). *Planning for Climate Change: Strategies for Mitigation and Adaptation for Spatial Planners*. London: Earthscan.
- Dempsey, N., Brown, C. & Bramley, G. (2011) ‘The key to sustainable urban development in UK cities? The influence of density on social sustainability’, *Progress in Planning*, 77(3), pp. 89–141.
- Dempsey, N., Bramley, G., Power, S. & Brown, C. (2011) The social dimension of sustainable development: Defining urban social sustainability. *Sustainable Development*, Vol. 19 (5): pp. 289–300. doi:10.1002/sd.417.
- Department for Business Innovation & Skills (2013) *Supply chain analysis into the construction industry: Report for the Construction Industrial Strategy*. London: BIS. Available at: <https://assets.publishing.service.gov.uk/media/5a7c08c040f0b645ba3c6499/bis-13-1168-supply-chain-analysis-into-the-construction-industry-report-for-the-construction-industrial-strategy.pdf>
- Department for Communities and Local Government (DCLG). (2017). *Fixing Our Broken Housing Market*. London: HMSO.
- Department for Culture, Media and Sport (2024) *Community Life Survey 2023/24: Background and headline findings - GOV.UK*
- Department for Levelling Up, Housing and Communities (DLUHC) (2024). *National Planning Policy Framework*. London: HM Government. Available at <https://www.gov.uk/government/publications/national-planning-policy-framework-2>
- Department for Levelling Up, Housing and Communities (DLUHC). (2022). *Levelling Up the United Kingdom: White Paper*. HM Government. <https://www.gov.uk/government/publications/levelling-up-the-united-kingdom>
- Department for Levelling Up, Housing and Communities (DLUHC). (2023). *National Planning Policy Framework*.
- Department for Transport (2024) *Walking and cycling statistics, England: Introduction and main findings (National Travel Survey) - GOV.UK*
- Dixon, J. & Durrheim, K. (2000). Displacing place-identity: A discursive approach to locating self and other. *British Journal of Social Psychology*, 39(1), pp. 27–44. doi.org/10.1348/014466600164318
- DLUHC & DEFRA (2024). *Biodiversity Net Gain: Planning Practice Guidance*. London: HM Government. Available at <https://www.gov.uk/guidance/biodiversity-net-gain>
- DLUHC (2022) *National Model Design Code Pilot Programme Phase 1: lessons learned*. London: GOV.UK. Available at: <https://www.gov.uk/government/publications/national-model-design-code-pilot-programme-phase-1-lessons-learned>
- DLUHC (2025). *Local Authority Green Belt Statistics for England 2024–25*. Available at: [https://www.gov.uk/government/statistics/local-authority-green-belt-england-2024-25-statistical-release](https://www.gov.uk/government/statistics/local-authority-green-belt-statistics-for-england-2024-to-2025/local-authority-green-belt-england-2024-25-statistical-release)
- Dreborg, K. H. (1996). *Essence of backcasting*. *Futures*, 28(9), pp. 813–828. doi.org/10.1016/S0016-3287(96)00044-4
- Duany, A. & Plater-Zyberk, E. (1982). ‘The Seaside Plan’, *Architectural Record*, 170(5), pp. 114–125.
- Duchy of Cornwall (2011) *Poundbury factsheet*, Poundbury: Poundbury Office.
- Duchy of Cornwall (2025) *Poundbury | Duchy of Cornwall* Date accessed May 2025
- Edmondson, A. C. (2000) *The Innovation Journey* by Andrew van de Ven, Douglas E. Polley, Raghuram Garud, Sankaran Venkataraman. The Academy of Management Review.
- Ehwi, R., Maslova, S. & Burgess, G. (2022) *Self-build and custom housebuilding in the UK: an evidence review*. Cambridge: University of Cambridge & Oxford Brookes University
- Ewing, R., & Cervero, R. (2010). Travel and the built environment. *Journal of the American Planning Association*, 76(3), pp. 265–294.
- Farrell, T. (2014). *The Farrell Review of Architecture and the Built Environment*. London: Department for Culture, Media & Sport.
- Farmer, M. (2016) *Modernise or Die: The Farmer Review of the UK Construction Labour Model*. London: Mark Farmer/BEIS. Available at: <https://www.constructionleadershipcouncil.co.uk/wp-content/uploads/2016/10/Farmer-Review.pdf>
- Federation of Master Builders (2017) *FMB House Builders’ Survey 2017*. London: Federation of Master Builders. Available at: <https://www.fmb.org.uk/resource/lack-of-land-and-lending-is-blocking-new-homes.html>
- Federation of Master Builders (2020a). *House Builders’ Survey 2020*.
- Federation of Master Builders. (2020b). *State of Trade Survey*. London: FMB.
- Forester, J. (1999). *The Deliberative Practitioner: Encouraging Participatory Planning Processes*. Cambridge, MA: MIT Press.
- Forrest, R. & Kearns, A. (2001) ‘Social Cohesion, Social Capital and the Neighbourhood’, *Urban Studies*, 38(12), pp. 2125–2143.
- Forsyth, A. (2015). What is a walkable place? The walkability debate in urban design. *Urban Design International*, 20(4), pp. 274–292. doi.org/10.1057/udi.2015.22
- Friel, C., Walsh, D., Whyte, B., Dibben, C., Feng, Z., Baker, G., Kelly, P., Demou, E., & Dundas, R. (2024). Health benefits of pedestrian and cyclist commuting: evidence from the Scottish Longitudinal Study. *BMJ Public Health*, 2, e001295. doi.org/10.1136/bmjph-2024-001295
- Gallent, N., Durrant, D., & Robinson, S. (2018). *Affordable housing: Why housing became unaffordable, and how to fix it*. Policy Press.
- Garrington’s (2025). *Best Places to Live 2025 in England and Wales* Date accessed May 2025

- Geels, F. W. (2002). Technological transitions as evolutionary reconfiguration processes: A multi-level perspective and a case-study. *Research Policy*, 31(8-9), 12571274. doi.org/10.1016/S0048-7333(02)00062-8
- Gehl, J. (2010). *Cities for people*. Washington, D.C.: Island Press.
- Gehl, J. (2011) *Life Between Buildings: Using Public Space*. Washington DC: Island Press.
- Giles-Corti, B., Vernez-Moudon, A., Reis, R., Turrell, G., Dannenberg, A.L., Badland, H., Foster, S., Lowe, M., Sallis, J.F., Stevenson, M. & Owen, N. (2016) City planning and population health: a global challenge. *The Lancet*, Vol. 388 (10062): pp. 2912–2924. doi:10.1016/S0140-6736(16)30066-6.
- GlobalABC (2025) *Global Status Report for Buildings and Construction 2024/25*. Global Alliance for Buildings and Construction. Available at: https://globalabc.org/sites/default/files/2025-03/Global-Status-Report-2024_2025.pdf
- Górczyńska-Angiulli, M. (2023) The effects of housing providers' diversity and tenure conversion on social mix. *Cities*, Vol. 138: Article 104370. doi:10.1016/j.cities.2023.104370.
- Gov.UK (2025) *People without decent homes - GOV.UK Ethnicity facts and figures* Date accessed June 2025
- Goodchild, B. (2021) Housing quality and design standards in England: the driving forces for change and their implications. *People, Place and Policy*, 15(1): pp. 33–45. doi:10.3351/ppp.2021.4964445474
- Graham, S. & Marvin, S. (2001). *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition*. Routledge.
- Grant, J. (2002). Mixed use in theory and practice: Canadian experience with implementing a planning principle. *Journal of the American Planning Association*, 68(1), pp. 71–84.
- Green S. D. (2024) *Making Sense of Construction Improvement*, 2nd, ed., Routledge, Abingdon.
- Hall, P. (2014) *Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century*. 4th edn. Oxford: Blackwell.
- Hall, P., & Pfeiffer, U. (2000). *Urban Future 21: A Global Agenda for Twenty-first Century Cities*. Routledge.
- Hardy, D. (2006) Poundbury: the town that Charles built, London: Town & Country Planning Association.
- Harris M. A., & Bird W. (2020). Bright spots, physical activity investments that work: Beat the Street. *British journal of sports medicine*, 54(8), pp. 489–490. doi.org/10.1136/bjsports-2018-099992
- Harris, E.C. (2013) *Supply chain analysis into the UK construction sector*. London: Department for Business, Innovation & Skills.
- Home Builders Federation (2024) *The economic footprint of home building in England and Wales*. London: HBF/Lichfields. Available at: [https://www.hbf.co.uk/documents/13965/The Economic Footprint of Home Building in England and Wales report - September 2024 v.pdf](https://www.hbf.co.uk/documents/13965/The_Economic_Footprint_of_Home_Building_in_England_and_Wales_report_-_September_2024_v.pdf)
- Healey, P. (2006) *Collaborative Planning: Shaping Places in Fragmented Societies*. 2nd edn. Basingstoke: Palgrave Macmillan.
- Healey, P. (1997) *Collaborative Planning: Shaping Places in Fragmented Societies*. London: Macmillan Press.
- Healey, P. (1999) Institutional analysis, communicative planning and shaping places. *Journal of Planning Education and Research*, 19(2): pp. 111–126.
- Healey, P. (2010). *Making Better Places: The Planning Project in the Twenty-First Century*. Palgrave Macmillan. ISBN 10 0230200575, ISBN 13 978-0230200579
- Henneberry, J., & Parris, S. (2013). The embedded developer: Using project ecologies to analyse local property development networks. *Town Planning Review*, 84(2), pp. 157–178.
- HM Government (2023) *Net Zero Strategy: Build Back Greener*. London: Department for Energy Security and Net Zero.
- Hock, E., Blank, L., Fairbrother, H., Clowes, M., Castelblanco Cuevas, D., Booth, A., Clair, A. & Goyder, E. (2024) **Exploring the impact of housing insecurity on the health and wellbeing of children and young people in the United Kingdom: a qualitative systematic review.** *BMC Public Health*, Vol. 24 (1): 2453. doi:10.1186/s12889-024-19735-9.
- HM Government (2024). *Planning overhaul to reach 1.5 million new homes*. Press release, 13 December 2024. Available at:
- <https://www.gov.uk/government/news/planning-overhaul-to-reach-15-million-new-homes>
- Hodkinson, S. (2018). Housing market failure and the crisis of UK housing. *Housing Studies*, 33(1).
- Home Builders Federation (2023a). *Reversing the Decline of SME Housebuilders*.
- Home Builders Federation (2023b). *State of Play: Challenges and Opportunities Facing SME Home Builders 2022/23*. Available at: https://www.hbf.co.uk/documents/12334/HBF_Report_-_SME_report_2023v2.pdf
- Homes England (2020) *Building for a Healthy Life*. BFL-2020-Brochure.pdf Date accessed June 2025
- Homes England (2023a) *Fact Sheet 7: Homes and different land types - GOV.UK* Date accessed June 2025
- Homes England (2023b) *Fact Sheet 9: What is affordable housing? - GOV.UK* Date accessed May 2025
- Homes England (2024) *Fact Sheet 1. The need for homes - GOV.UK* Date accessed June 2025
- House of Commons Library. (2023). *Future of small and medium-sized housebuilders: Debate Pack* (Research Briefing CDP 2023/0100). Published 5 May 2023. Available at: <https://commonslibrary.parliament.uk/research-briefings/cdp-2023-0100/>
- House of Lords. (2022). *Meeting Housing Demand: Report of the Built Environment Committee*.
- Inayatullah, S. (2008). *Six pillars: Futures thinking for transforming*. *Foresight*, 10(1), pp. 4–21. doi.org/10.1108/14636680810855991
- Innes, J. E. & Booher, D. E. (2004). Reframing public participation: Strategies for the 21st century. *Planning Theory & Practice*, 5(4), pp. 419–436.
- ITVX (2025) *Friendly Yorkshire market town crowned Britain's happiest place to live | ITV News*
- Jacobs, J. (1961). *The Death and Life of Great American Cities*. Random House.
- Jacobson, D. (2017). *New Urbanism Revisited: Social Realities Behind Utopian Visions*. *Planning Perspectives*, 32(4), pp. 569–588.
- Jahn, T., Bergmann, M. & Keil, F. (2012). Transdisciplinarity: Between mainstreaming and marginalization. *Ecological Economics*, 79, pp. 1–10. doi.org/10.1016/j.ecolecon.2012.04.017
- Karlsen, S. & Nazroo, J. Y. (2002). Agency and structure: The impact of ethnic identity and racism on the health of ethnic minority people. *Sociology of Health & Illness*, 24(1), pp.1–20.
- Kiberd, E., & Straňák, B. (2024). *Trapped behind the wheel: How England's new builds lock us into car dependency*. New Economics Foundation. https://neweconomics.org/uploads/files/NEF_Trapped-Behind-The-Wheel-updated.pdf
- Kibert, C. J. (2016) *Sustainable Construction: Green Building Design and Delivery*. 4th ed. Hoboken: Wiley.
- Klerkx, L., Aarts, N. & Leeuwis, C. (2010) 'Adaptive management in agricultural innovation systems: The role of innovation platforms', *Agricultural Systems*, 103(6), pp. 390–400.
- Klinenberg, E. (2018) *Palaces for the People: How Social Infrastructure Can Help Fight Inequality, Polarization, and the Decline of Civic Life*. New York: Crown.
- Knight Frank (2020) *Building Better, Building Beautiful Commission: Cost & Value – identifying the cost and value of well-designed development schemes*. Knight Frank. Available at: <https://content.knightfrank.com/research/1930/documents/en/building-better-building-beautiful-commission-cost-value-2020-7017.pdf>
- Krieger, J., & Higgins, D. L. (2002). Housing and health: time again for public health action. *American Journal of Public Health*, 92(5), pp. 758–768.
- Krier, L. (1984) *Houses, Palaces, Cities*. London: Academy Editions.
- Krier, L. (1998) *Architecture: Choice or Fate*. Windsor: Andreas Papadakis.
- Lancashire County Council. (2023). *Labour Market Briefing – Lancashire 2023*. Lancashire Insight. Available at: <https://www.lancashire.gov.uk/lancashire-insight/economy/labour-market/>
- Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., Swilling, M. & Thomas, C. J. (2012). Transdisciplinary research in sustainability

- science: practice, principles, and challenges. *Sustainability Science*, 7(Supplement 1), pp. 25-43. doi.org/10.1007/s11625-011-0149-x
- Larkham, P. J. (2003) 'The Place of Local Materials in Urban Design', *Urban Design International*, 8(1-2), pp. 21-34.
- Larsen, G. D. (2025) Sustainable built environments: lessons from history and environmental philosophy. In: (Ed) Victoria, M., Laing, R. A. and Bevan W. J. *Embedding Sustainability in Built Environment Curricula: Opportunities and Challenges*. Springer.
- Larsen, G. D., Lee, A., & Zala, M. (2025) "Sustainable healthy communities: the contested role of 'region' in the housing development sector," *CIB Conferences*. Vol. 1 Article 54. doi.org/10.7771/3067-4883.2066
- Larsen, G.D., Zala, M., & Lee, A. (2025). *Beyond Units: Regional insights into the creation of sustainable communities*. SEEDS Conference, Leeds Beckett University. Conference contribution. Available at: <https://hdl.handle.net/10779/leedsbeckett.30428596.v1>
- Lawless, P., & Downs, C. (2020). Housing supply challenges in England: an analysis. *Housing Studies*, 35(2).
- Lawrence, M.G., Williams, S., Nanz, P., & Renn, O., 2022. Characteristics, potentials and challenges of transdisciplinary research. *One Earth* 5 (1), pp. 44-61. doi.org/ 10.1016/j.oneear.2021.12.01
- Legacy, C. (2017). Is there a crisis of participatory planning? *Planning Theory*, 16(4), pp.425-442.
- Lei, Y. (2024) Urban/ village extension – design principles of new urbanism. PhD Thesis, University of Nottingham
- Letwin, O. (2018). Independent Review of Build Out: Final Report. London: HMSO.
- Lewicka, M. (2011). Place attachment: How far have we come in the last 40 years? *Journal of Environmental Psychology*, 31(3), 207-230.
- Leyden, K. M., Hogan, M. J., D'Arcy, L., Bunting, B., & Bierema, S. (2024). Walkable Neighborhoods: Linkages Between Place, Health, and Happiness in Younger and Older Adults. *Journal of the American Planning Association*, 90(1), pp. 101-114. doi.org/10.1080/01944363.2022.2123382
- Litman, T. A. (2003). Economic Value of Walkability. *Transportation Res. Rec.* 1828, 3-11. doi:10.3141/1828-01 Available at: www.vtpi.org/walkability.pdf
- Local Trust & OCSI. (2023). Everybody Needs Good Neighbourhoods: The Impact of Resident-Led Neighbourhood-Based Initiatives in Deprived Communities. National Lottery Community Fund. Available at: <https://www.tnlcommunityfund.org.uk/media/insights/documents/Neighbourhood-Report-AW7.pdf>
- Local Trust and Oxford Consultants for Social Inclusion (OCSI) (2019) Left Behind? Understanding Communities on the Edge. London: Local Trust. Available at: https://localtrust.org.uk/wp-content/uploads/2019/08/local_trust_ocs_i_left_behind_research_august_2019.pdf
- LSE. (2021). The economics of housing supply. London School of Economics.
- Lynch, K. (1960). *The Image of the City*. Cambridge, MA: MIT Press.
- Lyons, M. (2014). *The Lyons Housing Review: Mobilising Across the Nation to Build the Homes Our Children Need*. Available at: <https://www.thinkhouse.org.uk/site/assets/files/1874/lyons.pdf>
- Maas, J., Verheij, R.A., Groenewegen, P.P., de Vries, S., & Spreeuwenberg, P. (2006) Green space, urbanity, and health: how strong is the relation? *Journal of Epidemiology & Community Health*, Vol. 60 (7): pp. 587-592.
- Madanipour, A. (1996). *Design of urban space: An inquiry into a socio-spatial process*. Chichester: Wiley.
- Malmberg, A., & Maskell, P. (1997) Towards an explanation of regional specialization and industry agglomeration. *European Planning Studies*, Vol. 5 (1): pp. 25-41.
- Malmberg, A. and Maskell, P. (2002) The elusive concept of localization economies: towards a knowledge based theory of spatial clustering. *Environment and Planning*. Vol. 34 (3): pp. 429-449.
- Manlangit, M., Karadimitriou, N. & de Magalhães, C. (2022) Everyone wins? UK housing provision, government shared equity loans, and the reallocation of risks and returns after the Global Financial Crisis. *International Journal of Housing Policy*. doi: 10.1080/19491247.2022.2123270
- Manzi, T., Lucas, K., Lloyd-Jones, T. & Allen, J. (2010) *Social Sustainability in Urban Areas: Communities, Connectivity and the Urban Fabric*. London: Earthscan.
- Manzo, L. C. & Devine-Wright, P. (2020). *Place Attachment: Advances in Theory, Methods and Applications*. London: Routledge.
- Manzo, L. C., & Perkins, D. D. (2006). Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning. *Journal of Planning Literature*, 20(4), pp. 335-350. doi.org/10.1177/0885412205286160
- Marmot, M., & Wilkinson, R. (2006). *Social Determinants of Health*. Oxford University Press.
- Marmot, M., Allen, J., Goldblatt, P., Boyce, T., McNeish, D., Grady, M. & Geddes, I. (2010) *Fair Society, Healthy Lives: Strategic review of health inequalities in England post-2010*. London: The Marmot Review / UCL Institute of Health Equity. Available at: <https://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review>.
- Marmot, M., Allen, J., Boyce, T., Goldblatt, P. & Morrison, J. (2020) *Health equity in England: The Marmot Review 10 years on*. London: Institute of Health Equity. Available at: https://www.housinglin.org.uk/_assets/Resources/Housing/OtherOrganisations/The-Marmot-Review-10-Years-On.pdf
- Marshall, S. (2012) *Science, Pseudo-Science and Urban Design*. London: Routledge.
- Mason, H. (2013), Site video, www.jvenergen.co.uk/site_video, Date accessed May 2023
- Massey, D. (1994). *Space, Place, and Gender*. Minneapolis: University of Minnesota Press.
- MHCLG (2019). *National Design Guide: Planning Practice Guidance for Beautiful, Enduring and Successful Places*.
- MHCLG (2021). National Planning Policy Framework. Ministry of Housing, Communities and Local Government.
- MHCLG (2021a). *National Model Design Code*. London: Ministry of Housing, Communities and Local Government.
- MHCLG (2021b). *National Planning Policy Framework*. London: MHCLG. <https://www.gov.uk/government/publications/national-planning-policy-framework--2>
- MHCLG (2024). *Housing supply: net additional dwellings, England: 2023 to 2024 - GOV.UK*
- MHCLG (2025) *New Towns Taskforce: Report to Government New Towns Taskforce: final report*.
- Monk, S., & Whitehead, C. (1999). Evaluating the economic impact of housing policies. *Journal of Housing and the Built Environment*, 14(1), pp. 37-52.
- Monk, S., Whitehead, C., Tang, C., & Burgess, G. (2020). *Delivering Affordable Housing through Section 106: Evidence and Effectiveness*. Joseph Rowntree Foundation.
- Montgomery, J. (1998) Making a city: urbanity, vitality and urban design. *Journal of Urban Design*, Vol. 3 (1): pp.93-116. doi:10.1080/1357480980724418.
- Mossman, Alan., (2009). "There really is another way, if only he could stop ... for a moment and think of it" Why isn't the UK construction industry going lean with gusto?. *LC Journal* 2009 pp 24 - 36
- Mulley, C., Tyson, R., McCue, P., Rissel, C., & Munro, C. (2013). Valuing active travel: Including the health benefits of sustainable transport in transportation appraisal frameworks. *Research in Transportation Business & Management*, 7, pp. 27-34.
- Murray, M. & Langford, D. (Eds.) (2003) *Construction Reports 1944-98*, Blackwell, Oxford.
- Nabatchi, T., & Leighninger, M. (2015). *Public participation for 21st century democracy*. Jossey-Bass. ISBN: 978-1-118-68840-3
- NAO (National Audit Office). (2001). *Tackling Obesity in England*. London: The Stationery Office.
- National Design Guide (2021) <https://www.gov.uk/government/publications/national-design-guide> Date accessed May 2025
- Neal, P. ed, (2003), *Urban villages and the making of communities*, London: Spon Press.
- Neighbourly Lab (2024) *Making Sense of Belonging: How People Experience Place, Identity and Community*. London: Neighbourly Lab. <https://www.neighbourlylab.com/wp-content/uploads/2025/02/Making->

[Sense-of-Belonging-CDIC-Local-Area-Belonging-Project_Neighbourly-Lab_GLA_IUH_Design-4.pdf](#)

New Economics Foundation. (2024). *Trapped behind the wheel: How England's new builds lock us into car dependency*. New Economics Foundation.

New Towns Taskforce (2024). *New Towns Taskforce: Report to Government*. London: DLUHC. <https://www.gov.uk/government/publications/new-towns-taskforce-report-to-government/new-towns-taskforce-report-to-government>

OECD (2006). *Educational Facilities and Urban Planning: A Report for the OECD Centre for Effective Learning Environments*. Paris: OECD Publishing.

OFCOM (2025) [Exploring how people in the UK are affected by 'digital disadvantage' - Ofcom](#) Date accessed June 2025

Office for National Statistics (ONS). (2021) Office for National Statistics <https://www.nomisweb.co.uk/reports/localarea?compare=E06000059,E92000001> Date accessed May 2025

Office for National Statistics (ONS). (2022). *Local area labour markets: Indicators by UK local authority, 2021 and 2022*. <https://www.ons.gov.uk>

Office for National Statistics (ONS). (2023). *Regional Labour Market Statistics in the UK: April 2023*. <https://www.ons.gov.uk/releases/regionallabourmarketstatisticsapril2023>

Office for National Statistics (ONS). (2023a) [Characteristics of people in England and Wales with a second address - Office for National Statistics](#) Date accessed June 2025

Office for National Statistics (ONS). (2023b). *Job Density by Local Authority (2022)*. ONS. <https://www.nomisweb.co.uk/>

Office for National Statistics (ONS). (2024). UK House Price to Earnings Ratios.

Orton, J. D. (1997) From inductive to iterative grounded theory: Zipping the gap between process theory and process data, *Scandinavian Journal of Management*, Volume 13, Issue 4, pp. 419-438,

Pain, R. (2001). Gender, race, age and fear in the city. *Urban Studies*, 38(5-6), pp.899-913.

Parker, G. & Doak, J. (2012) *Key Concepts in Planning*. London: SAGE Publications Ltd. doi:10.4135/9781473914629. ISBN: 978-1-84787-076-6

Pevsner, N. (1951-1974) *The Buildings of England*. London: Penguin Books.

Pierre, J. & Peters, B. G. (2000). *Governance, Politics and the State*. Basingstoke: Macmillan.

Pike, A., Rodríguez-Pose, A., & Tomaney, J. (2017). Shifting horizons in local and regional development. *Regional Studies*, 51(1), pp.46-57.

Pinch, T. J., & Bijker, W. E. (1984). The Social Construction of Facts and Artefacts: or How the Sociology of Science and the Sociology of Technology might Benefit Each Other. *Social Studies of Science*, 14(3), pp. 399-441.

Place Standard Tool (2023) *How good is our place?* Edinburgh: Place Standard Tool. Available at: <https://webarchive.nrsotland.gov.uk/20250820143516/https://www.ourplace.scot/>

Poundbury (2025a) [Poundbury, Dorset - official guide to visiting, living or working in Poundbury](#)

Poundbury (2025b) [Economic Impact Assessment of Poundbury - Poundbury.co.uk](#)

Power, A. (2016) *Cities for a Small Country*. London: Routledge.

Project for Public Spaces (2009) *What is Placemaking?* [online] Available at: <https://www.pps.org/article/what-is-placemaking> [

Proshansky, H. M., Fabian, A. K. & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self. *Journal of Environmental Psychology*, 3(1), pp. 57-83.

Przybylski, A. K. & Weinstein, N. (2017). *Digital screen time limits and young children's psychological well-being: Evidence from a population-based study*. *Child Development*, 88(6), pp.1737-1749.

Public Health England (2017) [10 minutes brisk walking each day in mid-life for health benefits and towards achieving physical activity recommendations: evidence summary](#) Date accessed June 2025

Public Health England (2021) [Place-based approaches for reducing health inequalities: main report - GOV.UK](#) Date accessed June 2025

Punter, J. (2016) 'Poundbury: A Twenty-Year Review', *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 9(3), pp. 256-283.

Purcell, M. (2006). Urban democracy and the local trap. *Urban Studies*, 43(11), pp. 1921-1941.

Putnam, R. D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. Simon & Schuster.

Quist, J., & Vergragt, P. J. (2006). *Past and future of backcasting: The shift to stakeholder participation and a proposal for a methodological framework*. *Futures*, 38(9), pp. 1027-1045. doi.org/10.1016/j.futures.2006.02.010

Relph, E. (1976). *Place and Placelessness*. London: Pion.

Resolution Foundation. (2022). *Housing Shortfall in the UK*.

Robinson, J. B. (2003). *Future subjunctive: Backcasting as social learning*. *Futures*, 35(8), pp. 839-856. doi.org/10.1016/S0016-3287(03)00039-9

Rodríguez-Pose, A. (2013). Do institutions matter for regional development? *Regional Studies*, 47(7), pp. 1034-1047.

Rogers, R. (2015). *Density and Sustainability in Contemporary Urbanism*. *The Architectural Review*, 238(1422), pp. 45-51.

Rogers, R., & Power, A. (2000). *Cities for a Small Country*. Faber and Faber.

Rogers, E.M. (2003) *Diffusion of innovations*. 5th edition. New York: Free Press. ISBN-13 978-0743222099

Rogers, S. H., Gardner, K. H., & Carlson, C. H. (2013). Social Capital and Walkability as Social Aspects of Sustainability. *Sustainability*, 5(8), pp. 3473-3483. doi.org/10.3390/su5083473

Roper, J., Pettit, C., Ng, M. (2021). Understanding the Economic Value of Walkable Cities. In: Geertman, S.C.M., Pettit, C., Goodspeed, R., Staffans, A. (eds) *Urban Informatics and Future Cities*. The Urban Book Series. Springer, Cham. doi.org/10.1007/978-3-030-76059-5_15

Rossiter, A. (2002). "Urban Villages: the origins and legacy of Poundbury." About-Britain.com - Academic.

Royal Institute of British Architects (2020) *RIBA Plan of Work 2020*. London: RIBA Publishing.

Royal Town Planning Institute (RTPI) and LandTech (2024) Location of Development Sustainable transport and the location of residential planning permissions, 2012-2021. [Plan The World We Need](#)

Rydin, Y. (2011). *The Purpose of Planning: Creating Sustainable Towns and Cities*. Bristol: Policy Press.

Parham, E., Jones, E., McCoshan, E. & Chen, P.N. (2022) *But can I walk to work?* Salus Global, 7 Dec. Available at: <https://salus.global/article-show/but-can-i-walk-to-work>

Sallis, J.F., Cerin, E., Conway, T.L., Adams, M.A., Frank, L.D., Pratt, M., Salvo, D., Schipperijn, J., Smith, G., Cain, K.L., Davey, R., Kerr, J., Lai, P.-C., Mitaš, J., Reis, R., Sarmiento, O.L., Schofield, G., Troelsen, J., Van Dyck, D., De Bourdeaudhuij, I. & Owen, N. (2016) Physical activity in relation to urban environments in 14 cities worldwide: a cross-sectional study. *The Lancet*, Vol. 387 (10034): pp. 2207-2217. doi:10.1016/S0140-6736(15)01284-2

Samuel, F. (2010). *Towards a New Vernacular: Architecture and Identity in the 21st Century*. *The Journal of Architecture*, 15(6), pp.689-706.

Sandercock, L. (2003). *Cosmopolis II: Mongrel Cities of the 21st Century*. London: Continuum.

Savills (2025) [Health, Wellbeing, Education and Place Building: The role of place building in large residential developments on health, wellbeing and educational outcomes of residents in the UK. UCEM report Health-Wellbeing-Education-and-Placebuilding-Report.pdf](#)

Shahparvari, M. & Fong, D. (2018) The review of rework causes and costs in housing construction supply chain. In: *Proceedings of the 26th Annual Conference of the International Group for Lean Construction*, pp.1375-1384. doi:10.24928/2018/0514.

Sheffield Hallam University (2023) [Large UK housebuilders pay out £16 billion in dividends, as the cost of this to new homebuyers is revealed | Sheffield Hallam University](#)

Shelter (2024). *Brick by Brick: A Plan to Deliver the Social Homes We Need*. Galarza, V., Rich, H., Trew, C., Bloomer, S., Berry, C., & Matthew, W. Published 11 July 2024. Available: https://england.shelter.org.uk/professional_resources/policy_and_research/policy_library/brick_by_brick

Shelter UK. (2023-2024). Housing crisis annual reports.

- Silberberg, S., Lorah, K., Disbrow, R. & Muessig, A. (2013) *Places in the Making: How Placemaking Builds Places and Communities*. MIT Department of Urban Studies and Planning.
- Smith, N. (1996) *The New Urban Frontier: Gentrification and the Revanchist City*. London: Routledge.
- Space Syntax (2026) [Walkability Index - Space Syntax](#)
- Sport England. (2020). *Active Lives Children and Young People Survey: Academic Year 2018/19*.
- Stone, M. E. (2006). What is housing affordability? *The case for the residual income approach*. *Housing Policy Debate*, 17(1), pp. 151–184.
- Sustrans. (2023). *Walking and Cycling Index: The UK and Ireland's biggest ever survey of walking, wheeling and cycling*. Sustrans. Available at: <https://www.sustrans.org.uk/media/13416/sustrans-2023-walking-and-cycling-index-uk-aggregated-report.pdf>
- Sutton Trust (2025a) [Opportunity Index Interactive Map - The Sutton Trust](#)
- Sutton Trust (2025b) [The Opportunity Index Report May 2025](#).
- Tait, M., & While, A. (2018). *Housing Mix, Social Diversity and the Limits of New Urbanism*. *Housing Studies*, 33(9), pp. 1361–1380.
- Talen, E. (2002). *The social goals of New Urbanism*. *Housing Policy Debate*, 13(1), pp.165–188.
- Talen, E. (2012). *City Rules: How Regulations Affect Urban Form*. Island Press.
- Telega, A., Telega, I., & Bieda, A. (2021) Measuring Walkability with GIS-Methods Overview and New Approach Proposal. *Sustainability*, 13, 1883. doi.org/10.3390/su13041883
- The Prince's Foundation, Space Syntax, Knight Frank & Smart Growth Associates (2020) Walkability and mixed-use: Making valuable and healthy communities. *Knight Frank Research*. Available at: <https://kings-foundation.org/wp-content/uploads/2024/11/resear-6-walkable-cities-report-digital-1-667394a6.pdf>
- The Times (2025) [How we chose the best places to live in the UK 2025](#).
- Thompson-p, M. (2003) 'Urbanist' lived experience: Resident observations on life in Poundbury. *Urban Design International*. 8. Pp.67-84. [doi:10.1057/palgrave.udi.9000096](https://doi.org/10.1057/palgrave.udi.9000096)
- Tomany, J. (2014). Region and place I: Institutions. *Progress in Human Geography*, 38(1), pp. 131-140.
- Tomany, J., & Ashton, P. (2019). NIMBY as a political phenomenon. *Planning Theory & Practice*.
- Town and Country Planning Association (TCPA). (2014). *Planning for a Better Future: Delivering Sustainable Communities*. TCPA.
- Townsend, A. M. (2013). *Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia*. W. W. Norton & Company.
- Transport for New Homes (2018). Project Report: Transport for New Homes.
- Transport for New Homes. (2022). *Building Car Dependency: The impact of new housing on sustainable transport*. London: Transport for New Homes. Available at: <https://www.transportfornewhomes.org.uk/reports/building-car-dependency/>
- Tsenkova, S. (2009). *Affordable Housing in the Urban Context*. *Urban Research & Practice*, 2(3), pp. 271–289.
- Tuan, Y.F. (1977) *Space and Place: The Perspective of Experience*. Minneapolis: University of Minnesota Press.
- Twenge, J. M. & Campbell, W. K. (2018). *Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study*. *Preventive Medicine Reports*, 12, pp.271–283.
- Twenge, J. M., Spitzberg, B. H. & Campbell, W. K. (2019). Less in-person social interaction with peers among US adolescents in the 21st century and links to loneliness. *Journal of Social and Personal Relationships*, 36(6), pp.1892–1913.
- UK Green Building Council (UKGBC) (2023) *Whole Life Carbon Roadmap*. Available at: www.ukgbc.org
- UK Parliament (2025). *Planning and Infrastructure Bill: Written evidence*. London: House of Commons.
- <https://publications.parliament.uk/pa/cm5901/cmpublic/PlanningInfrastructure/memo/PIB15.htm>
- UN-Habitat (2018). *Developing Public Space and Land Values in Cities and Neighbourhoods – Discussion Paper*. Nairobi: United Nations Human Settlements Programme. Available at: <https://unhabitat.org/sites/default/files/download-manager-files/Discussion%20Paper%20%20Developing%20Public%20Space%20and%20Land%20Values%20in%20Cities%20and%20Neighbourhood>
- URBED (2020). *Lessons from Poundbury and Nansledan*. Urbanism, Environment and Design.
- URBED. (2014). *Uxcester Garden City: Second Prize in the Wolfson Economics Prize 2014*. URBED.
- Vale, B. & Vale, R. (2014) *Time to Eat the Dog? The Real Guide to Sustainable Living*. London: Thames & Hudson.
- Van den Bosch M., & Bird W. (2018). *Oxford textbook of nature and public health: The role of nature in improving the health of a population*. Oxford: Oxford University Press. ISBN: 9780198725916
- Van de Ven, A.H., Polley, D.E., Garud, R. & Venkataraman, S. (1999) *The innovation journey*. New York: Oxford University Press.
- Vogl, C. H. (2016). *The art of community: seven principles for belonging*. Berrett-Koehler Publishers, a BK Currents Book.
- Westenhöfer, J., Nouri, E., Reschke, M. L., Seebach, F., & Buchcik, J. (2023). Walkability and Urban Built Environments-A Systematic Review of Health Impact Assessments (HIA). *BMC Public Health*, 23, 518. doi.org/10.1186/s12889-023-15394-4
- Whitehead, C., & Scanlon, K. (2007). *Social Housing in Europe*. LSE London.
- Whitehead, C., & Williams, P. (2018). *Assessing the Evidence on Housing Supply and Planning*. LSE London.
- WHO. (2014). Health economic assessment tool (HEAT) for cycling and walking, World Health Organization, Regional Office for Europe. Available at: <https://www.who.int/tools/heat-for-walking-and-cycling>
- WHO. (2024) Determinants of health. Available at: <https://www.who.int/news-room/questions-and-answers/item/determinants-of-health>
- World Health Organization (1948). *Constitution of the World Health Organization*. <https://www.who.int/about/governance/constitution>
- Wilkins, V., Scott, M. & Beattie, L. (2020) 'Planning for Adaptability: Towards Climate-Resilient Place Making', *Town Planning Review*, 91(4), pp. 417–438.
- Wilson, W., & Barton, C. (2023). *Tackling the Under-Supply of Housing in England*. House of Commons Library.
- Wilson, W., & Barton, C. (2023). *What is affordable housing?* House of Commons Library Briefing Paper Number 07747. <https://commonslibrary.parliament.uk/research-briefings/cbp-7747/>
- Winch, G. (2010) *Managing Construction Projects: An Information Processing Approach*. 2nd edn. Oxford: Wiley-Blackwell.
- World Health Organization. (1948). *Constitution of the World Health Organization*.
- World Health Organization. (2023). *Social Determinants of Health*. <https://www.who.int/health-topics/social-determinants-of-health>
- Worpole, K. (2000). *Here Comes the Sun: Architecture and Public Space in Twentieth-Century European Culture*. London: Reaktion Books.
- Wyckoff, M.A. (2014) 'Definition of placemaking: Four different types', *Planning & Zoning News*, 32(3), pp. 1–10.
- Yung, E. H. K., Chan, E. H. W. & Xu, Y. (2014) 'Sustainable Development and the Rehabilitation of a Historic Urban District – Social Sustainability in the Case of Tianzifang in Shanghai', *Sustainable Development*, 22(2), pp. 95–112.
- Zolnik, E. (2024) Capturing the Value of Walkability. *Future Transp*. 2024, 4, pp.1334–1349. doi.org/10.3390/futuretransp4040064
- Zuniga-Teran, A. A., Orr, B. J., Gimblett, R. H., Chalfoun, N. V., Guertin, D. P., & Marsh, S. E. (2017). Neighborhood Design, Physical Activity, and Wellbeing: Applying the Walkability Model. *International Journal of Environmental Research and Public Health*, 14(1), 76. doi.org/10.3390/ijerph14010076

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