

Historic England  
**Increasing Residential Density in  
Historic Environments**  
Literature Review

Arup

ISSUE | 16 July 2018

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Job number 258772

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# 1 Introduction

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This literature review provides an appraisal of existing research on increasing residential densities, particularly in the historic environment. It forms part of a wider study undertaken by Arup, on behalf of Historic England, to explore how residential densities can be increased in new developments, in ways that are sympathetic to their historic environments. The literature review informs the wider study and sits alongside a series of case studies which exemplify good practice in providing increased residential densities in such environments. The findings from this literature review and the case studies will inform a set of recommendations aimed at guiding decision makers on what to seek from higher density developments, in the context of a series of approaches proposed by Government for increasing residential density in the *Housing White Paper*.<sup>1</sup>

The literature review draws upon the outcomes and findings of a range of studies and articles, taken from a variety of sources. These include government policy and publications, work undertaken by other public-sector bodies and think tanks, academic research, and practitioner-led studies by architects, urban designers and planners.

It is structured as follows:

- **Section 1:** Introduction.
- **Section 2:** Government approaches to increasing residential density – provides an overview of past and present government policy.
- **Section 3:** Defining residential density – introduces the different measures used for quantitatively measuring residential density and considers difficulties of defining what constitutes ‘high’ or ‘low’ density.
- **Section 4:** Designing residential density – explores different approaches and design interventions for increasing residential density, particularly in historic environments.
- **Section 5:** Planning policy and the development plan – reviews existing literature around planning policy and its formation, to explore how this can influence housing developments in historic environments.
- **Section 6:** Heritage and residential density in the planning process – discusses the role of policy implementation and planning process in shaping successful higher density developments.
- **Section 7:** Summary of the literature review – provides a summary of the key findings emerging from this literature review, to inform the wider study on increasing residential density in the historic environment.

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<sup>1</sup> *The Housing White Paper* (2017) Department for Communities and Local Government.

## 2 Government Approaches to Increasing Residential Density

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### 2.1 Residential density in previous policy

Residential density has formed a key part of the planning policy from central Government for many decades. Almost 20 years ago, the Urban Task Force's *Towards an Urban Renaissance* supported a general presumption against low density urban developments. It argued for a transition towards more densely populated towns, and challenged local authorities which refused applications on the grounds of density, in an effort to respond to increasing housing need.<sup>2</sup>

Following this report, there was an acceptance across government policy that increasing residential density in towns and cities is an important factor in providing much needed homes in England. This was followed by Planning Policy Statement 3 (PPS3) in 2000 (which was updated a number of times, before being superseded by the NPPF in 2012) that stated, "*using land efficiently is a key consideration in planning for housing*", and encouraged regions to set out density policies in their Regional Spatial Strategies.<sup>3</sup>

Replacing PPS3, the 2012 *National Planning Policy Framework (NPPF)* encouraged local authorities to set out their own approach to residential density through the local plan, to reflect local circumstances.<sup>4</sup> It also stressed the importance of good design in the built environment, encouraging local authorities to be proactive in guiding overall scale, density, layout and materials of new developments as part of the presumption in favour of sustainable development.

### 2.2 Current and future density policy

The Government published the *Housing White Paper* in February 2017, which set out the Government's proposals for boosting housing supply and creating a more efficient housing market. The document emphasised the need to "*(make) better use of land for housing by encouraging higher densities, where appropriate, such as in urban locations where there is high housing demand*" as one of a number of solutions to "*fixing our broken housing market*".<sup>5</sup> It emphasised the importance of considering housing development and increasing density in the context of local character, accessibility and infrastructure capacity, whilst meeting local need. It proposed a number of suggested approaches for increasing residential density, which included:

- Developing on sites where housing demand is high.
- Developing on sites that are well served by public transport.
- Replacing or building over low-density uses and intensification of sites.

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<sup>2</sup> *Towards an Urban Renaissance* (1999) Urban Task Force, Chaired by Lord Rogers of Riverside.

<sup>3</sup> *Planning Policy Statement 3: Housing* (2010) Department for Communities and Local Government, p29.

<sup>4</sup> *The National Planning Policy Framework* (2012) Department for Communities and Local Government.

<sup>5</sup> *The Housing White Paper* (2017) Department for Communities and Local Government, p18.

- Extending upwards.
- Infill development.
- Developing on brownfield sites.
- Estate regeneration.
- Utilising village locations.
- Extension to existing settlements.
- New settlements.

Since publication of the *Housing White Paper*, the Government has published a *Draft revised National Planning Policy Framework (March 2018, draft NPPF)* and a series of related consultations.<sup>6</sup> It continues to promote opportunities to sensitively increase residential density in appropriate locations, and suggests local authorities should set minimum density standards or density ranges for development. It also reinforces the approaches to increasing residential density listed above.

The wider study of which this literature review is part explores the topic of increased residential densities in the context of these approaches set out in the *Housing White Paper* and supported through the draft NPPF.

### 2.3 Definition of the historic environment

What constitutes the historic environment can be broad, and encapsulates many elements of the built and natural environment. The NPPF defines the historic environment as: *all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.*<sup>7</sup> This definition will be used for the purpose of this literature review, and the wider study within which it sits.

Within this broad definition, there are a number of different categories of designation for historic assets which are used to identify assets, sites or environments of particular importance, including:

- World Heritage Sites – sites, places, monuments or buildings of ‘outstanding universal value’ to humanity;
- Scheduled Monuments – nationally important historic buildings or sites included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport;
- Registered Parks & Gardens - historic parks and gardens of special historic interest;
- Registered Battlefields – important historic battlefield sites;

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<sup>6</sup> *Draft revised National Planning Policy Framework* (2018) Ministry of Housing, Communities and Local Government.

<sup>7</sup> *The National Planning Policy Framework* (2012) Department for Communities and Local Government, p52.

- Protected Wreck Sites – restricted areas around the site of a vessel lying on or in the seabed, protected on account of the historical, archaeological or artistic importance of the vessel, or its contents or former contents;
- Conservation areas – local planning authority designated areas of special architectural or historic interest;
- Statutorily listed buildings – designated buildings of special architectural and historic interest; and
- Non-statutory heritage assets and locally listed assets – those assets of the historic environment that are identified by local planning authorities.

## 3 Defining Residential Density

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*“At the simplest level, the concept of urban density is defined as the degree to which people, buildings and activities are concentrated.”<sup>8</sup>*

Residential density can be defined and measured in a number of different ways. While at a simple level density can be seen as the concentration of people and buildings within a particular spatial area, this literature review suggests that the topic of defining residential density is more complex. This section provides an overview of the written material in relation to quantitative and qualitative measures of density, in order to help inform a definition of increasing residential density for the purposes of this study.

### 3.1 Quantitative measures of density

While there are nuances to the definitions in individual documents, residential density is typically considered to be an objective, quantitative measure of the number of dwellings, people or rooms that can be accommodated on a site.<sup>9</sup> Despite this relatively simple definition, however, there are a number of different accepted measures through which the residential density of a building, development plot or wider area can be calculated. These have been subject to extensive study. The typical measurements used in England include the following:

- Number of dwellings per hectare.
- Number of habitable rooms per hectare.
- Number of bedrooms or bed spaces per hectare.
- Population per hectare.
- Floor Area Ratio (total Gross External Area of all floors / site area).
- Site Coverage Ratio (Gross External Area of ground floors/site area).

Dwellings per hectare (and to a lesser extent habitable rooms) is the most frequently utilised measure for calculating residential density in the UK.<sup>10</sup> It provides a quantitative indication of the number of residential dwellings provided as part of a development, against the site area. Within this measurement, residential densities can also be calculated as either net (which takes into account only that volume of built development given over to solely residential and associated land uses – such as access roads, private gardens and parking) or gross (which takes into account the total volume of built development – including public open space and non-residential uses etc.).<sup>11</sup>

Some practitioners favour the Floor Area Ratio (FAR) approach which measures the total floor area of a building in direct proportion to the residential floor area.<sup>12</sup>

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<sup>8</sup> *Urban Design Thinking: A conceptual toolkit* (2016) Dovey, K.

<sup>9</sup> *Planning Policy Statement 3: Housing* (2010) Department for Communities and Local Government.

<sup>10</sup> *Space per person in the UK: A Review of densities, trends, experiences and optimum levels* (2009) William, K., *Land Use Policy*, Volume 2, Supplement 1.

<sup>11</sup> *Planning Policy Statement 3: Housing* (2010) Department for Communities and Local Government.

<sup>12</sup> *Defining, Measuring and Implementing Density Standards in London* (2016) London Plan Density Research Project 1, London School of Economics.

The choice of measurement method can result in significant variation in results of residential density, and, as set out in the London School of Economics' (LSE) study *Defining, Measuring and Implementing Density Studies in London* for the Greater London Authority (GLA) to inform the emerging new London Plan, "there are differing institutional and economic drivers favouring any one of these...".<sup>13</sup>

While it is not within the scope of this study to explore the relative merits of each of these measures for calculating residential density (into which there has been significant study in recent years), it is useful to understand that defining residential density is at times contested, even at the quantitative level.

## 3.2 Perceptions of residential density

The debate about how residential density is best defined goes beyond consideration of density as a numerical measure. In particular, the literature reviewed suggests that while density may be quantifiable, what represents high, low and importantly 'good' residential density should not be considered through a quantitative lens only.

A dictionary definition of high-density housing is "housing with a higher population density than the average."<sup>14</sup> Building on this, in many contexts high density is defined through numbered thresholds such as those used in the current adopted *London Plan*, which sets guidelines for acceptable density in different parts of the capital.<sup>15</sup> Alternatively, high density can be defined in relation to a site's specific circumstances. For London First, in their study *Redefining Density*, increasing density represents using land more efficiently and more intensively to deliver more homes.<sup>16</sup> This supports the view, put forward in a study undertaken by the Government of South Australia exploring residential densities in Adelaide that residential density is relative in nature – it is dependent on a number of considerations and should therefore be viewed in the context of other factors including scale of buildings and local character.<sup>17</sup>

To explore this further, one can consider a development of three-storey, semi-detached houses with small back gardens. This typology may be considered high residential density in an area of detached housing surrounded by open countryside, while the same development, if located in the heart of London, would be unlikely to be identified as such. In this way, the definition of a development as high residential density is very much a relative concept, linked to a number of external factors beyond simply the quantitative. In other words "Density has never been simply a number...It cannot be conceived or acted upon in and of itself, because it is always a relation to other issues, spaces, and actors".<sup>18</sup>

<sup>13</sup> IBID, p15.

<sup>14</sup> *Collins English Dictionary* (accessed 2018) Collins.

<sup>15</sup> *London Plan: consolidated with alterations since 2011* (2016) Mayor of London.

<sup>16</sup> *Redefining Density: Making the best use of London's land to build more and better homes* (2015) London First.

<sup>17</sup> *Understanding Residential Densities* (2006) Government of South Australia.

<sup>18</sup> *The Geographies of Urban Density: Topology, politics and the City*, *Progress in Human Geography* (2015) McFarlane, C., 40(5), p3.

Moreover, much of the literature reviewed argues that the quality of residential density is fundamentally and intrinsically linked to users' perceptions of urban space.<sup>19</sup> In *Why Density? Debunking the myth of the cubic watermelon*, the A+T Research Group identifies a range of qualities (or 'performances') which make up experiences of residential density.<sup>20</sup> The hard performances are those elements of a scheme related to design and architecture which are 'buildable'. The soft performances represent the subjective elements of a building which relate to how the user interacts with it. Both are considered to be essential in experiences of residential density. 'Good' residential density, therefore, is as much about how a development is perceived, as about a quantitative measure.

As a result of the role that both quantitative and qualitative factors play in informing residential density, and perceptions of residential density, it is difficult to define what might represent 'high' or 'increased' residential density development. Building on this complexity, for the purposes of this literature review and the wider study it informs, a relative approach is taken in exploring increasing residential density, which views high and increasing residential densities in the context of an uplift compared to existing densities on the development site and/or in surrounding areas.

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<sup>19</sup> *Re-framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions* (2015) Cho, I., Heng, C. and Trivic, Z.

<sup>20</sup> *Why Density, Debunking the myth of the cubic watermelon* (2015) A+T Research Group.

## 4 Designing Residential Density

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Building on the suggestion from section 3 that residential density is about perception and experience as well as a quantitative measure, the role of design and placemaking in increasing residential density is explored here. It provides an overview of the literature and existing material around the role of design in creating successful, higher density housing developments.

### 4.1 Designing residential density

*“Design quality is fundamental to how places work: road layouts that prioritise pedestrians; public spaces that are safe and attractive; buildings that are an appropriate scale & density to support local services” (Clare Devine, Design Council).<sup>21</sup>*

Urban design plays a fundamental role in influencing both quantitative and perceived densities, and in creating high quality developments. A report by Ipsos MORI and Create Streets showed that people’s support for development on brownfield sites varied significantly as a result of the design of such developments.<sup>22</sup> In light of this, the literature reviewed highlights a number of design approaches which can be taken to inform the creation of successful higher residential density places, particularly in the historic environment. It is clear from the materials reviewed that there is no one approach to designing for increased residential densities, but there are a number of different design responses which can be drawn out.

#### Different building typologies

The design approach most often equated with the provision of higher density housing development is increasing building heights. This approach is criticised for a number of reasons, including lack of fit with the wider streetscape, overshadowing, and difficulties of creating a successful streetscape at ground level.<sup>23</sup> Much of the existing literature reviewed indicates, therefore, that higher residential density does not have to mean increased building heights as a range of typologies can achieve the same residential density outcome.

As asserted in the 2017 report, *The Misunderstanding of Higher Density*, there are many typologies of built development which can be used to achieve the same population density.<sup>24</sup> Exploring examples, the study shows two developments of identical building size, but where the unit types are switched from three-to two-bed. This creates more units within the same space, thus increasing residential density, when considered as persons per hectare. Another example in the same report shows higher densities (measured in persons per hectare) achieved in the

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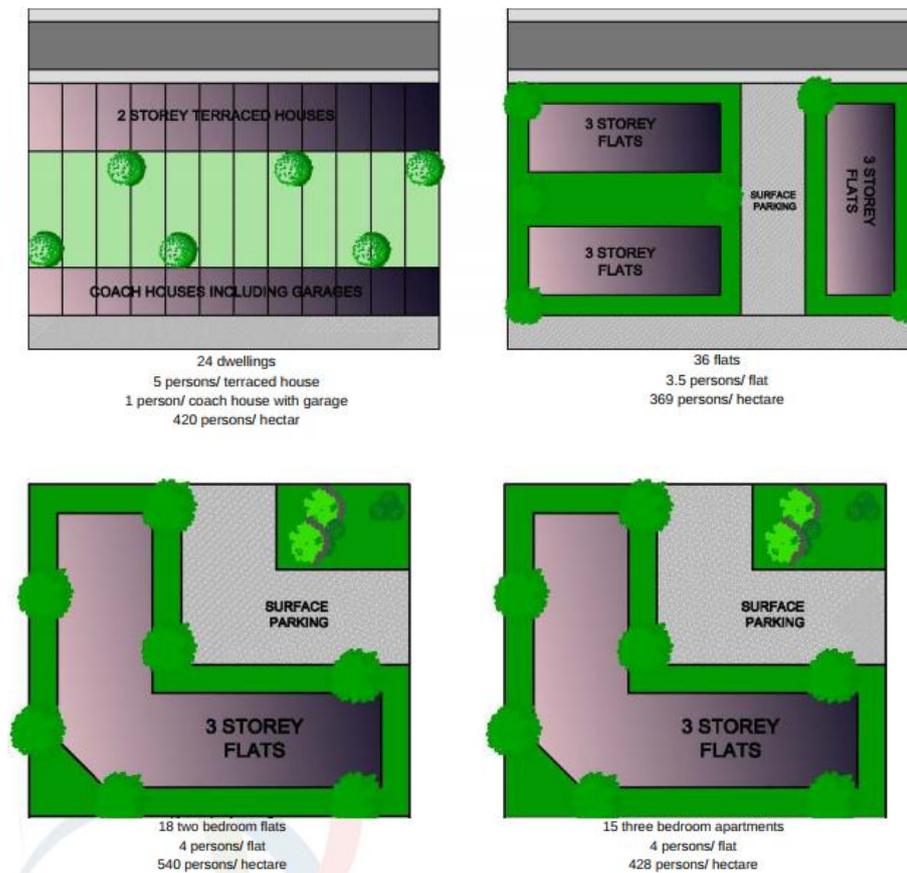
<sup>21</sup> Clare Devine, quoted in *Our Future in Place, The Farrell Review of Architecture and the Built Environment* (2013) Farrells, pp71.

<sup>22</sup> *Home Types Survey* (2015) CREATE Streets and Ipsos MORI.

<sup>23</sup> *Advice: Mansion blocks can achieve housing density without building high* (2015) Ben Kochan in Placemaking Resource.

<sup>24</sup> *The Misunderstanding of Higher Density* (2017) Grigore, D, Stobbs, A. and Felgate, M.

provision of two-storey terraces and coach houses, than in three-storey apartment blocks (see extracted images in Figure 1).



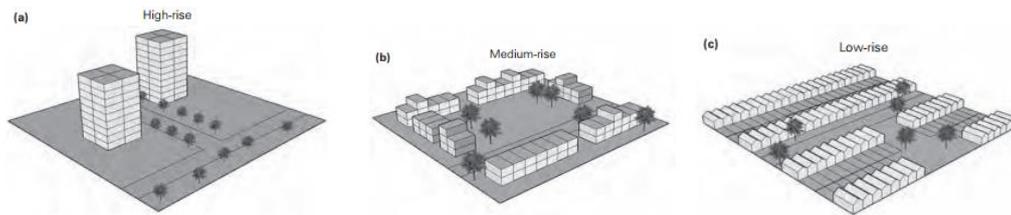
**Figure 1: Achieving the same residential density through different typologies<sup>25</sup>**

This approach is further supported in the 2012 study *Understanding Density and High Density* which looks at three hypothetical settlements with the same residential density of 76 dwellings per hectare, each with very different urban forms, as shown in Figure 2 (multi-storey towers, medium-rise buildings in central courtyard form, and parallel rows of single-storey houses).<sup>26</sup> Similarly, a study undertaken by the London Assembly explores the view that high residential density does not have to mean high rise, concluding that a number of different typologies, such as estate infill, stacked and interlocked homes, and innovative locations of amenity space, can be used to reach the same residential density of development.<sup>27</sup> It encourages developments that are high density but continue to follow existing street patterns and suggests a need to explore new typologies drawing on examples from European neighbours.

<sup>25</sup> Extracted from *The Misunderstanding of Higher Density* (2017) Grigore, D, Stobbs, A. and Felgate, M.

<sup>26</sup> *Understanding Density and High Density* (2012) Cheng, V.

<sup>27</sup> *Up or Out: A false choice* (2016) London Assembly.



**Figure 2: Different typologies of three developments with the same residential density<sup>28</sup>**

A 2016 report by Savills on behalf of the Cabinet Office, *Completing London's Streets*, encourages the intensification and regeneration of existing housing estates not through the re-provision of dated apartment blocks, but through the provision of “new streets of terraced housing and mid-rise mansion blocks”.<sup>29</sup> This call for medium-rise development is similarly echoed by others in the built environment industries. Create Streets champions the use of high density terraced housing and low rise apartments in London, that follow the conventional street pattern, suggesting that this presents a design approach more synonymous with London's architecture and more aligned with the desires of residents.<sup>30</sup> Similarly, a 2015 article in Placemaking Resource concludes that mansion blocks of six to eight stories can be a tool for increasing residential density while integrating more easily into their surroundings than taller buildings.<sup>31</sup>

### Using building heights

The commonly held idea that tall buildings are required to maximise residential density is, therefore, not always supported by literature on the topic. This is not, however, to say that tall buildings should never be introduced to the urban landscape. Indeed, the literature reviewed suggests that building at height can be a sensible way to accommodate more units on a small site area. For example, the British Property Foundation's advice on tall buildings suggests that building tall can have a significant beneficial impact on quality of life and streetscape, while also reducing land take releasing land for other uses.<sup>32</sup> Moreover a study by Urhahn Urban Design - *Successful Examples of High Density Development* – reports that “towers can be a positive addition to the wider urban environment...if carefully inserted into the built fabric.”<sup>33</sup> The key is, therefore, for tall buildings to contribute to the sense of place and the quality of development – they are not a tool for increasing residential density alone, but must integrate with the fabric of the cities and towns within which they are placed.

Considering the historic environment specifically, the literature reviewed supports the assertion that there is no reason that taller buildings cannot be developed. The important factor is to ensure that these developments respect design principles

<sup>28</sup> Extracted from *Understanding Density and High Density* (2012) Cheng, V.

<sup>29</sup> *Completing London's Street: How the regeneration and intensification of housing estates could increase London's supply of homes and benefit residents* (2016) Savills Research Report to the Cabinet Office.

<sup>30</sup> *Why aren't we building more streets?* (2016) Create Streets.

<sup>31</sup> *Advice: Mansion blocks can achieve housing density without building high* (2015) Ben Kochan in Placemaking Resource.

<sup>32</sup> *Tall Buildings: Advice on plan-making, submitting, assessing and deciding planning proposals*, British Property Foundation.

<sup>33</sup> *Successful examples of high density development* (2006) Urhahn Urban Design, p41.

around shape, approach, height, massing and views / overall placement to integrate with their historic environments.<sup>34</sup> If these elements are well considered, tall buildings can be one solution to providing good quality, higher density development. This aligns with Historic England's advice on tall buildings which acknowledges that they can make a positive contribution if in the right place and designed well.<sup>35</sup> Essential is that they respect the context into which they are placed. The advice recommends that a high quality tall building scheme will have a positive relationship with a number of aspects, including: topography, character of place, heritage assets and their settings, height and scale of development, urban grain and streetscape, open spaces, rivers, views and skyline.<sup>36</sup>

Looking more broadly at building heights, the materials reviewed suggest that the provision of a diverse skyline and streetscapes, steering away from one consistent height, is a successful design response for increasing residential density while creating good quality places. In autumn 2015, the Urban Design Group Journal published an issue on *Designing Housing* which suggested that successful development is about providing a diversity of building heights and typologies within sites and wider masterplan areas.<sup>37</sup> Providing analysis of a number of case studies, including the Aylesbury Estate Regeneration in London and the Brooke Peninsula in Lowestoft, the journal highlights a number of key factors which have led to the developments' success, particularly celebrating the location of towers overlooking open spaces to avoid "overbearing existing properties" and maximising views, and the staggering of building heights to make blocks less 'overbearing' in the landscape.<sup>38</sup>

If higher residential densities can be achieved through changing building heights and typologies, this has a fundamental relationship with massing and scale, which can be used to optimise site densities while responding to the context in which a development sits. The *NPPF* requires good design as one of the core principles of national policy.<sup>39</sup> This is supported by the *National Planning Practice Guidance (NPPG)* which provides guidance on how buildings and the spaces between them should be considered in relation to layout, form, scale, detailing and materials.<sup>40</sup> The *NPPG* sets out how new developments should respond appropriately to existing buildings, streets and spaces to ensure the development relates to and complements these.<sup>41</sup> This is supported by the Design Council's *By Design*, which provides a series of guidance notes on principles to look for in assessing the design value of schemes.<sup>42</sup> It sets out the need for developments to respond to local building forms and patterns of development. This is a key element of urban design relating to any development, but especially those which are seeking to

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<sup>34</sup> *The Historic Urban Landscape: Managing Heritage in an Urban Century* (2012) Bandarin, F and van Oers, R.

<sup>35</sup> *Tall Buildings: Historic England Advice Note 4* (2015) Historic England.

<sup>36</sup> *IBID.*

<sup>37</sup> *Designing Housing: Urban Design Group Journal* (2015) Urban Design Group, vol 136.

<sup>38</sup> *IBID.*

<sup>39</sup> *The National Planning Policy Framework* (2012) Department for Communities and Local Government, paragraphs 56 to 68.

<sup>40</sup> *National Planning Practice Guidance* (2014 updated 2017) Department for Housing, Communities and Local Government.

<sup>41</sup> *IBID.*

<sup>42</sup> *By Design: Urban design in the planning system: towards better place* (2000) Commission for Architecture and the Built Environment.

achieve high densities, as it helps to reinforce a sense of place and as such avoid creating an impression of over-crowding.

However, the literature suggests that, at times, the scale of development in relation to existing character and assets is misjudged, and is not appropriate in the context of surrounding historic environment. Research undertaken by Land Use Consultants on the impact of housing development on the historic environment suggests that the outcome of this can be detrimental to historic character, and could significantly alter the relationship between both the existing historic environment and surrounding natural features.<sup>43</sup> The research strongly discourages the use of ‘iconic’ design for its own sake, particularly through the masterplanning process, as it is often considered to come at the expense of local distinctiveness.

As set out in the *Handbook of Urban Morphology*, however, this does not mean a development necessarily needs to be the same scale and massing as its surroundings.<sup>44</sup> Rather, strategies can be employed with regard to (for example) building line, set/step backs, façade treatment and tree planting to mitigate changes in scale.

Reflecting these principles in a heritage context, *Cathedral Cities in Peril* sets out detailed design parameters that should be incorporated into heritage related developments specifically.<sup>45</sup> These mirror the ideas of complementing existing historic environment and context, and include:

- The integration and mixing of the old and the new: this is best achieved through high quality, high residential density infill developments, to avoid ‘gaps’ in the urban form;
- Tight integration with the historic core, without compromising strategic or local vistas, and other significant lines-of-sight;
- Using a scale and morphology that closely reflects that of the existing urban fabric;
- Drawing upon the existing townscape, including the relationship between historic environment, place and existing identity; and
- Measures to enhance the presence and visual interest of heritage assets, drawing upon features that create experiences of drama, and considering the wider landscape.

Development can also be integrated into the historic environment through the use of materials and detailing which reflect and complement their historic environments. As the *NPPG*’s section on design suggests, poor attention to detail can have a detrimental impact on development quality. Similarly, while materials do not need to match their surroundings, they should be of a colour, texture and grain that “*fit harmoniously with (their) surroundings*”.<sup>46</sup> This is supported by

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<sup>43</sup> *Evaluating the impact of housing development on the historic environment* (2014) Land Use Consultants for National Heritage Protection Plan project NHPP 2A1: 6172.

<sup>44</sup> *The Handbook of Urban Morphology* (2017) Kropf, K.

<sup>45</sup> *Cathedral Cities in Peril* (2015) Foster + Partners, with input from English Heritage and Terence O’Rourke MBE.

<sup>46</sup> *National Planning Practice Guidance* (2014 updated 2017) Department for Communities and Local Government.

Historic England's report on good practice in conservation areas which celebrates a series of 18 case studies for successful developments in historic environments.<sup>47</sup> In exploring how these reinforce character and contribute to local placemaking, it draws out that the use of high quality materials that respond to wider conservation area characteristics can enhance the historic environment.

## Public Realm and Open Space

Beyond design responses that address historic character, the literature reviewed suggests that the quality and quantum of public realm and open space can have a significant impact on the ability to provide increased residential densities. This is both in terms of actual space and perceptions of residential density, and quality of development. This is especially true in historic environments. The *NPPG's* section on design supports this finding in asserting that successful places incorporate a network of open spaces which form part of considerations of development layout and play a role in how developments relate to their surroundings.<sup>48</sup>

A generous and high quality public realm can reduce feelings of overcrowding, and improve perceptions of schemes that increase residential density – indeed as suggested by a study undertaken by the London School of Economics, “*the presence of green open space (is) one of the key attributes that make people in higher density neighbourhoods more satisfied.*”<sup>49</sup> In the paper, it is suggested that wider streets that are landscaped, provide appropriate street furniture, and generally provide high quality environments can reduce perceptions of increased residential density for users, while poorly designed pathways and roadsides etc. can make a development feel dense and remove sense of place. In relation to the historic environment in particular, public realm is also at the very heart of good placemaking, representing the setting within which people experience and interpret historic places.<sup>50</sup>

It can be argued, at a simple level, that a reduction in open space on-site can allow for more homes to be provided within a site, and as such higher residential densities to be achieved. However, much of the literature reviewed suggests that public realm and higher residential density development and open space are not mutually exclusive.<sup>51</sup> Efficient and effective design, with the provision of building typologies which cater to optimising site capacity, can facilitate a development which provides both residential density and open space.<sup>52</sup> The central courtyard typology, for example, is one successful way of providing open space which is secure and private, while optimising opportunities for built development around the perimeter.<sup>53</sup> Building taller is another means of achieving high residential

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<sup>47</sup> *Valuing Places: Good Practice in Conservation Area* (2011) Historic England.

<sup>48</sup> *National Planning Practice Guidance* (2014 updated 2017) Department for Communities and Local Government.

<sup>49</sup> *Density and Urban Neighbourhoods in London* (2004) London School of Economics, p61.

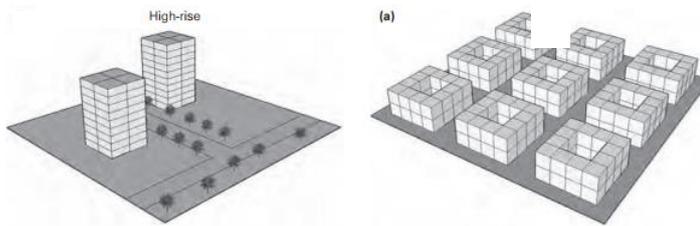
<sup>50</sup> *Urban Design as a Tool in Urban Conservation, and Urban Conservation as a Tool in Urban Design Research* (2014) Cidre, E, in Carmona, M (2014) *Explorations in Urban Design: An Urban Design Research Primer*.

<sup>51</sup> *High Density and Public Open Space: Are they Mutually Exclusive?* (2017) Hudson, D., *The Urban Development*, January 2017.

<sup>52</sup> *IBID.*

<sup>53</sup> *Understanding Density and High Density* (2012) Cheng, V.

density in a smaller area, leaving greater space for public realm (though noting the points above). This is demonstrated in Figure 3.



**Figure 3: Central Courtyard Typology and Taller Buildings as means of creating public realm.<sup>54</sup>**

## Other design factors

### *Car parking*

There are a number of other factors which can influence successful design in historic environment, which are apparent from the literature. Many schemes require the provision of **car parking** to cater for future residents' needs, but this takes up significant space on site and limits the area of land available for development. The removal or undergrounding of parking allows for increased flexibility in providing high residential density development without compromising on design or amenity, including allowance for the delivery of larger amounts of open space. *Successful examples of high density development* explores a number of solutions to provision of parking on-site, including podium or underground parking, or even parking on the roof of developments.<sup>55</sup> However, it should be noted that the undergrounding of car parking may have impacts on archaeological assets, and this should be considered carefully.

### *Privacy*

The use of design responses such as minimum distances between spaces, stepping back of upper floors to increase distances, and ensuring that habitable rooms are not facing each other, can act to reduce concerns regarding privacy in denser developments. Not only will this impact on residents' experiences of the development, but evidence shows that where insufficient privacy measures are integrated into development, residents will add their own additional screening, which is likely to impact upon the overall quality of design.<sup>56</sup>

The design approaches considered in this section offer a range of responses to providing high or increased residential densities, and can be applied specifically to developments in historic environments. The literature suggests that while each of these approaches represents a possible response to designing in the historic environment, not all will be appropriate in all contexts, and each should be weighed against not only other approaches suggested, but also the specific context of the site being developed.

<sup>54</sup> IBID.

<sup>55</sup> *Successful examples of high density development* (2006) Urhahn Urban Design.

<sup>56</sup> *Lessons from Higher Density Development* (2016) London Plan Density Research Project 2, Three Dragons with David Locks Associates, Traderisks, Opinion Research Services and Jackson Coles, Report to the GLA.

## 4.2 Placemaking and the importance and value of heritage

In combination, the different design approaches considered in section 4.1 suggest that placemaking is a key element of successful higher residential density development in historic environments. For the purpose of this study, placemaking is considered to be the process through which the places we live are shaped by arts, culture, heritage and design. “*Placemaking capitalises on a community’s unique assets, inspiration and potential with the intention of creating public spaces, places...and activities that promote people’s health, happiness and wellbeing.*”<sup>57</sup>

Ensuring that historic places are respected, and that new development is integrated into the historic environment, is not just of aesthetic importance. Indeed, as evidenced in Historic England’s *Translating Good Growth for London’s Historic Environment*, heritage plays an active role as a catalyst for growth and development, and is often central in the creation of place.<sup>58</sup> The *Translating Good Growth* study shows that the historic environment can be key to achieving successful change and drives economic, social and environmental dividends. Similarly, on a nationwide scale Historic England’s *Heritage Counts: Heritage and the Economy* shows that one in four businesses in a survey of over 100 agreed that the historic environment is an important factor in deciding where to locate.<sup>59</sup>

Moreover, the historic environment was shown to be an important consideration for property developers –property values near World Heritage Sites are almost £80,000 higher than the UK average.<sup>60</sup> Work undertaken by the London School of Economics in 2012 similarly found that people are willing to pay more to live in homes that are situated in a conservation area.<sup>61</sup> It found that houses in conservation areas sell for a premium of 23% on average.

In addition, a Historic England review of Business Improvement Districts (BIDs) (whose role includes place branding) found that the majority of BIDs rated heritage assets as important to achieving their objectives.<sup>62</sup> Earlier research in *Heritage Counts 2010* found that historic places improve the way people feel about places and investment in such places has an economic impact on the wider community.<sup>63</sup>

This evidence supports the assertion that the historic environment contributes to successful places that people want to live in. That people are willing to pay a premium to live in such buildings and areas is evidence that heritage can play a central role in place-making and should be a key consideration for developments.

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<sup>57</sup> *People, culture, place - The role of culture in placemaking* (2017) Local Government Association, p5.

<sup>58</sup> *Translating Good Growth for London’s Historic Environment* (2017) Historic England.

<sup>59</sup> *Heritage Counts Heritage and the Economy* (2017) Historic England.

<sup>60</sup> IBID.

<sup>61</sup> *An assessment of the effects of conservation areas on value* (2012) M. Gabriel, N. Ahlfeldt, and N. Wendland (LSE) for English Heritage.

<sup>62</sup> *Heritage Counts Heritage and Place Branding* (2016) Historic England.

<sup>63</sup> *Heritage Counts* (2010) Historic England.

## 5 Planning Policy

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England operates under a plan-led planning system. National planning policy, as set out in the NPPF, provides the framework within which local level planning policy is developed. Local planning policy, in the form of the development plan for an area, is particularly important in defining the scale and location of growth, and guiding how development will relate to the historic environment.

This section provides an overview of the existing literature around planning policy and its formation. It explores further the factors informing successful policy within the plan-led system and the importance this has in guiding successful development in the historic environment. It begins by exploring approaches to residential density policy, before considering heritage and design within policy. It then explores the role that place-based policy can play in increasing residential densities successfully.

### 5.1 How residential density is integrated into planning policy

The earlier sections of this review have shown that residential density can be interpreted in a number of ways, both through different quantitative measurements, and through taking into account other factors which affect perceptions and quality of residential density for individual development. Reflecting this context, residential density is interpreted and applied with considerable variation across the country in policy terms. The *NPPF* prompts local authorities to set their own densities to guide development in their areas; they are encouraged to include a policy within their development plan which considers residential density and its appropriateness within their boundaries.<sup>64</sup> However, an exploration of a range of local authority policy documents suggests that there is no one consistent approach taken.

In London, there is a strong core of city-level policy, in the form of the London Plan, which plays a significant role in guiding residential density of development across the capital. The approach set out in policy 3.4 of the current adopted *London Plan* uses the sustainable residential quality (SRQ) matrix to suggest the appropriate residential density (either in dwellings per hectare or habitable rooms) for development based on public transport accessibility level (PTAL), a single, aggregated score which measures the access to a point in the transport network at any given location.<sup>65</sup> It provides a minimum and maximum range for residential density of development (in dwellings per hectare, and habitable rooms) based on whether they are located in central, urban or suburban parts of London.

This approach to density has been criticised in recent years for seeking to ‘maximise’ rather than ‘optimise’ densities, as well as over-simplifying the residential density debate in the capital. In light of this, and reflecting the discussions above that securing successful high-density housing depends on a

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<sup>64</sup> *National Planning Policy Framework* (2012) Department for Communities and Local Government, Paragraph 47.

<sup>65</sup> *London Plan: consolidated with alterations since 2011* (2016) Mayor of London.

number of factors, the *Draft London Plan* (published November 2017) adopts a more fluid and flexible approach to guiding the residential density of development.<sup>66</sup> Draft policy D6 sets out that optimum residential density should be determined in relation to site context, connectivity (including but not limited to PTAL) and the capacity of surrounding infrastructure. Rather than the previous bounded ranges for residential density, a more fluid approach is set out which requires a management plan for densities over a certain threshold. Interestingly, the policy requires planning applications to include a number of different residential density measures, including units per hectare, habitable rooms and bedrooms per hectare, floor area ratio and site coverage ratio. This suggests that even at the policy level, there is an understanding that different methods for calculating residential density can produce different results, as set out in Section 3.1.

Outside London, other English local authorities, cities and regions have also developed their own residential density policies, in response to paragraph 47 of the *NPPF*.<sup>67</sup> These vary in terms of the level of detail provided:

- The *Draft Greater Manchester Spatial Framework* supports high residential density development in sustainable locations, such as town centres, which should be balanced with high quality social infrastructure, public spaces, and an integrated transport network.<sup>68</sup> The Spatial Framework does not provide any quantitative guidelines, but states that a high residential density urban offer will be developed in and around the regional centre, and around public transport, to allow for sustainable urban living.
- Other local authorities specify quantitative residential density guidelines. *The 2016 Draft Epping Forest Local Plan* for example, sets out an expectation for densities above 50 dwellings per hectare in town centres, with a lower range of 30 to 50 dwellings per hectare outside of towns and large villages.<sup>69</sup> It is, however, acknowledged that these ranges should not be applied mechanically and should be reviewed in the context of local factors, design, transport and social infrastructure.

This diversity suggests that while there are different approaches to guiding density of development, some local authorities are moving away from hard numbered thresholds, towards a more flexible approach to guiding density in their areas. This suggests a move away from target based policy, and towards an approach which enables the consideration of sites on a case by case basis, but within a clear framework which provides high level guidance. It is interesting to note, however, that while the historic environment is a consideration for residential density in some of the policies explored, there is little evidence found through this review of policies which explicitly combine the two topic areas.

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<sup>66</sup> *The London Plan Draft for Public Consultation* (2017) Mayor of London.

<sup>67</sup> *National Planning Policy Framework* (2012) Department for Communities and Local Government, Paragraph 47.

<sup>68</sup> *Draft Greater Manchester Spatial Framework* (2017) Greater Manchester Combined Authority.

<sup>69</sup> Policy SP4, *Epping Forest District Draft Local Plan Consultation* (2016) Epping Forest District Council.

## 5.2 How heritage and design are treated in planning policy

Heritage and design in historic environments are typically well covered by planning policy. The context for this is set by both statute, notably the duties in sections 66 and 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990, and national planning policy. As set out in section 2, the *NPPF* contains a series of policies which seek to maintain and enhance the historic environment.<sup>70</sup> It aims to manage change to heritage assets in a way that sustains and, where appropriate, enhances their significance. The *NPPF* also provides a number of requirements for how local plans should respond to the historic environment, including through the provision of evidence based policy and a clear strategy for conservation and enhancement of the historic environment.<sup>71</sup> Similarly, section 7 of the *NPPF* sets out the importance of design, referring specifically to local character and history.<sup>72</sup> This aligns with the considerations discussed in section 4 of this Literature Review.

In the context of England's plan-led system, a robust heritage policy can play a central role in facilitating good quality growth. As set out in Historic England's *Good Practice Advice Note 1: The Historic Environment in Local Plans*, evidence gathering is an essential part of successful policy development.<sup>73</sup> Defining and scoping potential assets and characteristics of importance before an area is identified for growth or significant change should be a key part of the local plan process. This evidence is important to fully understand the local context, and to help inform appropriate conservation and design principles. Historic England's advice on *Conservation Area Designation, Appraisal and Management* also supports this approach, stressing the importance of managing change in historic environments through a detailed understanding of place and the details, history, assets and other elements that contribute to its character.<sup>74</sup>

Looking at policy wording more specifically, in line with the *NPPF* planning policy has a role to both:

- conserve and enhance the historic environment<sup>75</sup>; and
- operate a “*presumption in favour of sustainable development*” which seeks to refuse development only where it would not be considered sustainable.<sup>76</sup>

In light of this, local authorities have a responsibility to conserve and enhance their heritage assets, while also supporting appropriate and suitable growth in their historic places. The *draft London Plan*, for example introduces a new policy HC1

<sup>70</sup> *The National Planning Policy Framework* (2012) Department for Communities and Local Government, Paragraphs 126 to 141.

<sup>71</sup> *IBID*.

<sup>72</sup> *IBID*, Paragraphs 56 to 68.

<sup>73</sup> *Good Practice Advice Notes 1: The Historic Environment in Local Plans* (2015) Historic England.

<sup>74</sup> *Historic England Advice Note 1: Conservation Area Designation, Appraisal and Management* (2016) Historic England

<sup>75</sup> *The National Planning Policy Framework* (2012) Department for Communities and Local Government, Paragraph 126.

<sup>76</sup> *IBID*, Paragraph 14.

on *Heritage Conservation and Growth* which asks development plans and strategies to demonstrate they understand the heritage value of sites and / or areas to “*inform the effective integration of London’s heritage in regenerative change.*”<sup>77</sup> This acknowledges the role heritage can play in creating sense of place and catalysing successful growth.

### 5.3 Place-specific policy

The literature suggests that planning policy and guidance at a development or place-specific level have a key role in integrating design, residential density and historic environment.

Historic England’s advice note on site allocations sets out how place-specific policy and allocations can be advantageous both in preventing harm to historic assets and their setting, but also in providing opportunities to celebrate the historic environment.<sup>78</sup> Similarly, previously referenced research undertaken by LUC into ‘what is working’ for new developments in historic contexts also stressed the important role of having a flexible, yet robust development plan.<sup>79</sup> It supported policy that goes beyond generic protection policies, by enforcing site-specific requirements for particular historic contexts, to ensure compliance with overarching aims and design principles as the most powerful means of influencing development proposals in historic contexts.

This place-based approach has been adopted by a number of local authorities in England, to provide more detailed and integrated policy on specific areas or developments, and is often supplemented by further guidance in Supplementary Planning Documents. The level of detail provided in site-specific policy and SPDs goes beyond that which would typically be in local plan strategic policies, and thus enables more detailed guidelines to be set with regard to design, heritage assets and residential densities. Some examples of local planning policies which successfully integrate residential density, heritage and design in site-specific policy include:

- The *Tottenham Area Action Plan*: which includes a series of policies on urban design, tall buildings, density, conservation and heritage, as well as identifying a range of opportunity sites for development in which it sets out specific considerations in relation to those topics.<sup>80</sup>
- The draft *Walsall Town Centre Area Action Plan*: which identifies specific heritage assets and characteristics within the action plan area and in specific investment areas, as well as guiding locations for tall buildings, design and density.<sup>81</sup>

As well as supplementary planning documents, local authorities are urged in the *NPPF* to consider using design codes to guide high quality design outcomes for

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<sup>77</sup> *The London Plan Draft for Public Consultation* (2017) Mayor of London, p268.

<sup>78</sup> *The Historic Environment and Site Allocations in Local Plans* (2015) Historic England.

<sup>79</sup> *Evaluating the impact of housing development on the historic environment* (2014) Land Use Consultants for National Heritage Protection Plan project NHPP 2A1: 6172.

<sup>80</sup> *Tottenham Area Action Plan* (2017) London Borough of Haringey.

<sup>81</sup> *Walsall Town Centre Area Action Plan: Draft for Examination* (2018) Walsall Council.

specific locations.<sup>82</sup> These are required to be flexible, and to “*avoid unnecessary prescription or detail and should concentrate on guiding the overall scale, density, massing, height, landscape, layout, materials and access of new development in relation to neighbouring buildings and the local area more generally.*”<sup>83</sup> This is supported by Historic England’s advice note on *The Historic Environment and Site Allocations in Local Plans* which encourages the setting of design principles and codes as means of ensuring a development is sustainable and appropriate.<sup>84</sup>

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<sup>82</sup> *The National Planning Policy Framework* (2012) Department for Communities and Local Government, Paragraph 59.

<sup>83</sup> *IBID.*

<sup>84</sup> *The Historic Environment and Site Allocations in Local Plans* (2015) Historic England.

## 6 Heritage and Residential Density in the Planning Process

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This section addresses how policy is put into practice, the role of engagement, different skills requirements and the importance of development delivery and management.

### 6.1 Policy in Practice

The consistent implementation of policy is a common theme of the literature reviewed. While there is little evidence of study at the national level, a number of studies exploring this have been undertaken in London. A study commissioned by the Greater London Authority to inform the revised London Plan found little evidence that the SRQ matrix approach previously set out is being consistently adhered to (see section 5.1).<sup>85</sup> Since the SRQ matrix was adopted, around 25% of all bedrooms built (between 2008 and 2015) have been on sites with a density of double that of the maximum density threshold. Local authorities often considered higher than matrix densities on a case-by-case basis, where design and infrastructure conditions were favourable, with the matrix thresholds considered as a ‘starting point’.<sup>86</sup>

Similarly, a study undertaken by Arup, on behalf of Historic England, explored how well heritage policies within the *NPPF*, *London Plan* and local authority planning policy are reflected in planning applications, and local authority decision making.<sup>87</sup> The study demonstrated a lack of awareness of London Plan heritage policies. It found several cases where London Plan heritage policies were not used to their full extent in decision making on schemes in the historic environment, alongside a number of cases where the policies were not referenced at all.

This suggests that planning policy is not always consistently used, and indeed that local authorities are not always aware of the policy that is at their disposal to guide development in their areas. It indicates that there is a role for better implementation of planning policy, as well as the stronger and more flexible approach set out in section 5.

### 6.2 Collaboration and Engagement

Collaborative approaches to design and development are a key theme from the literature of creating successful places. The role of public perception in ensuring local ‘buy in’, and supporting high quality development outcomes, emerges from many of the materials reviewed. The *Better Neighbourhoods: Making Higher Densities Work* research stresses how early engagement with local residents, combined with partnership working across a range of stakeholders, can help to raise aspirations and quality standards.<sup>88</sup> This aligns with paragraph 62 of the

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<sup>85</sup> *Defining, Measuring and Implementing Density Standards in London* (2016) London Plan Density Research Project 1, London School of Economics.

<sup>86</sup> *IBID.*

<sup>87</sup> *London Plan Review No.2* (2016) Historic England.

<sup>88</sup> *Better Neighbourhoods: Making Higher Densities Work* (2005) Building for Life.

*NPPF*, which similarly highlights how “*early engagement on design produces the greatest benefits*”.<sup>89</sup>

Early involvement of local authorities, as well as members of the public, is also seen to be of importance in achieving successful higher residential densities through high quality responses. As set out in the *NPPF*, a collaborative relationship between local authorities and developers can be important in ensuring consistent application of policy.<sup>90</sup> It can enable any potential barriers to development to be identified upfront, and allow local views on design and heritage value to be integrated into development proposals from the start.<sup>91</sup> Local authorities and developers therefore have an important role in working together to achieve the best outcomes for places.<sup>92</sup> In order to maximise the benefits, other statutory planning consultees should also be encouraged to take the same approach to early and genuine engagement with applicants. The literature reviewed therefore supports a need to encourage close partnership working across local authorities, agencies and developers, to produce optimal outcomes, including ongoing intervention to ensure assets are well-used and protected from decay.<sup>93</sup>

A charrette held by Brighton and Hove City Council stressed the role that planning performance agreements can have on seeking resolution for all parties on challenging higher-density schemes.<sup>94</sup> It also suggested that involvement of members of the planning committee in the pre-application process would facilitate collaboration at various levels, and help to increase confidence of all parties in each other’s commitment to the development. Going further, it was suggested that local authorities should be more demanding of developers, architects and planners on high-profile development, and should not be afraid of setting clear expectations for developments (whether through policy, in pre-application discussions or through the determination process) – this is especially the case in historic places.

### 6.3 Design and Heritage Expertise

Having the appropriate skills and review procedures has also emerged as an important factor in delivering successful higher residential density development. In the *NPPF*, design review procedures are encouraged to ensure high standards of design.<sup>95</sup> This is supported by research from the Design Council which sets out a series of principles for design review: these include the provision of independent, transparent, proportionate and objective advice.<sup>96</sup> It is then echoed in their 2013 report which highlights the benefits of design review as looking at

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<sup>89</sup> *The National Planning Policy Framework* (2012) Department for Communities and Local Government, Paragraph 62.

<sup>90</sup> *IBID*, Paragraph 189.

<sup>91</sup> *IBID*, Paragraph 190.

<sup>92</sup> *Evaluating the impact of housing development on the historic environment* (2014) Land Use Consultants for National Heritage Protection Plan project NHPP 2A1: 6172.

<sup>93</sup> *IBID*.

<sup>94</sup> *Brighton and Hove City Charrette – Building at Density: What does good look like?* (2017) Brighton and Hove City Council, attended 11 December 2017.

<sup>95</sup> *The National Planning Policy Framework* (2012) Department for Communities and Local Government Paragraph 62.

<sup>96</sup> *10 Principles of Design Review* (2017) Design Council.

schemes in their context, supporting good design and encouraging innovation in proposals.<sup>97</sup>

One of the challenges of implementing the above, and more generally ensuring high quality denser residential development, is that the processing and review of applications, and earlier engagement, requires significant resource from the local authorities, along with the capacity to uphold high architectural and design standards. The materials reviewed suggest that this can prove challenging against a backdrop of resource and budgetary constraints.

This point is illustrated in a study undertaken by the Urban Design Group, entitled *Design Skills in English Local Authorities*.<sup>98</sup> This piece of research assessed the availability and use of urban design skills and resources within local planning authorities nationally, over a period of five years. Based on the responses from 204 local authorities across England, the research concluded the following:

- In-house urban design capacity is very low:
  - Almost half of local planning authorities have no dedicated in-house design capacity;
  - Only around 10% of authorities have a dedicated urban design or place-making team;
  - There is an increasingly heavy reliance on conservation staff to double up as urban design officers; and
  - Non-specialist planning officers are making the key decisions in relation to design schemes of all types.
- There has been a drop-in design-related capacity over the past five years.
- Design review activity is concentrated in a few places, with only 19% of local planning authorities regularly using an urban design review.

In exploring how authorities are filling this gap in design expertise, while it was found that almost a quarter of councils are looking externally to procure advice on design, a larger proportion of 35% are asking colleagues from other departments – typically conservation officers or highways departments – to act in lieu of design experts.<sup>99</sup> It was also noted that for the majority of authorities, only very large or unusual planning applications are subject to design reviews, and few authorities engage in regular design panel discussions. This contrasts with the *NPPF* suggestion that all local planning authorities should have design review arrangements in place, to ensure high standards of design, and for major schemes a national design review is suggested.<sup>100</sup>

Similar trends can be seen in the heritage and conservation disciplines in local authorities. Historic England's joint research with the Association of Local Government Archaeological Officers and the Institute of Historic Building Conservation into local authority staff resources shows that the number of conservation specialists in local authorities fell by 37% between 2006 and

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<sup>97</sup> *Design Review: Principles and Practice* (2013) Design Council.

<sup>98</sup> *Design Skills in English Local Authorities* (2017) Urban Design Group and Place Alliance.

<sup>99</sup> *IBID*.

<sup>100</sup> Paragraph 62, *The National Planning Policy Framework* (2012) Department for Communities and Local Government.

2017.<sup>101</sup> This has been accompanied by a 35% decline in archaeological specialists advising local authorities in England.<sup>102</sup> The report goes on to show that this comes in the context of increasing planning applications and listed building consents.<sup>103</sup>

This evidences a skills shortage in local authorities for both heritage and design disciplines, and suggests that constraints on public finances mean that access to dedicated design and heritage capacity is not always possible. It suggests that there is a need to address this imbalance in specialist skills, without which the planning process is more likely to result in poor quality design, which can have long term adverse impacts on economic development, the experience of places, and increase future maintenance costs.<sup>104</sup>

## 6.4 Management and Maintenance

The literature reviewed also suggests that beyond the planning process, ensuring developments are delivered to the high quality consented, alongside the on-going management and maintenance of developments once implemented, is also vital to successful placemaking.

A study on urban design, edited by Professor Carmona, considers management of public realm and open space in the context of the historic environment to play a fundamental role in sense of place and success of developments.<sup>105</sup> Ensuring public access to heritage assets is considered to be central to their continued significance and role. On-going management of spaces, therefore, is also a factor in placemaking and the creation of successful higher residential density developments that continue to be successful following delivery. This is supported by the Berkeley Group's *10 Principles of Placemaking*, which includes investment in management as its tenth principle. It concludes that "*creating a great place is not just about getting the planning, design and construction right. The management and maintenance regimes must be set up to ensure that the scheme continues to look good, work well and stand the test of time.*"<sup>106</sup>

Models of on-going management for developments can vary. The Town and Country Planning Association has developed a guide on long-term stewardship, for Garden Cities.<sup>107</sup> This sets out the importance of ensuring development is looked after for its full lifetime. It highlights a number of different types of body which can be used to manage public assets, which include: management companies; community land trusts; development trusts; community interest companies; industrial and provident societies; co-operative societies; housing associations; energy service companies; and multi-utility service companies. The

<sup>101</sup> *The Ninth Report on Local Authority Staff Resources* (2017) Historic England, the Association of Local Government Archaeological Officers and the Institute of Historic Building Conservation.

<sup>102</sup> *IBID.*

<sup>103</sup> *IBID.*

<sup>104</sup> *Design Skills in English Local Authorities* (2017) Urban Design Group and Place Alliance.

<sup>105</sup> *Urban Design as a Tool in Urban Conservation, and Urban Conservation as a Tool in Urban Design Research* (2014) Cidre, E., in Carmona, M (2014) *Explorations in Urban Design: An Urban Design Research Primer.*

<sup>106</sup> *10 Principles of Placemaking* (2017) The Berkeley Group, p23.

<sup>107</sup> *Long-term Stewardship* (2017) The Town and Country Planning Association.

report also considers long-term funding opportunities, such as maintenance and service charges, charitable funds and public-sector funding.

## 7 Summary of Findings

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This literature review has shown that while residential density can be defined as a simple quantitative measure of the relationship between a given physical area and the number of people who inhabit that area, residential density also has a qualitative side, which relates to users' perceptions of how dense a development is. In this context, for the purposes of this study, increased residential density is defined in relative terms, linked to existing densities and character in the areas in which they come forward (**section 3**).

The literature reviewed herein has highlighted some common approaches to design which underpin successful place-making for higher residential density developments (**section 4**). It suggests a need to consider new developments in their wider context so they engender a positive relationship with the surrounding historic character. The existing literature also suggests that a robust but flexible planning policy approach to density, heritage and design supported by a strong evidence base and place-based approach has a central role to play in supporting successful growth in historic contexts (**section 5**). Research shows that a collaborative approach, which involves local authorities, local communities and a wide range of stakeholders is a core element of successful development. Resource constraints in local authorities act as a barrier to this at times, and resource allocation requires careful consideration (**section 6**).

As set out in the introduction, this literature review supports a wider study exploring successful ways to increase residential densities in the historic environment. As part of this wider study, the following summary of the findings from this literature review will be explored:

### Definitions of Density

- High and increased residential density include both quantitative and qualitative considerations. Residential density can be defined and measured in many ways. Taking into account both the different measurement techniques, and the qualitative and perceptual element of residential density to optimise site capacity while providing successful developments, high and increased density is defined for the purposes of this study in relative terms.

### Designing Developments

- Tall buildings can be one means of providing higher residential densities, particularly where a positive relationship with historic character, urban grain and skyline can be created. However, there are a range of different approaches that can be used to achieve the same residential densities.
- Successful high-density housing schemes positively respond to local building forms and patterns of development. This does not always mean replicating the scale and massing of the surrounding environment, but ensuring these are taken into consideration and complemented through designs.
- A high quality, well-designed streetscape can make higher density housing schemes feel more intimate, reducing perceptions of overcrowding within a

development. Public realm also plays a central role in both protecting the setting of historic assets, and in retaining local character.

### **The role of the historic environment**

- The role that the historic environment can play in creating successful places should be acknowledged right from the start of any development project. Ensuring local historic character is considered and properly reflected in development should be central to any development proposal.
- Heritage has a role to play in ‘place-branding’. It is not only something to be protected and enhanced, but can play an active role in creating sense of place and contributing to unlocking value and development opportunity.

### **Planning Policy**

- Robust, flexible policies within the local authority’s statutory local plan can influence development densities and their relationship to the historic environment. Policy has a role to both conserve and enhance, and support sustainable growth in historic places. Policy is most successful where it takes a positive approach to facilitating development that is right for its historic environment (protecting through utilising). Site-specific policies can also be a useful tool in reinforcing requirements for particular historic contexts.

### **Implementation and Delivery**

- Engaging with a wide range of stakeholders is central to successfully delivering higher density housing development. Community consultation can play a vital role in improving quality, securing local ‘buy in’, and ensuring developments become liveable neighbourhoods.
- There is a need to encourage close partnership working across local authorities, agencies and developers to achieve the best outcome. In order to achieve this, a relationship of trust and transparency between local authorities and developers can enhance the application of residential density policies.
- One of the challenges of implementing high quality denser housing development, particularly in historic contexts is that the processing and review of applications, and pre-application engagement requires expert advice from the local authorities. Some local authorities lack access to vital urban design and historic environment expertise, which increases risk in the development process.

### **Management and Maintenance**

- Ensuring that the elements which contribute to making a higher density development successful (such as good public realm, relationship with the historic environment etc.) are maintained once development is complete is essential. Effective management and maintenance strategies ensure that developments continue to function as proposed and stand the test of time.