

Superdensity – the sequel

Andrew Beharrell introduces the latest thinking by top housing architects. Their publication follows their 2007 paper *Superdensity* and in a series of essays responds to the housing now appearing on London's skyline

Since our four architectural practices came together to publish the first *Superdensity* report in 2007 (Recommendations for Living at Superdensity) many of its recommendations have become accepted best practice. However, the intensity of development in London continues to increase, in some cases way beyond the densities envisaged in our earlier study, and as such we feel it is time to both restate those principles and air emerging concerns.

The proliferation of tall towers is one controversial aspect of this trend, but not the only one.

We are concerned about the immediate social and environmental impacts of very dense developments and their long-term sustainability. We also observe that this new superdensity – which we've dubbed hyperdensity when it's over 350 homes or dwellings per hectare – derives, not from London's distinctive and popular urban forms, but from global development patterns. We may well ask, is London becoming a victim of its own success, meeting demand by sacrificing the very distinctiveness which makes people want to live and work here?

Though the rash of tall towers is a concern, this report is not another campaign against those per se – that genie is out of the bottle. Rather, it gives positive guidance on how to combine ambitious densities with popular and familiar urban forms.

Building on our first report, through a series of essays and case studies, we show that it is possible to create successful places based around streets and a variety of urban typologies, including houses and medium-rise apartment blocks, as well as some carefully integrated taller buildings.

We show that densities up to around 350 homes per hectare can be achieved in this way (corresponding to the top of the London Plan Density Matrix at 1,100 habitable rooms per hectare for central well-connected sites). Above that, we believe there should be a presumption against development, and that any exceptions should be subject to much more rigorous impact testing.

From Superdensity to Hyperdensity?

The pace and extent of change to London's physical fabric is greater today than at any time since the era of post-war reconstruction. In 1981 London's population was 6.8 million – today it is 8.3 million and predicted to reach 10 million by 2031. London's success in attracting people and money creates a tremendous challenge for the provision of additional homes and infrastructure and inevitable pressure to increase development densities.

It is against this background that our group of four architectural practices, specialising in housing and neighbourhood planning, is publishing further guidance and observations about how to create more and better homes for Londoners.

The practices have been at the forefront of housing debate, design and delivery for 40 years or more, and are currently delivering a significant proportion of London's supply of new homes. We are therefore able to take a long view, and to bring experience from across the whole spectrum of housing by type, location and tenure. We are creating homes for all sorts of people: young and old, wealthy and poor, singles and families.

In 2007, *Recommendations for Living at Superdensity* was published by Design for Homes with support from the NHBC and Design for London. This intervention was triggered by a shared concern that the density of residential development was increasing rapidly, but without a widespread understanding of how to create high density developments which would be successful in the long term – and how to avoid repeating past mistakes. We defined the threshold for superdensity as 150 homes per hectare (around 450-500 habitable rooms) or above. These figures are reflected both in past planning policies for central London and in the current London Plan.

Planning authorities have started to approve residential developments far denser than those we considered in 2007 – we refer to these as 'hyperdensity'. For example, Wood Wharf, next to Canary Wharf, will contain around 3,100 apartments at a density of 436 homes per hectare. It features a cluster of tall residential towers peaking at 57 storeys. Smaller developments, with more tightly drawn site boundaries, can work out at over 1,000 homes per hectare – more than double the maximum envisaged by the London Plan matrix.

Superdensity: the Sequel

This new report, *Superdensity: the Sequel*, consists of a series



of short essays and case studies which show how patterns of development in London have evolved since the first report was published and offers some ideas about the way forward. It does not revisit the design guidance in the original, which we think still holds good and is now widely accepted and practised. The new report does not try to be comprehensive. For example, it does not deal with the hugely important subjects of utilities, transport and community infrastructure. Rather, it aims to pro-

vide some fresh perspectives on how to create successful homes and places at high densities up to around 350 homes per hectare.

Although London is the focus of this report, the observations are relevant to other UK cities, and hopefully will become increasingly applicable as and when economic growth starts to exert development pressure more evenly across the country.

The first essay is called *How Dense Can We Be?* It shows

>>>



FAR LEFT: Portobello Square by PRP
LEFT: Ocean Estate, Tower Hamlets by Levitt Bernstein



Andrew Beharrell is senior partner, Pollard Thomas Edwards

>>>



just how far and how fast things have changed since our previous report. It concludes that there are many ways of creating more and better homes in London on previously developed land and at moderate height – before we resort to high-rise or Green Belt release. The public debate about housing supply and design has tended to polarise between those who think towers are the solution and those who believe that London should be allowed to spread outwards.

We believe that both solutions have some part to play, but neither is the only answer or the best answer. Our case studies show that there is lots of scope to create high density places within existing neighbourhoods and with a creative mix of typologies and building heights.

The second essay is called Street Life at Superdensity. It expands on the importance of thinking about our streets and public places as the setting for civic life and for the (mostly) private structures which should form the background to public space. It emphasises the primacy of the spaces-in-between and the limitations of the 'object building'. In this context, the question is not whether high-rise is appropriate to London, but



Co-authors Andy von Bradsky PRP, Ben Derbyshire HTA and Matthew Goulcher Levitt Bernstein

DOWNLOAD Superdensity – the sequel from: www.superdensity.co.uk

Contents
Foreword Peter Murray
Introduction
Recommendations
Chapter 1 How dense can we be?
– Andrew Beharrell, Pollard Thomas Edwards

Chapter 2 Superdensity and street life
– Ben Derbyshire, HTA

Chapter 3 Creating mixed communities at Superdensity
– Matthew Goulcher, Levitt Bernstein

Chapter 4 Managing Superdensity
– Andy von Bradsky, PRP Architects

Appendix A Case studies
Appendix B Recommendations for Living at Superdensity – summary of the 2007 report

how and where to combine different urban forms in relation to our street network.

The third essay is called Creating Mixed Communities at Superdensity. The integration of market housing with subsidised housing is enshrined in policy and good practice and is one of the things which makes London distinctive and different among world cities. It is relatively easy to create mixed neighbourhoods at low and medium densities, and the traditional London street house and mansion block are proven models of how to do it. However, it becomes progressively harder to do as densities rise, building heights increase and the spaces in between are squeezed. This piece looks at how good design can facilitate the integration of diverse households and can accommodate different tenures, levels of wealth, cultures and household size. It also considers whether integration is actually practicable and sustainable in high-rise development.

The final essay, Managing Superdensity, comes back to the growing importance of management strategies in sustaining successful places and the related issue of service charges. Denser (and especially taller) development requires more



management and therefore more cost to be passed on to the occupier. How can we design and manage high density developments to keep cost-in-use under control?

What are the implications of rising costs for residents on lower incomes – and is there any justification for 'poor doors'?

We conclude with some case studies showing recent and current projects which address all of the issues above. The projects are in London and the South East and involve neighbourhood-scale interventions combining mixed-tenure homes, public space and other community infrastructure. All achieve densities of between 150 and 350 homes per hectare, using mostly mid-rise typologies, combined with elements of low-rise housing and some carefully located taller buildings.

As they demonstrate there are many alternative ways to create more and better homes in London before we resort to building more super-towers or concreting over our open spaces. ■

LEFT: The Scene, Walthamstow by Pollard, Thomas Edwards
BELOW: QEII by HTA



Further Recommendations for Living at Superdensity

Here are our key recommendations for making superdensity work in 2015. More detailed exploration of the issues and guidance is interwoven into the topic-based essays in the publication and in the case studies.

- Adopt mid-rise development to meet London's housing needs: apartment blocks of between five and eight storeys, including family apartments and duplexes, create successful homes and neighbourhoods at surprisingly high densities, are cost-effective and perpetuate the character and street life of London. Creative combinations of mid-rise mansion blocks with taller elements can make room for family houses within high density neighbourhoods.
- Resist 'hyperdensity': there should be a presumption against 'hyperdense' developments over 350 homes per hectare, which should be confined to exceptional locations and subject to exceptional justification. At these densities, and even with the best practice approach we advocate, it is very difficult to create the conditions that allow mixed communities to thrive. The Mayor's new Housing Zones should not become populated with such hyperdense schemes.
- Integrate towers with street-based typologies: taller buildings do have a role within well-connected developments, provided they are integrated with other typologies and contribute to the

- creation of successful streets and other public realm. We must avoid trophy towers dropped at random into our unique city: they are alien to our street-based culture, socially divisive and make little contribution to meeting London's housing needs.
- Promote street life: the streets and squares of London provide an unbeatable model for successful urban living and are the envy of the world. We need to continue this tradition of urban place-making, ensuring all new development begins with a coherent strategy for the public realm.
- Build on London's tradition of mixed communities: unlike other global cities, London's residential neighbourhoods have evolved by successfully integrating diverse people of different income, age and household size. Larger developments should contain a balance of homes for families, the elderly and young people. The economic and social health of our city requires it.
- Provide a wider range of housing typologies: planning policies and standards are focused on conventional models of permanent housing for long-stay households. We also need alternative types of housing design and tenure to attract and retain London's young mobile workforce.
- Harness space above public buildings: recent precedents show that successful new homes can be built above schools, libraries, shops, cinemas and workspace. There is much more scope to

- exploit air-rights to meet housing need and intensify street-life - including making better use of public-sector land.
 - Design for management: intelligent management plans are essential to avoid future social and management problems in high-density housing. We need to balance capital and maintenance costs through tighter specifications, closer collaboration with suppliers and early involvement of housing managers in the design process.
 - Make service charges affordable for all: very dense developments, and especially tall towers, have higher management and maintenance costs than other typologies, and create more intense pressure on shared space and infrastructure. More rigorous projections of service charges are required to ensure that dense developments pay their way, but do not become unaffordable for future occupiers.
 - Develop new funding streams for long term management: we should under-write the long-term management of shared space and community facilities through capital endowments at planning approval stage and ring-fencing income from ground rents.
- And finally, let us not give in to collective amnesia. We have spent the last 30 years trying to understand and correct the mistakes of post-war development. Let's use this knowledge and not repeat the same mistakes. ■