Housing Density in Guildford Borough

Increased density optimizes use of scarce land resources?

MARCH 2025

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SHOULD HOUSING DENSITIES IN GUILDFORD BE INCREASED TO BETTER USE LIMITED LAND RESOURCE?

The Guildford Society believes that housing densities in Guildford need to be reassessed and generally increased. This document sets out the challenges Guildford faces and reviews how other authorities and organisations are considering the need for higher densities and shows how through good design this can be achieved. Finally, it discusses the benefits and opportunities from increasing density of selected developments.

The Guildford Society believes that it is essential to use all available sites including those allocated in the current Local Plan, brownfield sites etc., to maximum effect to meet housing demand and limit encroachment on the countryside. We have looked at examples of other councils managing density (normally in the context of comprehensive Urban Planning Policies). Four of these are discussed in Section 2 of the report.

It can be seen by the examples in this report that well designed, higher density housing development focused on good placemaking can provide excellent, attractive living environments for residents. Some of the benefits of higher density housing are set out in Section 4.

(Images on cover acknowledged on larger images in paper below)

Contents

1 GUILDFORD'S HOUSING CHALLENGES

Guildford is facing a number of challenges trying to satisfy the Government's new housing targets. The new Standard Method requires new housing numbers for Guildford to double from approximately 500 to 1000 new homes each year. This is going to be very difficult to achieve in a borough constrained by large areas of Greenbelt, its topography, poor infrastructure and the Surrey Hills National Landscape (formerly the ANOB). Where can sites whether brownfield or greenfield be found or once again will more greenbelt (or 'grey' belt) sites be sacrificed.

National Government is also interested in promoting higher density development . As an example, the New Town Taskforce is looking at new towns or substantial urban extensions to be built at a higher density that enables residents to walk to local amenities, take advantage of easier travel further afield and relax in shared,

inclusive, open green spaces close to home.

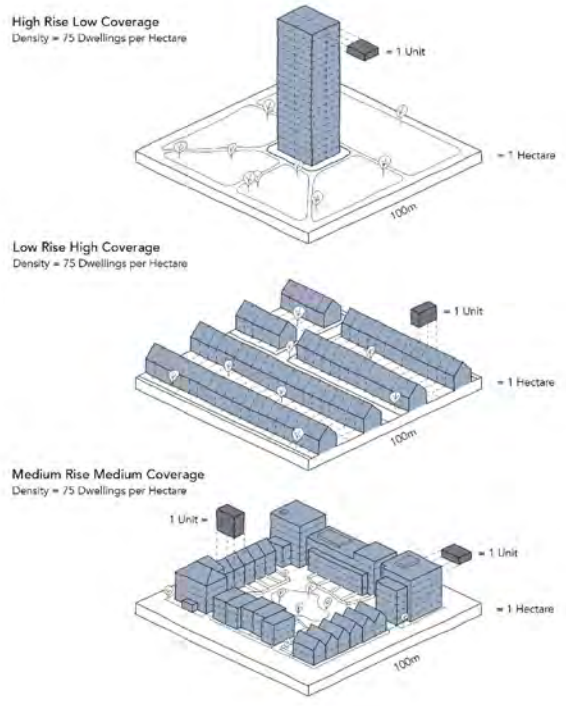
The Adopted Guildford borough Local Plan: strategy and sites 2019 (LPSS) identified five Strategic Sites for major development Weyside Urban Village, Wisley Airfield, Ash and Tongham, Gosden Hill, and Blackwell Farm. These sites were also the subject to a Strategic Development Framework - Supplementary Planning Document 2020 (SDF). Weyside Urban Village, Wisley Airfield and Ash and Tongham have received planning permission, with parts of Ash and Tongham now constructed.

Several of the Strategic sites had infrastructure improvements, notably upgraded transport links, identified in the LPSS 2019.

What is critical about the current Strategic Sites and any future sites identified, is the density of housing being considered. The critical factor is shortage of land so if development proceeds with lower density housing we will be squandering this key and finite asset. Therefore the densities of housing are of key importance.

Housing density is today generally measured in Dwellings Per Hectare (DPH). This is the most commonly used measure of density in the English planning system. It measures the number of self-contained dwellings within a specific area, usually the development site edged red. It tells us the number of dwellings within the area, but not the size of those dwellings. It does not tell us anything about building form.

This diagram illustrates how alternative forms of development can be planned to achieve the same 75 Dwellings Per Hectare (DPH)



In the Guildford Borough Council's Strategic Development Framework SPD the densities proposed are as follows:-

Weyside Urban Village 107dph (current proposals for the first phase are 90dph)
Gosden Hill 45dph
Blackwell Farm 45dph
Ash and Tongham 30dph
Wisley Airfield 42dph

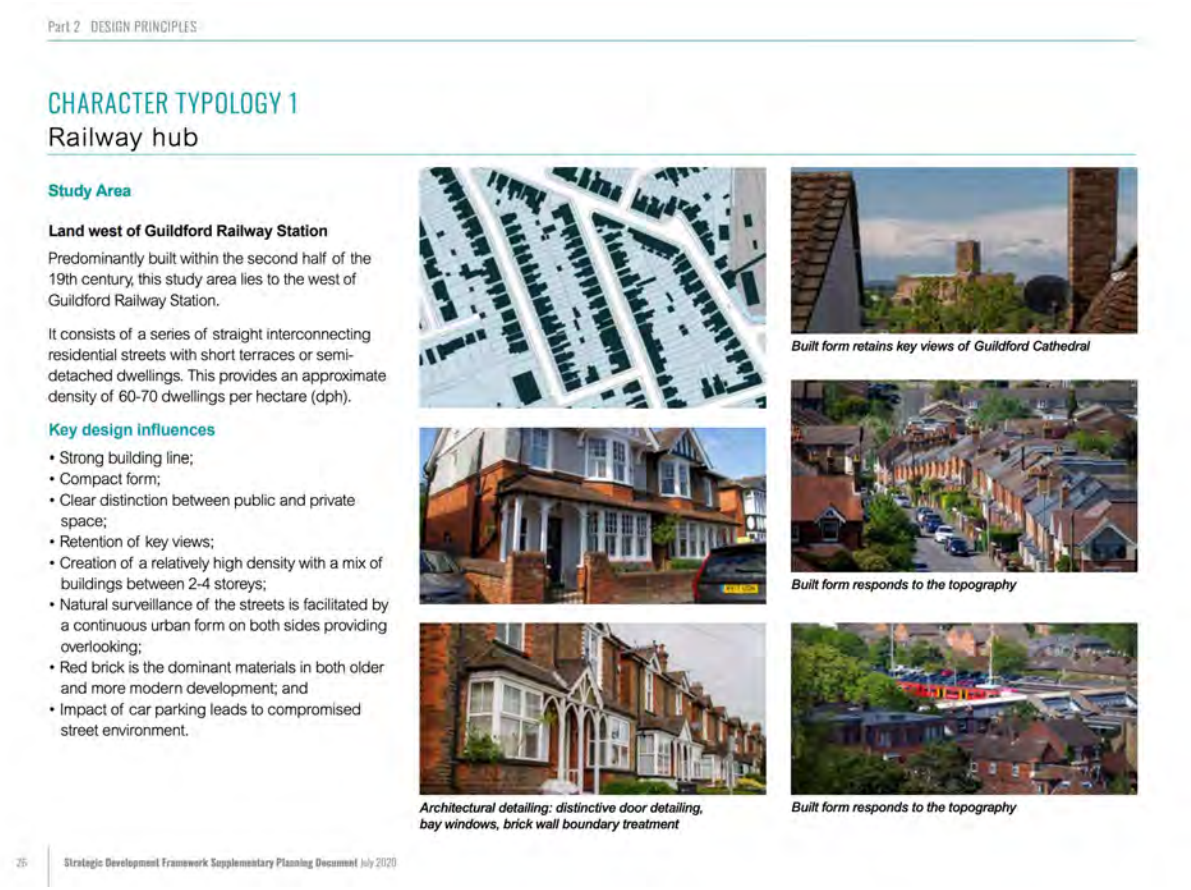
By comparison some of the developments in the town centre are being constructed to much higher densities:-

North Street: 100% apartment development 376dph
Plaza (Portsmouth Road): co-living development 792dph
Solum (Guildford Station): 100% apartment development 123dph
St Mary's Wharf: 100% apartment development 272dph

Many of the planning applications for new housing development within the Borough, viewed by the Guildford Society, are quite low density with generally two storey detached or semi-detached dwellings. These are designed around the car and car usage with roads and driveways consuming significant areas of land. Quite a number have standalone garages again consuming land.

Should these new housing schemes (including some of the strategic sites) be planned to higher densities with houses that are 3 and 4 storey, greater use of terraces of dwellings and where garages are planned, these are integrated with housing above. Where there are apartments in these schemes these could be of increased height, possibly up to 5 or 6 storeys.

The Strategic Development Framework SPD includes analysis of a number of Character Typologies of areas of Guildford with the area described as the Railway Hub having a density of 60-70 dph. This demonstrates that there are older housing areas of Guildford with higher densities and which prove popular residential neighbourhoods.



Part 2 DESIGN PRINCIPLES

CHARACTER TYPOLOGY 1

Railway hub

Study Area

Land west of Guildford Railway Station

Predominantly built within the second half of the 19th century, this study area lies to the west of Guildford Railway Station.

It consists of a series of straight interconnecting residential streets with short terraces or semi-detached dwellings. This provides an approximate density of 60-70 dwellings per hectare (dph).

Key design influences

- Strong building line;
- Compact form;
- Clear distinction between public and private space;
- Retention of key views;
- Creation of a relatively high density with a mix of buildings between 2-4 storeys;
- Natural surveillance of the streets is facilitated by a continuous urban form on both sides providing overlooking;
- Red brick is the dominant materials in both older and more modern development; and
- Impact of car parking leads to compromised street environment.

26 Strategic Development Framework Supplementary Planning Document July 2020

2 WHAT ARE OTHER COUNCILS' APPROACHES TO HOUSING DENSITIES?

A number of authorities, including town, city and county councils have concluded that densities need to be increased if their valuable land resources are to be used effectively. We have reviewed a number of the documents produced by some of these local authorities and other material on housing density. To illustrate how other councils and organisations are actively approaching the need to increase housing density we include details of Nottingham and Cambridge's approaches, Wirral's Density and Design Study and London First/Savill's 'Redefining Density' report on London. Also included are CPRE's report 'Double the Density, Halve the Land Needed' and Ash Sakula, Architects 'Profitable Neighbourhoods'.

It is evident with the councils included here that when pursuing increased housing densities they are requiring new housing typologies and high design quality.

2.1 NOTTINGHAM

Nottingham City Council have produced a very enlightened Design Quality Framework (DQF) https://www.dqfnottingham.org.uk/. Within this Framework there are Design Codes and Design Guides. One of the latter focuses on Housing

Density https://www.dqfnottingham.org.uk/housing-density In this Design Guide it sets out:

Why we need higher housing densities

The current national picture

For the last few decades, policy makers have been specifying gross densities of 20 to 40 dwellings per hectare (dph) in an attempt to prompt the delivery of greener, more pleasant environments. I often hear from development management and planning officers saying 'the density cap is necessary to protect the existing character of the area', yet, in practice, when new developments appear, they look very different to those surroundings officers are trying to protect. In fact, new developments often look as if they could be anywhere in the country.

Talking to housebuilders over many years in practice, I learnt that they are often faced with two huge forces pointing their direction of travel: 1) highways standards requesting overengineered environments, and 2) consumer's choice, with buyers looking for 'the American dream'. The trouble is that, as it happens, we are not in The States and we lack the vast amounts of land supply Americans enjoy.

The more recent Authority Wide Code requirement made us reflect and question why the popular density cap is not delivering place character, and whether it is as relevant as we hoped it would be. So, the quest is now to find the coding criteria that will help us deliver greener, healthier, more sustainable development with strong character and identity. To fix a problem, no better place to start than unveiling the cause.

Some shocking facts

- *The UK has a total area of 243,610 Km2, of which 21,194 Km2 are developed, of which: 63.1% is dedicated to agriculture; 20.1% to forestry, open land and water; and circa 14.8% to residential uses (3,167 Km2)*

- *There are currently circa 68 million people in the UK*

- *During the last 100 years, the UK population has increased an average of approximately 247,000 people per year, a third of whom are over 60 years old, 3.6% of whom are children*

- *The average number of persons per household in the UK is around 2.2 (circa 30,909,090 homes)*

- *The overall density of all residential areas in the UK is circa 98 dph*

- *The highways surface dedicated to cars in standard developments built by major housebuilders, is regularly between 30% and 40% of the development land*

- *If we condensed all the UK residential areas together, these would occupy the whole of Hampshire and Sussex put together.*

- If everyone in the UK lived in a recent development by a leading housebuilder, the residential use land would be more than three times the current one, and it would occupy an additional area the size of Cornwall, Devon, Dorset, Somerset, Wiltshire, Hampshire and Sussex put together.

- Victorian houses use less than half the land in comparison with current residential development by housebuilders. If everyone in the UK lived in a Victorian town house, the residential use land would be 40% more than the current one, an area equivalent to the size of Cornwall, Hampshire and Sussex.

- If we continue growing and building with the current housing model, with 50% of new homes delivered by leading housebuilders, we will need an area the size of Gloucestershire in the next 50 years for residential development.

- If we continue growing and building with the current housing model, with 50% of new homes delivered by leading housebuilders, cars could take an area the size of Fife, with Oxfordshire for humans, over the next 50 years

What a good code can do

Region-wide densities should aim for at least 98 dph, which is the current national average. Most rural areas can comfortably accommodate densities of 50 to 70 dph, but this must come with critical place variables to respond to the local character. Contrary to public belief, it is possible to deliver both. Suburban areas, village extensions and out of town developments should be aiming to achieve at least 100-120 dph, critically managing public transport, highways and parking provision to avoid infrastructure excess. Urban areas should absorb densities of at least 20 dph above the local trend in areas with building height restrictions. But it is important to note that density caps alone will not resolve the character issue.

In areas of strong existing character, or when development is small in size or high in impact, the design code clauses should emerge from in depth contextual analysis. But it is also critical that everyone involved understands that we cannot continue to live as we did in the past few decades. Not only because lifestyles have changed but also because the planet is under much more strain than ever before. We need to be much more efficient in our use of land.

Land-hungry development is the result of increased affordability in the UK. In the past few decades, people became car-reliant and accustomed to larger individual spaces, partly to accommodate the materialistic consumerism of the post-war years. The tipping point is close now, with affordability being so compromised for so many people. However, as we move towards a more digital existence, space requirements are likely to shrink again, but this will take time. In the meantime, we need to find the right balance to achieve land-efficient developments that deliver healthy environments.

Large developments - or those in isolation from existing built-up areas – have the capacity to determine a new character of their own and should not be trying to replicate the past. Reflecting current values and lifestyles and responding to the biggest issues of our times is always a better choice, after all, this is the mark we are leaving for future generations to learn from.

Although it is clear that some of the critical design parameters that can help deliver better places are well known across fields in our industry, what is not as obvious is how to determine the coding criteria that can help achieve those positive outcomes without preventing delivery on the ground: more compact, land-efficient development; more walkable, less car-dominated neighbourhoods; better use of green and blue infrastructure; and socially-positive public realm design.

2.2 CAMBRIDGE

Building Design has a useful article explaining how housing density is being increased in Cambridge. The article references a report New Neighbourhoods in Cambridge https://preview-cambridgeshire-cambscc.cloud.contensis.com/asset-library/New-Neighbourhoods-in-Cambridge.pdf , we also include a extract from the Report that focusses on density.

2.2.1 Article from Building Design 29th August 2024:-

HOW CAMBRIDGE EMBRACED GROWTH, OVERCAME NIMBYISM, AND BUILT BETTER HOUSING
A new report reveals how Cambridge overcame barriers to growth and set a new standard for UK housing development, writes Stephen Platt

A report has just been published that evaluates housing schemes in Cambridge and the Cambridgeshire Quality Panel's role in raising quality and explores potential lessons for other growth areas. The report describes how people in Cambridgeshire overcame the barriers to growth that stifle development and reviews models that increase the number of new homes delivered from each site. It aims to determine if the high standards seen in Cambridge can be replicated elsewhere in the UK.

The intended audience includes ministers in housing, communities, and transport roles, councillors, officers in planning authorities, design review panels, and anyone connected to delivering new housing. The report is supported by the Ministry of Housing, Communities and Local Government and Cambridgeshire County Council.

In 2022-23, Cambridge outbuilt Oxford by a ratio of 6:1 new homes. In previous eras, this might have meant a dash for quantity at the expense of quality. Instead, the area has won 11 Housing Design Awards between 2014 and 2024. Eleven awards betters the aggregate total of awards in England's 20 largest cities (excluding London), whose combined population of more than 30 million dwarfs Cambridge's 150,000. What lessons from this rise in quality are relevant to other growth areas?

How did Cambridge do it?
Cambridge embraced growth, overcame nimbyism, and built better. Innovation in the planning process began over 20 years ago with Cambridge Futures, a forum that brought together key people from the University of Cambridge, business, and local government, providing an evidence base for change by modelling seven development options. It tested development options and paved the way for The Quality Charter for Growth and then the Cambridgeshire Quality Panel (CQP).

Public consultation on the options secured political buy-in and local leadership, ensuring that Structure Plan proposals about changes to the Green Belt, densification, and the location of a new settlement did not meet with the kind of opposition that other places experience when proposing big changes.

In accepting growth, the community demanded high quality. The Quality Charter, devised in 2008, provided a framework for assessing new development with 4 Cs: Community, Connectivity, Climate, and Character. In 2010, the Cambridgeshire Quality Panel was formed to review major schemes. To date, the Panel has conducted 100 housing scheme reviews. The Quality Charter and the Quality Panel have had a significant impact on quality. The Quality Panel encourages applicants to go beyond what they are required to do and definitely helps raise the bar on quality in most schemes.

What is the evidence for the report?
The study described in the report was based on six new neighbourhood schemes in and around Cambridge. The key actors in the story – the planners, the applicants and their design teams, and panel members – were interviewed. Panel members then visited the sites and gathered in a workshop to pool their impressions.

The schemes case-studied
Photos source: Cambridge Architectural Research Ltd

Abode at Great Kneighton by Proctor and Matthews Architects and developed by Countryside Homes

Source: Cambridge Architectural Research Ltd

Abode at Great Kneighton is exceptionally good. Not only is density high (55 dph) relative to traditional housing estates built at the edge of towns (typically 25-30 dph), but it's also low-rise. The neighbourhood is intimate, with exceptional landscape integrated with the architecture, and all key services and amenities are provided.

Knights Park, Eddington by Pollard Thomas Edwards and Alison Brookes Architects

Eddington is also exceptional, but here the University of Cambridge, as landowner and developer, is taking the long view, investing not only in the future of the place it's creating, but also in the future vitality of university research. There are lessons for other places in the ambition, master planning, landscaping, and build quality of Eddington.

Marleigh Avenue designed by Pollard Thomas Edwards architects, developed by Hill Homes and Marshall

Source: Cambridge Architectural Research Ltd

Darwin Green and Marleigh, the other two schemes on the edge of the city, mostly offer a less expensive product, but housebuilders have still raised their game. Darwin Green has suffered from the economic realities of development in challenging times, and essential services – schools, parks, shops, and health centres – are still missing. Both look a little barren and treeless as a result of less sophisticated integration of the design and adoption processes. They are, however, still less than half complete and have the potential to mature.

North Ely and Phase 1 of Northstowe are what Panel members have described as 'good ordinary'. In North Ely, Hopkins Homes set a high standard of finish in individual homes, although the streetscape is poor. Northstowe will eventually be a town of 25,000 people. On Phase 1, a 'Northstowe style' is emerging, with townhouses up to 3 storeys tall with distinctive gable ends, although many homes are more conventional housebuilder 2-storey types.

Northstowe

Source: Cambridge Architectural Research Ltd

In Northstowe the roads are too wide, there is no tree strategy and cycleways have been commandeered by parked cars

Northstowe currently suffers from unfinished streets where planting and cycle lanes have been delayed because inhabited streets have been used as haul roads. Both North Ely and Northstowe are less than a quarter complete. In North Ely, it will probably be more of the same, but not the same quality, and in Northstowe, new housing types are emerging with renewed ambition from Homes England for it to be exemplary.

Cambridge has particular advantages. Is this approach relevant elsewhere?
Once the climate of opinion begins to change and people recognise that growth is desirable, it opens the door to discussions on how best to manage change. The Cambridge Futures experience and the concept of the Quality Charter offer a way forward, allowing a community to take ownership of the growth and benefit from improved amenities and infrastructure.

The Quality Charter and the Panel are absolutely replicable and can be adapted to meet local challenges.

Can we build 300,000 new homes a year?
The private sector is well able to deliver 200,000 homes a year. We built 192,000 in 2022 and 212,000 in 2023, about a quarter of which were registered as affordable. We built 245,000 in 2019 before Covid. We used to build an equal number of council and private houses each year. In 1970, local authorities and housing associations built 200,000 homes, and the total number of homes built was over 400,000. Since 1980, however, we haven't been building much social housing, which is the real need.
If we can win over local support for growth in the way Cambridge did and strengthen and resource the planning system to help speed up the process, it would seem entirely feasible to build 300,000 new homes a year with the necessary infrastructure, including public transport and jobs. The key lesson from Cambridge is that quality matters and that temporary provision should be made for essential community services until there is the critical mass of residents to support permanent provision.

2.2.2 Report: NEW NEIGHBOURHOODS IN CAMBRIDGE

https://www.cambridgeshire.gov.uk/asset-library/New-Neighbourhoods-in-Cambridge.pdf
By Cambridge Architectural Research Limited

This Report, quoted in the article above, highlights the success of Cambridge in delivering high-quality new neighbourhoods through strategic planning, innovative design, and collaborative efforts. Given the support of the local community, the lessons learned from Cambridge can be applied to other areas in the UK to improve housing quality and meet growth targets. The involvement of the Quality Panel, adherence to the Quality Charter, and early planning are critical components for replicating Cambridge's achievements.

A key section of the Report: Section 1.2 Density and Housing Layouts

New housing in Cambridge is twice the average density of conventional housebuilder estates up and down the land. It achieves this by dealing creatively with private, semiprivate and public space in a way which reduces the need for conventional size private gardens. Accordia, constructed between 2003-11, came at the right time and people recognised that bespoke house types could provide a high density that did not mean small and cramped.

The Quality Panel helped the evolution of several housing types and layout forms pioneered in Cambridge by giving confidence to planning officers and members. Chief among these was support for transgressing the yardsticks first introduced in 1919 by the Tudor Walters report designed to prevent town cramming and unsanitary housing conditions but which have stifled innovation. Many local plans specify minimum back-to-back distances of 21m and the South Cambridgeshire Design Guide refers to 25m.

The rules for minimal distances between principal windows and back garden depths effectively capped low-rise development density at 35 dwh, obliging developers competing in high-land value areas to abandon the most popular own-door street-access house for apartments. But apartment buildings have common parts, such as

lifts which are expensive to build and maintain, leading to unaffordable high management charges, flattening demand where management charges are less familiar to households, such as in the Cambridge area, and suppressing the number of homes delivered.

Peter Barber Architects were one of the first to reinterpret the Victorian back-to-back house type in their McGrath Road housing in Newham, London.4 In Cambridge, in Great Kneighton for example, the new house types achieve higher densities by shrinking the minimum distance between each house's principal exterior walls and by reallocating some private outdoor space given over as garden to outdoor space within the house footprint in terraces, balconies and courtyards. Overlooking is avoided by careful design, for example with notched upper floor plans and windows to the side rather than to the rear.

There are significant benefits from higher density, including efficient use of land, economies of scale, reduced travel distances and times, less pollution from motor vehicles and increased access to services. As Cambridge demonstrates, higher densities do not have to result in town cramming or poor environments.

Higher densities make more things possible. Higher density releases the potential to provide more community facilities and public transport infrastructure. More homes (and not just apartments) and a greater mix of types to sell that increases sales rates and delivers a sales receipt for developers to help finance more community facilities, better landscape, and public transport infrastructure. New housing in Cambridge is typically 2 to 3 times the average coverage rate of conventional housebuilder estate patterns at 7,000 to 10,000 sqm per hectare. It achieves this by redistributing some private open space, designing creatively to avoid overlooking, and incorporating car parking either within the ground storey of the dwelling or on street.

Crucially it achieves the much higher development intensity without resorting to apartments which are more expensive to build and maintain, have a narrower market and so restrict sales and delivery rates. The maximum permissible height is 4-5 storeys and most new housing in Cambridge is 2-4 storeys. This makes better use of land by more intensive development. Only 20% of the homes among the 2300 at Great Kneighton are in traditional apartment blocks whereas 60% are normal houses and 20% are duplex units with their own front door.

The model of standard housebuilders is unsustainable – it's profligate of materials, and nobody has really grasped the nettle of density. The economic use of land – that's ultimately what it's about.

Sustainable development needs a critical mass of people able to support retail, employment, education and public transport. It is widely accepted that a minimum density of 60 dph is required to support a tram service in urban areas.7 The six schemes studied, apart from North Ely, have a net density of 50-60 dph. However, the gross density is much lower because all the schemes have generous amounts of public open space.

2.3 LONDON

Business London (previously London First) with Savills has produced a report Redefining Density: Making the Best Use of London's Land to Build More and Better Homes
https://www.businessldn.co.uk/sites/default/files/documents/2018-05/Redefining-Density.pdf
Although produced in 2015 this report provides useful information on housing densities and the importance of design in achieving successful higher density housing developments.

2.4 WIRRAL

In 2019 a Density and Design Study was produced for Wirral Council
https://www.wirral.gov.uk/files/h-5.1-wirral-housing-density-study-interim-report-2019.pdf/download?inline

This is a detailed study of Wirral's existing developments and densities but critically considers the approaches to density being used in Chester, the Emerging London Plan (July 2019), Brighton and Hove City Plan and (2016) Croydon Local Plan (2018) and the Essex Design Guide.

In this Study's Conclusions and Recommendations, it states:

What is clear from the study, is that a step change is required in delivering higher densities. Existing urban opportunities such as small and medium sites and those in the inner urban core, as well as more effective use of larger sites, and any greenfield land that comes forward, is both necessary and desirable, as opposed to a traditional model of replicating existing densities. The work has clearly demonstrated that densification can be delivered on a number of scales, from large new build sites to upwards extensions and back-land development, all of which should be explored through specific Wirral case studies in successive stages.

3 HOW TO DESIGN AND PLAN FOR INCREASED DENSITY

3.1 CPRE REPORT: DOUBLE THE DENSITY, HALVE THE LAND NEEDED

The CPRE produced a report Double the Density, Halve the Land Needed
https://www.cprelondon.org.uk/wp-content/uploads/sites/10/2020/02/DoubleTheDensityHalveTheLandNeeded_1.pdf

This report states that according to CPRE research the average density assumption on brownfield register sites in 2018 was 41 dwellings per hectare. This report shows why doubling that should be within the realms of possibility for all authorities across England and why it might in fact be preferable to building at low density. In fact, most developments could be planned at 100 dwellings per hectare or more.

In London, it is common to see relatively high density development but there is still huge pressure to build out into Green Belt and so CPRE London has needed to:

• Reassure suburban Londoners that building at high density does not need to mean tower blocks and high rise, that it can be attractive both to look at and to live in
• Remind London Boroughs and residents alike that high density living has both social and environmental benefits and is attractive to many
• Remind London Boroughs that, if you build in Green Belt, you are consigned to building low-density, high-carbon, car-dependent housing which is unlikely to be affordable and will undermine the Mayor's Transport Strategy which seeks to dramatically reduce car trips in the city
• Remind everyone that many people do not have access to a car and that planning development without cars is not only possible but potentially attractive to many, particularly older people, young people and people on lower incomes.

The report continues:

Double the density, halve the land needed

According to CPRE research the average density assumption on brownfield register sites in 2018 was 41 dwellings per hectare. Though this has increased since the last report from 33dph it is still very low.

Why do we need to be building at higher density? "… it is generally considered that the reduced cost of servicing and the efficient use of public transport begin to take effect at densities as low as ... 62 dwellings per hectare."2 But the higher the density, the more benefits accrue, providing of course that the site is not isolated entirely from public transport, services and amenities.

High density developments should be positive for communities, do not need to involve high rise or 'town cramming' and can be visually extremely attractive.

High density in history

Victorian era housing. *Terraced houses have been a popular form of mid-density housing in the UK since the 17th century, and they were first designed for the wealthiest families, like the townhouses for the nobility surrounding Regent's Park. During the Victorian era (1837-1901), it became a popular means of accommodating the rise of working-class migration to urban areas driven by the Industrial Revolution.* *(See illustration on next page)*

Image: fet.uwe.ac.uk/conweb/house_ages/flypast/section1.htm

Post war surburban development *was much lower density at around 30 dwellings per hectare. "…after World War II urban planning largely centered around the use of municipal zoning ordinances to segregate residential from commercial and industrial development, and focused on the construction of low-density single family detached houses as the preferred housing format for the growing middle class." The physical separation of where people live from where they work, shop and frequently spend their recreational time, together with low housing density, which often drastically reduced population density relative to historical norms, made cars indispensable for practical transportation and contributed to the emergence of a culture of car dependency.*

The housing estates of the 60s and 70s *were relatively high density, though interestingly were often no higher in density than the Victorian terraces which were taken down to accommodate them. They did however cause distrust in high density development, particularly high rise.*

https://en.wikipedia.org/wiki/New_Urbanism#Defining_elements Image: www.powerpointltd.co.uk/project/communallighting-design-installation-14-storey-tower-block-lincoln/

What do different densities look like?

Note on accuracy: Densities can be misleading because it is not clear whether open spaces are included in the calculation. The density of a site is different to the density of an area as the latter calculation may include land given to roads, open or green spaces. The densities given here are a guide.

100 dwellings per hectare

Image: https://medium.com/land-buildings-identity-and-values/can-great-design-help-solve-the-housing-crisis-c70a078d409d

111 dwellings per hectare

*Image: https://medium.com/land-buildings-identity-and-values/can-greatdesign-help-solve-the-housing-*crisis-c70a078d409d

Donnybrook Quarter – Peter Barber Architects. 2618 sqm. Hackney east London. Low-rise high density street based city quarter. The scheme is laid out around two new tree lined streets which cross the site creating strong spatial connections with adjacent neighbourhoods. Completed in January 2006. Won the innovation in housing awards. http://www.peterbarberarchitects.com/donnybrook-quarter

84 dwellings per hectare

Hannibal Road Gardens – Beveridge Mews - Tower Hamlets London. Peter Barber Architects. 950 m2. 100% affordable housing. Includes community garden and playground. http://www.peterbarberarchitects.com/hannibal-road-gardens

Brook Valley Gardens – Barnet Borough. Countryside Properties and L&Q. Masterplan includes 5 phases from 2013 (start of phase 1) to 2025 (expiration of phase 5). 631 new homes over 7,5 hectares. http://www.dollisvalley.co.uk/media/Dollis-Valley-exhibition-boards.pdf

160 dwellings per hectare.

Springhead Park, Ebbsfleet, Kent. Mixed use residential development, to be finished in 2020. Architects: CHBC Architects. Approximately 50 000 sqm. 800 dwellings planned. https://www.kentdesign.org/developments/springhead-parkebbsfleet-carden-city/

Dwellings per hectare approx. 200

Cometa High Wycombe. Richard Clark Chartered Architects. 600 sqm. 12 new apartments.https://webarchive.nationalarchives.gov.uk/20110118121646/http://www.cabe.org.uk/case-studies/cometa/info

See the report for more examples
https://www.cprelondon.org.uk/wp-content/uploads/sites/10/2020/02/DoubleTheDensityHalveTheLandNeeded_1.pdf

3.2 ASH SAKULA: PROFITABLE NEIGHBOURHOODS

The architectural practice Ash Sakula (who were guest speakers at the Guildford Society/University of Surrey Architectural Lecture 2024) have produced a forward looking approach to sustainable housing design with increased densities as a core factor. Ash Sakula have a proven track record with housing developments where the designs focus on increased densities to maximise numbers of dwellings provided.

Their approach is superbly explained in their presentation Profitable Neighbourhoods https://www.profitableneighbourhoods.co.uk/

Ash Sakula as part of an Architecture Lecture delivered at University of Surrey 2024 explained the concept with particular reference to a site in Guildford. See video at https://www.youtube.com/watch?v=xLqTpqT1z3Y

4 BENEFITS OF HIGHER DENSITY HOUSING

Concerns are sometimes voiced about higher density housing with issues quoted such as poorer living environments, less privacy and less private amenity spaces. The information in the previous sections above, including built examples with some new housing typologies and excellent quality of design, hopefully shows that carefully planned housing developments at higher densities, can address all such concerns.

In the CPRE Report Double the density, halve the land needed they set out:

10 reasons why higher density living is positive for Communities

1. The higher the density, the more land is saved: space is used more efficiently.
2. The higher the density, the bigger range of shops and services that can be supported.
3. Of most significance is the cost of personal transport which diminishes rapidly as density increases. Better transport means better access to jobs, amenities, leisure, etc. At high densities fast, frequent, reliable public transport systems become fully effective with dramatic reductions in energy & costs.
4. As density increases the per capita cost of providing services such as water, gas, electricity and waste disposal reduces.
5. The cost of transporting materials and goods also declines. As the costs go down so does the consumption of energy.
6. As density increases, isolation and social exclusion is reduced for people without a car.
7. Density can also impact on affordability as the cost of land is lower per dwelling, and space is not needed for parking cars, for instance.
8. Higher density creates more vitality and diversity. “Bigger concentrations of people stimulate and support the provision of more services and facilities making possible a wider choice of restaurants, theatres, cinemas and other recreational opportunities. They support specialist centres and services for minorities, which are not possible where such minorities are dispersed in low density sprawl. …
9. “All this stimulates interdependent economic development that creates new employment opportunities and greater choice of employment.
10. “Above all, in higher density urban areas, all this diversity is within easy reach of where most people live. Ease of access is a key factor, which has critical implications for a sustainable quality of urban life.”

5 DENSITY AND GUILDFORD'S INFRASTRUCTURE

Increasing the densities of some of the larger Guildford housing developments, especially the Strategic Sites will add focus to the already stressed existing infrastructure problems in the Borough as identified in Shaping Guildford's Future. Of these possibly the most problematic is transport although flooding and power and drainage services are limiting potential development.

The current Local Plan was based upon the presumption that the A3 between the Stoke interchange and the A31 Hog's Back junction. The Local Plan states

The implementation of the three RIS (Road Investment Strategy) schemes during the Plan period, alongside other critical infrastructure, is required in order to be able to accommodate future planned growth both outside and within the borough.

As no major improvements have been made to the A3, the situation hasn't changed since the Local Plan was produced in 2019. Two strategic sites (Blackwell Farm, and Gosden Hill) also integrate with new rail stations both of which have made no progress.

Assuming the Government's new housing target requirements are to be met, Issues such as transport are likely to be the same whether currently envisaged developments (including the Strategic Sites) are built to higher densities or this new housing is developed on brownfield sites or more probably green (or grey) belt land around Guildford.

Concerns have already been raised about the adequacy of the existing road systems to accommodate the additional traffic that will be generated by developments such as Weyside Urban Village and Gosden Hill Farm, feeding on to already congested roads.

Whether it is decided to increase the density of housing on the currently envisaged developments, making more effective use of valuable land resources, or to develop new housing elsewhere, we think it is essential that Guildford must have a properly prepared integrated transport plan, covering all modes of transport to build truly sustainable developments.

6 CONCLUSION AND NEXT STEPS

Our conclusion is that GBC should be:

1. Reviewing urgently as part of the Local Plan Update process all the housing sites included in the Local Plan, not yet developed or having planning approval, to see where densities can be increased: These should include the sites in the Strategic Development Framework SPD including:
    - Gosden Hill Farm
    - Blackwell Farm
    - Ash and Tongham (sites not yet developed)
    - Wisley Airfield (Detailed Planning for large part of the site yet to be determined)

2. Reviewing all housing developments at planning stage or pre planning stage, to consider where housing densities can be increased. This should be conducted alongside emerging heights policies as appropriate.

3. Developing Design Codes similar to Nottingham including Design Guides on Housing Density setting high design standards essential for quality housing density.

4. Completing urgently the work on developing a Community Infrastructure Levy (CIL) document. This needs to be progressed to allow major Infrastructure development to be funded to support new developments and help unlock sites for development.

The Guildford Society has been active as a Civic Society in Guildford Borough for nearly 100 years. It brings together those who are concerned that Guildford protects its Heritage and Natural Beauty, supports an active and diverse community, and evolves to meet the needs of the future.

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