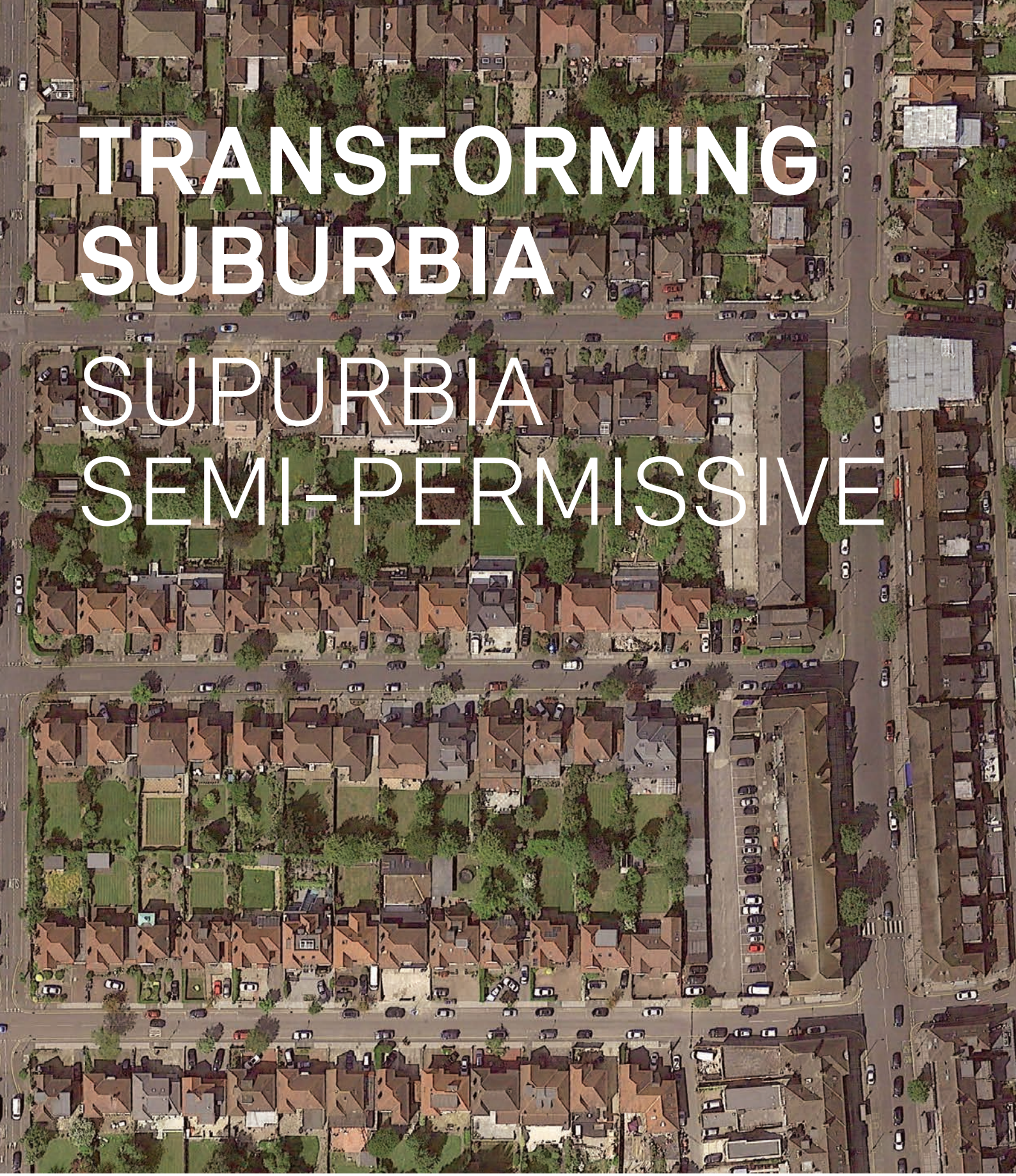


TRANSFORMING SUBURBIA

SUPURBIA SEMI-PERMISSIVE

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Planning Design Economics

2015

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SEMI-PERMISSIVE

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Foreword: Peter Murray

I am lucky enough to live in a suburb, and a very special one at that. Bedford Park is the 'first garden suburb' - it was a precursor of the Garden City movement and of developments such as Hampstead Garden Suburb and Brentham. It sports tree-lined streets, front and back gardens and distinctive fences. The majority of the houses, detached and semi-detached, were designed by R Norman Shaw in the Queen Anne style and built of bright red bricks fired in local kilns. It is low density.

Since it was built in the latter part of the 19th century there have been various phases of increasing that density. The Edwardians built two new mansion blocks. They are four storey rather than the two and three storeys of the surrounding houses, and they deliver 16 generous apartments where there would be four family houses.

In the 1930s a single large house, built for Jonathan Carr, the developer of the suburb, was demolished to make way for a block of older persons flats. Then in the 1950s and early sixties Acton Borough Council implemented a programme of demolishing the then rather run down houses and replacing them with blocks of flats. A single plot could deliver up to 20 new units over five floors.

The vandalism of the Council in demolishing important Norman Shaw houses so upset the locals that they set up an amenity society to protect them and as a result the majority of houses on the estate were listed in 1967 and the densification programme was halted.

Densification of suburbs is not new and done appropriately it works. It also has real benefits to the local community in providing a richer mix of types and sizes of accommodation to suit different lifestyles. Very importantly, it needs to be done with the consent of the local community; London's suburban residents are famously sensitive about development in their back yards.

That is why the well considered approaches to densifying London's suburbs illustrated in this book are so important. Suburban sprawl is an inherently inefficient use of land - the capital's most valuable resource. As the ideas on the following pages show, well considered replanning and densification of suburban areas can make a substantial contribution to the delivery of much-needed homes for Londoners. Not only can it deliver large numbers of homes but it can also help to regenerate the lacklustre economies of London's towns and high streets.

Executive Summary

For all their virtues, the inter-war suburbs need to change - they are land-hungry, energy-hungry and car-dependent – but local democracy and owner-occupation make large scale change almost impossible.

How can we modernise the suburbs, increase the number and variety of homes and reduce car dependence – but maintain the space, greenery and independence that people value?

This report shows how urban intensification of suburban London can increase housing supply, promote economic activity, improve local service provision and reduce congestion – whilst improving the quality of life, the choices available and the sustainability of the suburbs. Doubling the density of just 10% of the outer London Boroughs could create one million new homes.

Suburbia

Supurbia is a strategy for intensifying London's suburbs that balances their inherent advantages with higher density and amenity value. Its approach is twofold: redeveloping the local main streets and parades as mixed-use places with increased housing, improved service and amenity provision; and enabling owner-occupiers to develop their land, creating rich diversities of housing. The strategy will bring together local authorities and communities to plan appropriate developments, and allow homeowners to release equity in their land for home improvements. It will also reduce reliance on mainstream developers to ease the housing crisis, providing an approach that is more adaptable to communities' needs.

Semi-permissive

Permitted development rights can incentivise suburban householders to collaborate in replacing and supplementing their houses with modern homes. Giving suburban householders a vested interest in development could help to overcome resistance to change.

There are over 725,000 semi-detached and detached houses in the outer London Boroughs. This scheme could create over 100,000 additional homes and renew a similar number.

16 Ideas for transforming Metroland

The original report Supurbia: a study in urban intensification in Outer London was produced by HTA Design LLP in 2014.

It asked: how might suburban transformation be triggered, what incentives might begin to unlock the potential? Is there a case for special measures based on the principle of Housing Zones proposed in the GLA's Housing Strategy? Or should the incentives be more generally applied across the outer Boroughs and London as a whole?

The study made 16 preliminary proposals for further discussion. Many of these have been developed further in this latest report and in submissions to the NLA's New Ideas for London Insight Study.

Creating value in suburbia

The place potential of well connected areas of metroland makes possible value uplift associated with the Supurbia vision. According to Savills, the gross development value generated by homeowners who club together to develop their plots could be as much as 60% - a considerable incentive for change.

About this report and its authors

This report has been produced by HTA Design LLP and Pollard Thomas Edwards (PTE), with support from Savills and Nathaniel Lichfield and Partners.

It has grown out of an earlier report - Supurbia: a study in urban intensification in Outer London produced by HTA in 2014 – and from recent submissions by both practices to the NLA's New Ideas for London Insight Study. The report contained input from Savills on delivery and viability.

HTA's Supurbia - one of the ten winning entries to the NLA competition – covers a wide range of potential initiatives to transform the suburbs. Supurbia is offered here as an umbrella title not only for the ideas set out below, but also for other contributors to bring forward their own proposals.

Semi-permissive is Pollard Thomas Edwards's more detailed proposal to use carefully-framed permitted development rights to bring about beneficial change and to incentivise householders to become micro-developers. PTE was supported by planning consultants Nathaniel Lichfield and Partners.

The two approaches have much in common, but also show distinctively different attitudes to planning and delivery: PTE and NLP propose a more market-led approach facilitated by top-down planning reforms, while HTA propose a more consensual approach based on neighbourhood planning and local development orders. We have found the debate stimulating: we hope that the readers of this report will add their own contributions through our website.



Both Supurbia and Semi-permissive envisage a reduction in car domination and the greening of streetscapes

Introduction

The Metroland problem

When London's Metroland was first developed in the early 20th century, it was conceived as an affordable means of access to London's booming economy for working Londoners. It was popular, successful and gave rise to a culture all of its own, perhaps best characterised by the late British poet laureate, Sir John Betjeman in his 1973 documentary film, Metro-Land, made for BBC, and in various evocative poems, including 'Middlesex'; 'Gaily into Ruislip gardens / runs the red electric train...'

A century later, perceptions of some areas of outer London have deteriorated and some suburbs are under-performing by comparison with central London, lagging behind in job creation, average incomes and property values. According to the Smith Institute 'Towards a Suburban Renaissance' levels of poverty were still growing in outer London suburbs in 2014, whilst remaining stable in central London during the same period.

Supurbia is an idea that recognises that the capacity to increase supply identified in the recent Strategic Housing Land Availability Assessment (SHLAA) for London already includes the contribution of all currently identified brownfield sites, infill sites, redeveloped local authority stock and redeveloped industrial land. So the Supurbia idea instead concentrates on the capacity of the three quarters of a million privately owned semi-detached houses in outer London. Whilst once the suburban ideal, there has been some loss of original character, as front gardens have been converted for parking and verges and trees lost to hardstanding. Moreover, changes in household makeup mean that ever fewer households really benefit from their space.

These homes are not only low density - typically averaging only 25 - 35 homes per hectare - but amongst the most under-occupied. Nearly 40% of owner-occupier households (often 'empty nesters') have at least two spare bedrooms, while sharing groups who increasingly rent suburban homes rarely take full advantage of large gardens. In Bexley, based on the 2011 Census data, 45% of the population inhabit the ubiquitous three bed semi. 60% of the households comprise two persons or less, 80% are owner occupiers, 66% own cars, 24% own two or more cars. In one neighbourhood of three and four bedroom semis in Bexleyheath, which we examined as a pilot, we estimated that 38 households comprised 110 people including only 18 children, or 2.9 people per 3- or 4-bedroomed home.

At the same time, occupants of the suburbs are famously resistant to changes that might unlock the vast potential of this huge area of low density city. According to The Centre for London, 75% of people in outer London Boroughs (compared to 50% in inner London) oppose new housing development in their neighbourhoods. The politics and planning of housing development now favour the rights of those who are well housed to resist development in their neighbourhoods to meet the needs of those who are not. This phenomenon is now evident in all sectors of society, not just amongst the well-resourced middle classes.



The Supurbia project examines how financial self-interest could be one way of stimulating change

and delivering new housing development. The potential prize is great: doubling the density of just 10% of the outer London Boroughs would create the capacity for one million new homes - the area covered is simply huge and the capacity so correspondingly great that it should not be overlooked, either by the Local Authorities concerned or by the Mayor of London, who seek to find solutions to London's housing crisis.

But how might such changes be triggered and what incentives might begin to unlock the potential? And is there a case for targeted measures based on the principle of Housing Zones proposed in the GLA's Housing Strategy, or should the incentives be more generally applied across the outer Boroughs and London as a whole?

Metroland's Potential

The objective of Supurbia is to build on the inherent quality of the suburbs (individual homes on their own plots with parking, easy access to public and private open space set in a verdant environment) with a set of policies targeted at meeting popular aspirations. The underlying premise is that by offering people choices that are currently denied them, a notoriously static situation might be transformed into a dynamic one. A programme of urban intensification might trigger changes resulting in a much improved fit of population to its accommodation; that is more sustainable, efficient, affordable and desirable. The intended outcome is both an increase in housing supply and a more visually pleasing, greener urban environment. This should come alongside an improvement in economic activity, local service provision and reduction in energy use and congestion. In all, an improved quality of life for London's suburbanites.

Some of the neighbourhoods we have examined as potential pilot areas are decidedly sub-topian examples of a paradise lost; once tree-lined streets are now tree-less, what were front gardens are now concreted driveways, and homes have such low rates of occupancy that local services struggle and trade dies in local parades awash with cheap take-away joints and pound shops.

The Supurbia idea sets out to re-imagine such neighbourhoods with greater population density, better fitted to the available accommodation and creating improved commercial footfall for improved local services and safer streets. Our calculations show how contemporary building and public realm design, and standards of construction can also dramatically reduce energy use and increase biodiversity. Similarly, techniques of neighbourhood infrastructure design and management can redistribute supply and demand to avoid the necessity of major infrastructure replacement and renewal.



Paradise Lost - the qualities of suburbia have been eroded over time in some areas

Supurbia

Transforming Metroland

The main Supurbia idea addresses the streets of semi-detached housing behind main roads. With an estimated 24% of London's land classified as rear gardens, suburban plots consume a disproportionate amount of land. The typical suburban plot, at 8m wide and 40m deep, often accommodates no more than a two storey house with a footprint of 7.5m by 6m. So a mere 15% of the plot is actually built on, which could easily rise to 30%, not only leaving plenty of green space as gardens but potentially without any loss of greenspace - replacing large sheds with new homes and grassing over concrete verges are some obvious examples. These plots and the houses that sit on them also display a remarkable degree of consistency owing to the standardisation of approach adopted by their developers – often Wates and John Laing, the leading housing developers of the inter-war years. This uniformity lends itself to a standardised design-led approach to augment the housing provision that is described in what follows.

The vision for intensifying suburban London with consistent high quality development is for the Local Planning Authorities and the local residents within a neighbourhood to work together with a lead facilitator to draw up suitable and agreeable options for the redevelopment of privately owned properties, and of the public realm in the wider neighbourhood area. These would then be worked into a "Local Development Order". Local Development Orders (LDOs) are a mechanism by which a range of such standard design solutions can be pre-approved (i.e. granted planning permission) so as to create options from which householders can select their preference, without again having to apply for planning permission at a future date - more or less equivalent to permitted development. LDOs are applied to a defined area such as a neighbourhood or block.

To begin the process, Local Planning Authorities could take a consultative, pro-active, but more hands-on approach in partnering with developers and off-site manufacturers, whilst ensuring that local residents are fully engaged and on board from the initial stages of working on the Local Development Orders. In this way householders would have early input on the materials palette and design options that would be suited to a particular area. These would then be incorporated into Local Plans. Under this route it is important that residents buy into the proposals and are closely involved with them from the beginning.

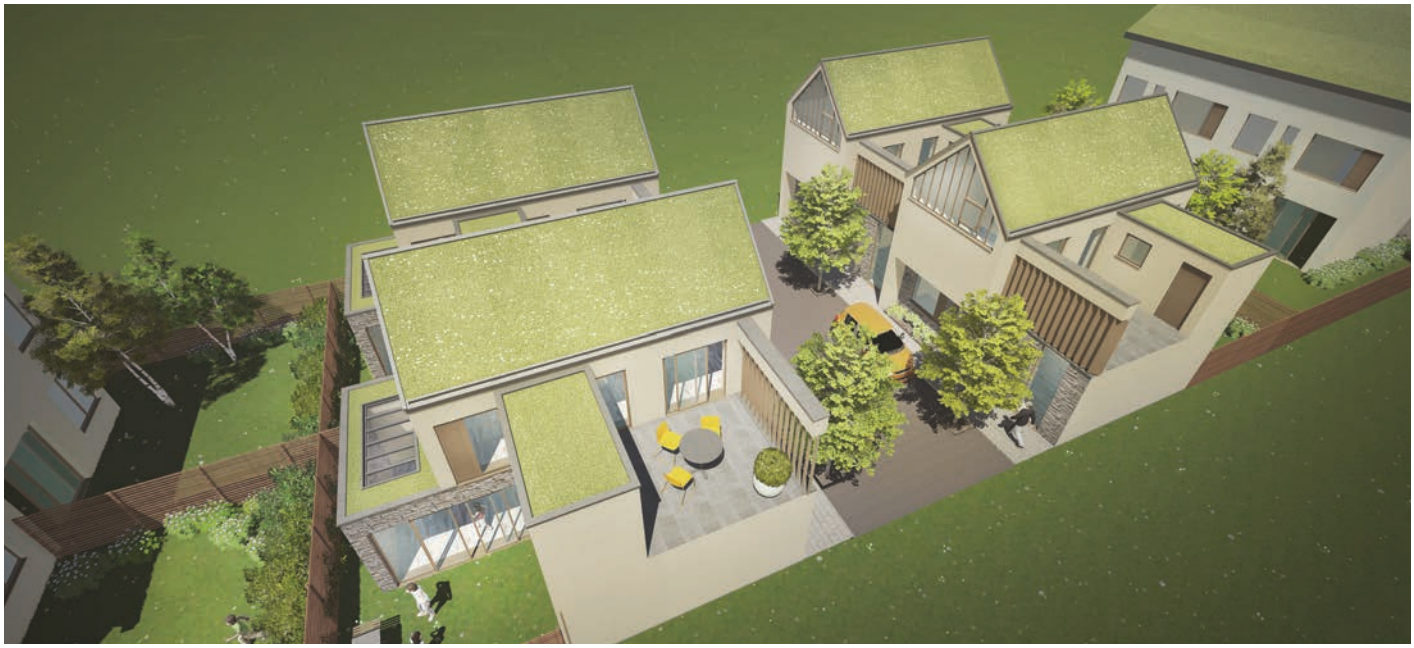
But actually Neighbourhood Planning might well be the main route to the designation of such areas within Local Plans. For Neighbourhood Planning a group would have to be formally established and the neighbourhood boundaries approved by the local authority. Aside from the potential cost of extensive consultation the Neighbourhood Plan would have to be approved via a neighbourhood referendum. Again, Local Planning Authorities could proactively encourage the formation of such groups but they could be more hands off in driving the process.

Either way, we suggest that the costs of such processes could be met by the promoters of the redevelopment or those of major regeneration schemes seeking to engage with surrounding neighbourhoods.

The process of creating a Local Development Order would bring into being a range of "plot passports" (a form of permitted development) for all homeowners in the neighbourhood. Plot Passports would be a menu of redevelopment options available for all homeowners within the neighbourhood to redevelop their property. They could exercise these options if they wanted to, but equally they could refrain from doing so, if they did not want their property redeveloped. Importantly one homeowner

refraining does not prevent another homeowner from going ahead, though it does obviously prevent the collaborative options with their immediate neighbours.

Just as importantly, though, it raises the opportunity for the owner of a single semi-detached house, or a pair of neighbouring or facing owners where there was collaboration between them, to exercise choices by developing their land to suit their needs; new family homes, bungalows or flats over garaging in rear gardens, or the redevelopment of pairs of existing semi-detached homes on existing street frontages. Each passport would also contain a solution that could be adopted to intensifying back garden land, depending on the degree to which householders would like to take up the opportunity on their land alone. We illustrate a possible range of plot passport options for existing semi-detached homeowners in the adjacent diagrams.



Transforming an existing rear access into a mews design that maximises private amenity space and avoids overlooking

The drawing below shows an area of South London with a typical range of suburban block typologies which would be suitable in principle for this treatment - some with rear access lanes between opposing back gardens, many with plots deep enough to permit rear garden development of the type we envisage. Having analysed such plots, we would have a set of suitable solutions for intensification.

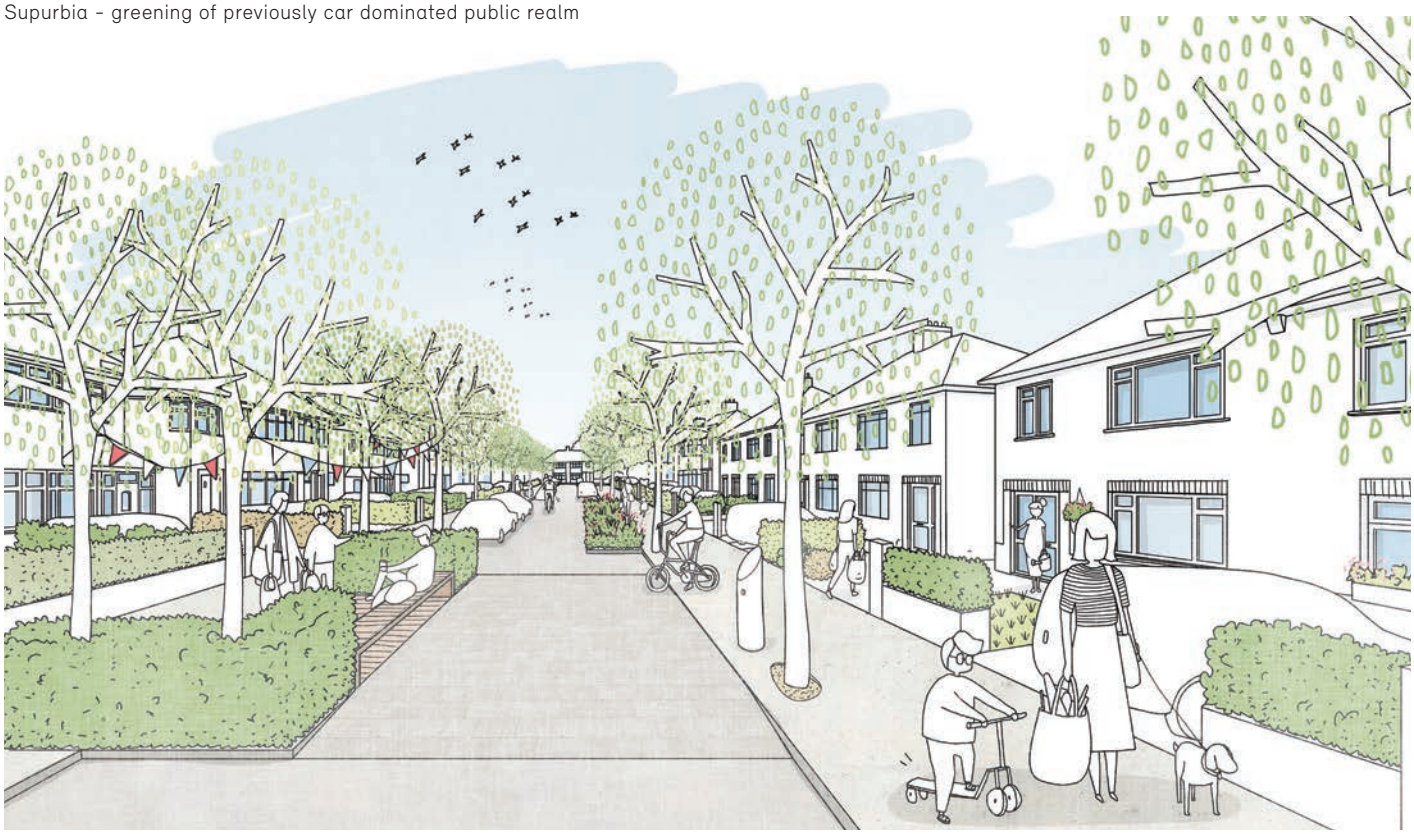
All in all, our illustrative block begins with a density of 33 homes per hectare - a typically low suburban density. If a quarter of all plots added one dwelling, the density would increase to 45 homes per hectare. Logistically we could intensify 10% of outer London boroughs every 10 years.

Initially the Supurbia policy would be about focused, area-based, schemes centred on under-developed transport hubs where urbanisation in a concentric pattern could create outward moving contours of increased value, like the ripples in a pond, triggering the take up of intensification schemes in a variety of typologies. This could transform the poorer, often subtopian areas of London's heavily concreted and low density suburbia into a vision of thriving, vibrant and sustainable placemaking – the Supurbian vision.



Illustration of a typical low density suburban blocks in outer London

Supurbia - greening of previously car dominated public realm



Making it happen

Financial incentives for homeowners

For each of the options illustrated we have evaluated the increase of value achieved as a consequence of development by individual homeowners, netting off development costs, and any value reductions occasioned by the reduction in garden sizes. The results indicate a realistic level of financial incentive for homeowners to exercise their redevelopment options in most cases. Land would thus be intensified while preserving buildings' individuality, and owner-occupiers could unlock the equity in their unused land and invest it in their home, raising the quality of housing across the neighbourhood and improving the street as front plots are renovated and the neighbourhood area improved (i.e. reinstating tree-lined streets) as part of the redevelopment.

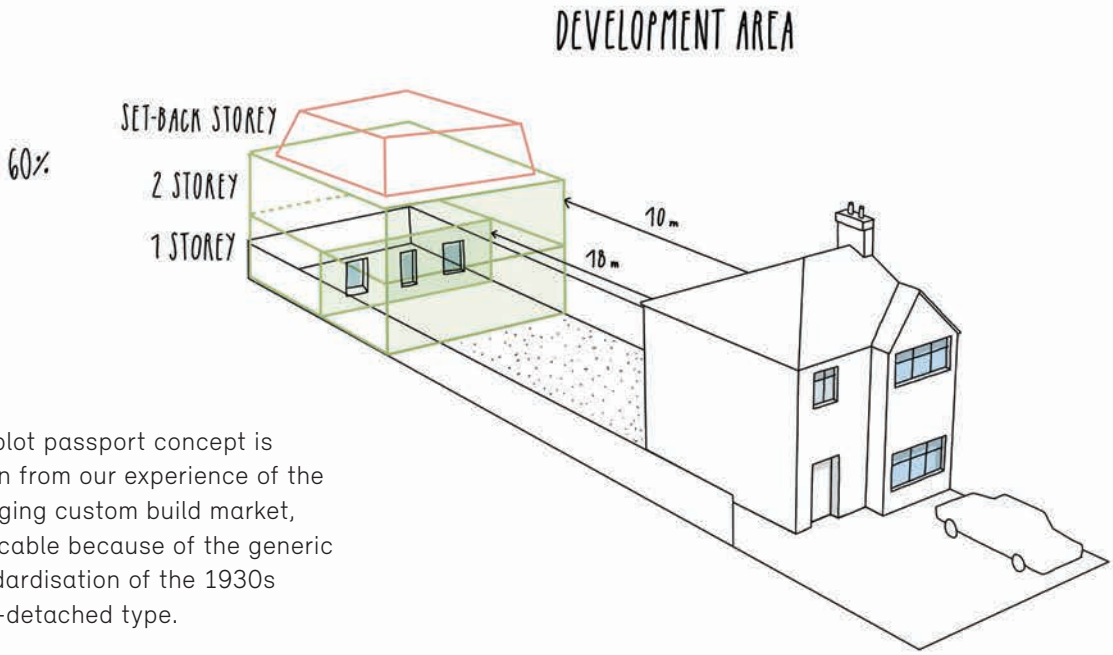
Our preliminary studies reveal that homeowners may stand to benefit from net development profits of between £110,000 and £210,000 per household, depending on the redevelopment option and typology adopted.

Changes to planning

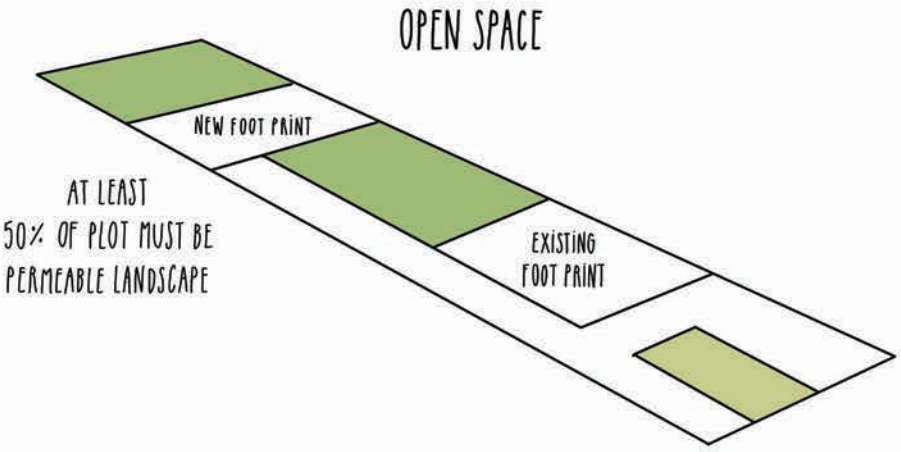
The Treasury's Productivity Plan published on the 10th of July 2015 made it clear that the Government sees the solution to the country's housing problem in the development of brownfield land via automatic permission for housing on such sites. But there are good reasons why brownfield land often remains undeveloped: being heavily contaminated and/or cut off from good access to public transport, the creation of well designed, good quality, popular and affordable housing without vast upfront investment and years of costly remediation seems a bit of a leap of faith.

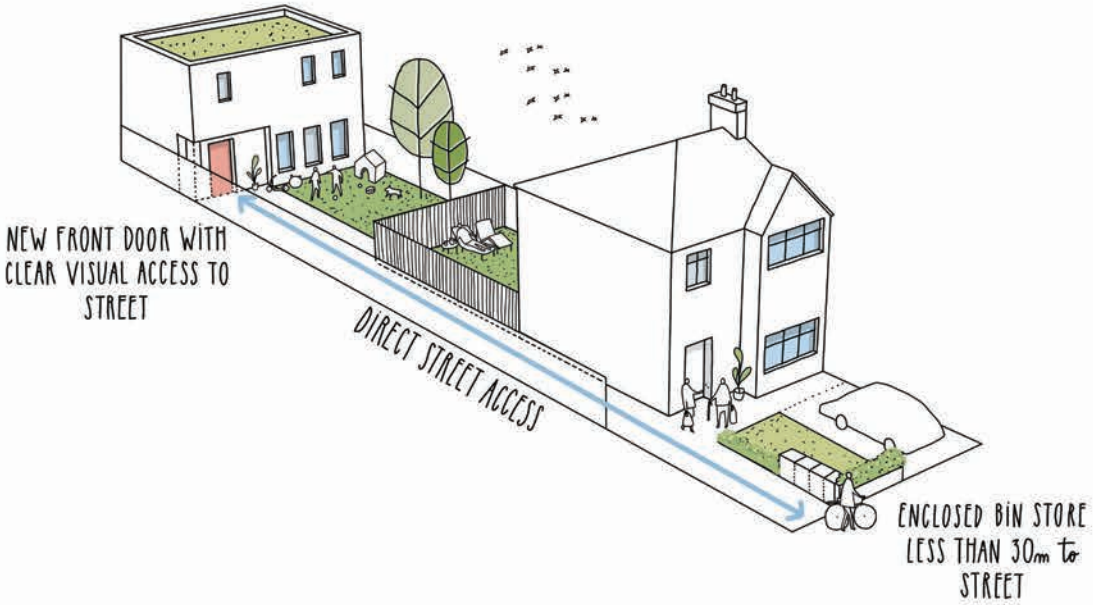
Back garden land is generally protected, but not all London boroughs take an entirely protectionist approach. Back garden land has been given added protection in the National Planning Policy Framework (NPPF) when it was reclassified from brownfield to formerly undeveloped land. However, the NPPF makes it clear that the key consideration should be whether back garden development would harm local character. We are not advocating a free for all; we believe a carefully considered design-led and consultative approach could improve the character of certain suburban areas.

Householders already have a wide range of permitted development rights, such as the ability to extend their homes up to 50% of the curtilage of the original house, back/side extensions up to 6 metres in the case of semi-detached and terraced homes from the closest back wall to the house (8 metres in the case of detached homes), loft extensions up to 40 cubic metres in the case of terraced homes and 50 cubic metres in the case of detached homes.



The plot passport concept is drawn from our experience of the emerging custom build market, applicable because of the generic standardisation of the 1930s semi-detached type.

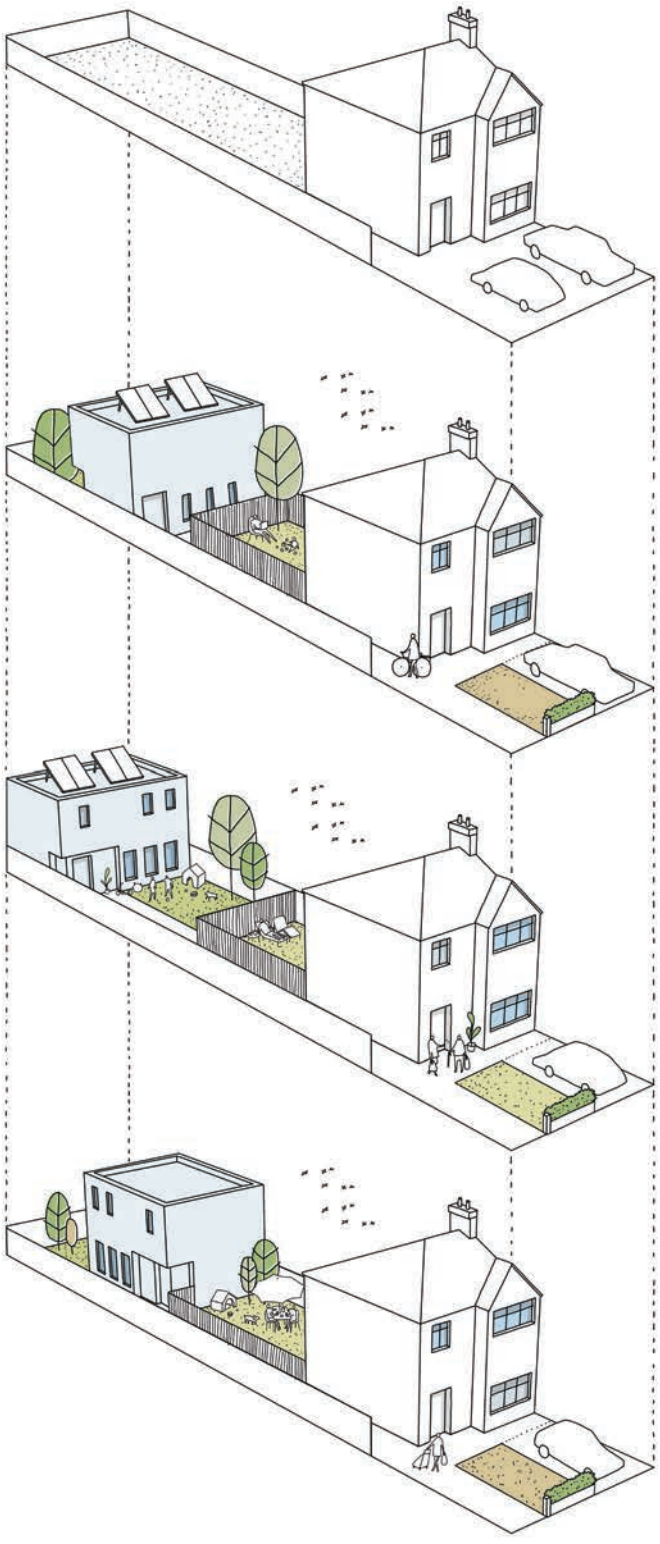




Example 1
Self Build Single Plot Intensification

This single plot intensification retains the main house garden up to 10m or 12m. Options show a new 2-storey, 2 bedroom mews house averaging 72sqm. Depending on the context and relationship to the main house, the design of the new mews houses are sited to the rear or front of the new plot with their private amenity space taking up the remainder.

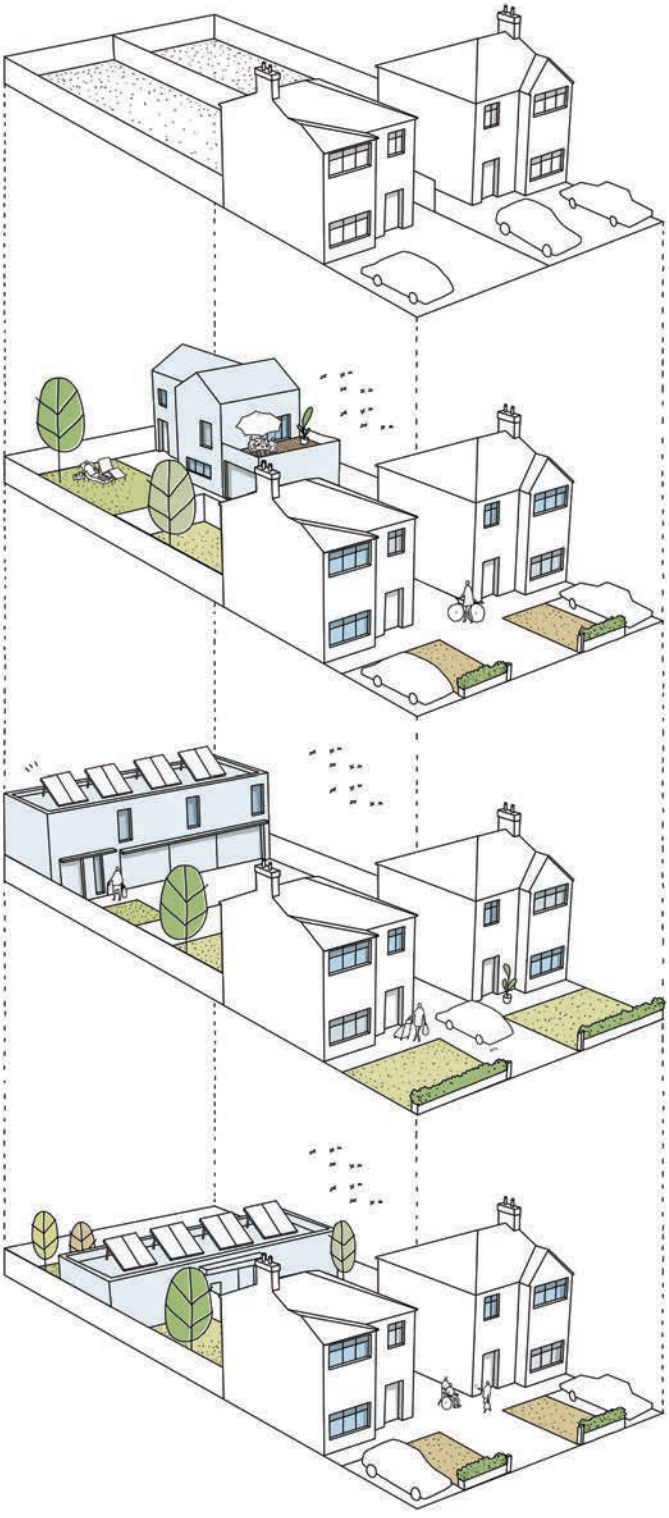
The range of options illustrated create one additional home and a typical profit of £140,000 for the homeowner.



Example 2
Self Build Double/Facing Plot Intensification

The double plot intensification of facing homes, which share a driveway, enables the creation of a third plot at the back that utilises a portion of garden space from each of the two main homes. The illustrated options show a double storey mews house, a flat above garages (one for each of the existing and new dwellings) and a single storey accessible dwelling. The options range in size from 72 to 90 sqm.

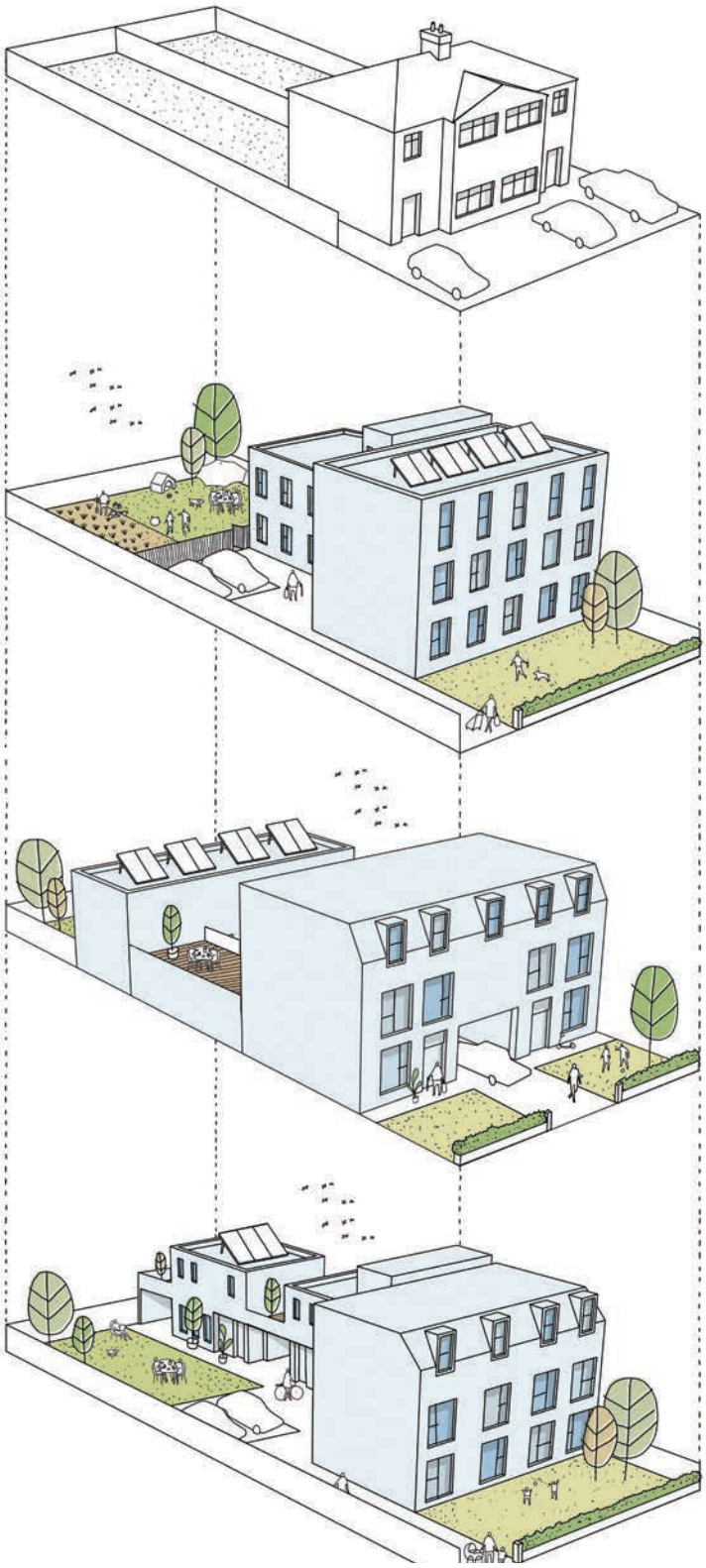
The range of options create one additional home and a typical profit of £110,000 for the homeowners.



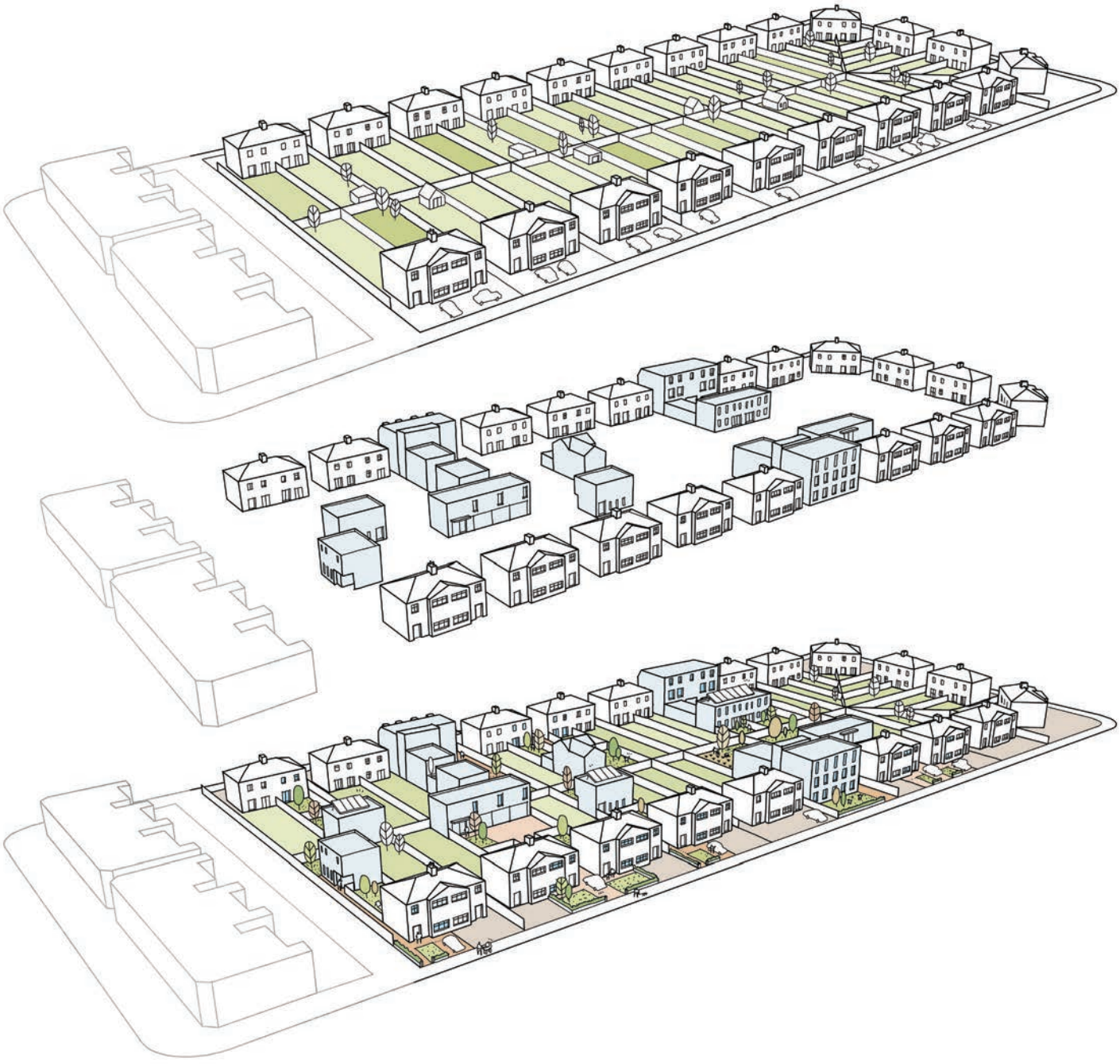
Example 3
Self Build Double/Paired Plot Intensification

The double plot intensification of paired homes enables the replacement of the two existing dwellings with an entirely new development that can provide a new block of flats or townhouses fronting the streets, with new garden houses to the rear overlooking the amenity spaces. The options present a range of shared or private amenity space arrangements and parking solutions.

These example illustrate either 4 or 5 new homes (with a net gain of 2 to 3 homes) and a typical profit of £210,000 for the homeowners.



The Supurbia concept envisages suburban improvement areas where a cocktail of policy initiatives including area based local development orders (and possibly local referenda, through neighbourhood planning). Plot Passports enable the gradual take-up of development opportunities as household circumstances permit. Public realm improvements further enhance the neighbourhood environment.



However, the current permitted planning rules do not allow for buildings to be constructed within the land that surrounds a house for the purpose of being lived in (i.e. having a plumbed-in and self contained bathroom and/or kitchen).

New measures announced in the Productivity Plan will include permitted development rights to extend up to the height of neighbouring buildings - if neighbours do not object. A lot of these measures do not necessarily allow for a well-considered approach to achieving high quality design; resulting in a widely eclectic, piecemeal and at times not ideal intensification of suburban areas.

Back gardens are widely valued because of their contribution to biodiversity. However, the development of back gardens does not mean that equal or increased amounts of biodiverse rich landscaping could not be put back on site – particularly with the use of living roof coverings such as the increasingly popular sedum.

So the permitted development rules should be changed to allow self-contained homes to be built on the land surrounding an existing house, where the design specification has been agreed with the neighbourhood, most probably through the neighbourhood plan.

Funding the creation of Plot Passports in a neighbourhood

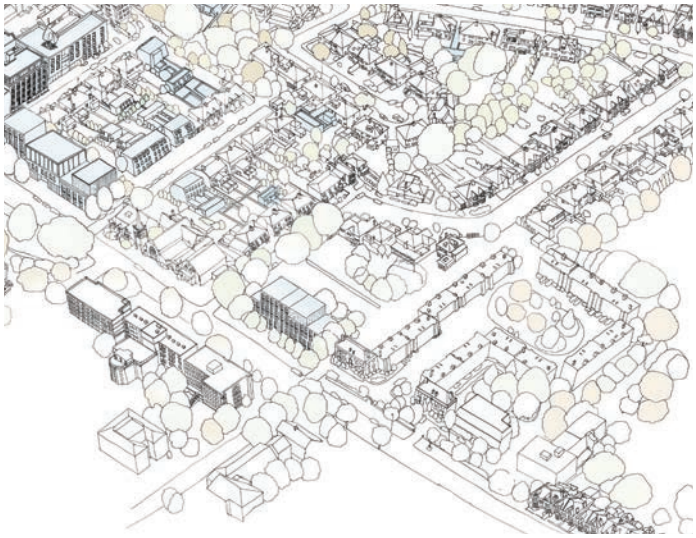
Outer London is now peppered with an increasing array of housing zones, opportunity areas, local authority estate redevelopments and major bownfield developments, particularly around new transport infrastructure investment. Many, if not most of these can seem like incongrous islands of high density threatening to overbear on the surrounding suburban neighbourhoods. It's not uncommon for the density of such projects to rise to 350 homes per hectare - so called 'superdensities' that exceed the density of surrounding neighbourhoods by ten times or more.

We envisage that the joint venture partnerships of local authorities, developers and housing providers that have to come together to deliver these gargantuan projects may see the virtue of engaging with the populations of the surrounding suburban hinterland of their developments, many of whom can otherwise be in entrenched opposition to what may seem to them to be interloping alien developments. In our experience opposition and support are opposite sides of the same coin and one can turn to the other if only there is the appropriate incentive.

So these consortia may well be willing to sponsor neighbourhood planning in the interests not only quelling potential opposition, but also because participation in urban intensification around their projects would be a way of adding value to their investment. If so, we foresee the identification of suitable pilot areas, the collaboration of



Before



After

Many two storey shopping parades have the capacity for redevelopment suitable for both millennials and empty nesters, liberating the suburban hinterland for family accommodation.

local authorities and sponsorship of community advocates to undertake Neighbourhood Planning exercises designed to nest suburban improvement areas within Local Plans.

The design-led approach

The next stage is the development and testing of designs for the range of typologies we have illustrated in more detail. This is a design-led and technical process in which the procurement and constructional issues would be flushed out. The premise is that the standardised nature of semi-detached suburbia is such that this exercise will produce a range of standard solutions capable of meeting the regulatory challenge in most of the circumstances that can be foreseen. These solutions would therefore become standard templates suitable for adoption within the framework of Local Development Orders - enabling the rapid adoption of pre-approved typologies in a wide range of settings.

Analysis of plots would produce sets of suitable solutions for intensification of back garden land and redevelopment of existing buildings, indicated on plot passports comparable to outline planning permissions. These would incorporate planning considerations such as sunlight/ daylight, back-to-back distances, retention of valuable trees and suitable amounts of open space, and could give guidelines on how to reinvest a portion of gain from development into improving the environmental efficiency of main houses. Each passport would contain a range of parameters and solutions for intensifying back garden land and redeveloping existing buildings.

Property owners could select a pre-approved option or customise one within the set parameters, either developing their land alone or in collaboration with neighbours where this was an option. This concept builds on the current approach of both permitted development rights and forthcoming zoning for brownfield land; local authorities would provide additional amenities as intensification reached agreed thresholds. Each improvement will have been agreed through the Local Development Orders and tied to income generated through the development process and additional council tax revenue.

Tax Increment Financing might become the method for funding improvements to neighbourhood energy systems and area improvements to public realm that we envisage as part of the process of achieving a significant improvement to neighbourhood quality to accompany the investment in individual and groups of private homes.

This process enriches limited suburban housing stock with a spectrum of options. Instead of the undifferentiated one and two bedroom homes that dominate many large scale developments, this will include family homes with gardens, investor PRS schemes, accessible ground floor older people's accommodation (bungalows) and affordable starter houses for young households. Plot passports will



New family homes accessed from existing frontages designed to maximise the private amenity, and eliminate overlooking

Supurbia will be a more socially inclusive and convivial environment



enable local authorities to agree parameters on the range of sites within a neighbourhood, optimising quantum and mix of development. This provides opportunities to speed investment from custom build to small investors and builders.

A new breed of SME in high quality offsite manufactured homes

The plot passport menu of options would comprise online design catalogues for homeowners to choose high quality, pre-manufactured yet durable housing options exceeding London standards. Groundwork can be minimised through the use of lightweight prefabricated structures and the experience of construction using pre-manufactured structural insulated panels (SIPS) is that disruption is minimal. These techniques would maximise speed and minimise inconvenience of construction, helping to preserve existing communities and taking full advantage of the pre-existence of all necessary infrastructure.

This makes room for niche developers that already specialise in custom built or pre-manufactured houses to grow into the market and work with local authorities and communities to continue the development of the different house types. This takes the onus of easing the housing crisis off large-scale speculative development, which often faces huge obstacles in terms of funding and community opposition, introducing a steadier stream of housing supply into the market. In addition, it champions the needs and characters of local communities and preserves the qualities that make London's suburbs so popular, while combining them with the vibrancy and convenience of the city centre.

Conclusion

As well as increasing housing supply and improving London's suburbs, the Supurbia concept has the capacity to liberate equity locked up in relatively poor quality private housing stock by facilitating home owners to participate in profitable development which will also increase supply and improve neighbourhoods. The design-led approach, based on Local Development Orders and prior approval of plot passports would guarantee a high quality outcome.

We recommend pilot studies, located in the hinterland of large scale urban regeneration schemes in London that would enable local people to participate in the betterment of their neighbourhoods and thus become advocates for, rather than opponents of, urban intensification and new housing development, turning NIMBYism on its head or turning NIMBY's into YIMBY's (Yes – in my back yard!)

Semi-permissive

The challenge

London's biggest building boom took place in the 1920's and 30's, with massive expansion of the suburbs around new commuter rail and underground links. The great architectural legacy of Metroland is the semi-detached house. There are around 541,000 semi-detached dwellings in the outer London Boroughs, and over 176,000 detached houses.

The form was pioneered by distinguished architects and planners of the Arts & Crafts and Garden City movements, and popularised by the developers of By-pass Tudorbethan. They all extol the merits of a house with its own front door, and gardens front and rear. Pairing offers the appearance and status of a 'villa' and the practical benefits of a garden-passage and side-windows – at a lower development cost than a detached house.
The semi has been celebrated in popular culture, from John Betjeman and Osbert Lancaster to the Bonzo Dog Doo-Dah Band and The Good Life.

For all its virtues the inter-war suburban semi is in some respects an outmoded dwelling type for 21st century London. It is land-hungry and energy-hungry and encourages car dependence. Car-cramming has disfigured the street-scene, destroying privet hedges and cherry trees. The side passage is less important now that we have stopped digging for victory and feeding coal-fired boilers. The admirable flexibility of the semi to suit growing and shrinking families becomes a problem in a time of housing pressure. Many suburban homes are under-occupied: if empty-nesters could realise some value from their asset, move into a more convenient home and free-up a family dwelling then everyone wins. Conversely, in some areas privately rented semis in multiple occupation provide overcrowded and insanitary living conditions.

Politicians and planners are very reluctant to promote change in the suburbs, and suburban voters are fiercely protective of the status quo. The pattern of individual freeholds and predominance of owner-occupation contribute to community cohesion, but make large scale change almost impossible.

So, how can we modernise the suburbs? How can we update the building stock to modern standards, increase the number and variety of homes, reduce car dependence – and yet retain the characteristics of space and greenery, privacy and independence that people value?



The vision ...



... The reality in some areas of outer London

Our solution

Our proposal is to use permitted development rights to incentivise the owners of semis (and detached home-owners also) to collaborate to replace or supplement their two houses with additional modern homes – development will be semi-permitted. It builds on the wider-ranging work by HTA on Supurbia, and it works like this.

Owners of adjoining semis (sharing a party wall) would be permitted to redevelop or radically remodel their houses to create three or more modern homes.

Owners of neighbouring semis (removing their party fence and combining their side passages) would be permitted to develop one or more single-storey courtyard house at the rear. Our proposal would lift the blanket restriction on 'garden grabbing' and extend permitted development with a more intelligent approach.

We have modelled six scenarios based on a pair of typical suburban house plots, and creating between one and five additional homes.

Pre-conditions

Our proposal is to establish a Prior Approval process under the Town and Country Planning General Permitted Development Order 1995. It would apply in the following circumstances:



There must be a net increase in residential dwellings



Developments must be within 800m of a tube or railway station



Land in the Green Belt is excluded



Conservation Areas, statutorily and locally listed buildings are excluded

The presumption is that approval will be granted subject to the verifiable checks set out below.

The Rules

Permitted Development must not be hampered by over-complex rules or subjective approvals. On the other hand, a few simple rules can ensure that a decent standard of design is achieved. These need to be measurable, easily understood by the applicant and easily checked by an approved inspector. Permitted development should improve the appearance and sustainability of its setting, not damage them.

Transport

Given the requirement to be within 10 minutes walk of a station, a reduction in car parking will be acceptable subject to a Controlled Parking Zone being in place or being created. Capped financial contributions towards a CPZ and Car Club may be required. Cycle parking is required in line with existing policies.

Flooding

Within Flood Zone 2 or 3 a Flood Risk Assessment is required.

Design

The GLA would prepare a Supplementary Planning Document (SPD) providing minimum design standards for Semi-Permissive development. A Design Statement must accompany the Prior Approval application.

Financial contributions

Unless a local CIL is in place, a Section 106 Agreement on a standard template will cover transport and affordable housing obligations where required. A financial contribution to affordable housing would be set at a standard rate per additional home created.

The benefits

Semi-permissive development could make a significant contribution to housing delivery in London, and it can be implemented quickly and easily working within the established planning system.

Approximately 40% of land in outer London falls within 800m of a local station, which suggests that around 287,000 existing houses meet the location requirement. If just 10% of owners brought forward proposals to double the homes on their plot, this would create 72,500 additional homes and renew a similar number. A 15% take-up coupled with our more ambitious design scenarios could create over 200,000 additional homes.

New and remodelled homes would comply with modern technical, access and space standards, including energy standards. (Anyone who has lived with draughty Crittall windows knows how uncomfortable and costly to run a 1930's house can be).

The location and transport criteria will help to reduce car dependence and parking blight.

The scheme will generate work for small builders and local design and planning professionals.

Our proposals will provide a strong financial incentive for collaborating owners to help solve London's housing crisis.

We expand on this with the Development Appraisal that follows.

What next?

The GLA is asked to endorse the scheme and fund research and development of a pilot scheme in a designated area.

Existing Homes *	
Detached	180,000
Semi-detached	550,000
Total	**730,000**

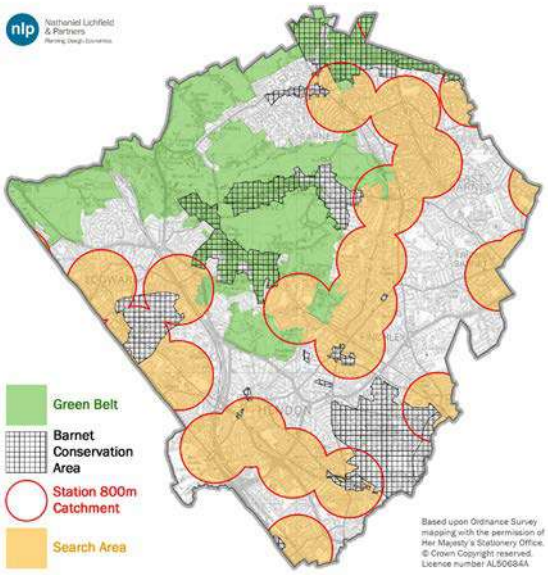
Net Additional New Homes

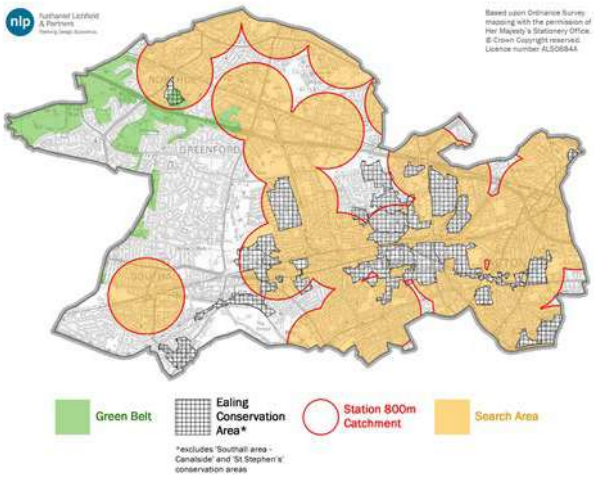
Participation rate	One additonal home per existing house	Two additional homes per existing house
5%	36,500	73,000
10%	73,000	146,000
15%	109,500	219,000

Net Additional New Homes (Barnet and Ealing)

Participation rate	Scenario A	Scenario B	Scenario C	Scenario D
	2 become 3	**2 become 4**	**2 become 6**	**A, B and C combined**
5%	1,369	2,738	5,477	3,195
10%	2,738	5,477	10,954	6,390
15%	4,107	8,215	16,431	9,585

* Based on 2011 census and 2014 household data of outer London boroughs only



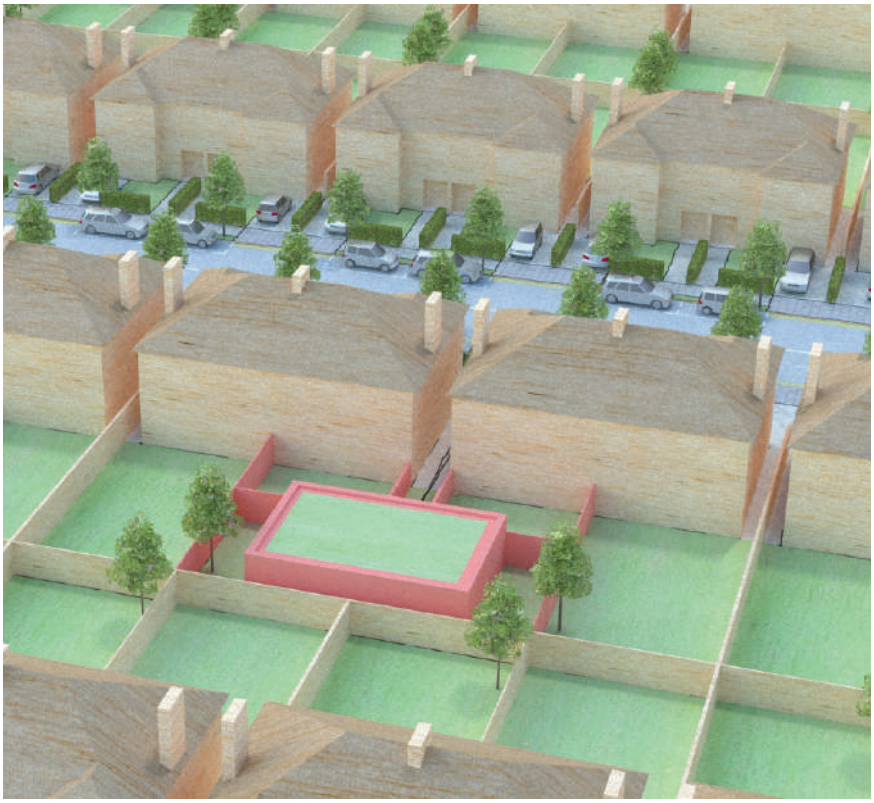


Applying the pre-conditions to sample boroughs

Scenario 1 - two become three



The scenarios for change are based on a typical outer London suburban street of semi-detached houses with on-plot parking. Plot width is 9.0 metres and garden length is 15.0 metres. Existing houses are 2.5 storeys with four bedrooms and around 135 sqm floor space.



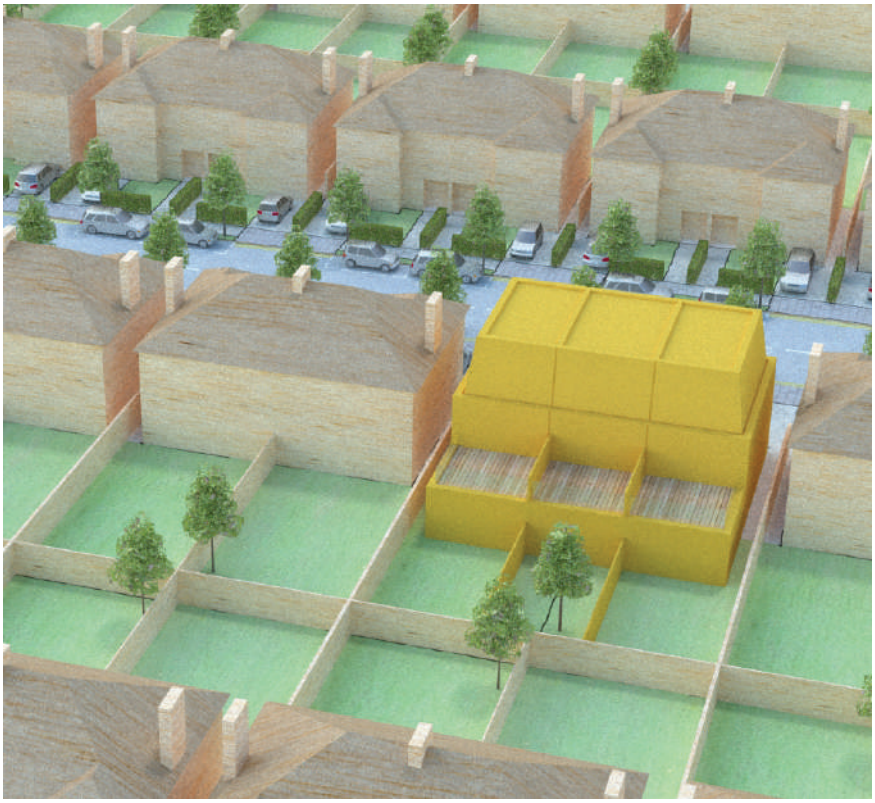
In scenario 1, neighbouring owners collaborate to combine their gardens and remodel their side-passages, creating access to a new single-storey house located in the rear garden. At 75 sqm the new house has two bedrooms and is wheelchair adaptable, making it ideal for older downsizers or for a small family. The existing and new properties each has a 30 sqm garden. The new house has a green roof and its outlook is into its own courtyard gardens, minimising impact on neighbours. There is no demolition of the existing homes.

Many existing suburban houses have larger gardens, which may enable the insertion of two houses rather than the one shown here.

Scenario 2 - two become three



Two adjoining semis are replaced by three terraced houses, each with front and rear gardens and roof terraces. Internal plot width is 4.8 metres and total floorspace is 145 sqm including a second floor mansard, providing space for four bedrooms or more.



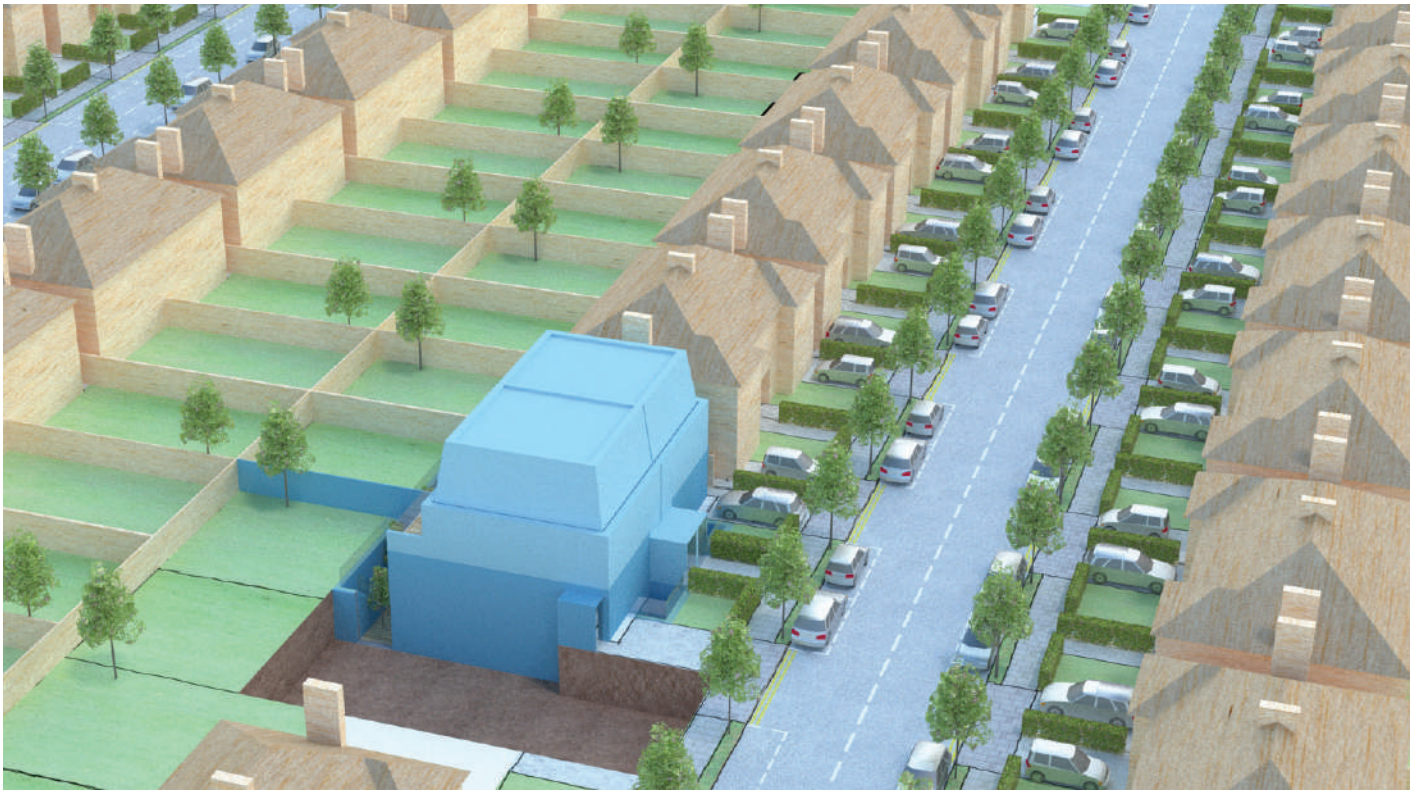
Scenario 3 - two become four



Two adjoining semis are replaced by a pair of garden flats with a pair of duplexes above. All four homes have their own front door to the street and direct access to a private garden, and the duplexes also have large roof terraces. The floorspace of the flats is 104 sqm and the duplexes are 130 sqm: all are generous family homes with space for three or four bedrooms.

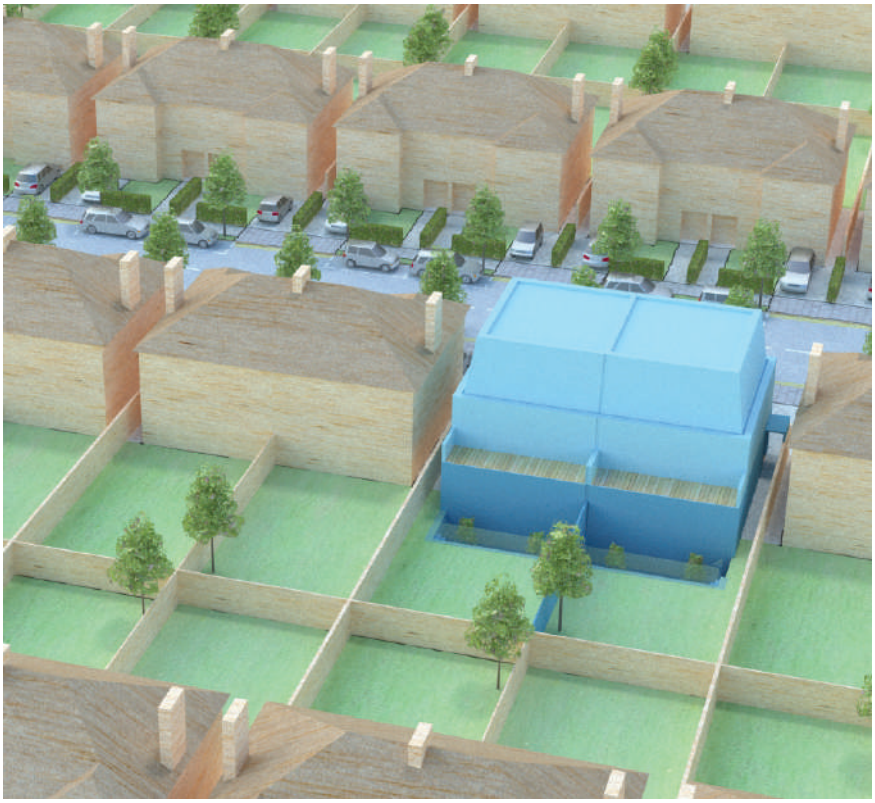


Scenario 4 - two become four

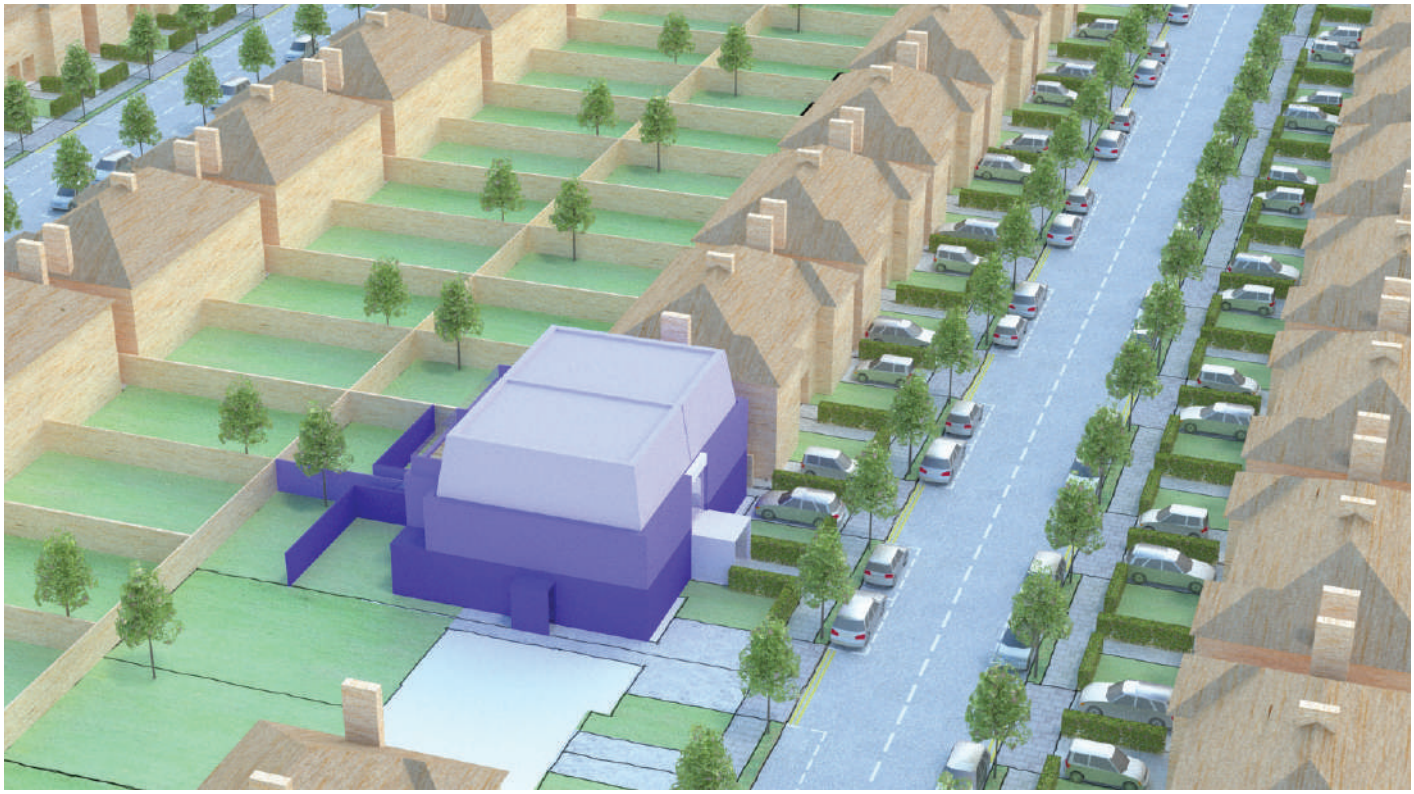


Two adjoining semis are replaced by a pair of ground floor and basement duplexes with a pair of duplexes above. All four homes have their own front door to the street and direct access to a private garden or large roof terrace. The floorspace of the lower duplexes is 160 sqm and the upper duplexes are 125 sqm: all are generous family homes with space for four bedrooms or more.

The cost of basement excavation and construction make this scenario more suitable for higher value areas.

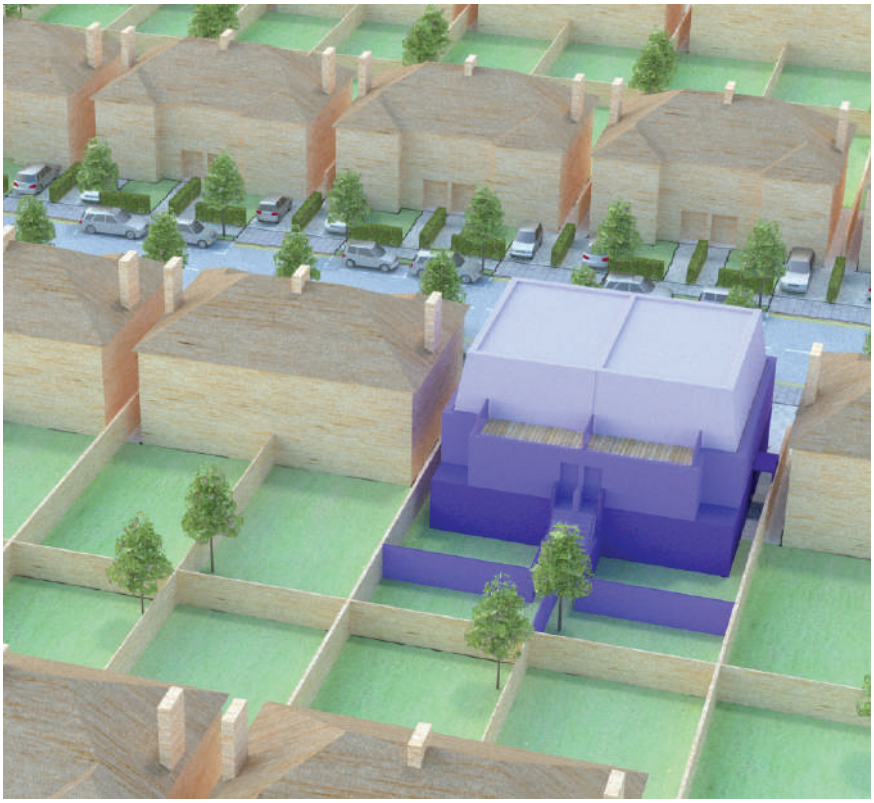


Scenario 5 - two become six



Two adjoining semis are replaced by a small three-storey block of six flats. Ground and first floors flats have three bedrooms, at least 86 sqm floorspace and direct access to a private garden. Second floor flats have two bedrooms and 70 sqm floorspace.

On suitable sites, this scenario will yield the most homes and the highest financial value to the existing owner.



Scenario 6 - 12 become 24



This shows all of Scenarios 1 to 5 combined in a single suburban block and interspersed randomly with retained semi-detached houses. It also shows that Scenarios 1 and 3 could be combined. The overall impact is sympathetic to the existing scale and grain of the neighbourhood.



Draft Design Guide for Semi-Permitted Development

To be effective, Permitted Development must not be hampered by over-complex rules or a subjective approvals process. On the other hand, a few simple rules can ensure that a decent standard of design is achieved. These need to be measurable, easily understood by the applicant and easily checked by the approved inspector. Permitted development should improve the appearance and sustainability of its setting, not damage them.

The objective is to promote 'good ordinary' design, which will stand the test of time – and to prevent bad design. Following rules cannot in itself achieve award-winning outcomes or ground-breaking innovation. Other satisfactory solutions – and maybe better ones - may well be possible, but will require planning permission in the normal way.

So, we propose to draft and test a simple design guide covering the following headings – the final version would be put to the GLA for endorsement and adoption as a Supplementary Planning Document. It would include guidance on the following topics. We have added in italics the assumptions made in our sample Scenarios, which generally adopt a conservative approach.

1.Building lines and distance between facing habitable room
Our scenarios follow the existing building lines to the street and maintain at least 20m between facing rear windows.

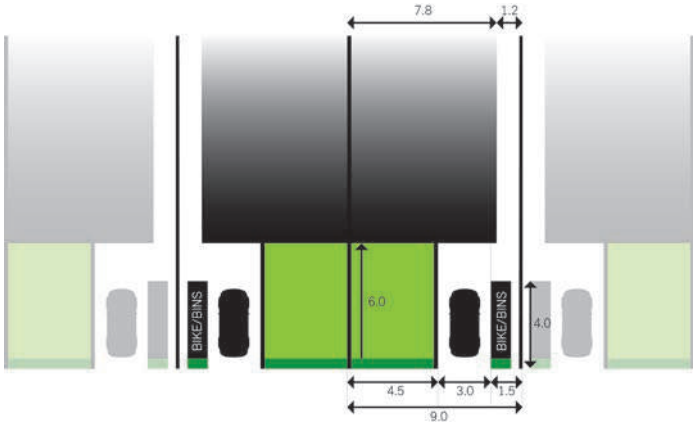
2.Height and massing in relation to the prevailing eave and ridge heights in the area
Our scenarios build no higher than existing ridge heights. We use mansard roofs set-back behind parapets to increase second floor accommodation.

3.Gardens and terraces
Every home in our scenarios has a generous private outdoor space. Gardens are at least 30sqm and roof terraces are larger than London Plan standards.

4.Internal space standards
Our scenarios focus on family homes and show internal areas larger than London Plan standards.

5.Basements
Our scenario 4 includes ground and basement duplexes. We propose that wholly basement flats should be disallowed.

6.Front gardens and car parking
We believe the suburban street scene should be dominated by greenery not cars. We show hard-standings covering no more than 50% of the front garden area, and openings for car access no more than 3.0m wide, leaving most of the frontage for hedging.



Example of measurable design rules

7.Refuse stores and cycle parking
Semi-permissive development is an opportunity to counter bin blight. The discrete integration of refuse storage and cycle parking takes precedence over the provision of on-plot car parking.

8.Mechanical and electrical kit
Semi-permissive development is an opportunity to counter blight from pipes and wires by minimising the allowable kit visible from the street.

9.Roof and wall materials
Semi-permissive development could stipulate a durable palette of traditional materials and a prohibited list of those which easily degrade.

10. Side passages
The gap between semis is a key aspect of their character and utility. However, where there is sufficient width to meet access requirements, it is acceptable to enclose the side pas-sage with a single-storey infill subordinate to the main building.

Sample Development Appraisal

By way of example we have tested the financial viability of Scenario 3, which replaces one pair of semi-detached houses with two duplexes and two flats. This is likely to be one of the more financially challenging options, but it passes the test and incentivises the owners with £200,000 profit. By comparison, Scenario 1 is easy, because it involves no demolition, and Scenario 5 will generate the most value.

There are many ways in which collaborating owners could develop their combined plots and create new and improved homes. They may want to occupy one or more of the new homes themselves and sell the others, or they may want to move elsewhere and sell or rent them all.

Enterprising and equity-rich pairs of householders could fund and carry out their own development. Some may group together to create larger co-housing projects. Others will turn to the market, which will respond with funding and development packages increasing the speed and scale of change. Developers can offer streamlined services based on a standardised set of designs, which would also lend themselves to consumer choice through custom-build.

In order to test the financial viability of Semi-Permissive we have assumed a scenario whereby a developer contracts with the owners to fund and carry out all the development work. On completion the developer pays the full market value of the original houses (now demolished) and shares the development profit with the owners. Owners can also choose to swap their original equity for one of the new properties: this would reduce development risk and sales costs.

This scenario provides the owners with maximum return for minimal effort and minimises stamp duty and finance costs. The downside is that the owners need to fund their own alternative accommodation during the development period: alternative scenarios can provide some or all of the plot value up-front, enabling the owners to buy or rent elsewhere, but would reduce the profit margin.

The main influence on viability and profit level is the additional amount of floor space and added value of the new homes in comparison with the old ones. Clearly the differential will be greatest where the existing plots are under-developed and the houses are in poor condition. For this exercise we have assumed average conditions and a typical mid-value location.



Small is beautiful

Image courtesy of www.acrylicize.co.uk

Development income

Two garden flats @ 1200 sqft each valued at £570,000	1,140,000
Two duplexes @ 1400 sqft each valued at £665,000	1,330,000
Gross sales value	2,470,000
Sales, marketing and legal costs @2.5%	(62,000)
Net income	2,408,000

Land cost

Two semi-detached houses @1450 sqft each valued at £550,000	1,100,000
Legal costs assuming deferred payment and no SDLT	15,000
Total	1,115,000

Planning costs

Affordable housing contribution@ £20,000 per additional home	40,000
Car club contribution	5,000
Professional fees	10,000
Total	55,000

Works costs

Demolition and enabling works	25,000
Construction @ £1500 per sqm	725,000
Fees and miscellaneous costs @ 10%	75,000
Finance costs @7.5% based on 15 month cashflow including void period	31,000
Total	856,000

Outcome

Development income	2,408,000
Combined development costs	2,026,000
Gross surplus	382,000
Developer's margin @ 20% of planning and works costs	182,000
Additional profit allocated to owners	200,000

16 ideas for transforming Metroland

The original report, "Supurbia: a study in urban intensification in Outer London" was produced by HTA Design LLP in 2014.

The study showed how urban intensification of suburban London might contribute to an increase in housing supply, promote economic activity, improve local service provision and reduce congestion – whilst improving the quality of life, the choices available and the sustainability of the suburbs.

The study suggested that giving suburban householders a vested interest in development could help to overcome resistance to change. It contended that doubling the density of just 10% of the outer London Boroughs could create 20,000 new homes per annum.

But how might such changes be triggered, what incentives might begin to unlock the potential? Is there a case for special measures based on the principle of Housing Zones proposed in the GLA's Housing Strategy? Or should the incentives be more generally applied across the outer Boroughs and London as a whole? The study made 16 preliminary proposals for further discussion. Many of these have been developed further in this latest report and in submissions to the NLA's New Ideas for London Insight Study.

Here is the list in full.

1. Suburban intensification zones
Designation of priority status for areas of poor environmental quality, and high levels of social deprivation and fuel poverty. A planning policy framework for intensification including enhanced permissible development rights, relaxation of density limitations and restrictions on development in gardens. Area based collaboration integrating contributions from the local authority social landlords, private housing developers, and energy providers, amongst others. Pre-negotiated development agreement for standard intensification typologies (pattern books).

2. Redevelopment of high street frontage
Development of high quality homes for millenials and downsizers following HAPPI principles in locations close to appropriate services. Significant increase in residential densities (doubling or trebling) and re-provision of smaller amounts of retail floorspace that can be serviced from the street, liberating rear service areas for conversion to high quality shared public realm. Improvements to public realm, provision for shared transportation – mobility scooters, electric bikes and cars.

3. Planning consent through Local Development Orders and Plot Passports
Enable co-housing and custom build projects by collaborating neighbours through planning legislation creating permitted development opportunities as described in the plot passports (referencing the pre-approved pattern books) in consenting neighbourhoods. Local Authorities promote such incentives through Local Development Orders. Over time, some communities may adopt Neighbourhood Plans to encourage intensification which would lead to area based referenda based on mutual consent.

4.Local Pattern Books

Use of pattern books (developed by local architects, possibly for a royalty fee) for new homes which are compliant with modern building regulations, life time homes principles and national space standards. Based on the typological uniformity of the archetypal semi-detached suburbia, a range of standard typologies (possibly prefabricated, at least in part). The range of solutions would include roof and rear extensions, mews houses and gap infilling types. The Pattern Books can be referenced in the plot passport.

5.Custom build

Packaged development service for purchasers of high quality, branded manufactured homes, including site acquisition, choice of appropriate mortgages, manufactured home showroom, site and service preparation, pre-negotiated framework agreements with LPA for approved types.

6.Car sharing

Set up local fleet companies to hire out electric only vehicles and e-bikes on a large scale. Encourage homeowners to ditch owning their cars and use the fleet cars and bikes instead. Offer them an allotment outside their home where their car-parking space used to be.

7.Public realm improvements

Phased reduction in space allocated to cars in private ownership alongside take up of modal shift to sustainable transport and car/bike/mobility scooter sharing. Introduction of street trees and biodiverse green infrastructure and creation of new micro parks on unused parking spaces due to an increase in car sharing. Create cycle lanes following a reduction in street car parking by 50%. Turn some streets into linear parks with games areas, trees and play spaces for toddlers.

8.Neighbourhood concierge

Local corner shop or cafés to expand to deliver a neighbourhood concierge to accept deliveries, keep keys, arrange dry cleaning or house cleaning and to include a Swap Shop (based on collaborate consumption principles for hiring out / swapping sporting equipment, DIY tools, photographic gear, fitness equipment, etc)

9.Zero carbon new homes

Build super-efficient homes that minimise the impact on the energy and water grids. This will save money by saving the cost of additional infrastructure that is always needed on greenfield sites. These homes need no new roads, sewers, power lines or drains, they already exist.

10.Carbon budget

Give each plot a carbon budget to spend, which enables them to trade amounts emitted between the new and the existing homes. Link it to local taxation. Reduce the budget over time to make sure that the homes are maintained and upgraded.

11.Retrofitting

Encourage the improvement of the energy efficiency of the existing buildings to make space in the infrastructure grids for new homes.

12.Neighbourhood water management scheme

Water usage and waste streams should be reduced to minimise the impact of the new development on sewer and drainage systems. By building efficiently and by retrofitting improvements to the existing stock we can remove the need to install new and expensive infrastructure. Low water use appliances, Sustainable urban drainage, using rainwater to irrigate gardens and recycling systems are all practical methods that can be applied.

13.Neighbourhood Energy Storage

Create large battery storage nodes near substations to enable local enterprises to generate and store energy locally where it is needed most. Use roof-mounted PV systems, local car park areas, roofs of supermarkets and businesses to site PV arrays. Encourage locals to use the energy when it is cheaply available by selling stored energy at a low rate.

14.Drone delivery

Set up a drone delivery company to deliver the myriad of small packages coming from online shopping. Reduce the daily traffic in the suburbs substantially and improve air quality at the same time.

15.Ban combustion

Introduce a boiler replacement drive where gas combustion is replaced by air source heat pumps as homes are upgraded. With the car hire replacing combustion engines this will remove pollution from the suburbs for good, reducing noise, improving air quality, improving health and the desirability of city life.

16.Internet of things

Use the local energy storage enterprise to set up an Internet of Things network to enable energy savings to be maximised. Freezers that shut down at peak times to save power at no risk, electric vehicles that charge themselves when there is a lot of renewable energy, washing machines and dishwashers that turn themselves on when its cheapest to run a wash.

Conclusion

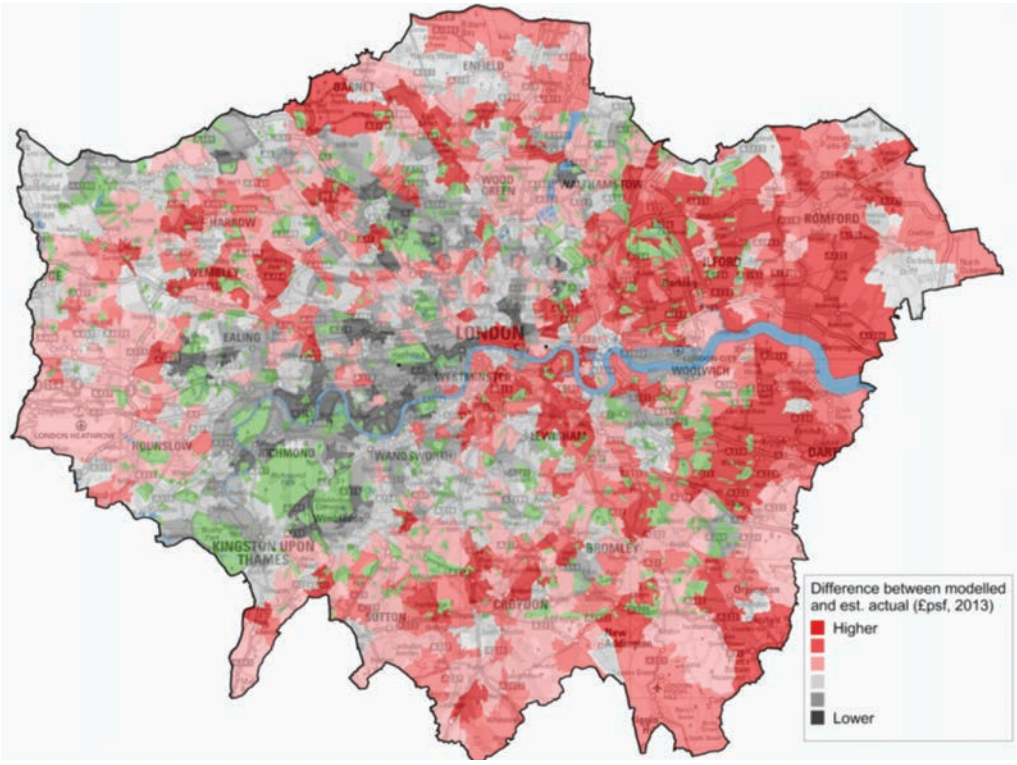
We propose one or more pilot studies in collaboration with participating Local Authorities, where we intend to explore the possibilities of these approaches based on realistic assessments of actual and potential value. We recognise that the piecemeal nature of ownership in London's suburbs means that the outcome would need to be capable of supplying sufficient yield for the owners of such property to create the necessary incentive for change.

We envisage area based schemes, centred on under-developed transport hubs where urbanisation in a concentric pattern could create outward moving contours of increased value, like the ripples in a pond, triggering the take up of intensification schemes in a variety of typologies which we will explore and illustrate. Our hope is that we can postulate a viable scenario for processes capable of transforming the poorer, often subtopian areas of suburbia into a vision of thriving, vibrant and sustainable placemaking – a vision of Supurbia!

Creating value in Suburbia

The place potential of well-connected areas of metroland makes possible value uplift associated with conversion to Supurbia significant.

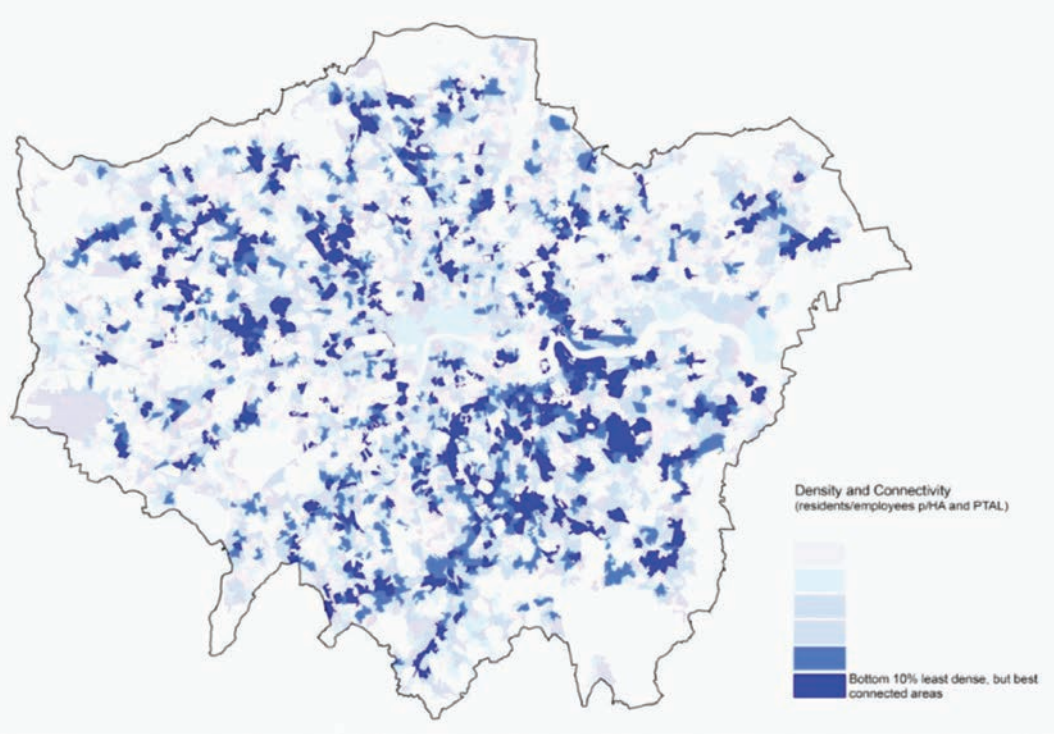
The map below shows Savills model of value uplift potential in London, it shows some of the greatest potential is in suburban outer London.



London's value uplift potential

This map shows the difference between the modelled potential flat values and existing flat values. The darker the red areas, the greater the potential for regenerative development to unlock market value uplift and achieve the modelled flat values. In these areas, there is likely to be a barrier to reaching higher values. In order to achieve value uplift, this barrier will need to be removed. There needs to be a catalyst to remove this barrier, which could be either a transport improvement or high standard placemaking. The creation of Supurbia from Suburbia may be part of this.

The places in closest proximity to central employment locations are likely to see value uplift before more distant locations so it would seem best to locate the parts of metroland that are closest to faster transport nodes.



London's Density potential

In addition to this place potential, the potential increase in housing density means gross development values (GDVs) per hectare should increase substantially.

A worked model of the Supurbia site shows that using a conventional developer model to achieve it yields a lower, though not unrespectable margin of 21% after the costs of land acquisition and development. Land acquisition under conventional models would however be lengthy, difficult and fraught with problems. If one landowner is unwilling to sell, it could scupper the whole scheme and cost a great deal of money. Significant premiums would probably need to be paid for units in order to incentivise owners to sell.

If owners themselves are incentivised to club together in groups around each building group of, say 8 properties, the uplift they could see on the gross development value of their new buildings could be in the region of 60%. This is because they would not have to acquire their site. As owners, they would be landowner developers.

The table shown is a roughly worked case study of the Supurbia site and shows that the density uplift is significant (from 25 units per hectare to 59 units per hectare) and that, even without place quality uplift, the potential returns to the owners of the typical 3 bed semis in the area should be significant enough to act as a strong incentive for development.

This begs the question as to what sort of development vehicle would be needed for owners to realise this uplift.

Three elements would appear essential:

- 100% agreement of neighbours in groups of houses capable of enabling development and land equalisation agreements in advance of development to share the benefits of cooperation equitably.
- Group self-procurement mechanisms with trusted providers to minimise development risk.
- Mechanisms to minimise capital outlay by landowners until units are sold or mortgaged. This might be secured on land or built property value by custom house builders.

	Hectares	Current housing units per hectare	Current value per hectare	Gross development value per hectare	After all costs
Suburbia	1.58	25	£14.8m		
Supurbia	1.58	59		£53.2m	
Less build costs				£33.1m	
Developer's margin					21%
Owner occupier's self procured margin					62%







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David Lunts, GLA
John Lett, GLA
Mark Lucas, London Borough of Redbridge
John Miller, London Borough of Lewisham
Kathryn Firth, PUBLICA
Marc Vlessing, Pocket Living

