Create Streets Response to the Draft London Plan: what would Bazalgette do?
March 2018

About Create Streets

Create Streets (www.createstreets.com) is a built environment social enterprise and independent research institute. We conduct research into associations between different types of urban form and building with popularity, wellbeing, long term economic value, sustainability and density. Our major studies include *Heart in the Right Street*, *Beyond Location*, *A Direct Planning Revolution for London?*, *Create Streets, Creating Streets in Cornwall with consent* and many dozens of essays, surveys, articles in the media and blogs. We have a major comparative study of international planning systems being published shortly (*From NIMBY to YIMBY: how to build homes and win votes*). As well our research, we work with community groups, developers, councils and landowners to 'make this come to life'. Our focus and expertise is on co-design and co-creation in a collaborative atmosphere. We have undertaken extensive workshops and teaching (both in an academic and a community context) on urban design and on the links between urban design and good outcomes.

On 22 January our director was asked to give evidence to the London Assembly Planning Committee on the London Plan. This response builds on the evidence we gave then which is also included in appendix two.

Overview

1. There is lots to commend in the draft London Plan. Its core vision of mixed use urban development with more homes and more affordability is impossible not to support. Inevitably this response focuses on what could be improved

2. Trying to get more certainty into small sites via design codes and certainty on affordable housing percentage is also critical – and shows awareness of the key peculiarity of British planning in historic and comparative terms – its unpredictability.

   Our concern (which we are also hearing from some boroughs) is that too much of rest of plan will be open to endless debate and misuse. This will be particularly so given the huge pressure on achieving greater density that is emerging in the draft plan. This is especially the case in London's suburbs. It is also crucial that design codes are popular if they are to work. We suggest a co-creation process with residents to avoid the design disconnect

3. London faces its greatest housing crisis since nineteenth century, and the Mayor has both a thumping majority and was elected with a very clear message of more housing in his manifesto. We had hoped therefore, that reflecting this unique challenge and his powerful position, that the plan would be even more ambitious and visionary. In this response we've therefore asked the question: **what would Bazalgette do?** We see the answer as being a set of ambitious but implementable proposals that would serve the needs of Londoners and go a long way towards solving London's major challenges – both now and in the longer term.

4. We also worry that some of the core ideas underpinning the Good Growth Principles (above all GG1) are very incomplete. There is a focus on the (undoubted) advantages of density & none on

the (equally undoubted) disadvantages[1]. The best towns and cities hold this in tension with what we call Gentle Density. Given the provable importance of beauty on wellbeing and the growing cultural expectation that design is something everyone influences, we were also sorry not to see far more focus on neighbourhood plans.

Introduction: More ambitious, more visionary, more London

London is a special city. It has been home to visionary and historic ideas, people and events over hundreds of years. It can handle visionary. It can handle ambition. The current Mayor is in a propitious position: He has a large majority and he has a strong mandate for homes – it was both one of the main features of his manifesto and contributes to be one of the most talked about issues in the capital (and beyond.) There is also a wide realisation that the continual failure of multiple governments to solve the housing crisis is a situation that cannot be allowed to continue, and requires significant action. This plan is moving in the right direction. By (tentatively) introducing Design Codes and more certainty on affordable homes, the plan demonstrates a commendable understanding of the key problems facing the housing market.

But this significant problem requires significant intervention. More is needed to set land prices so as not to create pressures for (nearly always socially segregated) superdensity and to ensure that development is done with wide-ranging popular support.

Our proposals therefore are:

1. Community codes for all character areas in boroughs worked up with local residents

Relevant Policies:

H2: Small Sites (p.152)

The new Draft London Plan requires boroughs to '*prepare area-wide design codes to promote good design and to proactively encourage increased housing provision and higher residential densities on small housing developments.'* (Policy H2: Small Sites.)

At Create Streets we were delighted to see Design Codes introduced for small sites. We see them as a valuable tool in addressing the housing crisis and speeding up popular development. A design code is a set of illustrated design rules and requirements which instruct and may advise on the physical development of a site or area.

Unfortunately design codes are not often used, or not utilised effectively when they are. Often, for example, they are not specific enough and need to be more visually and numerically defined to give existing residents more confidence on crucial features of future development. We therefore recommend codes which (as far as possible) are *visual* and *numerical.* This is to aid clarity and certainty. Policies requiring "good design" or "appropriate materials" are capable of almost infinite interpretation (or misinterpretation) and risk ending up as a complete waste of time – and indeed, can embed bad or unpopular design as well as good

That said, they can work. A 2006 UK Government assessment of 15 different Design Codes contrasted to four non-coded approaches conducted by Professor Matthew Cremona of UCL found that design codes deliver enhanced sales values and increased land values. They also often seem to be associated with better-defined places than the more combative development control

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[1] For a good summary of the evidence see Montgomery, C. (2013), *Happy City* & Boys Smith, N. (2016), *Heart in the Right Street.*

process otherwise normally delivers. They also are a more widely used and established feature in the planning systems of the rest of Europe- which has consistently managed to build systemically more homes than the UK with nothing like the equivalent level of political controversy. There, if developers and builders follow the Local Urban Plan to the letter, then the difficulty, complexity and cost of achieving development control is very low compared to the UK.

Recommended approach to Design Codes

Our approach to design codes, and one that we'd recommend for inclusion in the London Plan, is about *maximising certainty of acceptable development*. We do this so that residents and neighbours have confidence about what will be built, but also so that developers are less tempted to overpay with consequent overdevelopment or reduction in quality or quantum of affordable housing.

We have found that that the most effective design codes don't rely primarily on words but use pattern books, façade ratios, sketches, blocks sizes and street ratios wherever possible. The detail and measurements relate both to architectural features of the buildings, but also to scale, height, blocks size and street width.

These can draw upon both existing local vernacular architecture, and the preferences of the local community (which might overlap) or they can be more innovative. Having the local community involved in a genuinely collaborative co-design process tends to be a win-win for both developer and community: issues and preferences can be worked out together, trade-offs can be understood and made, and both sides can reach, together, a point of consensus.

The point of design codes should be to give everyone – from residents to council to developer - confidence that what will be built is what people want to see. Co-design works to achieve this as it enables everyone involved to understand the constraints of what can be achieved, and to come to agreements together about the best approach.

Using more design codes could seed up the delivery of new homes and permit a wider range of smaller and third sector developers. Homes that comply with design code should be built under building regulation control rather than full planning permission in some types of site. Greater certainty would remove the huge advantage that larger, more experienced and well-capitalised developers have under the current, historically and comparatively very peculiar, British planning system.

We're a research-led organisation, and we are very confident that the evidence demonstrates that this approach is very often the best way to make better places– and helps to avoid controversy where there could instead be consensus.

2. Code Zones

Relevant Sections:

Chapter 2 Spatial Development Patterns pp.25-96

Building on the logic set out above and of Policy H2, we think that the London Plan should allocate several prominent development sites as pilots for a 'zoning' or design-code led approach. Those being developed due to HS2 and new developments we are advocating in the Thames Estuary (Thames Towns) might be good options

Particularly since the advent of the 'viability assessment' the British planning system is bedevilled by uncertainty of what will and won't be permissible. This is in contrast to most planning systems around the world which more tightly regulate but do not nationalise development rights[2]. By creating land price uncertainty such regulatory uncertainty acts as a non-trivial barrier to entry. As far as possible, the London Plan should try to set land prices for brownfield development so as to avoid pressure for over-development. This has already been done for affordable housing requirements. One way to extend it into issues or urban form and design (as would not be unusual in most other countries) would be to encourage form-based Area Actions Plans (as is being done for the Old Kent Road for example) or to extend the requirement (in policy H2) for borough-wide design codes for small sites to development on boxland sites. Such codes would ideally be worked up with local residents and could be relabelled community codes.

3. **Commitment not to consultation but to co-design (and Neighbourhood forum style ballots) for estate redevelopment**

   Relevant Policies:

   Policy H10 Redevelopment of existing housing and estate Regeneration (p.175)

   '*Ground-breaking plans by Mayor for estate regeneration ballots*' 2nd February 2018, from https://www.london.gov.uk/press-releases/mayoral/ground-breaking-plans-for-estate-regen-ballots-0

   The move towards resident involvement in estate regeneration is encouraging. We have seven questions for assessing estate regeneration, which we think need to be answered in the affirmative. Three of them are particularly relevant here:

   • Does it have support of residents?

   • Does it have support of neighbours?

   • Does it at least keep social housing equal & treat leaseholders and tenants fairly?

   In line with this, Create Streets support the idea of ballots for estate regeneration. But the logic should be pushed further. Rather than merely the same old process with a ballot tacked onto the end of it, we want to see genuine resident involvement from the very beginning.

   Of course, having a ballot would require councils and developers to pay more heed to the concerns of residents anyway. But just a ballot and nothing else could still lead to adversarial processes and potentially manipulated outcomes. There are unanswered questions to do with ballots including: when does it take place? What are people voting on – the concept of regeneration, or the specific proposals? If the former, how do we make sure residents don't vote for one thing only to see something rather different ensure? If the latter how far can plans be amended after vote, if at all?

   What would be greatly superior to a mere ballot would be a proper process of co-design, with residents and architects sitting down in a room and drawing up the designs together, with paper and pencils. The designs that came out would have the support of residents because they would

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[2] See Boys Smith & Toms (2018 – forthcoming), *From NIMBY to YIMBY: how to build homes and win votes* and Boys Smith & Toms (2018), *Creating Streets in Cornwall with Consent.*

be the residents' own designs. We've seen time and time again that residents are willing to support and even campaign for new development if the plans are partially their own. Estate regeneration is never easy, but co-design is a process in which everyone involved understands from the start the pressures and constraints faced by everyone else. They can then work on collectively finding the solutions to the issues that arise as the process goes on. This leads to the compromises and consensuses that ultimately get things done to everyone's satisfaction.

4. Maximum density.

Policy D1 London's Form and characteristics

Policy D8 Tall Buildings (p.126)

Policy D6C Optimising Housing density

The London Plan is certainly one of 'up' not 'out.' The Green Belt is protected by policy G2. There is no longer a London density matrix. The tall buildings policy is largely pushed down to boroughs. The assumptions within the SHLAA are very explicitly pushing up the density assumptions for capacity measurements. (For example in tables 2.10 and 2.11 of the SHLAA).

Our concern is that with no effective upper limit on densities, the current plan risks a vicious circle of spiralling land prices, superdensity, high service charges, neighbourhood resistance and an inability to deliver physically acceptable or mixed tenure developments. Even if the full density matrix is not replaced, we would suggest a much more unambiguous density upper limits by urban type within Policy D6. As present we think the consequence will be higher land prices and downward pressure both on good design and on developments which can successfully support families and mixed tenure communities.

This will set land prices and make it easier both to deliver affordable housing and better places. This outcome should surely epitomise 'Good Growth' – whilst the alternative would be difficult to call anything but Bad Growth.

5. Encouraging, not banning popular high density medium rise 'London-like neighbourhoods.'

There is nothing new in mixed use neighbourhoods and 'living above the shop'. Yet London's most familiar streets in Chelsea, Covent Garden and Shoreditch are very hard to replicate under current planning rules. One barrier is the technical requirements that come with each use class category. They can be challenging to combine in a mixed-use setting – such as the required distances between habitable rooms to avoid overlooking. This can force down residential densities which would impact reduce potential catchment for surrounding shops.[3]

Also making it hard to deliver 'London-like neighbourhoods' are specific rules or guidance on street design, daylight and sunlight, turning circles, access, staircases, on-street-parking, lifts and many others all of which collectively mitigate against high density low rise development. We have set these out in previous research as have others.[4] The rules tend to have the

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[3] Douglas Wheeler Associates (2009), *Research examining the barriers to achieving mixed use development and identifying approaches to overcome these barriers.*

[4] See Boys Smith (2016), *A Direct Planning Revolution for London?,* pp. 22-7. London First (2017), *Guiding Light: Unlocking London's residential density*

unintended cumulative effect of 'pulling the city apart' with fewer bigger buildings further apart from each other. This is why so many recent London development feel so 'blocky' and unnatural. One experienced developed commented on a (locally very popular) development we were involved which increased the proposed density on a site while enjoying >95 per cent local support: "very beautiful. You'll never get it through planning." This is ridiculous.

To deliver density at a human scale and replicate the best of London, we need new guidance for urban areas which take into account available open space near the development, the benefits of traditional streets of various widths as an amenity and different building types at varying scales – terraced housing, mansion blocks and mid-rise flats. This will have very material ramifications for the next London Housing Design Guide. The GLA should also seek to change some Building Standards to permit medium rise high density 'London-like' developments.

6. **A more balanced understanding of the advantages and disadvantages of density.**

Relevant sections:

Chapter 1: Planning London's Future (Good Growth Policies) pp.9-24

We are pleased that the draft plan recognises the need to support higher densities and allow for the city to change. Higher densities provide the critical mass of people to support the investment in hard and soft infrastructure. Allowing for a larger number of homes on a site can also make the difference between a development that is viable and one that is not.

However, overly-high densities can also come with material disadvantages of lower resident wellbeing, developmental issues for children, higher maintenance costs and service charges with consequent unaffordability for all but the wealthy to say nothing of falling public support for new development.

Chapter one (Good Growth) of the London Plan should be redrafted to reflect the unavoidable tension for human wellbeing between the advantages of higher density and of lower density and more personal space. This would set a more correct framework for decision-making for humans across the city. At present chapter one risks being significantly intellectually unbalanced in its summary of the evidence. See appendix one for a summary of some of the evidence for the 'sweet spot' of 'gentle density'.

7. **Better Brownfield: How to banish boxland and turn it into popular, mixed-use London-like neighbourhoods and streets without losing jobs or shops**

Relevant Policies:

Chapter 1 Planning London's Future (Good Growth Policies) pp.9-26

D1 London's form and characteristics (p.98)

D8 Tall buildings (p.126)

H1 Increasing Housing Supply (p.144)

E5 Strategic Industrial Locations (SIL) (p.239)

E6 Locally Significant Industrial Sites (p.245)

E7 Intensification, co-location and substitution of land for industry, logistics and services to support London's economic function (p.246)

Greater clarity on mixed-use 'London-like neighbourhoods' on brownfield sites.

Greater clarity on mixed-use 'London-like neighbourhoods' on brownfield sites. Obviously much of the focus of the London Plan is on building on brownfield sites. The London Plan should more clearly aim to develop brownfield and industrial sites into complex 'London-like' mixed neighbourhoods. These should be more clearly described and defined so that they can be measured. The tension between the need for ongoing industrial use and the need for more housing should be explicitly referenced in the London Plan with preference for **'London-like neighbourhoods'** with maintenance of ongoing use and the importance of streets and urban form reflected more clearly in policies GG2, D1, E7 and H1. The policy on Healthy Streets (T2) should also reflect the need for a good urban form, beauty and lack of high rise wind tunnels materially to encourage walkability.

As London grows there will be competing pressures for land. The draft Plan highlights concerns over the loss of commercial space in the capital and its effects on economic prosperity. Policies E5 and E6 offer protection to Strategic Industrial Land and Locally Significant Industrial Sites. The Mayor is right that productive land uses should not be swept aside to make way for sterile dormitory developments. However, there is a danger that borough officers interpret these concerns too narrowly, settling for the safety of the *status quo* rather than risk creative change. Land use on boxland industrial sites is rarely optimal and we must not waste the potential to combine uses with better design. Boroughs should therefore critically look at all industrial sites, even those that are operational, to determine if a 'mixed use' approach is possible. Landowners of industrial and 'big box' retail sites must be even more strongly encouraged to come forward with Mayoral support. Policy E7 is useful in this context but should be more ambitious. It also needs far more reference to issues of good growth and urban form

8. **An inspiring and popular vision. *Where* should development be? And *what* should it be? Create Boulevards, Elizabeth Towns and Thames Towns.**

   Relevant policies:

   SD1 – SD10: Chapter 2 Spatial Development Patterns (P.25-96)

   Our spatial vision for the future of London needs to become profoundly more inspirational about *where* our new development will be and *what* it will be. Chapter two of the London Plan sets out where much (though not all) development can come from. However, these sites need to be linked together with a greater and more comprehensible focus on what they will be and how they will look. We suggest three unifying themes to capture the potential to **banish boxland** and build **'London-like neighbourhoods.'**

   - **Elizabeth Towns:** a populist programme for a series of medium-rise, high density traditional mixed-use town centres on former boxland along the new Elizabeth Line with their own distinctive, popular and beautiful aesthetic and walkable, finely-grained urban form. This will be particularly relevant in places such as Ilford
   - **Thames Towns:** a populist programme for a series of low-rise, high density traditional mixed-use towns along the banks of the Thames Estuary with their own distinctive, popular

and beautiful aesthetic and walkable, finely-grained urban form. Thames Towns are not built from towers, but nor are they sprawling car-dependent suburbia.[5]

- **Create Boulevards:** a partially community-led programme for the populist beautification and intensification of London's arterial roads with more trees and a range of beautiful, popular medium-rise developments with pre-set designs agreed by local communities to permit faster higher development of more homes.[6] This should include transport interventions such as trams into central London, as well as Banning non-electric private traffic into zone one and parts of zone two from several years into the future.

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[5] Se http://dev.createstreets.com/front-page-2/campaigns-copy/thames-towns/ for more details.
[6] See http://dev.createstreets.com/create-boulevards/ for more details.

Appendix 1: 'London-like neighbourhoods' are popular and good for you

The approach to density, urban form and mixed-use development advocated in the London Plan is laudable as far as it goes but importantly incomplete. It stresses the advantages of high density but has very little to say on the necessarily contrasting advantages of more space and lower density. It says very little on the importance of urban form and nothing on the importance of beauty.[7] But these are critical- for building good places and for doing so with local consent. This report argues that the right approach is a traditional 'mixed-use' neighbourhood of 'fine-grained', beautiful, walkable terraced streets, homes, offices and shops in a conventional block structure. We call these 'gentle-density' developments **'London-like neighbourhoods'**. They benefit from the advantage of higher density such as more walkability. They also profit from the advantages of lower density such as more personal space, access to greenery and not feeling overly stressed or crowded by your environment.

London homes are expensive, above all, because there are such a limited number of the *type* of homes in neighbourhoods that meet the criteria that people most want in the locations that they most want them. The widest study ever carried out on sales values and urban form in British cities found that London homes in traditional street patterns with a high proportion of pre-1900 buildings had a value premium in 2016 about five times greater than that carried by a new build property everything else held equal.[8] People place a huge value on the spatial and architectural character of such places. But there simply aren't enough truly **'London-like neighbourhoods'** compared to the number of people who want to live in them. And London's housing demand will not be met by the housing found in single-use, car reliant, housing estates. The shortage of housing in desirable neighbourhoods is more important than the shortage of housing units *per se*. The London Plan should aim to fix this. It is trying but it is only part way there.

In addition to their mix of uses **'London-like neighbourhoods'** have some key components:

- **Connectivity and streets.** Streets that 'plug into' the surrounding city. A well-connected, highly walkable, traditional street pattern of differing types and sizes with multiple junctions and route choices;

- **Greenery.** Frequent green spaces inter-weaved into the neighbourhood either as private gardens, communal gardens or well-overlooked public spaces between blocks and where people really need them and frequent them. Lots of street trees;

- **Density.** Enough density to be walkable but not to be overwhelming, stressful or to create high long-term maintenance costs;

- **Height.** Most buildings at human scale height. Sparing use of residential towers and only in centres for the small number of people who seek them;

- **Blocks and facades.** Blocks neither too big nor too long. Buildings that appear to be buildings not entire blocks. No long blank walls. Narrow fronts with many doors and strong 'sense of the vertical' to break up the scale of terraced blocks. Clear fronts, backs and internal private or communal gardens inside blocks; and

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[7] Policy D1 London's form and characteristics is the most explicit on what should be built but our strong concern is that this will normally be trumped by the Plan's wider pressure for density, other policies, land values and the development process. Mayor of London (2017), *The London Plan*, p.98.

[8] Boys Smith, Venerandi, Toms (2017), *Beyond Location*, pp. 120-1.

- **Beauty and design.** Beauty really matters. Ignoring popular aesthetic appeal is missing a key trick. Must have a strong sense of place. A variety of street types, design, green spaces. Streets that bend and flex with contours of the landscape. Some surprises. Not designed by committee.

From Islington to Dulwich Village, these are the defining components of the most popular, valued and valuable parts of London and indeed of most of the most successful city neighbourhoods worldwide. Nor are people's preferences irrational. Improving data availability now permits us to analyse the links between urban form and wellbeing with a breadth of information that was unimaginable until recently. We can therefore argue confidently that a traditional, beautiful 'mixed-use' neighbourhood is good for residents, the economy and investors.[9] Amongst the key advantages are;

- **Less traffic and lower pollution**. In one study, 'residents of mixed-use neighbourhoods took non-motorised modes 12% of the time compared to 4% of trips in single use communities;'[10]

- **More walking**, **greater physical activity** and **better resident health**. Conventional walkable neighbourhoods are meaningfully correlated with lower rates of obesity, diabetes, heart disease and high blood pressure. One recent literature review found that 50 out of 64 relevant studies found associations between compact walkable neighbourhoods and positive health outcomes. The remainder were unclear. None showed a reverse correlation;[11]

- **Greater mental wellbeing and more pro-social behaviour** from knowing more of your neighbours, better use of green space and appreciation of physical beauty. A 2011 survey of 27,000 respondents in ten US cities found stronger correlations between a place's physical beauty and people's satisfaction with their communities than any other attributes.[12] People are also measurable more likely to help their fellow citizens in front of nice buildings with active facades than ugly ones with blank facades;[13]

- **More housing** due to greater public support for new development. In one 2015 MORI poll opposition to new housing in principle halved in practice for the most popular design;[14]

- **Lower crime** in traditional urban blocks due to clearer 'backs and fronts' to homes. Analysis (for example in Perth or London) has shown how such blocks typically suffer from less crime;[15]

- **Better long term returns to investors** and **higher council tax receipts**. In addition to the city-wide data cited above, analysis of land values and property tax at the American city of Ashville for example showed that replacing an acre of box retail and parking with finely grained, mixed-

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[9] For the most up to date literature reviews see Boys Smith, Venerandi, Toms (2017), *Beyond Location,* section two and Boys Smith (2016), *Heart in the Right Street*, chapters three to ten.

[10] Ewing R, Kreutzer R. (2006), *Understanding the Relationship between Public Health and the Built Environment.* LEED-ND Core Committee Report, pp. 20-3.

[11] Talen, E. & Koschinsky, J. (2014) 'Compact, Walkable, Diverse Neighborhoods: Assessing Effects on Residents', *Housing Policy Debate*, 24:4, pp. 717-50.

[12] Leyden, K. et al (2011), 'Understanding the Pursuit of Happiness in Ten Major Cities', *Urban Affairs Review*, vol. 47, pp.861-888.

[13] Edible Urbanism Project, *Happy Seattle*, www.thehappycity.com/wp-content/uploads/2015/03/Editable-Urbanism-Report.pdf

[14] Local polling and visual preference surveys are also near unanimous in their findings See Boys Smith (2016), *Heart in the Right Street*, pp.85-91. Also see Boys Smith (2016), *A Direct Planning Revolution for London?*, pp. 5-10.

[15] For instance, see presentation made by Tim Stoner at 11 March 2014. Available at: www.slideshare.net/tstonor/tim-stonor-predictive-analytics-using-space-syntax-technology

use, walkable city would increase sales and property tax per acre from $6,500 to $634,000 per acre whilst also increase residents per acre from 0 to 90 and jobs per acre from 5.9 to 73.7;[16]

- **Easier to integrate market and affordable housing** due to reduced need for high service charges (as required by towers or complex off-street developments). Very big buildings tend to have higher management costs especially as they age.[17] More finely-grained density avoids this.

Finally, such historic urban patterns can provide high density neighbourhoods without it feeling stressfully crowded and with no need for towers (though these may sometimes be appropriate).[18] High density need not mean high-rise. Very small areas like San Francisco's Chinatown and the Centro district of Madrid achieve higher population density than Hong Kong– though over a much smaller area. Both combine mid and low-rise buildings (two to eight storeys). Public open space is in streets, some tree-lined and very pleasant.[19] This, or something like it, is the right route for London. Density should be provided through **'London-like neighbourhoods.'** The new London Plan's Good Growth principles should reflect this.

[16] Montgomery, C. (2013), Happy City, p.271.
[17] Boys Smith (2016), *Heart in the Right Street*, pp.44-45.
[18] Ellard (2015) *Places of the Heart: The Psychogeography of Everyday Life.*
[19] Savills (2015), *The World and London,* p.9.

CREATE streets

The London Plan – what would Bazalgette do?

Evidence submitted to the London Assembly Planning Committee - January 2018

The London Plan – what would Bazalgette do?

1. *There is lots to commend in the draft London Plan and its core vision of mixed use urban development with more homes and more affordability is impossible not to support. Inevitably these notes focus on what could be improved*

2. *Trying to get more certainty into small sites via design codes and certainty on affordable housing % is also critical – and shows awareness of the key peculiarity of British planning in historic and comparative terms – it's **unpredictability.** Our concern (& we're also hearing this from some boroughs) is that too much of rest of plan will be open to endless debate and misuse – above all given huge pressure on greater density emerging in plan especially in suburbs. It is also crucial that design codes are popular – we suggest a **co-creation process** with residents to avoid the **design disconnect***

3. *Furthermore, London faces its greatest housing crisis since nineteenth century, the mayor has a thumping majority and was elected with a very clear message of more housing in his manifesto. We had hoped the plan would be more ambitious and visionary. We've asked the question: **what would Bazalgette do?***

4. *We also worry that some of the core ideas underpinning the Good Growth Principles (above all GG1) are very incomplete with focus on the (undoubted) advantages of density & none on the (equally undoubted) disadvantages. The best places hold this in tension with what we call **Gentle Density.** Given the provable importance of beauty on wellbeing and the growing cultural expectation that design is something everyone influences, we were also sorry not to see far more focus on neighbourhood plans*

British planning is very strange in international terms

Name of primary permission

Country	Name of main permit (and English translation)	Primary focus
Austria	• *Baubewilligung* • Construction Permit	• Right to construct • Building regulations
Belgium	• *Permis de batir* • Permission to build	• Right to construct • Building regulations
Denmark	• Byggetilladelse • Building Permit	• Right to construct • Building regulations
France	• *Permis de constuire* • Construction permit	• Right to construct • Building regulations
Germany	• *Baugenehmigung* • Building Permit	• Right to construct • Building regulations
Greece	• *Oikodomiki adeia* • Building Permit	• Right to construct • Building regulations
Ireland	• Planning permission	• Right to construct
Luxembourg	• *Permis de construire* • Construction permit	• Right to construct • Building regulations
Netherlands	• *Bouwvergunning* • Building Permit	• Right to construct • Building regulations
Portugal	• *Licenciamento Municipal de Obras Particulares* • Municipal Licensing of Private Works	• Right to construct • Building regulations
Spain	• *Licencia de edificacion* • Construction permit	• Right to construct • Building regulations
UK	• Planning Permission	• Right to construct

- In every country other than UK and Ireland primary permission is building permission not planning permission

British planning is most unpredictable and ineffectively local

Level of discretion – JRF analysis

Discretionary	Zoning with more discretion	Zoning with less discretion
UK	Australia	Germany
	France	New Zealand
	Denmark	Switzerland
	Netherlands	South Korea
	Republic of Ireland	USA
		(Czech Republic)

The mayor can't 'fix' this but this is why he needs to focus on

- Certainty of form

- Certainty of design, materials & facading

- Certainty of affordable housing & other infrastructure costs

Average size of authority setting regulations

Country	Average population
Belgium	17,000
Denmark	20,000
France	1,550
Germany	5,000
Greece	190,000
Ireland	40,000
Luxembourg	3,300
Netherlands	23,000
Portugal	34,000
Spain	4,800
UK	119,000

	Component of system	British planning compared to international norms
1.	Governance and control	Broadly comparable
2.	Green belts and urban limits	Modestly different
3.	Sharing of land value capture & incentives	Broadly comparable
4.	Land assembly and infrastructure	Modestly different
5.	Rules and predictability	**Fundamentally different**
6.	Stakeholders	Modestly different
7.	Penalties	Broadly comparable
8.	Enforcement	Broadly comparable

Source: EU, JRF, Create Streets Research

Same point is true historically – C18th had much tighter form control


- Following on from 1667 & 1707 Acts
- 1774 Act defined seven rates of house by
  - land area
  - Height
  - Number of storeys
  - Rental value
  - Thickness of party & external walls
- Materials ("brick, stone, artificial stone, copper, tin, slate, tile or iron")
- Obliging windows to be set in recessed reveals
- Proportions of bow windows, shop windows, cornices
- Wooden decorations only on shop windows and frontispieces to doorways

This is why it is so easy to date most of London. It came out of a book based on the legislation

e.g. Peter Nicholson, *The New & Improved Practical Builder, 1823*

First Rate House (1774 Building Act)
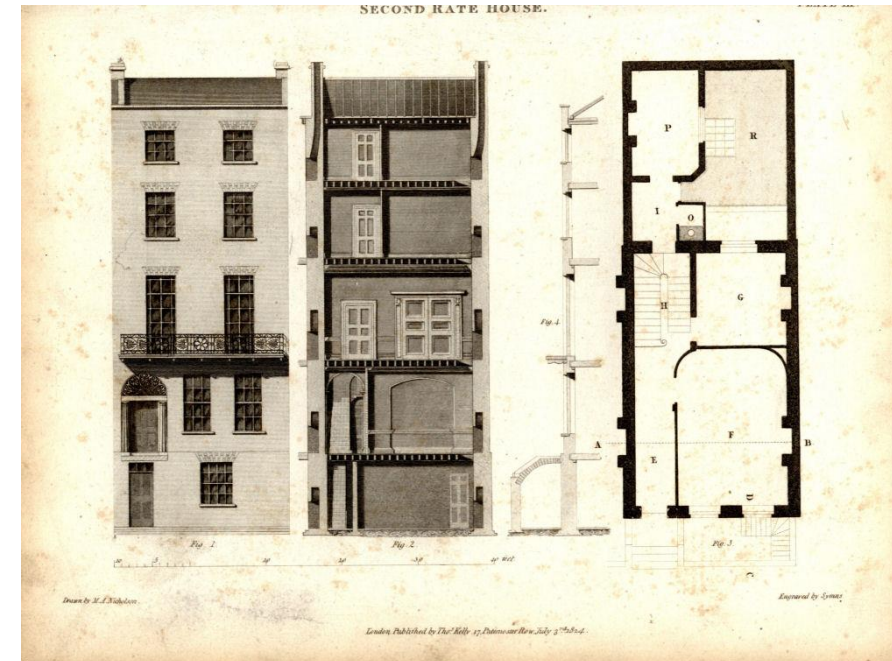
- Role of George Dance the Younger
- Sir Robert Taylor

Design codes – late C18th style
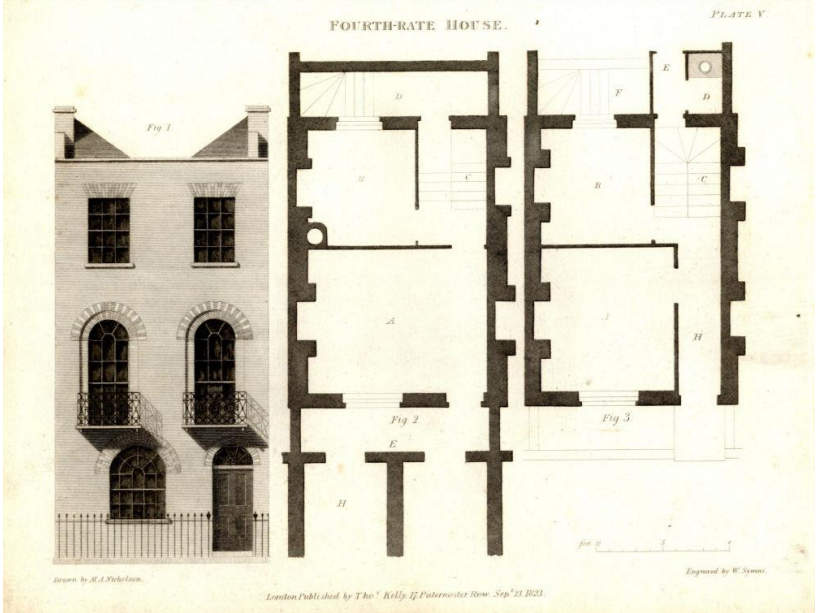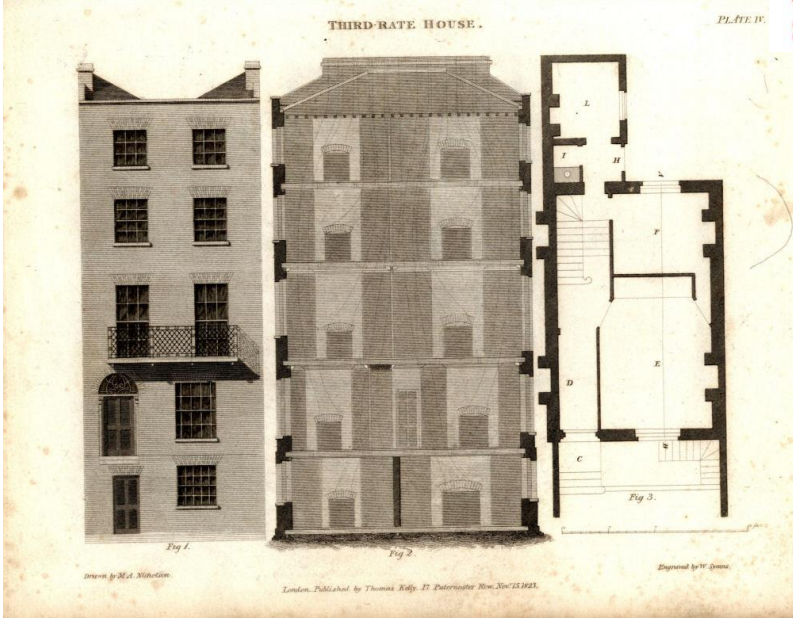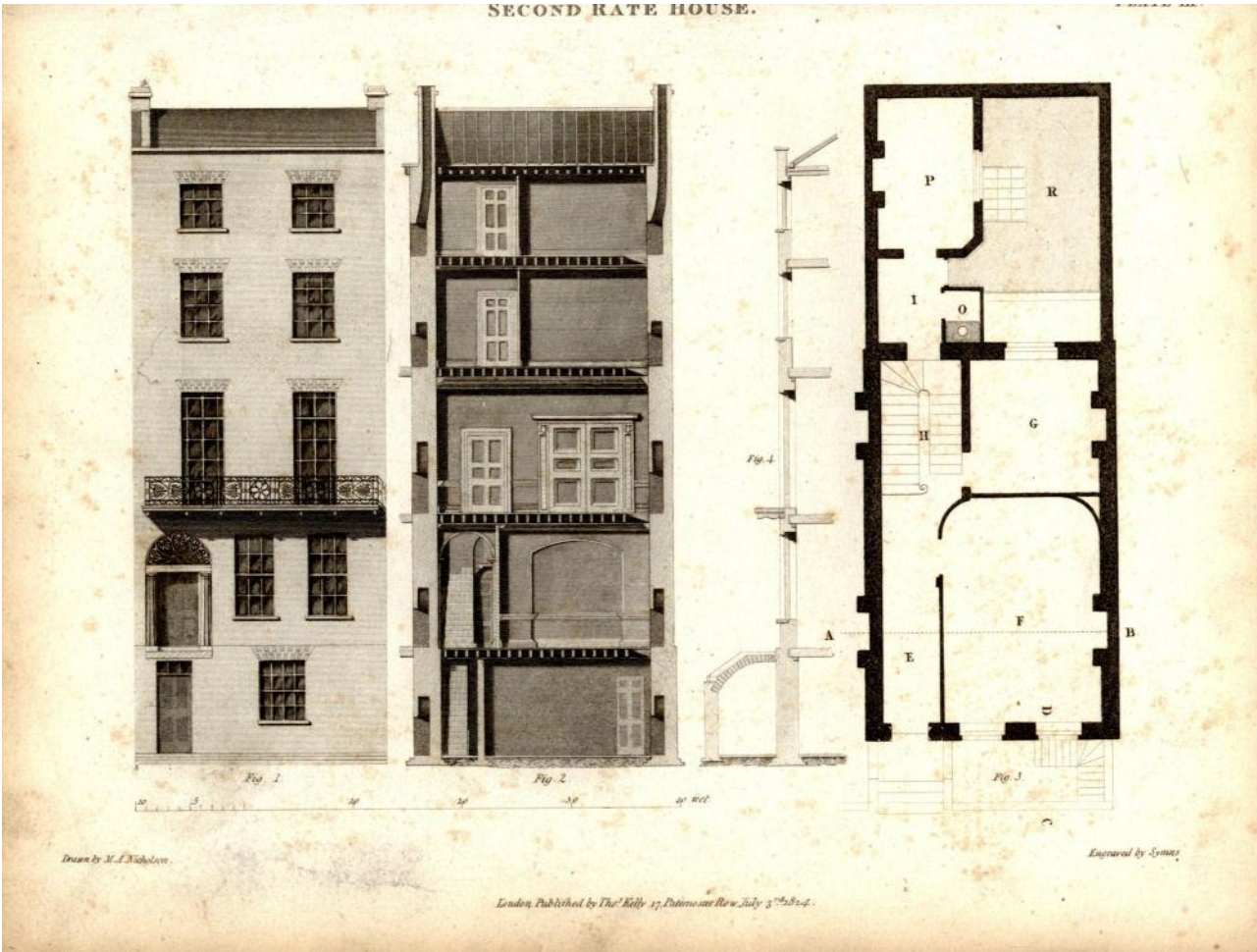
Peter Nicholson, *The New & Improved Practical Builder*, 1823
Second, Third and Fourth Rate Houses

As an aside, we've had greenbelts before (sort of)

Elizabeth I
- 1580 – ban on all new building within three miles of city
- 1589 – ban on new homes without 4 acres of land each
- 1592 – ban on lodgers

James I
- 1605 – ban within one mile of City boundary
- 1608 – ban on all new building without a licence
- 1625 – ban on all new buildings within 5 years

Braun & Hoggenberg, from 1572 Copperplate Map

We also had 'planning' in the Seventeenth century in the sense of planning permission not regulation on built form

Court of Star Chmber

1608 rules

- No rebuilding without licence
- No new building without licence
- Threat of imprisonment
- Demolished up to 7 years
- Materials sold for poor
- Administered by Court of Star Chamber
- Generally aligned with other royal constraints upon freedom (such as banning books) and was abolished in 1640 by the Long Parliament
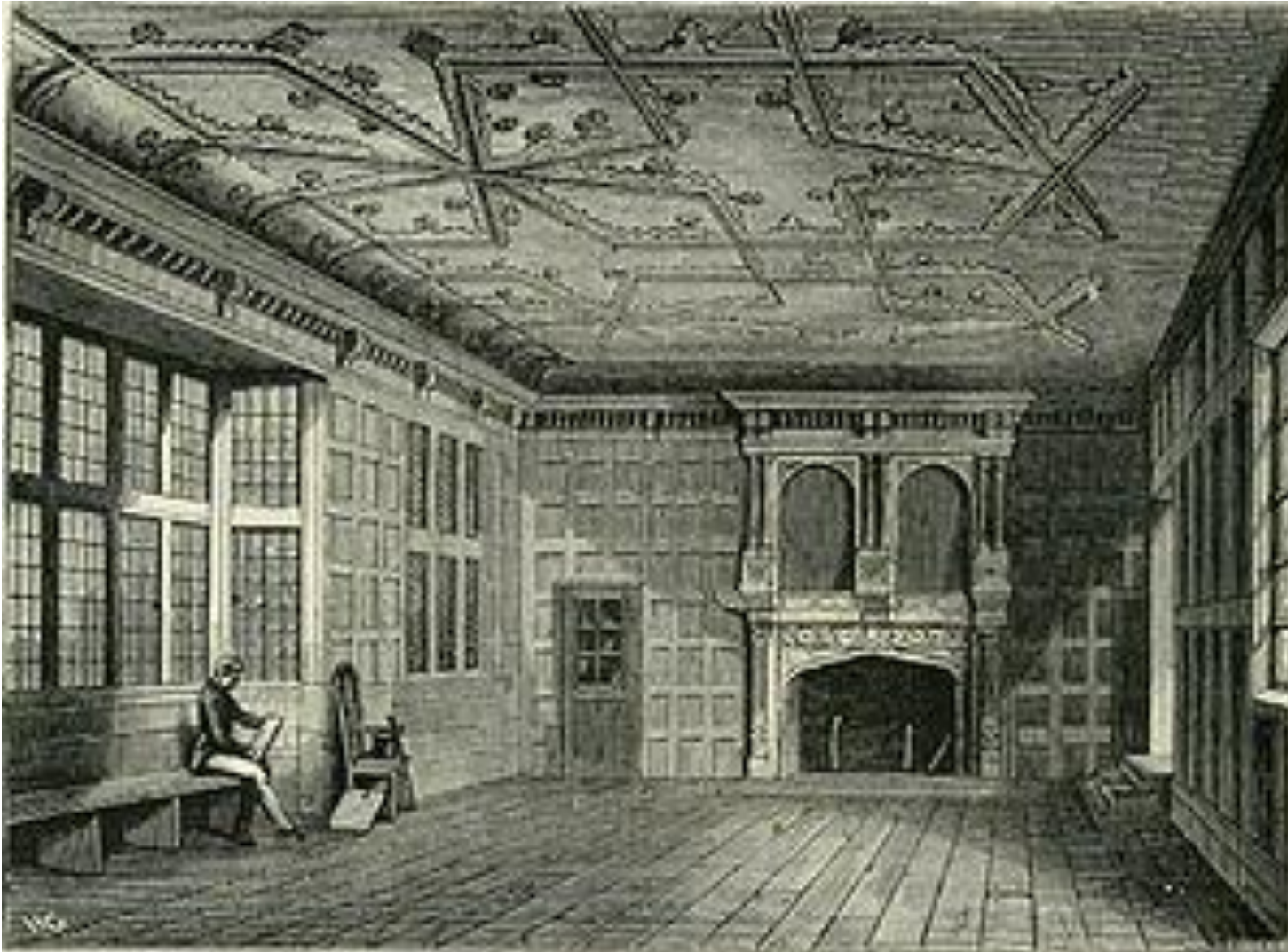
Create Community Codes

Making design codes people-powered

What are design codes?
A design code is a set of illustrated design rules and requirements which instruct and may advise on the physical development of a site or area.

Why are we talking about them?
For the first time ever, Sadiq Khan's London Plan (p.152) has announced that London boroughs will be required to prepare design codes for small sites. But the London Plan doesn't say how they should be created – or by whom.

Why should we use them?
Using more design codes could seed up the delivery of new homes and permit a wider range of smaller and third sector developers. Homes that comply with design code should be built under building regulation control rather than full planning permission in some types of site. Greater certainty would remove the huge advantage that larger, more experienced and well-capitalised developers have under the current, historically and comparatively very peculiar, British planning system.

What's the difference between design codes and planning permission?
A design code is more proactive. It allows a council to say we want to do 'this' here, and to be very specific about what 'this' means. If you adhere to that specific code, you are allowed to build it – simple. If you want to do something different, you have to go through a longer, riskier process. At the moment that longer, riskier process is what happens for every single planning permission – this is very resource intensive, means councils can mostly be only reactive in their policy for specific sites, and that communities get very little say in changes to their area. This less risky mechanism is not entirely absent from planning at present. It can be delivered though outline planning permission but brings fewer advantages. The new 'Permission in Principle' regime may also make it easier to use them although this is not yet completely clear.

Create Community Codes

Making design codes people-powered

Why do they work?

Design codes work when they reflect what people want to see. Rather than having a long drawn out planning argument on every new development, if a site has design codes that have already been drawn up and supported by residents, then there's no need to have that long intensive debate. Councils and developers can know what is acceptable, and will be massively incentivised to build just that.

Design codes give ordinary Londoners confidence – confidence that what they want to see in their neighbourhoods is what ends up happening. Most Londoners are in favour of more housing, but it's unsurprising that there are suspicions about the form that this new housing will take, when you look at some of the things which have been developed. Design codes should be about allowing communities to set what gets built in their neighbourhoods, whilst also speeding up London's delivery of much-needed housing.

Who should create them?

We think there should be a collaborative process in which the community, the council and some architects sit down and work out what people actual want to see – backed up by polling. We've run lots of these workshops and they can work. People thrash out ideas and come to a consensus, persuading others or making compromises where necessary.

Who else does them?

There are now over 400 form-based codes in US and Canadian cities. In 2010 Miami, became the first major US city to replace their historic zoning code with a code. The US Department of Defence has recently switched to using them. A Tennesse official has commented;

'*Nashville has adopted form-based codes for over 30 districts, corridors and neighbourhoods. The direct result has been an increase in property values and a much greater desire to develop in areas with form-based codes due to the certainty that the code provides the developer and the community*'

Certainty of acceptable built form also forms a more important component of development control in most of Europe which has consistently managed to build systemically more homes than the UK with nothing like the equivalent level of political controversy. In most of Europe, if developers and builders follow to the letter the Local Urban Plan, then the difficulty, complexity and cost of achieving development control is very low compared to the UK. We used to us them in Britain. Much of London was designed with what we'd now term design codes. Why can't more of London be like that?

What would Bazalgette do?

Furthermore, London faces greatest housing and air quality crisis since nineteenth century, mayor has a thumping majority and very clear message of more housing in his manifesto. We had hoped would be more ambitious and visionary. We've asked the question: **what would Bazalgette do?**

Some truly radical (but doable) ideas would include

1. **Community codes** *for all character areas in boroughs worked up with local residents*

2. *Commitment not to consultation but to* **co-design** *(and Neighbourhood forums style ballots) for estate redevelopment*

3. *Banning non electric private traffic into zone one and parts of zone two from several years into the future*

4. **Trams into central London**

5. **Thames Towns** *– a programme of beautiful high density, finely-grained new towns in the Thames Estuary*

6. **Elizabeth Towns** *– a programme of beautiful finely-grained gentle density intensifications along the Elizabeth Line*

7. **Create Boulevards** *to intensify use along London's main roads*

A plea for the use of data in urban design

"architecture and planning does not have an empirical, evidence-based tradition in the sense that psychologists or the ... sciences would understand.
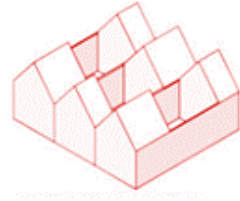
There are very few studies that ever go back to look at whether one type of dwelling or another, or one type of office or another, has a systematic impact on how people behave, or feel, or interact with one another"

David Halpern, Director of Behavioural Insight Unit, Cabinet Office

What makes a place ? Is all of this reflected in Good Growth?

Connectivity

Density

Greenery

Homes

Facades

Urban Blocks

Land use

Height

Space

Design

Light cuts across these

Living in very big blocks tends not to be good for you...

Create Streets: evidence from controlled studies, 1962 - 2013

Association	Total number of studies	% showing high rise 'bad'	% showing no link	% showing high rise 'good'
Satisfaction with home	12	92%	0%	8%
Levels of mental strain, crowing, stress, optimism	19	66%	21%	11%
Depression and more serious mental health	5	100%	0%	0%
Suicide	4	50%	50%	0%
Behavioural problems for children	5	80%	20%	0%
Levels of crime	6	50%	50%	0%
Fear of crime	2	50%	0%	50%
Pro or anti-social behaviour	5	100%	0%	0%
Levels of social engagement and social capital	16	75%	13%	13%
Children's progress in high- rise	11	91%	9%	0%
Total	85	78%	12%	11%

"the literature suggests that high-rises are less satisfactory than other housing forms for most people, that they are not optimal for children, that social relations are more impersonal and helping behaviour is less than in other housing forms, that crime and fear of crime are greater, and that they may independently account for some suicides"
Professor Robert Gifford literature review

Vancouver high rise residents ...
- less likely than those living in detached homes to know their neighbours' names - 56% to 81%
- Less likely to have done them a favour - 23% to 48%
- Less likely to trust them - 40% to 60%
- Less likely to believe that their wallet would be returned if lost locally - 55% to 68%

Source: Create Streets Research, Gifford, Vancouver Foundation

CREATE streets

Shakespeare Tower, Barbican

- Service charge £8,000 a year

- 11% of this (£880 per year per flat) is on window-cleaning alone

- C.500-700 times what the owners of most, much larger, houses would pay over twelve months to clean their windows every four to six weeks

Source: Superdenisty II Report

Energy use in office buildings increases with height per sqm
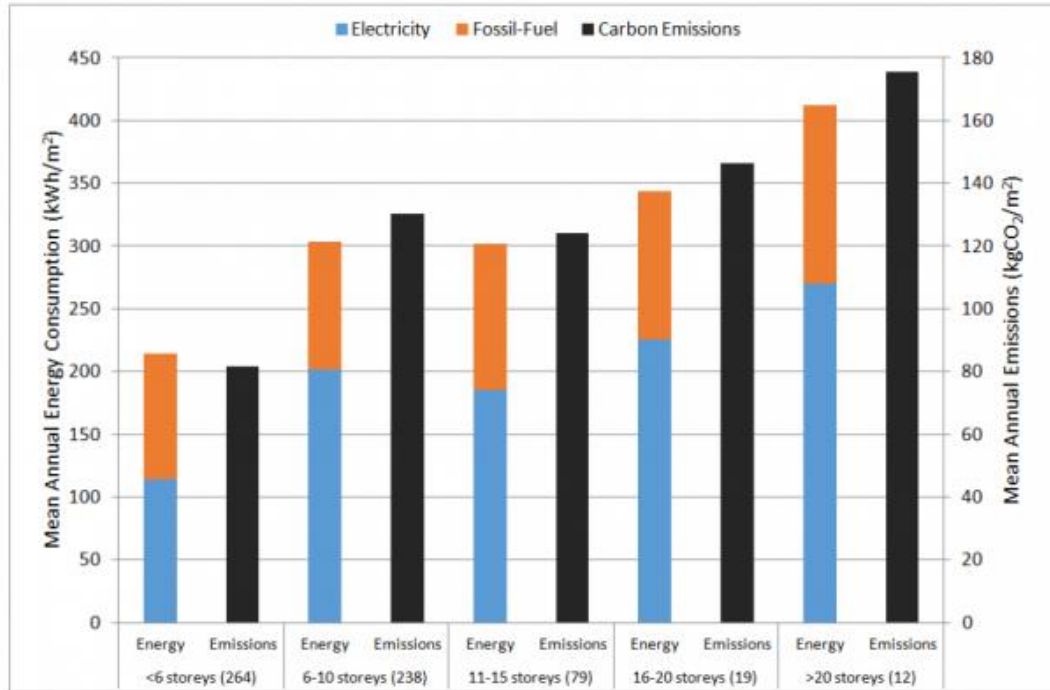
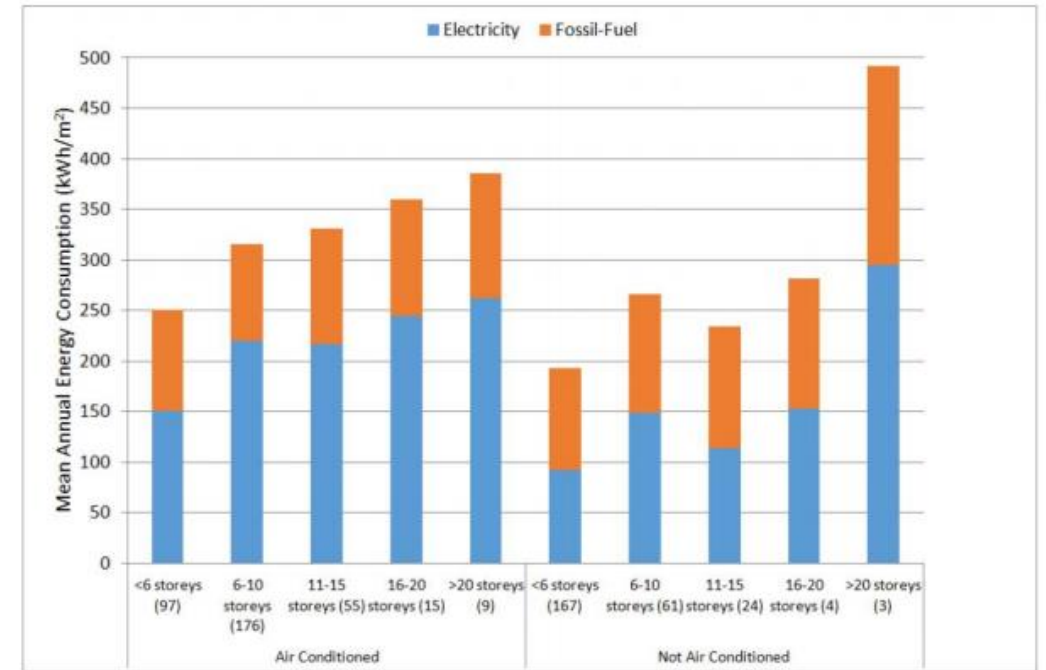Figure 1: Energy use (kWh/m2) and carbon emissions (kgCO2/m2) in 600 office buildings of differing heights.

Figure 2: The results for energy use of Figure 1 divided between air-conditioned (left) and non-air-conditioned buildings (right)

Source: Professor Philip Steadman , UCL

Lessons from a study of every property sale in London in 2016

Sales premiums associated with different components

variable	London
House type detached [C]	70,789
House type semi-detached [C]	60,545
Offering of pre-1900 properties	58,397
Intersection density	57,556
Avg. no. bedrooms [C]	55,518
Prox. to closest her. park	51,004
Prox. to closest listed building	49,767
Freehold or leasehold [C]	48,469
House type terraced [C]	41,312
Prox. to closest metro station	37,879
% of all green areas	22,607
Diversity of transport modes	17,547
Prox. to closest forest	15,514
New build [C]	8,795
Connectivity	8,427
Diversity of amenities	675
Population density (OA)	-3,438
Street centrality	-5,024
Prox. to closest bus stop	-5,418
Prox. to closest park	-6,281
Prox. to closest rail station	-12,553
Prox. to closest rec. ground	-20,436

The heritage premium is **four times** greater than the new build premium in London

Index of Multiple deprivation associations

London

- Population density
- % of unbuilt land
- Density of bus stops
- Street centrality
- Density of dead-ends
- Diversity of amenities
- Density of train stations
- % of green areas
- % of heritage parks
- Connectivity
- Density of metro stations
- Offering of pre-1900 properties
- Diversity of house types

Explanatory power =	72%
Significance test =	pass
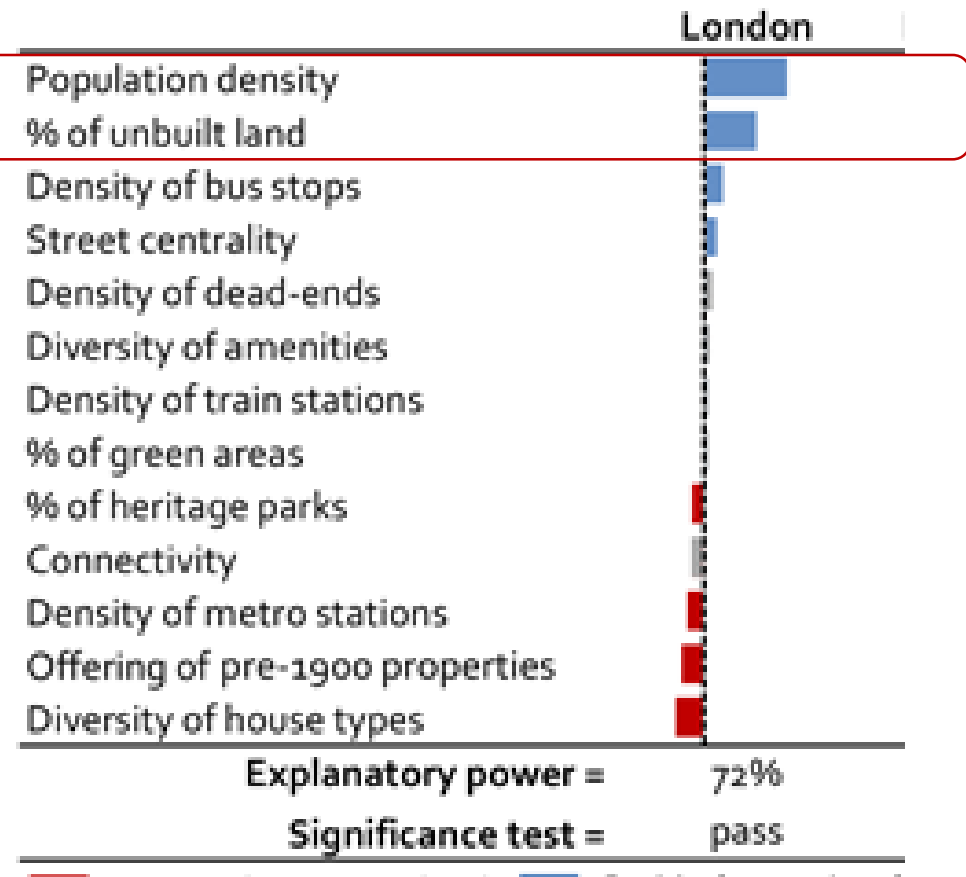
- Areas of high population and low ground coverage are significantly associated with higher deprivation

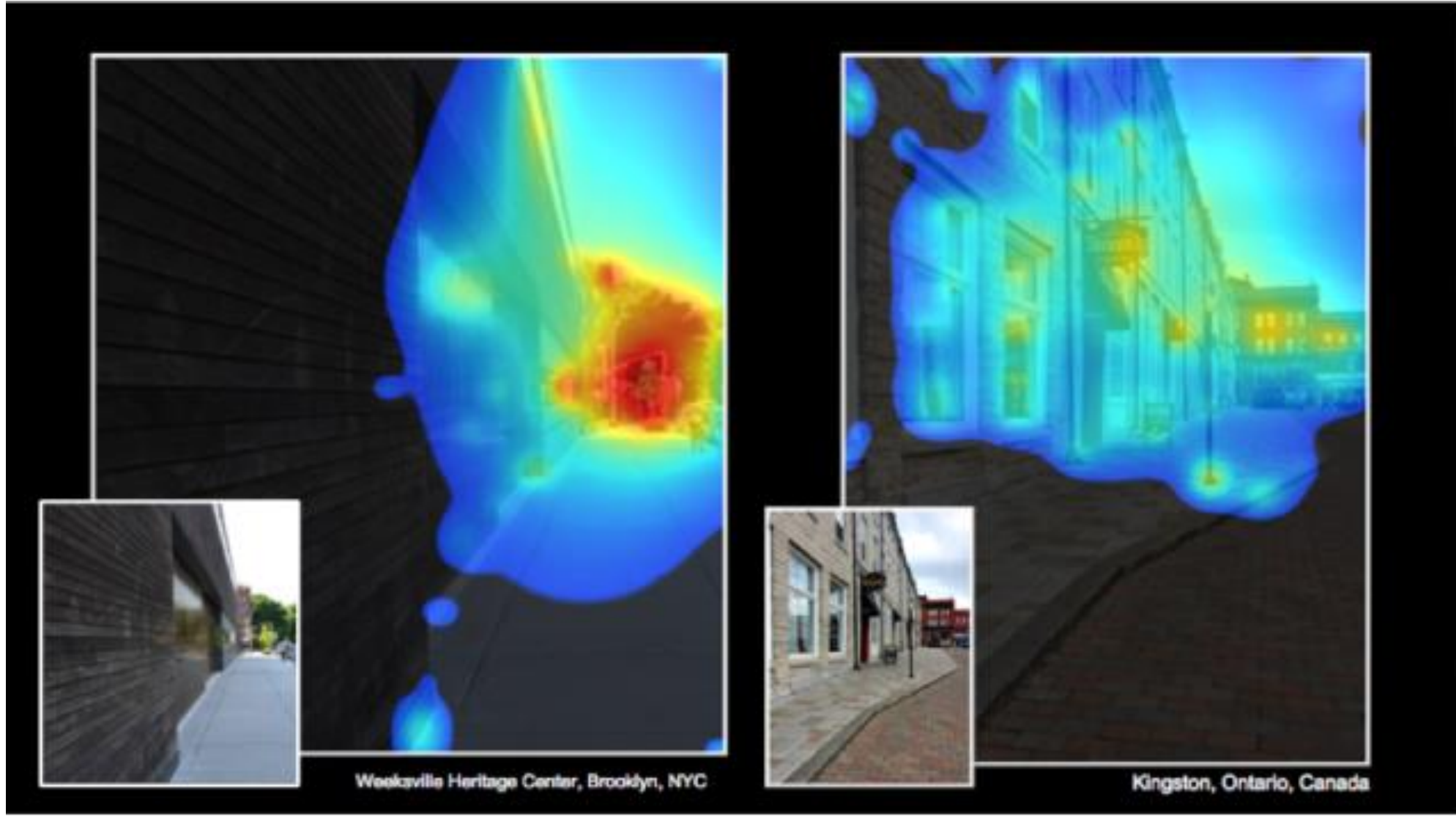Source: Create Streets, *Beyond Location*

Facades impact behaviour...

Volunteers posed as lost tourists at both locations. They stood on the pavement, looking confused and with an open map The 'lost tourists' did not approach anyone. They waited for random passers-by to offer help.

- *10% of passers-by offered help at active facade*
- *2.2% of passers-by offered help at active façade*
- *Seven times as many at the active site offered to let our 'tourist' use their phone (7% versus 1%).*
- *Four times as many offered to actually lead our tourist to their destination (4% vs 1%).*

Source: Happy City Project

Facades matter

Weeksville Heritage Center, Brooklyn, NYC

Kingston, Ontario, Canada

Source: Ann Sussman, Gognitive Architecture

Facades matter

Weeksville Heritage Center, Brooklyn, NYC

Kingston, Ontario, Canada

Source: Ann Sussman, Cognitive Architecture

Our brains respond well to faces & symmetrical complexity

Source: Ann Sussman, Cognitive Architecture
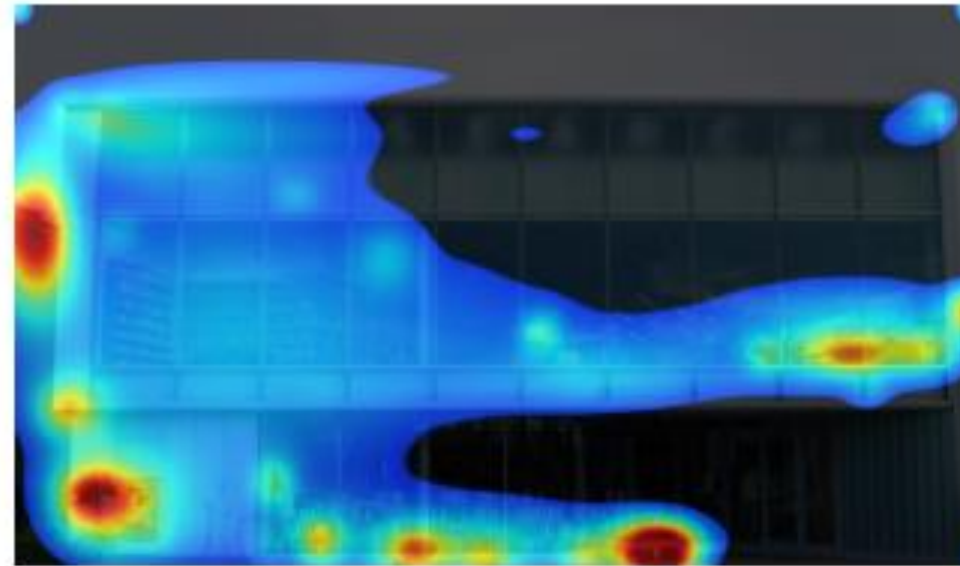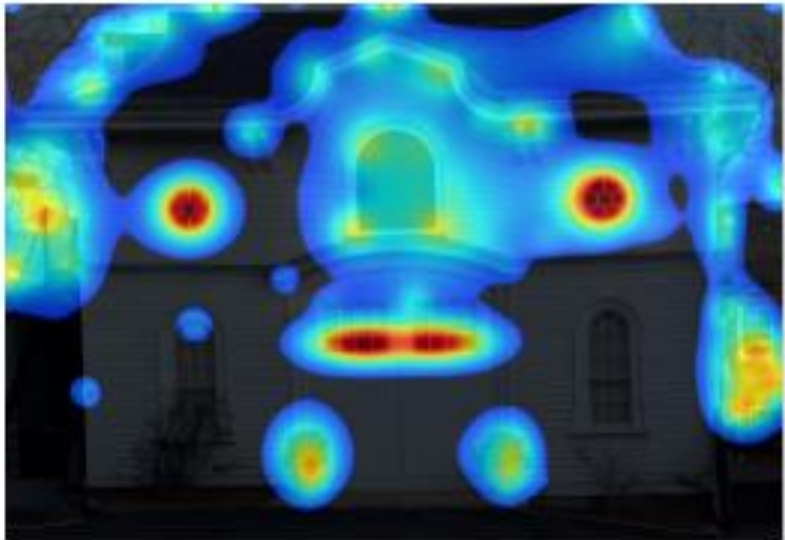
Conventional blocks lead to lots of good things

- Clear blocks & fronts
- Mews
- Lower crime (Perth & London studies)
- Less traffic
- More walkable
- More useable green space

Source: Create Streets Research, Savills, Space Syntax

Conventional blocks and density
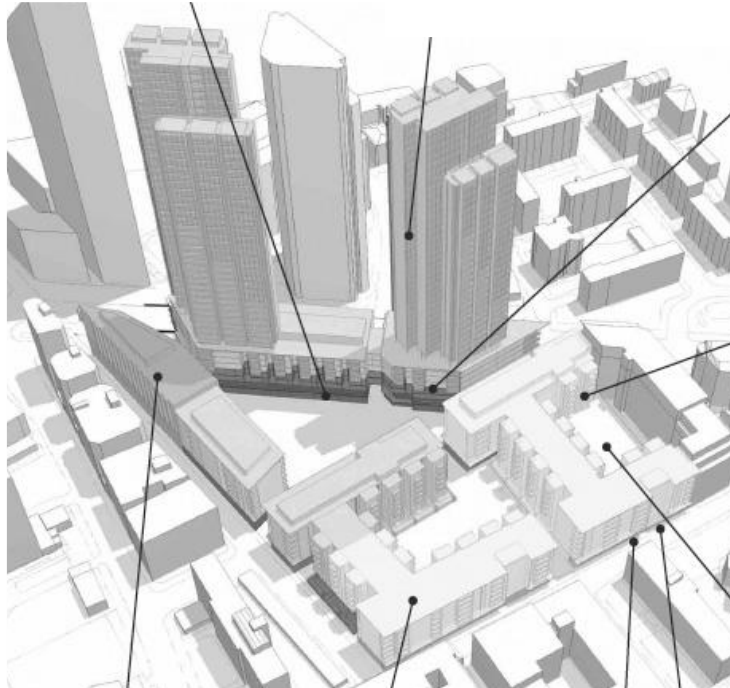
Foster & Partners, 250 City Road
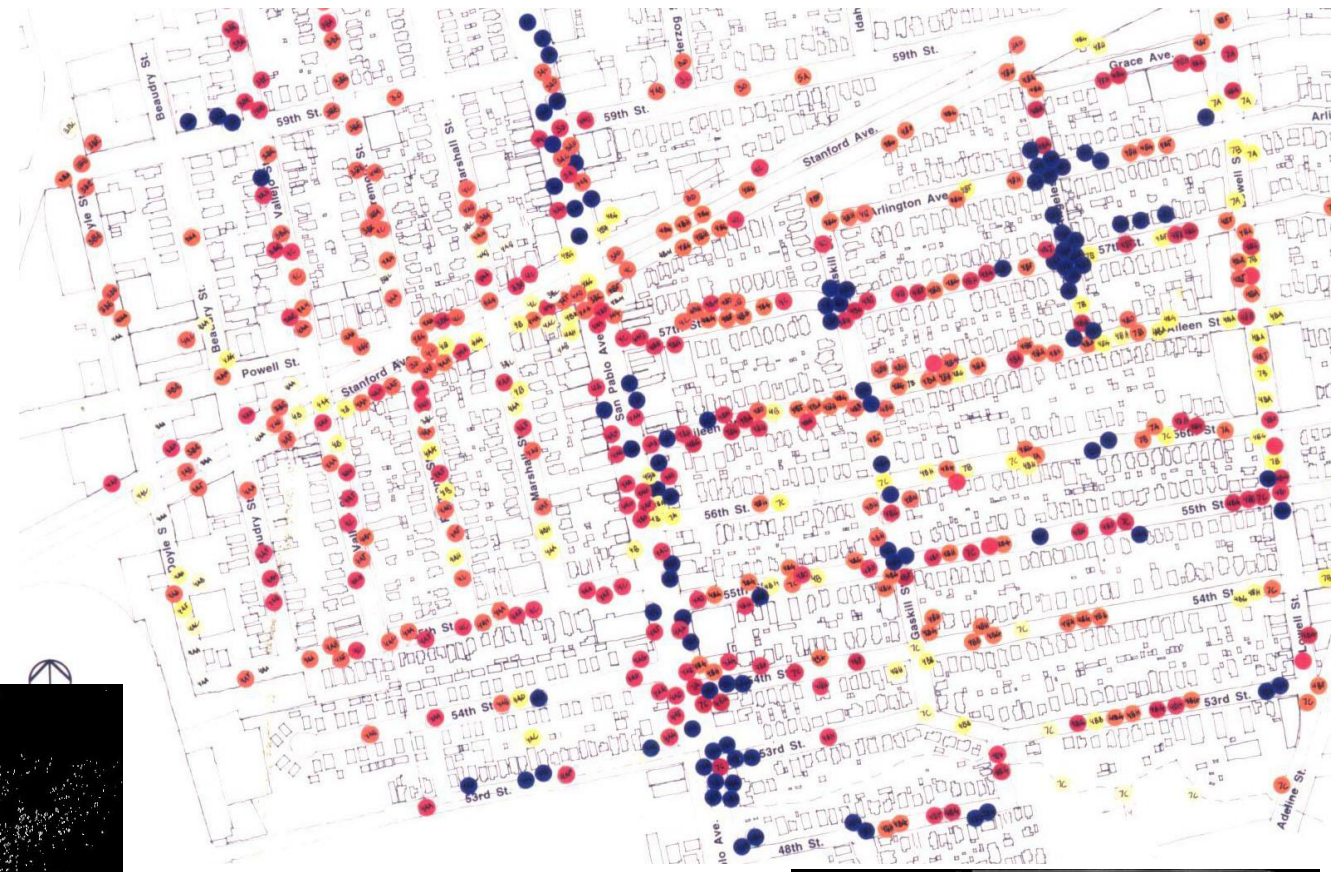- *2 towers of 36 storeys*
- *7 storey buildings*
- *Cut off angle 82° & 85°*
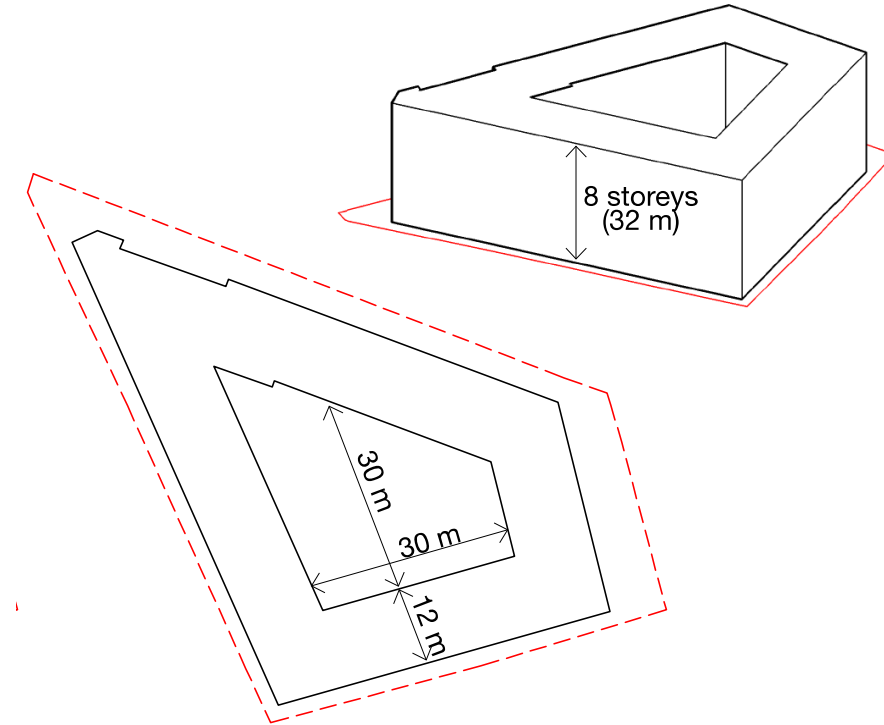
Equivalent GIA
- *8 storeys court*
- *Cut off angle only 45°*

8 storeys
(32 m)

30 m

30 m

12 m

Is beauty subjective or objective ?

Self reporting on where people feel

- Very good
- Good
- Bad
- Very bad

Type of house that attracted the most positive responses

Only location in a neighbourhood characterised by 'bad feeling' responses which attracted 'very good' feelings


Source: Yodan Rofe, *Planum*

Does beauty matter for our mental health?

A 2011 survey of **27,000 respondents in ten US cities** found stronger correlations between a place's physical beauty and people's satisfaction with their communities than any other attributes. It had, for example, a correlation of 0.560 with overall place happiness, 0.534 with city satisfaction and 0.510 on recommending a city as a place to live for family and friends. Factors such as 'overall economic security' came no where close.

A 2008-2010 Gallup survey of **43,000 people in 26 cities** agreed. It found that residents' ratings of the aesthetic attraction of their cities and green spaces correlated significantly with residents' attachment to their city. This is turn correlated with GDP growth. In this survey, **aesthetic attraction to their city came third in the pecking order behind 'Social Offerings' (what there was to do) and 'Openness' (perception of openness to different types of resident) as a predictor of attachment. However, it still ranked above education, basic services or safety.** A third study has also found that a perception of beauty is significantly associated with community satisfaction and significantly more important than individual demographic characteristics.

CREATE streets

Blocks reach surprisingly high densities...
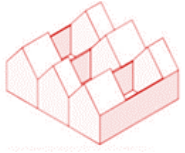
	Description (example area in London)	Storeys	Homes/ hectare	Habitable rooms/ hectare
1.	Terraced houses (Victorian/ suburban e.g. Wandsworth)	2-3	~50	~250
2.	Terraced houses (Georgian format e.g. Kennington)	4-5	~75	~300
3.	Terraced houses plus a few flats (e.g. Notting Hill)	4-5	~100	~300
4.	Mixture of flats plus some terraced houses (e.g. Pimlico)	4-6	~175	~525
5.	Terraced flats (e.g. Ladbroke Grove)	5-7	~220	~600

Source: Create Streets Research, Savills

Green is good for you . . . . . when you get to use it

Green is good…

- Famous study by Ulrich, showed patients recover better with view of natural scene.
- 9 studies correlate vegetation with lower levels of crime & expected crime.
- Communal gardens & actually gardening can be associated with higher happiness, wellbeing
- View of greenery gives 5-30% more value.
- Studies link street trees with reduction in speed and crashes, improvement of air quality and of both mental and physical health

…except when it isn't

- 8 studies that associate levels of greenery with higher fear and more fear of crime – specifically with denser vegetation. One study does correlate with higher crime
- Beyond 2-3 blocks people visit parks far less. (US)
- Focus groups suggest preference for personal space vs communal
- Some popular & complex have unsustainable running costs
- Health correlates most with scenicness (sic) rather than greenery.
- Consideration must be given to relationship with rest of built environment.

Answer is: Little & Often & Cost-effective to manage

Terraces – what people want
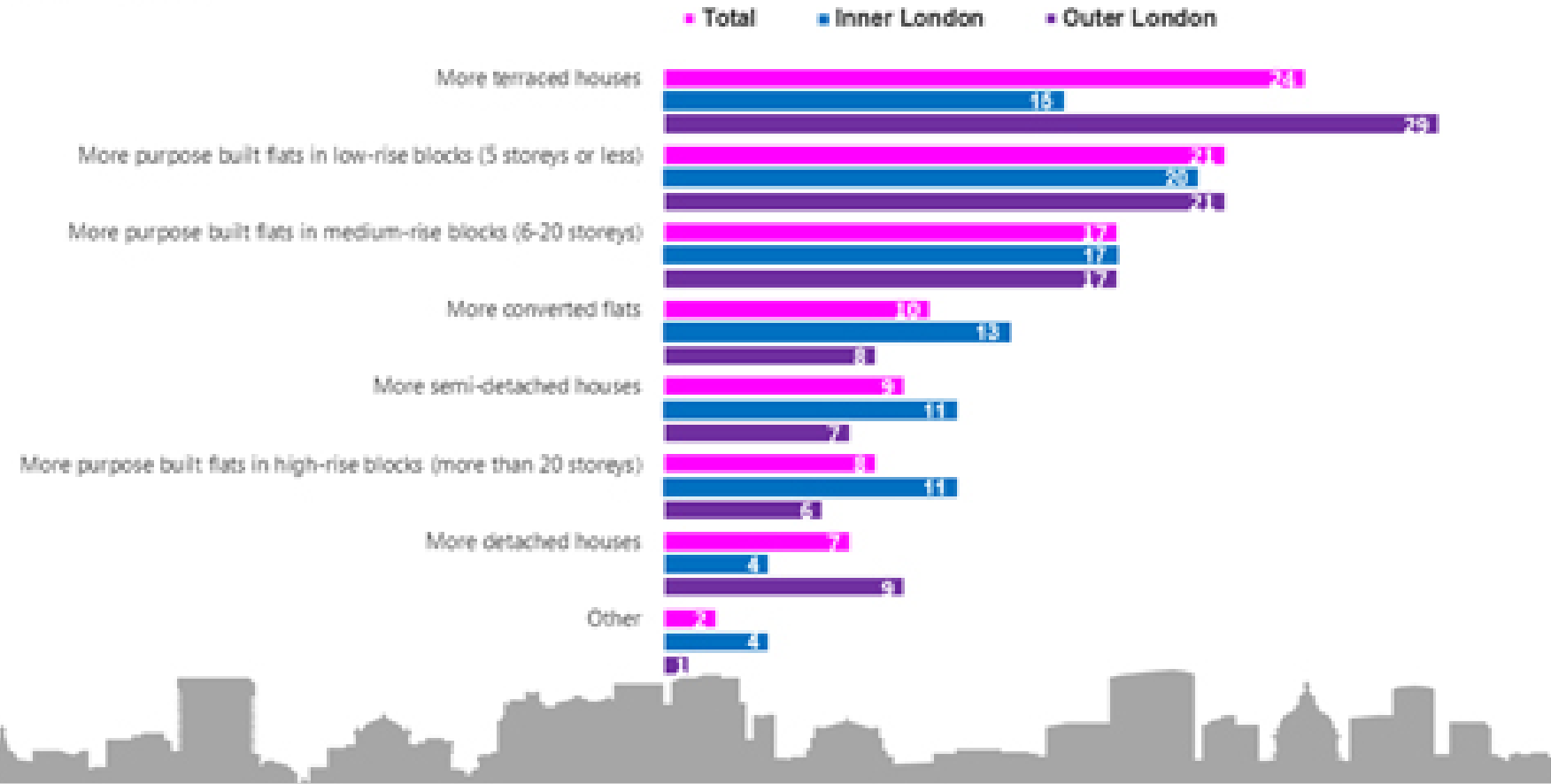
Design has major impact on support for homes

Q2 I am now going to show you five different types of new housing... to what extent would you support or oppose the building of new homes similar to the photo in your local area on brownfield land?

Ipsos MORI
Social Research Institute

Type A (Derwenthorpe)

73%
12%

Type B (South London)

23%
61%

Type C (Poundbury)

75%
12%

Type D(Bude)

51%
31%

Type E (East London)
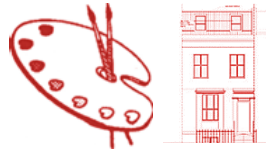
34%
46%

Key: **Strongly/ tend to support**
        Strongly/ tend to oppose

NB – Respondents asked to review initial screen of all five images for a minute before rating each image *individually* (and order randomised for each respondent) – see methodology note.

Base: 1,000 adults aged 15+ in Great Britain. Fieldwork dates 15-31 May 2015

Source: Ipsos MORI / Create Streets

"CGI" of Georgian-inspired terrace

40%

"Pastiche" of Victorian housing built in 1999

47%

"New London Vernacular" housing just built*

7%

The 'Design Disconnect'

Innovative housing just built*

6%

* Prize-winning. Total of nine awards for these two options

Summary of data on links place to wellbeing

1. Greenery. *Frequent green spaces inter-woven into the city either as private gardens, communal gardens or well-overlooked public spaces between blocks and where people really need them and frequent them. Large parks are necessary but need not be ubiquitous. Lots of street trees;*

2. Homes. *Somewhere between the very real and valued advantages of suburban living but at greater densities (think terraces of houses with some flats) and without the long commutes and consequent isolation. Children preferably in houses not flats. As many houses as possible;*

3. Height. *Most buildings at human scale height. Sparing use of residential towers and only in city centres for the small number of people who seek them. No children in high rise;*

4. Connectivity and streets. *Streets that 'plug into' the surrounding city. A well-connected, highly walkable, traditional street pattern of differing types and sizes with multiple junctions and route choices. Some pedestrian or bicycle only streets, but mostly mixed with generous pavements.*

5. Land use. *Mixed use of residential, commercial and retail wherever possible and where traffic implications can be managed. Retail nearly always interspaced with commercial and dotted around primarily residential as far as density permits;*

6. Blocks. *Blocks neither too big nor too long. Buildings that appear to be buildings not entire blocks. Narrow fronts with many doors and strong 'sense of the vertical' to break up the scale of terraced blocks. Clear fronts, backs and internal private or communal gardens inside blocks. No deck access;*

7. Space. *Minimal internal semi-private space. No residential corridors. As few doors as possible off the same 'core.' External open space normally less than about 90m in breadth*

8. Beauty and design. *Beauty really matters. Ignoring aesthetic appeal is missing a key trick. Must have a strong sense of place, which normally (but not always) references a place's history through materials or style. A variety of street types, design, green spaces. Streets that bend and flex with contours of the landscape. Some surprises. Not designed by committee*

9. Facades. *No long blank walls but frequent front doors (ideally with modest front gardens) or shop fronts. 'Walking architecture' is more popular, more complex and more valuable than 'driving architecture.' Some front doors should have steps for social and public health reasons*
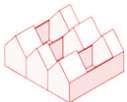
10. Density. *Enough density to be walkable but not to be overwhelming, to undermine wellbeing, or to create high long-term maintenance costs. About fifty-220 homes per hectare*

CREATE
streets