
Create Streets

Not just multi-storey estates

Nicholas Boys Smith

Alex Morton



CREATE streets

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Creates Streets Ltd's mission is to campaign for social (and indeed all) housing developments to be focused on creating streets with houses and low-rise flats. We are working with policy-makers and with local communities forming neighbourhood plans to support this. We also aim to start the process by engaging in real developments, particularly in south and inner-London. We are a private limited company. Company number: 08332263.

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Introduction

There is an overwhelming housing crisis in London. It is perhaps the biggest issue many people in the capital face. But this crisis is also an opportunity.

London has a large amount of social housing built as large multi-storey blocks from the 1950s to the 1970s. This housing is unpopular with the public. Nor, ironically, is it particularly high density. Replacing it with proper terraced housing would transform London, making London more attractive, benefitting residents, and potentially allowing a large increase in housing in the capital. Create Streets has therefore been created to encourage and facilitate the replacement of London's multi-storey housing and the development of brown-field sites with real houses in real streets. You can find out more about us at www.createstreets.com.

The empirical evidence is overwhelming. Large multi-storey housing blocks (be they high-rise or medium-rise) are usually disliked and are correlated with bad outcomes for the people forced to live in them, even when socio-economic status is taken into account. They are bad for society and crime levels and a very poor return on investment for those who own them in the long-term. They cost more to build, maintain and fall into disrepair sooner. They are very bad for children and families, yet in particular children in social housing are forced to live in multi-storey homes.

With very few exceptions, usually lived in by the wealthy and childless, such as the Barbican Centre, large multi-storey estates are nearly universally shunned by those who can afford to choose. Turning their back, literally, on the rest of the city, many post-war multi-storey housing estates have sadly become physically distinct, self-defining 'ghettos'. Chris Holmes, the former director of Shelter, concluded that 'housing poverty is now the most extreme form of social inequality in Britain, with those who experience the greatest inequalities being those living on housing estates.' Many of these multi-storey estates were badly built and have been poorly maintained. They will need to be rebuilt within the next few decades.

Unfortunately we have been repeating the errors of the past. We are not delivering major housing increases through redeveloping London's estates back into streetscapes. Instead we have been focusing on a few sites and rebuilding them with multi-storey blocks again to very high density. Such higher densities are normally not what people in the area want or need. Paradoxically across London we are massively under-delivering housing, with construction of just 16,000 homes started in the last twelve months where data is available. So we are both building in a high-density style that few people support, and failing to tackle our housing crisis.

We want to encourage and facilitate the replacement of these post-war estates with a combination of low rise apartments and real houses in real terraced streets.

People want to live in streets and are happier and more sociable when they do. Failed public space can be converted into private gardens. And building streets is cheaper than building high. It can provide more homes than the failed multi-storey housing being replaced (Largely low rise Kensington and Chelsea is one of the highest density boroughs in the country). And it will (in the long run) provide a better economic return for the landowner. It is a viable option. It could also help end the sharp physical divide in modern London – between streets in which the middle classes live and estates and tower blocks where the middle classes refuse to live. All will benefit; those living nearby, those on the estates, and those who are currently struggling to find a home (because the housing supply will increase and rents will therefore rise more slowly). We believe that a mid-point estimate is this could provide 260,000 homes on top of replacing all existing dwellings. This would be a large scale increase in the level of housing in London and done in an attractive and popular way. We call on the Mayor's office to undertake a full assessment of how many homes creating streets could deliver over the next few years.

In short, we can rebuild London along better lines both to improve lives and help solve our housing crisis. It is time to create housing. It is time to Create Streets.

Nicholas Boys Smith
Create Streets

Executive Summary¹

Chapter 1: Repeating the multi-storey errors of the past

After twenty years of strong reaction against the multi-storey and high-rise estates of the 1950s, 60s and 70s policy makers have decided we again need to build large high-rise or multi-storey developments. We are in danger of repeating the errors of the past.

- From the 1950s to 1980 the UK demolished 1.5 million homes, largely homes in streets. It replaced many of them with high-rise and multi-storey estates. In addition it built many new housing estates on war-damaged or other land.
- These were so unpopular that there was a backlash and for twenty years very few multi-storey developments were built. Between 1979 and 1998 only 6 buildings higher than 35 metres were built in Britain. In 1997, only 14% of new homes were flats.
- However many planners and policy makers wanted to return to the multi-storey estate, particularly in London. The London Plan of 2004 (repeated in 2011) assumed that higher density was always better. Flats have again become the main type of development.
- Rather than seek to rebuild all the modernist multi-storey estates at once, a piecemeal approach has been taken, with a small number of estates being rebuilt normally at very high densities and with a multi-storey approach. For example the Heygate estate redevelopment will double the number of homes on its site.
- Yet London is not building enough homes – with construction of only 16,000 homes begun in the twelve months up to the end of September 2012. We are both building too few homes and poor quality homes. We are in danger of repeating the mistakes of the past – at no gain.

Chapter 2: People want to live in houses in streets

The vast majority of people want to live in houses in streets. This is true in Britain and elsewhere, and has been for decades. Multi-storey estates are adored by a small minority who impose them on society as a whole but rarely choose to live in them.

- The majority of British people have consistently wanted to live in houses in streets. At least 89% of Britons want to live in a house on a street.
- Zero per cent (i.e. not one person) in one poll said they wanted to live in a tower block flat. Only 2% wanted to live in a modern loft style apartment. Over 80% of people in one estate (Robin Hood Gardens) wanted to pull them down.

¹ References for all data in the executive summary are included in the main text.

- Large numbers of studies show that people in high-rise blocks are much less satisfied with where they live, even controlling for socio-economic variables. This is true across various societies and countries.
- Survey after survey also shows that there is strong opposition to anything higher than five storeys and that people like private gardens, not communal space.
- The proportion of people choosing to live in high-rises and multi-storey estates is low, particularly for families. Social tenants account for 21% of all households with children but 79% of those living on or above the fifth floor. Children in social housing are sixteen times more likely to live on or above the fifth floor than children not in social housing. People don't want to have families in multi-storey estates. Those who can afford to don't.
- Older houses close to multi-storey estates command a very large premium square foot for square foot to the estates that often replaced them when planners bulldozed whole areas.
- Those who built multi-storey estates preferred to live in more conventional homes. Ernest Goldfinger, who built Trellick tower, lived in it for just two months before moving back to his house in Hampstead.
- Many local people opposed the creation of such estates. Residents in Liverpool, Glasgow, London and Manchester all fought to stay in their houses or refused to move into high-rise developments. They were imposed against local people's wishes – in some cases aided by central government.
- Again, local people's views are being ignored. When social tenants are asked how they would like to see estates redeveloped then time and time again surveys show they want conventional houses in conventional streets.
- Surveys of the housing or buildings people dislike *always* show very high proportions of people disliking multi-storey buildings, particularly (but not only) modernist ones.

Chapter 3: Multi-storey housing is bad for its residents

Multi-storey developments lead to higher crime and are bad for residents and children's health and mental well-being even adjusting for socio-economic conditions.

- The dislike of multi-storey estates is not just aesthetic. This type of housing harms those living there. Multiple studies show that multi-storey housing is heavily correlated with bad social outcomes for the people forced to live in it, *even when socio-economic conditions are identical*.
- A large number of controlled studies show the residents of high-rise blocks suffer from more stress, mental health difficulties, neurosis and marital discord. Even when socio-economic status is comparable, studies have shown children living in high-rise accommodation suffer from more stress, hyperactivity, hostility and juvenile delinquency. They are more likely to suffer from temper tantrums and less likely to learn how to dress themselves or use the lavatory age-appropriately. Death by suicide is higher.
- Studies show that the 'communal areas' of estates are likely to be vandalised, suffer anti-social behaviour, and lead to higher crime. Multiple studies have found positive correlations between high-rise living and crime and anti-social behaviour
- It is difficult to bring up children; several studies show that children go outside less when they live in high-rises and that they spend more time playing alone

or in restricted play leading to measurably higher levels of maternal concern. It is harder to supervise children. Levels of crime committed by children are higher in multi-storey estates.

- The deliberately atomising and dehumanising scale makes it harder for communities to form. Residents may meet more people but they will know fewer of them, undermining social relationships. Studies in Canada, the US and Europe have all found fewer friendships and interactions and less sense of 'community' or 'membership' among high-rise residents than socially similar groups living in streets or low-rise. In one study stamped addressed envelopes and charitable donations were placed on hallway floors in college halls of residence. Both were passed on or returned in inverse proportion to building height. The view of local people in most areas that multi-storey estates destroyed communities is backed up by the evidence. They did.
- Multi-storey housing offers a plethora of semi-private, semi-public unpoliceable spaces such as corridors and stairwells which are hard to survey and which offer multiple escape routes. One study found that crimes in such housing occurred at about the same rate inside apartments but were 28% higher outside buildings and 604% higher in the interior public spaces. Other studies have supported this.
- These factors interact; an area with lack of community feeling and unsupervised children and greater opportunity for crime is a toxic mix. It is expensive and difficult to try to reduce these factors. The best thing is to not create multi-storey estates in the first place.
- Research into where the 2011 riots occurred showed that there was a strong correlation between multi-storey estates and areas hit by rioting. As those compiling the data noted, it is difficult to socialise teenagers in these estates. Both David Cameron and Boris Johnson argued we must mend our social fabric. One of the biggest changes we could make to repair our social fabric is our policy toward failed multi-storey estates.

Chapter 4: Multi-storey housing creates a spiral of decline

Those who can afford to leave multi-storey estates. But the failures of the estates are not caused by people leaving. Those who leave estates do so because almost no one wants to live on them in the first place.

- It is a myth that estates only failed because those in work largely abandoned them. Those in work abandoned them *because they failed*. It is nearly impossible for them to work. Most people don't like living in them. Those who can usually leave quite quickly.
- Studying individual estates shows this. The Park Hill estate in Sheffield socially collapsed well before changes in the 1977 Housing Act pushed those who were out-of-work to the top of the social housing list. The Aylesbury estate in Southwark saw a similarly rapid decline because people did not want to live there.
- It is a testament to the human spirit that communities have been created on these estates in difficult environments. Yet this cannot disguise that such estates unhealthily segregate people as most people who can move out, do so. Such estates by their very nature create a spiral of decline as this makes things even worse for those left behind.

Chapter 5: Create streets and houses that work

Low rise flats, houses and streets work. They are popular. Social housing that is not on multi-storey estates tends to function better and allows more mixed communities.

- Housing and streets work and are popular. Even large scale social housing works better when it is created in street based developments that look like most private housing.
- These homes could have been the way that post-war housing developed. The tragedy was that many planners and officials decided against this. We are now in danger of ignoring the lessons of the past. Replacing multi-storey estates will not solve all social issues. But it will help reduce many social problems.

Chapter 6: Streets are more viable than multi-storey estates

Multi-storey estates are more expensive to build and maintain than houses and low-rise flats. For landowners, those nearby, and a city in general streets are more viable and a better long term investment, while still profitable for developers. Multi-storey estates impose a cost on those living nearby. The viability of multi-storey estates in many places only exists because of limited land release – a much better approach would be large scale estate redevelopment.

- Multi-storey housing costs more to build per square metre than other high density options. A ten-storey building is 10% more expensive to build per square metre than a five-storey building. A fifty-storey building is 60% more expensive. The disastrous multi-storey estates of the past were economically unviable. The build cost per square foot was 1.65–1.8 times higher for multi-storey flats compared to houses.
- Costs are higher as the complexity is far greater and the level of risk involved in multi-storey housing is higher (you can't halt it once started and it is harder to sell near the start of the proceedings). More space is lost to areas that cost to build and maintain (lifts, corridors) but cannot be sold on.
- Multi-storey housing is expensive to maintain. It costs between 50% to 100% more than maintaining houses and low-rise flats. Maintenance is more complex and communal areas are more often vandalised.
- Building attractive streets is the best overall option. Other than in very high cost areas, landowners make the highest long term return with such developments, and they are good for those living in and near them. Only for developers are they the most profitable, due to higher build costs and margins.
- The long term importance of connectivity to value is highlighted by Savills research which showed that areas which were street based had significantly higher values. They found 'the more permeable the street networks of a neighbourhood, the greater of choice of routes through it, the higher the property value'. Research by Space Syntax also showed that businesses and flourishing communities are supported by well-connected streets.

- Thus multi-storey estates impose a direct cost on the areas around them by closing off through routes and reducing the connectivity of adjacent spaces. There is also a cost imposed because multi-storey estates are unpopular and unattractive. 'Neighbourhood' is the number one attribute people look for when buying a property and over 80% find the feel and look of an area important.
- Some planners argue for multi-storey estates when they are not the only or most viable option due to density targets. Developers support them due to increased returns. This is not to say that there are no cases where multi-storey development is appropriate, but once all costs (including on those nearby) have been included, this is likely to be rare.
- If there were a general push for multi-storey estate redevelopment then land would fall in price and we would build more of the homes that London needs.

Chapter 7: Creating streets can build the homes London needs

By initiating a major redevelopment programme across London's multi-storey estates we could build many of the homes we need between now and 2020. Creating streets can both increase the density of London housing of London and make it more attractive, gaining vital political support for new homes. We are currently building 16,000 new homes against a minimum need of 32,000. Creating streets could create 260,000 new homes on brownfield sites, done in a popular way.

- It is a myth that multi-storey estates were needed or housed more people. In Southwark and Newham, for example, population and density fell while multi-storey estates proliferated. It was developers and planners, not local people or need, that drove them.
- One study quoted by the 1999 Urban Task Force showed that terraced houses at least match the housing densities (about 75 units/hectare) of most high-rise housing. One London School of Economics study concluded that, 'Notting Hill, Lancaster Gate and Earl's Court with five and six storey houses ... are among the most densely populated neighbourhoods in the country ... density can be achieved without very tall structures'.
- Lord Rogers has noted that we are building at half the density (68 dwellings a hectare) Georgian terraces reached (implying 160 dwellings a hectare) while the 2011 London Housing Draft Supplementary Planning Guidance noted that areas like Maida Vale and Notting Hill achieved densities of 200 dwellings a hectare.
- The place with the highest density in the UK is Kensington and Chelsea. The level of density achieved by the traditional terrace can match high-rise living but in a way that is more in line with people's architectural preference. If we 'pepperpot' redbrick apartment blocks within traditional streetscapes then we should achieve even higher densities.
- Houses in streets are also more flexible as they can convert between houses and maisonettes as required as area demographics shift.
- A plausible estimate is that there are 360,000 dwellings in London in post-war multi-storey estates. This is based on data about the numbers of social homes

and the proportion of social homes built as multi-storey estates in London. If this is the case, then assuming redevelopment at a range of higher densities from 100–160 units a hectare gives between 120,000 and 500,000 or so homes. The mid-point for these estimates is 260,000 homes.

- The 260,000 homes would be in addition to replacing existing dwellings – meaning this would be a large scale increase in London’s housing stock. Thus because the sites would have more housing after than before. Not only would all existing tenants be rehoused, this large increase in new homes would be private and the sales receipts used to facilitate redevelopment.
- This mid-range would be a huge increase in housing – nearly eight years’ worth of demand – taking us to 2020 according to what is needed in the London Plan. It would massively increase housing delivery from the unacceptably low 16,000 homes a year started up to end-September 2012 in London.

Chapter 8: Policy recommendations

London is in danger of repeating the past and failing to build the homes we need. London must seize this opportunity. We call on the Mayor’s office to take action to scope a major estate redevelopment programme, action to make sure redevelopment schemes are supported by, not inflicted on, local people, and create a competition to redesign existing estates. Central government should support reform.

- This report is not arguing against multi-storey apartment blocks in all situations. But it should only be allowed if it fits with the local area and local people support it.
- A large scale programme of estate redevelopment could deliver the homes London needs while building areas that are popular and homes that stand the test of time. This is much more preferable than the current limited redevelopment which is delivering far too few homes but cramming in very high densities in a few sites.
- The Mayor’s office should commission a full study of how redeveloping multi-storey estates into streets and houses, including case studies in specific areas and how many areas could be redeveloped. This should give a clearer idea of how many homes this could deliver in the next few years and how it could be done.
- The London Plan should remove density targets that assume higher is always best. It should remove any rules that make traditional streetscapes difficult. It should feed in to central government where national rules make this difficult.
- For example, some of the current building regulations may make it difficult to build attractive streetscapes. The Mayor’s office should act as champions in removing these barriers in partnership with central government.
- The London Plan should incorporate the work of the study and require all large scale estate redevelopments go through neighbourhood plans and referendums.
- There should be a London-wide right to ‘override’ local planners where what is proposed in neighbourhood plans or local plans is not supported by local people, and consultations fail to offer real choice. This would open up an estate redevelopment for a set period to new neighbourhood plans.

- This method would create real competition where different developers could present different visions for local people to choose from. This would stop a bad neighbourhood plan being proposed and when this fails, control returning to the council. It would be a real choice for local communities.
- London should set the aim to ensure that the proportion of social tenants with children living on the upper floors of multi-storey blocks falls in line with the share of private tenants. This should not be done by increasing the numbers of private tenants with children living in multi-storey blocks above the 3rd floor.
- If the Mayor fails to take a lead on this area then local authorities should implement estate redevelopment in their area, use neighbourhood plans, and remove density targets (if possible). This will help more homes be delivered.
- We hope that neighbourhood plans that do come forward find the arguments in this report helpful and we urge them to use them as often as possible.
- We call on the Mayor's office or an institution of London-wide repute (e.g. the Evening Standard) to run a competition with a cash prize and, if possible, easier planning permission where entries:
 - Are high density, beautiful streets that redevelop a multi-storey estate
 - Would win local people over in a neighbourhood plan and inspire people
- We call upon planners, architects and others to help us create streets, and for policy makers to help realise a vision of a better London which begins to tackle its housing crisis.

1

Repeating the Multi-Storey Errors of the Past

From houses and apartments to multi-storey estates...

Social housing built after the First World War and immediately after the Second World War was generally of a high standard. It followed the logic of earlier commercial development – being largely composed of houses on streets with small gardens. These were often referred to as ‘cottage estates’ and very much followed the tradition of the Garden City ideal.² Even blocks of flats were typically two storeys high and very rarely more than five. They tended to be of a limited scale, well built, constructed of materials that matched the locality, and normally kept to a fairly conventional streetscape.

However, from the 1950s this began to change. Architectural fashion (Le Corbusier of course but also home grown architects such as Alison and Peter Smithson) proclaimed the possibility of rebuilding cities as ‘streets in the sky.’³ And the political pressure was to build as many homes as possible as quickly as possible. The Conservative 1956 Housing Subsidy Act favoured high-rise housing. Flats of four, five and six storeys obtained much larger government subsidies. And above six storeys the subsidy rose by a fixed amount for each additional floor. A flat on a four storey block received £20, a flat in a six storey block received £38, 2.3 times the subsidy paid on a house. Increasing by £1.15 each floor this multiple over a normal house rose to 3 for a flat at fifteen storeys and 3.4 for one at twenty storeys.⁴

By subsidising otherwise uneconomic buildings these policies achieved their ends. In the twenty years from 1955 around 1.5 million homes in streets, squares and alleys were demolished – about 10% of all homes in the country.⁵ Many of these were run down and extensive use of compulsory purchase was made in order to progress ‘slum clearance’. Two wars, depression and (above all) rent controls that limited the return that could be made from them starved them of repairs and investment for a generation. Unfortunately they were replaced with a whole generation of 1950s, 60s and 70s housing estates which ignored how people actually wanted to live. They ignored the strong tradition of indigenous house building still being practiced after the war – the Span housing by Eric Lyons, for example, or the best housing by Tayler and Green.⁶ Many instead took the idea of the tenement block to a new extreme with high-rise buildings and medium-rise buildings many hundreds of metres long with overhead walkways, long internal corridors, multiple entrances and many hundreds of flats inside. By 1979 4,500 tower blocks had been built throughout Britain, usually erasing

² Indeed the 1918 Tudor Walter standards which defined minimum standards for social housing (room sizes, number of windows, density of homes per acre) were in part developed by Raymond Unwin the architect of Letchworth Garden City. Towers, G (2000), *Shelter is not enough*, p. 50.

³ Le Corbusier’s ideas enjoyed enormous prestige in post-war Britain. His vision was to sweep old grimy coal-smearred houses and replace them with an ordered townscape of towers, avenues and welkways. Le Corbusier felt that ‘the design of cities was too important to be left to the citizens.’ Sandbrook, D. (2006), *White Heat*, p. 622. The Smithsons first proposed the concept of linked medium-rise concrete slabs (first labelled ‘streets in the air’) in an unsuccessful competition entry of 1952. It was first realised in Park Hill, Sheffield. Glendinning, M. and Muthesius, S. (1994), *Tower block: Modern public housing in England, Scotland, Wales and Northern Ireland*, p. 116.

⁴ Dunleavy, P. (1981), *The Politics of mass housing in Britain*, p. 37.

⁵ Holmes, C. (2003), *Housing, equality and choice*, p. 9.

⁶ See Simms, B. (2006), Eric Lyons and Span or Harwood, P. and Powers, A. (1998), *Tayler and Green – The Spirit of Place in Modern Housing*.

all trace of the streetscape which had preceded them. The winner of one of the Department of the Environment Design awards in the 1970s was for a building half a kilometre long.⁷

Then from multi-storey estates to houses and apartments...

During the late 1960s and early 1970s communities started campaigning against being forced into tower blocks. Government agencies and the private sector gathered the data which showed not just how unpopular multi-storey living was (that was obvious) but also its strong correlation with poor social outcomes. Architects and town planners lost confidence. In 1977, one of the apostles of monolithic slab-blocks, Peter Smithson, admitted that he had 'made a big mistake' in his monumental designs for the Robin Hood Gardens estate.⁸ In 1980, the architect Walter Segal wrote;

'To humanise huge structures by architectural means is an unrewarding task. The loss of identity, the divorce from the ground and the collectivisation of open space pose dilemmas that cannot be disguised by shape, texture, colour and proportion. A good view over landscaped space compensates only a few. The human animal does not appreciate being reduced to the scale of a termite.'⁹

One tower block was so badly built it collapsed (Ronan Point which now forms the layer of hardcore under London City Airport).¹⁰ Others were demolished (for example Oak and Eldon Gardens in Birkenhead). Fashion and planning guidelines changed. Both parties shifted ground in response to the strong reaction against multi-storey modernist building. The subsidies to build high were reduced under the Labour government of Harold Wilson, and with the reduction in council housing construction under Margaret Thatcher, who also made clear her distaste for modernist architecture, multi-storey construction slowed and high-rise construction ceased completely. No private developers were prepared to build them. For twenty years far more houses were built than tower blocks or flats. Between 1979 and 1998 only 6 buildings higher than 35 metres were built in Britain. In 1997, 47% of new homes were detached houses. Only 14% were flats.¹¹

But now back to multi-storey estates again...

The turn of the century saw a new push by the advocates of high-rise living, notably in the 1998 Rogers report for the government's urban task force, *Towards an Urban Renaissance*. This argued that people would accept high-rise living and that policy should be altered accordingly. In 2000 and 2005 central government's Planning Policy Guidance Note 3 was deliberately changed to encourage higher density and higher rise developments.¹² Specifically in London, the then mayor, Ken Livingstone, aggressively supported this approach stating 'I made my view absolutely known – I raised it again and again at meetings – that I would favour higher buildings and higher densities.' The London Plan put this into action with many assertions that density should be increased and tower blocks raised: 'the Mayor will promote the development of tall buildings ... [the boroughs] should not impose unsubstantiated borough-wide height restrictions.'¹³ The London Plan also set important density targets which have dominated development planning over the last decade.

7 In one 1980s survey these huge medium size dwellings were even less popular than tower blocks. Coleman, A. (1985), *Utopia on trial*, p. 35.

8 Cited in Stewart, G. (2012), *Robin Hood Gardens – the search for a sense of place* (Wild Research), p. 15.

9 Cited in Hanley, L. (2007), *Estates – an intimate history*, p. 115.

10 The failure of Ronan Point in 1968 was probably the most symbolic of all tower block failures. Shoddily built, a gas bubble caused by inferior materials resulted in an explosion when the building was only two months old killing four. One tenant commented subsequently, "I wouldn't live there rent free." Towers, G (2000), *Shelter is not enough*, p. 41.

11 National House Building Council cited in *The return of high-rise Britain*, BBC website, 1 March 2004.

12 In 2006 Planning Policy Guidance Note 3 was replaced with Planning Policy Statement 3 which nevertheless kept minimum density targets.

13 Greater London Authority (2004), *The London Plan*, p. 181. This is just one reference among dozens. Also see p. 6, p. 46, p. 54, p. 65, p. 68 and many others.

These targets related to what was termed the 'PTAL'. The PTAL is the standard UK measure of public transport accessibility taking account of distance to transport hubs and the service level at the morning peak (from 08:15 to 09:15). The idea behind it is that the more public transport there is then the higher density any development should be.

A score of 1 indicates a very low access to the location by public transport. A score of 6 indicates excellent access by public transport. Hr/unit gauges typical home size by measuring habitable rooms (Hr) per unit (house or flat). U/ha is a density target defined as number of units (house or flat) per hectare. Hr/ha is a measure of existing density defined as habitable rooms per hectare.

Of course in London then most areas have quite a high score on the PTAL measures, because London public transport is quite extensive. This means that new developments are often required to be very high density. The targets are set out below.

Table 1.1: London Plan 2004 and 2011 London Housing Density targets

Setting	Public Transport Accessibility Level (PTAL)		
	0 to 1	2 to 3	4 to 6
<i>Suburban</i>	150–200 hr/ha	150–250 hr/ha	200–350 hr/ha
3.8–4.6 hr/unit	35–55 u/ha	35–65 u/ha	45–90 u/ha
3.1–3.7 hr/unit	40–65 u/ha	40–80 u/ha	55–115 u/ha
2.7–3.0 hr/unit	50–75 u/ha	50–95 u/ha	70–130 u/ha
<i>Urban</i>	150–250 hr/ha	200–450 hr/ha	200–700 hr/ha
3.8–4.6 hr/unit	35–65 u/ha	45–120 u/ha	45–185 u/ha
3.1–3.7 hr/unit	40–80 u/ha	55–145 u/ha	55–225 u/ha
2.7–3.0 hr/unit	50–95 u/ha	70–170 u/ha	70–260 u/ha
<i>Central</i>	150–300 hr/ha	300–650 hr/ha	650–1100 hr/ha
3.8–4.6 hr/unit	35–80 u/ha	65–170 u/ha	140–290 u/ha
3.1–3.7 hr/unit	40–100 u/ha	80–210 u/ha	175–355 u/ha
2.7–3.0 hr/unit	50–110 u/ha	100–240 u/ha	215–405 u/ha

These targets, which can be used to reject planning applications, implicitly argue that higher density is always better whether it be a new estate with often double the density of the post-war developments or a high-density high-rise infill. While, as discussed later, we can increase the densities of the post-war estates by replacing them with conventional terraces, whether it is wise to go beyond this to some of the ultra-high density developments of recent years must be questionable.

Importantly, although the 2011 London Plan has reduced the verbal focus on increasing density, the actual density targets remain exactly the same. The change of political regime from Ken Livingstone to Boris Johnson has not changed the

London Plan's strong focus on putting more people and higher buildings into less space. The density targets cited above are identical in the Livingstone and Johnson London Plans.

These changes achieved their end. By 2004 24 buildings higher than 35 metres were being built per year. In 2003 there were only 1,800 high-density flat developments in England. By 2007 there were 5,600 with 3,800 under construction and 5,600 more with planning permission. This is a staggering 740% increase in only four years. Not surprisingly, overall house starts in the South East made up of flats or maisonettes rose from 17% in 1998 to 46% in 2003. The figures today are probably even higher.¹⁴ One leading real estate advisor has talked of a 'resurgence of high-rise living'.¹⁵ A study by the Cambridge Centre for Housing and Planning Research has talked of a 'sharp increase in housing densities, and in a shift from houses to flats. As a result housing association in London have built ... housing stock built to exceptionally high densities relative to the standards of the recent past.'¹⁶

Many of the plans being put forward at present are again for multi-storey living. They are so different from the town around them that many can be legitimately described as self-contained, physically distinct developments. Just as in the 1960s and 1970s there is little chance of many of them relating to or 'plugging into' the rest of the city. We are in very severe danger of repeating the failures of those decades and forcing on some of our citizens an urban framework that the rest of us consistently reject – the multi-storey estate. Just because the architects' pictures look nice and because we are using less exterior concrete does not mean we are giving people what they really want or need.

One example (among many) is the re-development of the Ferrier estate in Greenwich. Built in the late 1960s and 1970s of concrete panels the Ferrier estate was enormous, with eleven 12-storey towers and many other large medium-rise buildings. By 2003, after no more than thirty years of unpopularity and crime, the decision was made to demolish and start again.



From Ferrier Estate (1970) ... to Kidbrooke Village (2012). An improvement but still tower blocks and no real streets

The first parts of the new Kidbrooke Village development which is replacing the Ferrier estate are now occupied. More are being built. Kidbrooke Village has no concrete panels, a better name and is being well advertised. But little else has changed. In the last analysis, we have replaced one enormous development of tower and slab-blocks with few real streets with another enormous development of tower and slab blocks with few real streets. It still does not look like or function as the rest of London that most people want to live in.

14 www.skyscrapernews.com. Kunze, J. (2005), *The revival of high-rise living in the UK and the issue of cost and revenue in relation to height*, University College London, p. 5, p. 21. Wallace, A. (2010), *Public attitudes to housing*, p. 19. CBE (2005), *Better neighbourhoods*, p. 9.

15 CBRE Q1 2012, *UK Residential View Point*, p. 1.

16 Jones, M. (2012) *High density housing – the impact on tenants*, p. 2.

Beguiled by high-spec, high profile town centre developments, many commentators assume that building standards are somehow higher and blocks of flats somehow better than they were a generation ago. This is not always true. Even sympathisers of building big have eviscerated recent design standards and materials. Owen Hatherley, the author of a defence of modernism, has written of ‘the new ruins of Great Britain’ and specifically condemned (among many other buildings) the new St Paul’s Tower in Sheffield as ‘a desperately tacky high-rise; the panels that can be seen on the lower floors suggest a

“New British homes have never been so small. The average new-build home in the UK is 11% smaller than the average home in the UK. And British new-build homes are now the smallest in Europe.”

rather unexpected revival of seventies corporate architecture.’¹⁷ Far worse, because it is far more impactful on real peoples’ lives, many modern blocks of flats continue to use (as often in the 1960s or 70s) lightweight, pressed steel ‘C’ section stud wall framing with plasterboard attached. These are cheap but these are not robust. Where used as ‘party’ walls between dwellings or

to create corridors, the fire and sound insulation is created usually by simply building two walls rather than one. This is easily breached by impact damage or later works to install or enhance services. The long term sustainability of such construction remains very poor. Also reminiscent of the 1960s and 1970s many new schemes are cutting future running costs by eschewing any gardens and using exclusively ‘hard landscaping.’¹⁸

Further, this second generation of multi-storey flats is actually worse in some important ways. Firstly, the desire to meet high environmental standards has led to buildings so well insulated that they are almost sealed off from the outside world with very limited natural air-flow. Because they are built with heavily insulated, lightweight frames, rather than traditional masonry walls, they lose heat very quickly if windows are opened. Accordingly, many now require either forced ventilation or even full air-conditioning to maintain acceptable living conditions and provide adequate ventilation to prevent damp or moisture from cooking or washing from building up. This (needless to say) undermines their environmental credentials. But fitting, let alone maintaining, air conditioning is sometimes too costly for affordable homes. The necessary air-conditioning or ‘whole house’ ventilation system is therefore sometimes replaced with a cheap extractor fan. Create Streets have seen one development, less than ten years old, in East London, where residents are consequentially experiencing heavy condensation, dampness and extensive mould growth. This has health implications. We are aware of many other examples where current policies have led to poor quality housing construction.

Secondly, new British homes have never been so small. The average new-build home in the UK is 11% smaller than the average home in the UK. And British new-build homes are now the smallest in Europe. New homes are 16% bigger in Ireland, 53% bigger in the Netherlands and 80% bigger in Denmark. A 2004 Joseph Rowntree report found that new homes were shrinking yet further and the situation was getting worse.¹⁹ A 2009 report by the Royal Institute of British Architects (RIBA) found the same:

¹⁷ Hatherley, O. (2010), *The New Ruins of Great Britain*, p. 79.

¹⁸ Jones, M. (2012) *High density housing – the impact on tenants*, pp. 8–9.

¹⁹ RIBA (2011), *The case for space*, pp. 9–10.

*'Anecdotal evidence suggests many new build flats, particularly those in city centres designed predominantly for the investment market, are very small. There are lots of examples of flats where floor space amounts to less than 40m²...It is astounding and alarming that while every other consumer good has improved in quality over the course of the twentieth century English housing appears to be getting smaller, meaner and less fit for purpose.'*²⁰

Unsurprisingly 47% of residents of new build homes find their homes limit their choice of furniture. Fifty seven per cent do not have enough storage space.²¹ Many purchasers are buy to let investors not potential residents. With tiny poky flats we have the makings of future slums if poor demand and falling rentals ever reduce the incentive to invest in their maintenance.

Tiny flats would seem to be a likely outcome of another current example – the currently proposed redevelopment of the Heygate Estate near Elephant and Castle in South London. The Heygate is a large neo-brutalist estate of tall concrete blocks surrounding communal gardens. Completed in 1974 it never established any true sense of community and quickly established a reputation for violence and crime.

After many years of increasing dilapidation, Southwark Council adopted a regeneration programme that included demolishing the Heygate estate, in 2004. The economic context and practical difficulties, notably the levels of asbestos in the site, have delayed its execution. This has permitted time for revision. The Masterplan of February 2012 mitigates some errors in earlier schemes. The site is less sequestered. Ground level pedestrian streets pass through it and connect to neighbouring thoroughfares. Not all buildings are flats and most social housing is in medium-rise sections of the scheme. A gradation of building heights provides 'defensible space', avoiding the monolithic segregation of the past.

However, there is only a single street of houses. The scheme is strongly driven by the high density targets in the London Plan which seem to have Talmudic force and mystery. The density of occupation, relative to what went before, is more than doubled (2,462 units replacing 1,100). This is driven by immediate return to the developer, not long term value to the ultimate owners or the overall quality of the neighbourhood. Other viable alternatives could have been explored. Architecturally, many flats will be very small. There is minimal private outdoor space. The single very large green space proposed seems likely to be as unloved as most communal areas on large estates are now. Plural spaces of more modest size might have stood a better chance of being 'owned' by nearby residents and rendered more secure.

Too much relies on the resignation rather than the active support of local people. Only 140 of the original residents have said they wish to return. Many locally 'just want something to happen' after years of delay. The project typifies current missed opportunities.

The start of a counter-reaction against high density?

Just as in the 1960s and 1970s many people have opposed ultra high density, multi-storey living. As the next chapter will show then this type of living is as unpopular as ever. This has led to the incoming coalition government making welcome changes in national policy in this area. In June 2011 the government changed its formal policy to abandon minimum density targets, although it still insisted that 'the density of existing development should not dictate that of new

20 RIBA (2009), *Improving housing quality*, p. 9.

21 RIBA (2011), *The case for space*, p. 9

housing.’²² The 2012 National Planning Policy Framework instead permits local planning authorities to ‘set out their own approach to housing density to reflect local circumstances.’²³

However, local plans continue to set high density targets. London in particular is pushing for a very high density future. The 2011 London Plan contains the same density targets as the 2004 London Plan. And schemes being developed now are still referencing these high targets. For example London housing density targets were quoted in conversation by the developers of the 2012 Heygate Estate redevelopment as the ultimate reason why the site had to be more than doubled in density from 1,100 units to 2,462 units.

In London, the new planning framework gives huge power to the Mayor of London. This is an important opportunity. The London Plan is targeting the construction of 322,100 homes during the next ten years, or 32,000 homes a year.²⁴ This is the bare minimum required to meet the projected population growth. These homes are needed if we are to control the rocketing cost of renting. Unfortunately, in the twelve months up to the end of August 2012 construction was started on only 16,000 homes in London.²⁵ This is a fraction of the number required just to keep rents and house prices stable, let alone start reducing prices to a more affordable level. Policy Exchange have discussed the broader issue of how failing land and development models intersect in reports such as *Cities for Growth* and *Why Aren't We Building More Attractive Homes?* But what is certainly clear is the current model for delivering enough homes in London is not working.

We urgently need more new homes to revitalise the neighbourhoods still blighted by post-war development. The East of London can and should rise to challenge the West of London in wealth, infrastructure and quality of life. There is a need to make sure that those on low incomes are not forced to live in homes that only exist because some town planners believe they should.

We are in danger of forgetting our past and repeating its mistakes. The current notion that we need to build ultra-high density multi-storey in London is mistaken. People reject it and is not delivering the homes we need or that people want. We are in danger of creating a second generation of shoddy homes – while also failing to build enough homes.

This is what Create Streets wants to help prevent. Achieving our goal would not resolve social problems at a stroke. Far from it. But it would at least ensure that we are not loading the dice against the poorest members of society.

22 Planning Policy Statement 3 (2011), p.17.

23 National Planning Policy Framework (2012), p. 13.

24 Mayor of London, (2011), *Housing Draft Supplementary Planning Guidance*, p.14.

25 Table 217 House building: permanent dwellings started and completed, by tenure and region (quarterly) and Table 253a House-building: permanent dwellings started and completed, by tenure and district, September quarter 2012 from www.gov.uk

2

People Want to Live in Streets

There is unambiguous evidence that almost all people want to live in streets, not in high-rise flats. Those who live in streets and houses are happier about where they live than those in multi-storey units. It is no coincidence that most high-rise living, particularly for families, exists in large scale social housing, where residents have much less choice than the private sector.

The evidence from polling and surveys

In poll after poll it is clear that almost all British people (and most people around the world) would rather live in houses in streets than flats and would almost always avoid tower blocks. At around the same time the government were imposing new high density targets, one survey by MORI found that only 2% of 1,018 British respondents said they wanted to live in a 'modern loft style apartment.' Zero per cent (not a single person) wanted to live in a 'tower block flat'. In contrast, 89% wanted to live in a house in a street. In another MORI national survey, 67% did not want new tower blocks put up for living accommodation. Even if they were not personally forced to live in them, people clearly oppose new high-rise towers.²⁶ In a third survey MORI survey in 2005, less than 1% wanted to live in any sort of high rise apartment at all.²⁷

The same view emerges strongly from every survey in any decade. Mid-twentieth century Mass Observation Surveys reported consistently that people hated living in flats. A British government survey of housing in London, Liverpool and Leeds in the late 1960s found that over two-thirds of families with children in multi-storey estates wanted to move into a house.²⁸ In 1967 the GLC found that 75% of their applicants preferred a house with a garden and one academic concluded in 1981 that 'very substantial majorities of residents in high flats would prefer to live in houses according to all the studies asking about housing preferences.'²⁹ Over 80% of residents of one of the iconic British multi-storey housing developments, Robin Hood Gardens, wanted them pulled down in 2007.³⁰ Even more recently research carried out by MORI for RIBA on what people 'need and expect' from their homes found that the British continue to dislike communal living. 'Private gardens were preferred to shared gardens'. This has particular relevance for London and the Mayor's office since 'those in urban London [were] most keen across all the groups to have some outside space in their new property.'³¹

People in tower blocks are the least happy with their homes. In seven controlled comparative surveys of people living in tower blocks and in low-rise housing, the people in high-rise blocks were the least satisfied – even if their social and economic status was identical. In the first survey, British flat dwellers complained more about privacy,

26 Most desirable housing types overall were the bungalow (30 per cent), the village house (29 per cent), the Victorian terrace (16 per cent) and the modern semi (14 per cent). *Bungalows are people's choice in England*, MORI 2002. *Tall Buildings – public have their say for first time*, MORI 2001.

27 Evans, A., Hartwich O.M. (2005), *Unaffordable housing*. pp. 21–2.

28 Towers, G. (2000), *Shelter is not enough*, p. 71.

29 Dunleavy, P. (1981), *The Politics of mass housing in Britain*, p. 94.

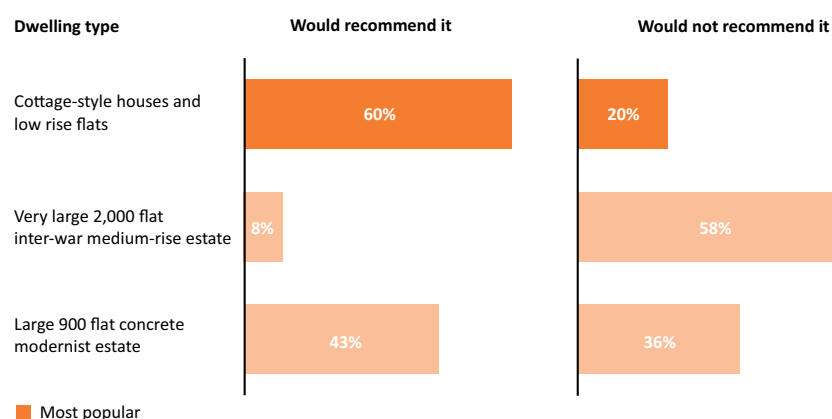
30 Cited in Stewart, G. (2012), *Robin Hood Gardens – the search for a sense of place* (Wild Research), p. 16.

31 RIBA (2012), *The way we live now*, p. 49.

isolation, loneliness and noise. In the second survey, an American comparison of otherwise equal college students randomly assigned to high or low-rise buildings, those in low-rise buildings were more satisfied. A nationwide Canadian survey found satisfaction highest among those in houses and lowest among those in high-rises. In a New York comparison of randomly assigned social tenants those in high-rise buildings were less satisfied with their building than those in low-rise buildings. The same was true of a survey of moderate-income households where high-rises were found to be less satisfactory than terraced houses or low-rise flats. In a sixth study, the taller the building, the lower the residents' satisfaction even when several possible influences (education, income, age) were taken into account.³² Finally, a 2009 Indian study of 512 randomly selected families found a starkly 'unfavourable perception of the housing environment by the residents of high-rise buildings.'³³ In general people were clearly opposed to high-rise living.

Another recent, though less wide-ranging, British study compared three West London estates. They interviewed residents of Old Oak – a post-First World War development of 'homes for heroes', a network of streets and houses with some two storey flats. They interviewed residents of White City – a huge 1930s estate with 2000 flats and large balcony blocks with outdoor corridors. Finally, they interviewed residents of Edward Woods – an estate of 900 flats in high and medium-rise concrete blocks. The reports' authors described Edward Woods as 'the typical post-war "concrete complex" modernist estate built in the hope of elevating social conditions through building upwards rather than out.' The researchers asked residents whether they liked living on their estate and why. The answers were clear. Residents living in the only low-rise estate with streets (Old Oak) were far happier than the residents of White City and Edward Woods. Six out of ten of the residents of Old Oak interviewed would recommend it as place to live. Only two out of ten would not. By contrast only 43% of the Edward Woods residents interviewed and only 8% of White City residents interviewed would recommend those estates as a place to live. Thirty six per cent would not recommend Edward Woods as a place to live and 58% would not recommended White City. The difference is stark.³⁴

Figure 2.1: Percentage recommending and not recommending estate as 'place to live'



Source: Lane, L. and Power, A. (2009) *Low income housing estates*

32 Cited in Gifford, R. (2007), "The Consequence of living in High-Rise Buildings" in *Architectural Science Review*, vol. 50. pp. 4–5.

33 Chatterjee, M. (2009), 'Perception of Housing Environment among High-Rise Dwellers' in *Journal of the Indian Academy of Applied Psychology*, 35, pp.85–92.,

34 Lane, L. and Power, A. (2009) *Low income housing estates*. In fact four estates were studied but no detailed interviews were conducted at the fourth so this has been excluded from our synopsis. P. 7, pp. 44–52.

People also know specifically what they dislike about high-rise. In an early 1980s survey of residents' views of London multi-storey housing, there were 258 specific and spontaneous negative comments about multi-storey housing and 67 spontaneous positive ones – a ratio of nearly four to one against. The main dislikes were the way the estate was set out and the lack of individual gardens (54 complaints), the height of buildings (45 complaints), the type of corridors (35 complaints), the number of flats per block (31 complaints), overhead walkways (30 complaints), the play areas (24 complaints) and the way in which some blocks were raised on stilts (14 complaints).³⁵ More recent research for RIBA also highlights how people continue to find communal gardens deeply unsatisfactory. RIBA found that typical apartment block residents interviewed 'appreciated that the properties were set in a natural area [but] they felt that this space was difficult to use as a personal outdoor area as sharing the area with others did not tend to work well.'³⁶ The evidence is clear. People want gardens rather than communal space on estates.

Urban planners and designers who work with communities to understand what they truly want find that it is conventional streets that are consistently the most popular. The American architect and planner, Anton Nelessen, has devised the Visual Preference Survey. This asks participants in a neighbourhood to rank images of places, spaces and land uses on a scale from +10 (love it) through 0 (indifferent) to -10 (hate it). Results across surveys have not been tabulated but recent surveys show a strong preference for streets you can walk in as opposed to large buildings or high-rise. A recent survey in Washington State showed 76% opposed to new high-rise. Sixty per cent favoured three storey town houses. Another recent survey in Connecticut found participants liked 'tall buildings, close to [the] sidewalk' and disliked anything 'five storeys or taller.' Professor Nelessen has also commented from his extensive experience that members of the public 'when left on their own to design, after minimal orientation ... will always produce a design that looks like a traditional community.'³⁷ Human beings know what works and what doesn't.

The evidence from where people actually live and what they will pay for

The evidence on what people say they like is backed up by the hard data on where they live and what they will pay for. In 2001 there were 21.6 million households in England and Wales. 4.2 million of these (19%) lived in the social rented sector. However, the social rented sector accounted for 48% of households living on or above the second floor of a building, 56% of those living on or above the third floor of a building, and 71% of those living on or above the fifth floor of a building. Strikingly of 142,000 households living on or above the second floor of a building, 100,000 were social tenants. The higher the floor the more likely an inhabitant is to have been put there by the council or a housing association and the less likely to have chosen it in the private sector.³⁸

An even more dramatic disconnect between what people choose to pay for and what social tenants have to put up with emerges from comparing households with children. People with kids really don't like living high. 6.2 million households contained children in 2001. Of these 1.4 million (21%) were living in social tenancies. Of the 4.8 million households in the private sector there were only

35 Coleman, A. (1985), *Utopia on trial*, p. 33.

36 RIBA (2012), *The way we live now*, p. 52.

37 Nelessen, A. (1994), *Visions for a New American Dream*, p. 100. Visual Preference Surveys accessed at, <http://www.easthamptonct.org/pages/Booklet7.pdf> and <http://cosweb.ci.shoreline.wa.us/uploads/attachments/pds/towncenter/VPSR.pdf>. Accessed October 2012.

38 Office of National Statistics, www.ons.gov.uk, 2001 Census. 2011 Census data not yet available.

43,193 owner-occupied or private rented households with children living on or above the second floor of their building. However, there were 100,503 households with children in social tenancies out of the 1.4 million households in this sector living on or above the second floor. Put sharply, families in social tenancies represented only 21% of all households with children. But they represented 70% of households with children living on or above the second floor.

The gap widens the higher you go. There were only 5,475 owner-occupied or private rented households with children living on or above the fifth floor of their building. In contrast, there were 20,122 households with children in social tenancies living on or above the fifth floor. Seventy five per cent of children living on or above the third floor, and a startling 79% of those living on or above the fifth floor were social tenants despite the fact that social tenants only make up 21% of households with children. If you are a child in social housing you are sixteen times more likely to live on the fifth floor or above than a child in private housing. In Inner London 31% of children living in social housing live in a dwelling that has a minimum floor that is the second floor or above. For all children the comparable figure is 2.3%.³⁹ This is a staggering gap.

Clearly, families very rarely choose high-rise multi-storey living if they can afford an alternative. High-rise living is largely confined to those in social tenancies. This is even more so for those with children. Most people who can afford to choose to live nearer the ground.

The housing market further reflects these strong preferences. Put simply, other things being equal (and often even when they're not) square foot for square foot conventional houses in conventional streets sell for more than flats in tower blocks or medium-rise leviathans. There are a few top end 'apartments' that charge a premium. However they are vanishingly small as a proportion of the overall housing stock and are largely confined to a few exclusive enclaves (the Barbican or high-rise developments looking over the Thames or Hyde Park). They are so unpopular that it is hard to get a mortgage to buy one. It is worth quoting at length the website findaproperty.com which also cites a mortgage broker from Charcoal:

*'Former council flats ... They're not just cheaper, they're often massively so.... Ask most people what they think of your average inner-city council estate and they'll probably conjure up a desolate world of broken lifts, boarded up windows, and empty wind-swept spaces strewn with litter.... A flat in a tower in a high-rise ex-local authority block is normally a no-no – usually, I'd say don't go above five floors because it will be difficult to get a loan.... Ray Boulger of Charcol explains: "Many lenders will have a ban on all flats and others won't consider anything in a tower block above a certain number of storeys, usually four, five or six. Whether you're buying on the ground floor or the top is irrelevant. It's the number of floors in the whole building that will be important. And concrete is also a problem, mainly because some Sixties blocks were made from substandard material and have not weathered well. There are exceptions, of course. If it's in a good location, of good quality (though brick is generally best) and there is clearly strong demand, lenders won't have a problem (e.g. the Barbican)... The more they look like a typical council property the cheaper they will usually be... Low-rise (under five storeys) brick-built developments, and those in good locations, are the best bet.'*⁴⁰

³⁹ Ibid.

⁴⁰ www.findaproperty.com
accessed in February 2011.

By contrast, typically, older houses in older unspoilt streets which do not have modern developments and particularly modernist developments nearby are more popular and expensive than newer houses in 'spoilt' streets. Houses are typically more popular and expensive than apartments of the same surface area and are also normally far cheaper for owners to maintain. Locations with a real sense of 'place' are most popular of all, with a local cluster of shops and a genuine sense of a physically self-contained community (think of the high prices of all the 'villages' in London from Walthamstow Village in the north via Chelsea to Dulwich in the south). Middle class or rich areas tend to be more traditional in streetscape than poorer areas (compare Pimlico to Borough or Islington to Tooting). Most people know what they are looking for in their local neighbourhood and know when they see it. The irony is that many of the streets torn down as slums and replaced by estates are now the least popular location in that area, while the modest houses on the nearby streets that survived are often highly valuable.

The distaste for multi-storey housing has been clear for decades

This general distaste for living in multi-storey housing is not new. It has been clear over many years in what nearly all people from nearly all backgrounds have said or done. The *Guardian* journalist Lynsey Hanley grew up on a council estate in the 1970s and 80s. She now lives in an ex-council flat in London and has written, 'My heart sags every time it senses the approach of those flat, numbing boxes that prick the edges of every British town. I feel bad talking about them in this way as though every house were a human waiting to be hurt.'⁴¹

Multi-storey housing seems to contradict so many essentially private and domestic notions of British life. In 1940 George Orwell defined the English culture that is 'most truly native' as 'the pub, the football match, the back-garden, the fireside and the "nice cup of tea" ... It is the liberty to have a home of your own, to do what you like in your spare time, to choose your own amusements instead of having them chosen for you from above.'⁴² Orwell's sense of England was not of tower blocks and communal facilities but of the private virtues of the small suburban villa, the *soi-disant* cottage or the worker's terraced house. It is no surprise that this vision of homely domesticity triumphed when the number one attribute people look for in an area is that it is a quiet area.⁴³

Tower blocks, being made of glass and concrete, also lacked any sense of place. The Edinburgh tenement block is clearly distinct from the red brick back to back of Birmingham, the sandstone terrace of Oxford or the stock brick house of London. The more successful apartment blocks of the early twentieth century have also tended to be more domestic in scale and to be built of more emollient local materials (be it brick, sandstone or granite). Lynsey Hanley went on, 'I find myself wishing that I'd come from a real place, with proper chimneyed houses instead of endless tragic boxes with people in them.'⁴⁴ Ironically some of the rapidly assembled prefabricated houses (prefabs) built to alleviate the post-bombing housing shortage permitted residents to achieve this sense of place because they were houses. They were small but they were self-contained with front and rear gardens. Their few remaining (now elderly) residents want to live out their lives in their prefabs.⁴⁵

41 Hanley, L. (2007), *Estates – an intimate history*, p. 5.

42 Orwell, G (1941), *The Lion and the Unicorn*, pp. 39–40. (Penguin edition)

43 *Bungalows are people's choice in England*, MORI 2002

44 Hanley, L. (2007), *Estates – an intimate history*, p. 37.

45 *Ibid.* p. 83.

Certainly *avant-garde* architects who design multi-storey housing seem to prefer living in conventional streets. The architect Ernő Goldfinger (whose buildings so displeased Ian Fleming that he appropriated Goldfinger's name for a James Bond villain) did more than most. He decided to live among those whom he described as 'my tenants' by spending two months in flat 130 on the twenty-sixth floor of Balfour tower which he had designed. Floor by floor he invited all the tenants up for champagne parties. Then he left and went back to his terraced house in Hampstead.⁴⁶ More recent apostles of modernism make the same decision. Richard Rogers designs huge temples of steel and glass but chooses himself to live in a stucco-fronted Victorian terraced house in traditionally set out Kensington and Chelsea.⁴⁷ Lord Rogers' spirited defence of one of the most hated of post-war blocks (Robin Hood Gardens) as 'majestic' led the journalist Simon Jenkins to comment, 'I doubt if its defenders have gone near it. Architecture's love for Robin Hood Gardens is strictly platonic.'⁴⁸ It would not be unfair to describe the creation of the large post-war estates as the work of well-heeled utopians ignoring what the people wanted in favour of what they thought the people should want.

The dislike for multi-storey estates is not just a new or uniquely British phenomenon. Well-connected streets, not massive high-rise blocks set back from the public space, have been at the heart of our civic culture for millennia. They are how we get about and how we interact with one another. Academics have spent lifetimes demonstrating what any driving tour will tell you. From Riga to Reykjavik, from Aberdeen to Athens, successful villages, towns and cities have all depended on, indeed been defined by, well connected streets.⁴⁹ Nor has technology changed this. The Harvard economist, Edward Glaeser, has recently cited the fall and rise of New York, or the emergence of a hub of technology firms to the east of the City of London (Silicon Roundabout) to argue that 'proximity has become ever more valuable as the cost of connecting across long distances has fallen.' Smart people still need to meet each other.⁵⁰ Streets with houses or low-rise buildings make this easy. This is why the most innovative, even counter-cultural or politically subversive, neighbourhoods are often located in the most physically conventional quarters: Greenwich Village in New York, Soho in London, La Rive Gauche in Paris.⁵¹

This widely felt distaste in Britain is not merely due to the fact that 1960s tower blocks' were cheaply built or because their dull grey concrete has aged badly. Many local councils recognised at the time that they were not building what people wanted.⁵² And even when brand new they appalled. In 1971 Stanley Kubrick used tower blocks and the recently completed Thamesmead development to symbolise the vicious dystopia of *The Clockwork Orange*.⁵³

There were numerous instances of local communities campaigning against being put in their new tower blocks or trying to leave them. Across the country community groups sprung up to resist 'slum clearance' and fight against decantation into tower blocks and estates. These grew in strength and number during the late 1960s and early 1970s and played a large part in shifting public policy away from high-rise and tower block. Examples are numerous.

- In Liverpool, residents of the six year old 14-storey slab-blocks officially known as Haigh, Canterbury and Crosbie Heights (but known locally as the 'Three Ugly Sisters') campaigned for the right to leave.

46 Warburton, N. (2003) *Ernő Goldfinger: The Life of an Architect*, p. 157.

47 *The Telegraph*, 5 September 2010.

48 Cited in Stewart, G. (2012), *Robin Hood Gardens – the search for a sense of place* (Wild Research), p. 16.

49 For a highly theoretical study of the role streets play in advancing connectivity see Hillier, B. and Hanson, J. (1984), *The social logic of space*.

50 Glaeser, E. (2011), *Triumph of the City*, p. 6.

51 The nature and success of both Paris and New York more broadly support this argument and the arguments that will be developed throughout this paper. Paris is defined by streets (the boulevards of Baron Haussmann) with low or medium-rise apartments. And most of residential New York (beyond Manhattan) is low-rise. The high-rise apartments of Mid-Town or the Upper East Side are confined to a prosperous elite (most without children) and only viable due to the ability to meet the high running costs required by multi-storey housing. See below.

52 For example the London council of West Ham had to be initially persuaded by the Ministry of Housing who complained that 'the general preference in West Ham for houses rather than flats' was 'an unwarrantable prejudice.' Dunleavy, P. (1981), *The Politics of mass housing in Britain*, p. 214.

53 Just to make the point clear, the film's protagonist, the fifteen year old practitioner of 'ultra-violence' lived in 'Municipal Flatblock 18A.' Sandbrook, D. (2006), *White Heat*, pp. 617–8.

- In Glasgow, residents of the Shawfield and Old Swan areas pressed for rehabilitation of their streets rather than being moved out.
- In Manchester, The Whittington Association and then the Ladybarn Association campaigned to protect their terraced houses against demolition.
- In Birmingham, the Sparkbrook Community Association argued for rehabilitation not demolition and a few years later residents in Saltley did the same. It was largely community action that halted the programme of ‘slum clearance’ in the city.
- And in London, community groups such as the Battersea Redevelopment Action Group, the North Southwark Development Group and the North Islington Housing Rights Project all argued for the rehabilitation of their houses rather than their wholesale demolition.⁵⁴ The Beckton protest committee argued passionately against being moved into tower blocks in Newham (at one protest meeting one question to the council summed up the mood of residents: ‘you claim you’re bettering us but you’re not. You’re nicking space off us – you are going to give us less than we started with. It’s a bloody farce.’)⁵⁵

In many cases, civil servants in central government colluded with the bright new high-rise future against the wishes of what local people wanted. The Packington Estate proposal to demolish old Victorian squares in Islington and replace them with a new multi-storey estate was opposed in a campaign led by local Labour councillors. When this went to appeal the Department for Local Government quickly pushed the scheme through before Ministers had a chance to consider the case, forcing them to accept it as a done deal.⁵⁶

“The dislike for multi-storey estates is not just a new or uniquely British phenomenon”

The schemes were almost never initiated due to local pressure. As one Deptford resident recalled, ‘I can’t think of anyone who really wanted to move.’⁵⁷ When only a very few years old, much of the new multi-storey housing became ‘hard-to-let’ – to use the contemporary official jargon. Families and households simply refused to move in. Examples are endless. The Thamesmead Estate, completed in 1968, was only 40% full by 1974.⁵⁸ Across London in Haringey, 55% of housing applicants wouldn’t move to the Broadwater Farm Estate within five years of its completion in 1971.⁵⁹ Ernő Goldfinger’s much acclaimed Trellick Tower (known locally as the ‘Tower of Terror’, with a reputation for a high risk of rape in the lifts and staircases) was ‘hard-to-let’ within only a few years. And Castle Vale in Birmingham (opened in 1965) was so unpopular that by 1981 one third of the apartments were empty.⁶⁰

Though often better built, more recent large developments of flats remain very nearly as unpopular as those of forty years ago. It is true that there are some iconic high-end multi-storey developments in places like central London. However their success (which mirrors the historic success of the Barbican) is not representative. It is certainly not reflected in more ‘normal’ situations where local residents’ surveys continue to show a stubborn preference for streets and houses. To take one example, in a 2004 survey of residents’ views about the redevelopment of the failed forty year old Packington Estate, 91% of respondents wanted no development greater than 3–5 storeys, 81% opposed proposals to build up to 8 storeys and

54 Towers, G. (2000), *Shelter is not enough*, p. 71, pp. 75–7.

55 Dunleavy, P. (1981), *The Politics of mass housing in Britain*, p. 252.

56 *Second Time Round the Block*, *The Observer*, Sunday 20th March 2005.

57 *Our Streets*, Deptford High Street, screened on BBC2, 8 June 2012.

58 Sandbrook, D. (2006), *White Heat*, p. 618.

59 Hanley, L. (2007), *Estates – an intimate history*, p. 126.

60 Coleman, A. (1985), *Utopia on trial*, p. 33.

86% wanted a new development to reinstate the traditional street pattern.⁶¹ The chairwoman of the tenants association of another London development (the Aylesbury Estate in Southwark) also scheduled for demolition and for rebuilding with more flats and multi-storey housing commented simply, 'I'd rather live in a council house.'⁶² Even more recently, the East London Community Land Trust consulting on how to develop the site of a former hospital, St Clements, near Mile End, found a clear preference from the members for conventional houses in conventional streets.⁶³

To take a broader example, surveys run in the media to find the 'worst building in Britain' or similar consistently feature modernist tower-blocks and slab-blocks. None feature standard terraced or semi-detached houses. One 2001 BBC list of 'Britain's worst buildings' was entirely composed of modern tower blocks, office blocks and large developments (such as the grade II listed but locally hated Sheffield Park Hill Estate).

However 'Britain's worst buildings' were not just composed of the stained and fading concrete of the 1960s. The BBC's own 1980s White City building and the recent development of the St George's Wharf in Vauxhall, London, also featured on the list. A 2005 Channel 4 survey came up with similar results.⁶⁴ Research done by the mortgage provider, Cheltenham & Gloucester, in 2004 leads to the same conclusions. Modern monumental architecture (domestic or non-domestic) is no more popular than the buildings of forty years ago. A self-selected sample was used to produce a list of the ten worst and ten best buildings in Britain. No recently-built building featured on the list of 'best buildings.' The Dome, the Gherkin, Canary Wharf, the Scottish Parliament, St George's Wharf, BBC White City, Tate Modern, the Bullring in Birmingham, the Post Office Tower and Centre Point all appeared in the ten worst buildings list.⁶⁵ The point is not that these large buildings are necessarily bad or inappropriate as office blocks or government buildings. (Create Streets has no view on the optimum size of commercial buildings). But their inclusion does show that the public opposition to high-rise is not being fundamentally undermined by better recent construction quality. One recent writer supporting tower blocks was nevertheless forced to concede that 'tall buildings are not loved' and that most people see them as 'inhuman and unnatural.'⁶⁶

In short, the facts are clear. Opinion polls and residents' surveys, the behaviour of the housing market and the actions of local communities over decades all point to the same conclusion. Most people most of the time would rather live in a house on a street (or a flat in a low-rise building) than a tower block. And, as we shall see, it is a very sensible preference.

61 *Packington Estate Planning brief, Appendix 4* (2005), available at www.islington.gov.uk accessed in December 2011. The most popular spontaneous feedback to the survey was a request to prevent any building above four storeys.

62 Jean Bartlett cited on BBC news report by Jon Kelly, dated 12 July 2007. Available at www.bbc.co.uk accessed in December 2011.

63 Private conversation. *The Guardian*, 20 February 2012.

64 Hanley, L (2007), *Estates – an intimate history*, p. 118.

65 Adam, R. (2005), *Architectural preference in the UK – a digest of recent research*, p. 1.

66 *The Times*, *Eureka*, p. 35, p.39, May 2012.

3

Multi-Storey Housing is Bad for its Residents

Multi-storey housing is more risky and makes people sadder, badder and lonelier

Most people strongly prefer to live in houses in streets. This should alone be enough to push us toward building streets rather than repeating past architectural mistakes. However, the evidence is even stronger against multi-storey living. Creating housing on streets is not just a matter of aesthetics or quality of life through the built environment. It helps reduce much more serious problems. Even when you take account of social and economic status, tower blocks and estate-based high-rise and multi-storey living are meaningfully correlated with social breakdown, crime and misery. Even in the best of conditions, they are hard to raise children in, tend to discourage close human relations and provide a myriad of hard to police, semi-private opportunities for crime often with multiple escape routes.

It was studies showing this, carried out in the 60s and 70s, which halted the previous generation of multi-storey developments. These studies have been largely forgotten, and more recent ones which support their findings are little read. However, the findings are clear. And if we ignore them we are in danger not just of repeating the mistakes of the past but of inflicting misery in the future.

The vast majority of controlled studies show that the residents of high-rise blocks suffer from more strain and mental health difficulties than those in low-rise buildings, even when socio-economic status is identical.⁶⁷ To cite one example, a study of British military families randomly assigned to houses and 3–4 storey low-rise flats found those in flats suffered from about three times the rate of neurosis as those in detached houses whilst also being 57% more likely to need to go to the doctor and 63% more likely to be referred to a specialist. Increased sickness or mental strain were most pronounced for children under 10 and for women aged 20 to 29 and those over 40.⁶⁸ At the other end of the social spectrum a study in Hong Kong found that there was more emotional strain among people living in multiple-family units on higher floors. One 1992 study found that elderly male residents in Kolkata and Dhaka struggled with the stress created by living in high-rise buildings.⁶⁹

A 1978 study of working-class and lower middle class residents of the Bronx in New York found ‘vast differences’ between those living in high-rise and low-rise buildings. Those in high-rise had less social support, a lower sense of control over their lives and felt more crowded than their sociologically identical neighbours in low-rise buildings.⁷⁰ UK researchers have found that mothers in flats are

67 We are only aware of two studies (one from 1962 and one from 1974) with no correlation between those living in high-rise and poor mental health. The 1962 study showed slight improvements in mental health as slum-dwellers moved into high-rise. The 1974 study found comparable levels of maternal psychiatric well being in high-rise, low-rise and family dwellings. See Gifford, R. (2007), ‘The Consequence of living in High-Rise Buildings’ in *Architectural Science Review*, vol. 50. p.6.

68 Fanning, D. (1967), ‘Families in flats’ in *British Medical Journal*, 18, pp. 382–386.

69 Dasgupta, S.K., Bhattacharyya, S. & Asaduzzaman, M. (1992), ‘The impact of tall buildings on elderly residents’ *Bangladesh Journal of Psychology* 13, pp. 7–15.

70 McCarthy, D. & Saegert, S. (1978), ‘Residential density, social overload, and social withdrawal’ in *Human Ecology*, 6, pp. 253–272.

more depressed and lonely, that rates of mental illness rose with floor levels, that psychological symptoms increased in high-rise buildings and that those moving out of high-rise became happier and less depressed. A study that controlled carefully for age, education and occupational level found that husbands (though not wives) in flats rather than small houses had a greater incidence of psychiatric illness, that fathers had worse relationships with their children (hitting them more often) and that marital discord was higher.⁷¹

The same appears to be true for children. Most studies have found clear correlations between high-rise living and childhood behavioural problems – again even when socio-economic status is comparable. No study has found high-rise living beneficial to children. One matched 99 pre-school children on gender and economic well-being and found that children in high-rises suffered from more behavioural problems.⁷² In another boys (but not girls) who lived in fourteen versus three storey buildings were rated by teachers as having more problems such as hyperactivity and hostility.⁷³ Other studies have found children in high-rises suffering from more bedwetting and temper tantrums and that the best predictor of juvenile delinquency was not population density but living in blocks of flats as opposed to houses. One Japanese study found that the development of many skills such as dressing, helping and learning to use the lavatory was slower.⁷⁴ (Blocks of flats are often dangerous for children too with a steady stream of children falling to their deaths.⁷⁵)

Though not as strong, the evidence also suggests that tower blocks might even encourage suicide. Without wishing to be glib, tower blocks don't just make you more depressed. They make it easier to kill yourself – you can jump. One 1992 study compared suicide rates in New York's five boroughs. Manhattan's suicide rate was double that of Brooklyn despite Brooklyn being less wealthy. However, suicides occurred in Manhattan about as frequently as in other boroughs for normal methods (i.e. hanging). It was jumping from tall buildings that explained the difference.⁷⁶ A Singapore study found the same phenomenon. Between 1960 and 1976 the proportion of the population living in high-rises rose from 9% to 51%. During the same period the overall suicide rate rose by 30%. However the suicide rate by leaping rose by 299% while the suicide rate from other means actually fell. A Canadian specialist in environmental psychology, Professor Robert Gifford, who has published an important summary of the evidence on high-rise living, concluded that at the very least high-rise living made death by suicide more likely and at worst was a contributory factor to causing people to try to commit suicide in the first place :

'Thus although the overall suicide rate increased by 30 per cent, the rate of suicide by leaping increased many times faster, suggesting that more tall buildings leads to more suicides by providing opportunities to leap from them. One is tempted to speculate that dissatisfaction with the high-rise form itself is a contributing factor.'⁷⁷

There are multiple other areas where such living contributes to human misery. There is overwhelming evidence that medium and high-rise blocks are negatively correlated with neighbourliness and positively correlated with crime and anti-social behaviour. Houses with sociologically similar housing tenants in them see less crime and more socially positive behaviour. One influential survey

71 Cited in Gifford, R. (2007), 'The Consequence of living in High-Rise Buildings' in *Architectural Science Review*, vol. 50. pp. 6–7.

72 Richman, N. (1977), 'Behaviour problems in pre-school children' in *British Journal of Psychiatry*. 131, pp.53–58.

73 Saegert, S. (1982) 'Environments and children's' mental health: residential density and low income children' in Baum, A. & Singer, J. *Handbook of psychology and health*, pp. 247–271.

74 Cited in Gifford, R. (2007), 'The Consequence of living in High-Rise Buildings' in *Architectural Science Review*, vol. 50. p 8., p. 10.

75 Despite forty years of improving safety, children are still falling to their deaths from multi-storey housing. In April 2011 fourteen year-old Giovanni Peddie fell 40 feet to his death from the window of his family's flat on the Aylesbury Estate as he played hide and seek with his eight year-old brother. The offending window pivots 180 degrees. horizontally with 'little applied pressure' and is 'used on housing estates up and down the country.' *Evening Standard*, 3rd November 2011.

76 Marzul, P. et al (1992), 'The effects of access to lethal methods of injury on suicide rates' in *Archives of General Psychiatry*, 49 pp. 451–458.

77 Gifford, R. (2007), 'The Consequence of living in High-Rise Buildings' in *Architectural Science Review*, vol. 50. p. 8.

led by Alice Coleman in the early 1980s found very strong positive correlations between levels of litter, excrement, graffiti and vandalism and the presence of tower blocks. Professor Coleman's team examined 4,099 blocks (high-rise and medium-rise) and 1,800 single dwellings in Tower Hamlets and Southwark.⁷⁸ They found:

- Litter in 86% of the blocks and 20% of the single family houses
- Faeces and urine on 7.5 and 44% of the blocks respectively and in the doorways of 0 and 0.1% of the single family houses⁷⁹
- Graffiti on 76% of the blocks and 1.2% of the single family houses, and
- Vandalism on 39% of the blocks and 1.9% of the single family houses.

Professor Coleman's team then assessed the correlations between different design features in the blocks and the levels of litter, excrement, graffiti and vandalism. They found that there were very strong positive correlations between anti-social behaviour and the number of dwellings per entrance, the amount of semi-private space, the number of dwellings per block, the number of storeys per block and the presence of overhead walkways.⁸⁰

Other studies in other countries strongly substantiate these findings and show fairly clearly a positive correlation between high-rise living, crime and behaviour problems and a negative correlation between high-rise living and neighbourliness and pro-social behaviour. Nor is this restricted to the lowest socio-economic groups. A 1980s comparison of Californian students found that students in high-rise accommodation committed measurably more (largely petty) crime than those in a nearby low-rise hall of residence. An important 1975 US study by Oscar Newman found that the number of felony crimes rose with the height of the building in which the family lived for both poor single-parent families and moderate-income two-parent families. Crimes occurred at about the same rate inside apartments but were 28% higher outside buildings and 604% higher in the interior public spaces.⁸¹ Seven years later a 1982 study of 2,500 residents of US moderate and low income housing projects also found that building size was positively associated with high crime levels. The only thing that rose faster than crime itself was the fear of crime.⁸²

Three key reasons why multi-storey housing is bad for people

Most of us instinctively recognise that high-rise housing is somehow less communal or sociable. As one resident of a modest low-rise development noted, 'if they did put up the tower blocks here I might not have been the person I am.'⁸³ But why should large buildings have this impact? Human beings are not automatons. As Professor Coleman notes, 'Even in the best housing there may be people who chose to behave badly, and even in the worst there are people who maintain impeccable standards. Bad design does not determine anything, but it increases the odds against which people have to struggle to maintain civilised standards.'⁸⁴ There can be no deterministic link between surroundings and the actions of a single human being. But it appears that, relatively quickly, multi-storey housing on large estates atomises individuals, undermines society and makes it harder for some people to make the right rather than the wrong choices.

78 Coleman, A. (1985) *Utopia on trial*, pp. 24–20. The publication of this work was very influential in changing government policy away from tower blocks but led to deep academic and political resentment among some architects and local politicians. In fact 53 of the 4,099 blocks were in Oxford.

79 Urine was only measured for Tower Hamlets.

80 Coleman, A. (1985) *Utopia on trial*, p. 79.

81 Newman, O. (1996), *Creating Defensible Space*, p. 13.

82 Cited in Gifford, R. (2007), 'The Consequence of living in High-Rise Buildings' in *Architectural Science Review*, vol. 50. p. 8.

83 *Our Streets*, Camberwell Grove, screened on BBC2, 13 June 2012.

84 Coleman, A. (1985) *Utopia on trial*, p. 83.

The data would appear to support three key themes:

- The difficulties that multi-storey buildings pose for those bringing up children.
- The atomising and dehumanizing size of multi storey buildings makes it harder to form relationships or behave well toward your neighbours.
- Multi-storey buildings can create a myriad of opportunities for crime due to their hard to police semi-private corridors, walkways and multiple escape routes.

Multi-storey living makes bringing up children harder

First of all it appears to be much harder to bring up children in large blocks of flats – particularly high-rise ones. Several studies show that children go outside less when they live in high-rises and that they spend more time playing alone or in restricted play. This is not without consequences. One controlled study, compared mothers of under 5s in the Newcastle estate of Cruddas Park. Sixty two per cent of mothers living on the sixth floor or above reported difficulties with the ‘play, health [or] personality’ of their children. Fifty three per cent of mothers in high rise below the sixth floor reported issues. However only 3% of mothers in houses reported issues.⁸⁵ When children do go out they are also out of sight and much harder to control. As early as 1961 British qualitative research was showing that mothers were concerned about the safety of their children on balconies, staircases and lifts and that the lack of outdoor play opportunities was creating stress and illness for mothers. Over 50% of young children in high flats were only ever playing in their flats.⁸⁶ Explaining the proven link between flats and litter Professor Coleman summed up the dilemma:

‘There can be little doubt that littering characterises flats more than houses and it is easy to see why. In houses with gardens, children can spend their formative pre-school years under close parental supervision. The garden is a safe place where toddlers can gain the self-confidence that comes of venturing out alone while knowing that help is immediately at hand if needed. They learn to care for the home territory, partly through the natural impulse, at this age, to imitate parents, and partly by being taught, until litter abstention and litter clearance become engaged habits.

In blocks of flats these child-rearing advantages are not available. A mother has a different range of options – all of them unpalatable. She can keep her children safely indoors, which deprives them of energetic exercise to let off steam. She can let them play on the balcony, with the risk of a serious fall. She can let them loose in the corridor, where their noise may drive their neighbours mad. Or she can allow them out into the grounds, where she cannot always be supervising them, and where they pick up bad habits from unsupervised children. Some parents succeed, against all the odds, in teaching their children not to litter. Others do not, and litter may be ever-present. Children then see it as the norm, not as an environmental insult – an attitude which is probably permanent... .

As successive age-groups of litter louts are bred, their collective activities become too much for the remaining litter clearer. An old lady living in a slab-block in Tower Hamlets described how at first she had regularly scrubbed the corridor and staircase, only to find them promptly relittered and fouled by dogs. Her sense of responsibility was strong, and she continued the abortive cleaning for a whole year before finally giving it up as useless.⁸⁷

⁸⁵ Gittus, E. (1976), *Flats, families and the under-fives*, p. 81.

⁸⁶ Ibid. p.11.

⁸⁷ Coleman, A. (1985) *Utopia on trial*, p. 83.

A seminal study by Pearl Jephcott of multi-storey housing in late 1960s Glasgow had reached similar conclusions:

‘... the new form of housing segregates the generations and cuts off the child from his home. In traditional housing dozens of reasons lead him to make brief appearances there. He turns in to shelter from a squall, to fetch a toy, to go the toilet, to wheedle 2p when he hears the chimes of the ice cream van – all of which mean he is fairly often in touch with his grown ups. In a high flat this is less likely because of the bother of the lift. The adult is equally reluctant to have to use it. And as regards anybody having a glance now and then to see if he is all right, the child can slip under the block, round the corner and vanish from sight more easily than in a street... The child’s casual contacts with people other than his own home have also lessened. No one leans on a sill or pops out to look at a pram, no couples have a half hour blather at the gate, no father mends a fence, no gran sits on the step minding a toddler but also available for talk with the 8 year old.’⁸⁸

These themes still hold true today. Research carried out by MORI for RIBA found that parents had the strongest preference for private gardens. One interviewee commented: ‘I would like my living space to lead onto my garden. At the moment I’m upstairs and the garden’s down. My son is a terror, he needs space to run but I don’t always want to be out in the garden.’⁸⁹ These problems with children would seem to be crucial to the difficulties that many tower blocks have faced over the years as petty failures reinforce each other and spiralled down into criminality. Seventy per cent of graffiti in one study was committed by children.⁹⁰ In another study children were responsible for much of the urine and faeces with excrement most common in blocks next to play areas, especially where the design made it difficult to reach home in a hurry.⁹¹ A UK Home Office Survey also found that vandalism in tower blocks was significantly correlated with the number of children aged 6–16, increasing in direct proportion to the average number of children per dwelling.⁹² This downward spiral should not be surprising. As the evidence supporting the so-called ‘broken windows’ theory shows, vandalised spaces just attract more vandalism, violation and crime.⁹³

The inhuman and dehumanising scale discourages behaving well to your neighbours

Large buildings atomise and dehumanise. They increase anonymity and decrease friendships. Residents may meet more people but they will know fewer of them. They feel far fewer bonds of social interdependence. But society needs these bonds. Professor Robert Gifford, has cited a very wide range of controlled studies that make this point emphatically. A Canadian study found that high-rise residents tended to choose friends from outside the building. A Hong Kong study found that high-rise residents with a strong sense of neighbourhood tended to interact with colleagues or schoolmates rather than physical neighbours. A study of American students found that those in small living units believed they benefited from more social interactions than those in high-rise buildings. A study of German and Italian high-rise residents found that both wanted more friends among their neighbours and believed this would be possible if they lived in smaller buildings. Other studies back up this belief. At least four

88 Jephcott, P. (1971) *Homes in high flats: Some of the human problems involved in multi-storey housing*, p. 87.

89 RIBA (2012), *The way we live now*, p. 53.

90 Redknap, C. (1983), *The effect of entrance design in blocks of flats, unpublished report to the Nuffield Foundation*. Cited in Coleman, A. (1985), *Utopia on trial*, p. 26.

91 Coleman, A. (1985) *Utopia on trial*, p. 26

92 Wilson, S. (1978), ‘Vandalism and “defensible space” on London housing estates’ in *Home Office Research Study No. 47*.

93 Wilson, J. & Kelling, G. (1982), ‘Broken Windows’ in *The Atlantic Monthly*.

separate studies show that high-rise residents have fewer genuine friendships with their neighbours than low-rise residents. In one Israeli study, women who lived on high floors knew more neighbours but those on lower floors had closer relations with those that they knew. Those with garden flats had three times as many friends in the building as those on high floors. In another study residents of low-rise buildings had 50% more local friends than residents of high-rise buildings. Two other studies found that social relations were poorer for high-rise residents.⁹⁴

Some planners and architects celebrate this lack of domesticity. Describing Balfron Tower and Trellick Tower (the latter being the ‘hard-to-let’ tower discussed earlier and termed locally the ‘tower of terror’) Ernő Goldfinger’s biographer, Nigel Warburton, praised them in terms that are surprising given they were meant to be homes. ‘Viewed from outside, they are incredibly muscular, masculine, abstract structures with no concessions to an architecture of domesticity.’ James

“With such damaged social bonds, with fewer friendships, it should be no surprise that crime and misery are high in multi-storey blocks”

Dunnett’s praise is even more bizarre: ‘The sheer concrete walls ... impart a delicate sense of terror. At the summit of the tower the boiler house ... evokes the bridge of a warship. At night the estate is illuminated by the merciless beam of powerful arclights mounted

on the summit of the slab.’⁹⁵ The idea that architects should try to terrorise their residents clearly borders on the perverse. It is unsurprising that those who built them rarely lived in their terrible creations.

Even when architects were not trying to deny domesticity or be delicately terrifying, one consequence of such grotesque scale is clear. People just aren’t as nice to each other in large blocks of flats. In two 1970s studies stamped addressed envelopes without a return address were placed on hallway floors in college halls of residence that were 22–25, 4–7 and 2–4 storeys high. Letters were mailed in inverse proportion to building height in both studies. Donations were also sought off milk cartons for an art project. The fewest donations per capita were received in high-rise blocks. Interviews of student residents in these and one other Israeli study also reported that social support and involvement declined with height within buildings. A comparison between those in high-rise flats and garden flats found that those in garden flats had a significantly greater sense of ‘community’ and a greater sense of ‘membership’.⁹⁶ This evidence corroborates the recollections of many residents of neighbourhoods bulldozed to build estates that the local sense of ‘community’ never recovered. As one Deptford resident recalled, ‘once they started pulling everything down, it all died.’⁹⁷

With such damaged social bonds, with fewer friendships, it should be no surprise that crime and misery are high in multi-storey blocks. Criminals are confident that they are less likely to be identified or challenged. They feel freer to prowl for opportunities to burgle or rob. This phenomenon was studied in the important 1972 work, *Defensible Space* by Oscar Newman. He termed it *anonymity* and his findings revealed that as anonymity increased so did crime. Oscar Newman’s most famous study was based on all the public housing projects in New York (169 estates covering 4,000 blocks of flats and many houses with a population of half a million people). He identified five primary drivers of anonymity: low

94 Cited in Gifford, R. (2007), “The Consequence of living in High-Rise Buildings” in *Architectural Science Review*, vol. 50. p.10.

95 Warburton, N. (2003) Ernő Goldfinger: The Life of an Architect, p. 157.

96 Cited in Gifford, R. (2007), “The Consequence of living in High-Rise Buildings” in *Architectural Science Review*, vol. 50. p. 9, p. 10. A comparison of elderly Afro-Americans in high-rise and low-rise buildings found a similar phenomenon though other social differences between the two groups meant that the survey was only suggestive.

97 Our Streets, Deptford High Street, screened on BBC2, 6 June 2012.

density (mostly meaning that there were larger areas of public space which were far from earshot or visual oversight), the sheer size of an estate, the number of people using the same entrance, the number of storeys per block and the degree to which the common parts of the building are shared and defended by different households. Consistent with the data set out above he found that crime increased in line with building height and that it was concentrated in semi-public spaces which were shared by large number of dwellings, spaces where there was no sense of responsibility or ownership.⁹⁸

Increasing the ease of crime

It is also simply easier to commit crime in the complicated concrete and glass jungles of modern multi-storey housing. It offers a plethora of semi-private, semi-public unpoliceable spaces such as corridors and stairwells which are hard to survey and which offer multiple escape routes. Streets with windows and doors looking out onto them are open to easy public view. If they have bay windows, if houses are near the street (as in old fashioned terraced housing) or if doors are raised above ground level they are also particularly easily policed by residents simply looking out of their front windows or standing by their front doors. Dealing drugs or committing a robbery outside a house on a street is possible. But it does mean exposing yourself and there are likely to be witnesses. An external corridor on the (say) sixth floor of a medium-rise slab-block is a rather easier proposition. There is still a risk of being witnessed. Most flats have small kitchen windows looking out onto the corridor and you might be spotted from afar. But overall the chances of quickly snatching a bag or wielding a knife unobserved are greater.

Easier still however would be an internal corridor or stairwell in a tower block. There are very unlikely to be any witnesses. It is not for nothing that the stairwells, corridors and landings of tower blocks have long been associated with vandalism, robbery, burglary, drug-dealing and murder or that Oscar Newman's study (cited above) found that crime was only 14% greater within flats themselves but 604% greater in interior public spaces of high-rises. The communal facilities of Trellick Tower were vandalised before any tenants had even moved in and the fire hydrants were vandalised six times in the first eight months – leading to a power failure during the building's first Christmas in 1972.⁹⁹ The lifts in Robin Hood Gardens were also being vandalised within a year of completion – well before anyone could blame all failures on poor maintenance.¹⁰⁰ This theory also helps explain why more crime is associated with houses or buildings whose door faces away from the street. There is less surveillance. A final specific problem with multi-storey housing is the multiplicity of escape routes. Lifts, multiple staircases and exits have been found in several studies, (for example by Oscar Newman and Alice Coleman), to be positively correlated with crime.¹⁰¹

'Fixing' the inherent problems of multi-storey housing is expensive and imperfect

On large estates the multiple failures caused by these problems interact. The dehumanising effect of large and ugly estates combines with the fact that crime is easier to commit. As people are alienated by their surroundings from their neighbours and feel isolated from other people and more depressed, then those

98 Newman, O. (1996), *Creating Defensible Space*, pp. 9–30.

99 Warburton, N. (2003) *Ernö Goldfinger: The Life of an Architect*, pp. 164–8.

100 Cited in Stewart, G. (2012), *Robin Hood Gardens – the search for a sense of place* (Wild Research), p. 15.

101 Coleman, A. (1985) *Utopia on trial*, pp. 13–7.

with a predilection to commit crime may do so – especially if the layout of their environment makes this easier. Young adults, the group most likely to be tempted into crime, are particularly affected if their own development and socialisation is impeded by their built environment.

In some estates it has proved possible to ‘design out’ some elements of these problems, particularly that of anonymous but easily accessible spaces. Following on from the studies of the 1970s and 1980s cited above, remedial work was done on many multi-storey estates. Entrances were given keypads and buzzers. Connecting walkways between blocks were dynamited. Extra doors were built to restrict the number of dwellings per entrance. Where budgets permitted, CCTV and even a concierge were introduced. These changes were intended to reduce anonymity, increase the level of surveillance and reduce alternative escape routes. Although there has been much less systematic research over the last twenty years, many of these changes have had a positive impact – particularly where it has proved possible to provide full time surveillance or in some tower blocks where it is easier to control access. (One building that has been successfully improved by increased security is Trellick Tower, no longer known as the ‘tower of terror’). However, improvements are expensive and limited. Where this has worked, such as Trellick Tower, there has usually also been a socio-economic shift to more affluent professionals, often without children. Such groups can bear the higher costs that multi-storey living needs in order to work. Further, building multi-storey blocks only to lobotomise the scale and space which is their defining feature seems a little perverse – and certainly expensive. One study by the Centre for Housing and Planning Research at Cambridge University described them as ‘resource intensive, both in capital expenditure and in ongoing revenue expenditure.’¹⁰² Houses and streets provide the same features without the need for the paraphernalia of buzzers, a salaried concierge and monitored CCTV. As the American writer Jane Jacobs put it pithily: ‘this is something everyone already knows: A well-used street is apt to be a safe street.’¹⁰³ Solving one of the issues helps but it alone will not change that much.

The Packington Estate in Islington demonstrates both the potential for improvements but also the limits to what is possible without a fundamental shift back to streetscapes. The Packington Estate was enthusiastically pushed through by planners and central government in the 1960s in the face of local resistance. It was composed of 27 large slab-blocks, six storeys high, linked together by pedestrian decks at ground level and at the third floor. Its descent was rapid and it quickly became notorious for its ‘gang culture.’ Starting in 1988 a series of improvements were made. The overhead bridges were demolished. Upper and lower levels were given separate access. Courtyards were made private to specific groups of flats. A new estate management office was built and manned. Camera surveillance was introduced. And on each deck metal screens restricted access to a relatively small number of dwellings. These eliminated some of the worst elements of the design.¹⁰⁴

It was only a question of stemming the inevitable however. There were ongoing problems with the inherent safety of the buildings. (In 2003 they were revealed to not be compliant with gas regulations imposed in the 1970s after the collapse of Ronan Point tower block). Nor did issues with crime disappear. The Packington Estate remained linked to Britain’s most notorious drugs gang – the Adams family.¹⁰⁵ The high security necessary to overcome the disadvantages of multi-

¹⁰² Jones, M. (2012) *High density housing – the impact on tenants*, p. 4.

¹⁰³ Jacobs, J. (1993), *The Death and Life of Great American Cities*, p. 44.

¹⁰⁴ Towers, G. (2000), *Shelter is not enough*, pp. 161–2.

¹⁰⁵ *The Independent*, 17 September 1998.

storey design was intrusive to normal life and led one local councillor to write, 'it cuts the estate up into fortresses where each staircase and landing is bisected by fences; one former resident calls it Colditz.'¹⁰⁶ In 2007 tenants agreed to the estate's demolition and the bulldozers went in during spring 2011. The estate was only 41 years old. Meanwhile the early Victorian terraced houses identical to those destroyed to build the estate in the first place are 150 years old and sought after local homes. As discussed earlier, the estate redevelopment ignored the views of local people in key respects.¹⁰⁷ The planned development met residents' part way. The traditional street pattern is being reinstated.¹⁰⁸ But residents' desire for no high-rise housing, with 91% opposing development more than 3–5 storeys high, is being overruled.

Most people dislike multi-storey housing for very rational reasons. Large blocks of flats make it harder to discipline and control your children, create enclaves for thieves, undermine the ability of householders to 'police' the common space and tend to atomise society. To some extent improved use of entry phone technology and a reduction in the number of dwellings per entrance can prevent complete social breakdown but keeping these improvements 'live' is expensive and requires constant vigilance. Building streets would be a cheaper way to achieve the same goal while also providing a more human and humane environment.

Box 3.1: The 2011 riots

The degree to which the correlation between post-war estates and crime has not been removed by better crime prevention measures is clearly shown by the 2011 UK riots which were exacerbated by our multi-storey estates. According to research by Space Syntax Limited, a spin-off company of the University College of London, post-war estates and the 2011 UK riots were meaningfully correlated. They found that:

'84 per cent of verified incidents in north London and 96 per cent in south London took place within a five minute walk [400m] of both an established town centre and, secondly, a large post-war housing estate. Local centres without large post-war estates nearby were unaffected... Local centres that were unaffected, such as Stoke Newington, are as well connected as many of the areas where incidents were recorded... However in these areas there are no large post-war housing estates in close proximity. This is the case in 75 per cent of the unaffected local centres within the north and south London study areas...'

*Most post-war housing estates have been designed in such a way that they create over-complex, and as a result, under-used spaces. These spaces are populated by large groups of unsupervised children and teenagers, where peer socialisation can occur between them without the influence of adults. This pattern of activity, and the segregation of user groups, is not found in non-estate street networks. Our analysis of court records shows that the almost three quarters of convicted rioters in the study areas live on large post-war housing estates.'*¹⁰⁹

This correlates precisely with the evidence reviewed in this chapter. Children raised in physically and socially distinct multi-storey flats are less likely to be controlled or socialised, more likely to be cut off from society and more likely to witness, be the

¹⁰⁶ 19 March 2008 blog of Bridget Fox, //bidgetfox.wordpress.com accessed in December 2011.

¹⁰⁷ *Packington Estate Planning brief, Appendix 4* (2005), available at www.islington.gov.uk accessed in December 2011.

¹⁰⁸ The first phase of the re-build has been prize winning due to the revival of streets. The developer, Hyde Housing, won the *What House?* development award in November 2012 and was specifically praised for a 'welcomed return to traditional streets and squares... with a contemporary interpretation of period style.' http://www.hyde-housing.co.uk/News_1.aspx?id=12:35040&id=12:35039&news=12:38068&b_mainnews_0=12:38068. Accessed January 2013.

¹⁰⁹ See, <http://spacesyntaxnetwork.wordpress.com/2011/09/15/london-riots-location-analysis-%E2%80%93-first-findings/>. Accessed December 2011.

victim of or commit crime. This is the environment in which some families are more likely to fail and gangs more likely to fester. It is hardly surprising that Space Syntax found such a correlation between riots and large estates. This does not excuse the behaviour of individual rioters. But it does mean that we have to accept that what we built in the past and are building again has stacked the dice against some parts of our community.

In the wake of the 2011 riots, David Cameron argued that it had showed his views about the need to mend broken Britain were vindicated: 'my personal priority: to mend our broken society – that passion is stronger today than ever. Social problems that have been festering for decades have exploded in our face.'¹¹⁰

Boris Johnson argued that while it was right that a firm line was taken with individual rioters, then 'what Londoners also want is for everyone 'politicians, teachers, police, parents' to sort out the underlying issues that encouraged them to riot'.¹¹¹

One part of the solution will be to look at the issue of the physical places where most of the rioters came from. When we know that high rise multi-storey estates reinforce social problems, we have a duty as a society to avoid putting people in places that are unhealthy for them and thus bad for wider society. Politicians have a chance to help tackle social issues through ensuring that we build communities that reinforce our social bonds rather than weaken them.

¹¹⁰ <http://www.guardian.co.uk/uk/2011/aug/15/david-cameron-riots-broken-society>.

¹¹¹ Boris Johnson, speech to Conservative Party Conference, Tuesday 4th October 2011.

4

Multi-Storey Housing Creates a Spiral of Decline

The vicious cycle of the high-rise

The case for building more multi-storey estates would seem therefore to be weak. It gets worse. Once built, multi-storey estates tend to spin into a negative cycle of further decline. Slab-blocks and tower-blocks have proved so consistently unpopular over so many years that those who can move out generally do. Social multi-storey housing has ended up as dense repositories for the most challenged and disadvantaged members of society, who then are further disadvantaged by living in poorly designed neighbourhoods. Local crime is higher than for comparable populations in conventional housing due to high anonymity, low surveillance and multiple escape routes. Social hubs, shops and pubs therefore tend to shut. Other members of society also avoid what becomes, in their eyes, a frightening place to be. It is easy to avoid because it looks different. Although there are now some great counter-examples (for example the Walworth Academy near the Aylesbury Estate), local schools with catchment areas dominated by estates have tended to collapse in quality as all other families avoid the whole area. Chris Holmes, the former director of Shelter, has recognised, that 'housing poverty is now the most extreme form of social inequality in Britain, with those who experience the greatest inequalities being those living on housing estates.'¹¹² All these correlated phenomena have ended up exacerbating and reinforcing the problems described above – creating a vicious circle of social breakdown. It is worth citing examples to make the point.

Of course, within these areas, most individuals continue to live their lives, just like the rest of us. They form friendships, relationships, have families. But they do all this in a more menacing and less pleasant neighbourhood sequestered from the rest of society. This is not about poverty *per se*. It is about the fact that the residents of these estates are forced to live in places that have been designed very poorly and along lines that make it harder for people to live normal lives, free from crime, anti-social behaviour, and as part of a flourishing integrated community.

The Park Hill Estate, Sheffield

One famous case is the Park Hill Estate in Sheffield. Opened in 1961, it was highly praised by architects at the time and listed by English Heritage in 1998. It is composed of a ribbon of multi-storey concrete blocks connected by wide high-level decks.¹¹³ The idea was the walkways would be busy with people moving

¹¹² Holmes, C. (2003), *Housing, equality and choice*, p. 49.

¹¹³ That said even one laudatory review conceded, perhaps unconsciously echoing Wellington, that Park Hill's blocks 'might not frighten the inhabitants but they certainly frighten me.' Hatherley, O. (2010), *A Guide to the New Ruins of Great Britain*, p. 92.

from flat to flat and milk floats would be able to glide elegantly from block to block. Many were deliberately moved *en masse* with the same neighbours as they had had before. Walkways were even given the same names as the flattened streets they were replacing.



North Block and play area, Park Hill Estate, Sheffield

Source: http://www.bbc.co.uk/southyorkshire/content/image_galleries/park_hill_old_photos_gallery.shtml?22

But it didn't work. Initially popular with some mainly due to better plumbing, most residents quickly came to dislike the vertigo-inducing walkways and the zig-zag corridors. The estate was cut off from the rest of the city by open land and the same steep hill that gave the estate its name. The design also provided an infinite number of escape routes for muggers or burglars. One resident complained in 1967, 'It's a dump. An absolute dump. I've come out of a dump into a super-dump'.¹¹⁴ The profound social and physical disintegration just got worse. Sex attacks multiplied during the 1970s. There was a major cockroach infestation. Most families with any capacity to choose or move left, christening Park Hill 'San Quentin' after the Californian jail where Johnny Cash had played to convicts. Even before the 1977 Housing Act (which increased the proportion of disadvantaged people being placed in social housing), those who could either left or started refusing to move to the estate. Transient tenants replaced them whose behaviour and impermanence helped accelerate the collapse.

By 1981 the author of the most important academic study of post-war housing concluded that Park Hill had 'failed dismally'.¹¹⁵ When the 'right to buy' came along in the 1980s, no one did. Park Hill became a repository for 'problem families.' The demise of the local steel industry was the *coup de grace*. Even tenants with fond memories were forced to concede that, 'the shops and on-site pub closed, long-term neighbours left and drug use escalated'. By 2007 the complex was only half occupied with 1,500 living in buildings designed to house at least 3,000. The estate was so run down and revolting that Sheffield Council (unable to pull it down due to its controversial listed status) was forced to sell the entire thing for £1. So fundamental is the required refurbishment that almost everyone has

¹¹⁴ Sandbrook, D. (2006), *White Heat*, p. 620.

¹¹⁵ Dunleavy, P. (1981), *The Politics of mass housing in Britain*, p. 57.

been required to leave so that the buildings can be stripped back to their concrete shell. They are being almost completely rebuilt even though only 50 years old.¹¹⁶

There is currently a major refurbishment of the flats underway – led by Urban Splash. The majority will be sold in the private sector. Urban Splash alone is said to be spending over £130 million – much supported by the taxpayer. £130m amounts to at least £149,000 for each of the 874 flats. This is more than the £112,000 average flat price advertised in late 2011.¹¹⁷ It is notable that the determination of parts of the planning bureaucracy to save these crumbling and failed estates is in contrast to how they tend to be viewed by most people. The first two comments on a BBC website discussion of Park Hill are telling:

‘I never lived on Park Hill, but had many friends who did in the 80s and 90s. I think that high-rise living is bad no matter where it is ... I think they should have blown it up.’

‘A grotesque vanity project that should never have happened... It will be a multi-coloured white elephant and should have been flattened.’¹¹⁸

The Aylesbury Estate, South London

Even more notorious is the Aylesbury Estate in Southwark. Replacing a dense network of mixed terraced housing, it is a huge development of 2,700 homes stated in 1963 and completed in 1977. There are 50 houses. Everything else is flats in large concrete slab-blocks. They turn their back on the rest of the city and provide a maze of walkways, stairwells, lifts and corridors in which to commit crime. One young mother moved to the estate commented; ‘there’s nowhere for the kids to play ... it’s like a prison, isn’t it, all concrete.’¹¹⁹ Things started to go wrong fairly swiftly. By the 1980s the estate had become a byword for urban decay. Crime escalated. Local schools failed. The few shops provided for in the estate closed. By 1999 there were 408 criminal offences per 1,000 of the population. One child growing up there at the time has since become the rapper Tinie Tempah. He has written:

‘London is one of the only places in the world where you can live in a council block and see a beautiful semi-detached house across the street. Growing up around that was inspirational, it kept me motivated.’¹²⁰

Few were as motivated, lucky and talented as him and able to look beyond the estate walls. Many instead fell prey to a cycle of deprivation and poor educational achievement. At one point only 17% of local children were achieving five good GCSEs. Tony Blair made his first speech as Prime Minister there to highlight the challenges of broken Britain and £56.2m of public money has been sunk in trying to improve matters. The equivalent of spending about £20,800 per flat and about £7,500 per person, this has had an impact. Crime is now at 108 criminal offences per 1,000 of the population and 55% of children now get 5 good GCSEs. However, things can still be fairly grim. When a resident was shot in one of the communal gardens his body was undiscovered for 24 hours (a compelling testament to the failure of semi-private spaces). Southwark Council employees working on the estate are also bussed in due to the number of attacks. One BBC correspondent visiting a few years ago remained unimpressed;

116 Towers, G. (2000), *Shelter is not enough*, pp. 40–1. Hanley, L. (2007), *Estates – an intimate history*, pp. 116–118. *The Guardian*, 25th September 2011. *The Independent*, 15th June 2011.

117 Average price calculated from 23 flats advertised on www.urbansplash.com on 30th December 2011.

118 Sheffield and South Yorkshire section of www.bbb.co.uk. Accessed in December 2011. Not updated since October 2009. It should be stated that there were positive comments further down the discussion expressing some fond memories and hoping for the best for the future.

119 *Our Streets, Camberwell Grove*, screened on BBC2, 13 June 2012.

120 www.tinietempah.com accessed in December 2011.

*'When its stark, ugly concrete walls surround you on every side, it feels as though the Aylesbury Estate ... doesn't want you to escape. Architecture that once, in more idealistic times, must have looked bold and inspiring now appears merely bleak and oppressive... the lifts still smell of urine and the central heating keeps breaking down.'*¹²¹

Rather than spend a further £350m renovating the estate, the council wants to demolish the place. The council hopes to nearly double the number of units and sell off 2,600 as private homes to fund the demolition and re-build. Most of the new dwellings will be flats and most will be in multi-storey blocks. The blocks look nice in the architect's pictures. But so did the Aylesbury Estate. Some have a partial brick veneer on their concrete frame. They are also less massive and monolithic. But they are still, when you come down to it, multi-storey blocks for, in large part, social tenants. They are not houses or low rise flats in streets. Jean Bartlett, the chairman of the tenants association, commented:

'the extra money has improved the estate ... but that hasn't stopped the buildings deteriorating. I'd rather live in a council house. But the option on the table for starting again with new housing association flats is much better than what we've got.'

Another tenant supported this view: 'I'd like to see more council houses.'¹²² Sir Michael Caine who grew up nearby and filmed the vigilante film, *Harry Brown*, in the neighbouring and similarly monolithic Heygate Estate has called the whole development a 'rotten place' which 'should never have been built.'¹²³

A profound failure of social policy encouraging social division

In short, due to their unpopularity and fundamental failures of design, in estate after estate, the poor have ended up segregated into visually distinct and physically inward-looking neighbourhoods. The centre-left think thank the IPPR's Forum on the Future of Social Housing was therefore only half right when they concluded that 'large estates fail because policies over time have led to high concentrations of economically inactive people, often accompanied by high child density and many vulnerable people.'¹²⁴ Most estates started failing immediately and those able to battle their way through the system began to avoid them pretty quickly. Only those most disadvantaged ended up being forced there. This created a vicious circle but the estates were unpleasant and unpopular to start with.¹²⁵ What is truly shocking is that twenty years after much of the research was conducted and published we are in danger of repeating ourselves. The debate may have moved on. But in 2012 we are still corralling the poor and disadvantaged into unpopular physically distinct locations. And we are now in danger of building a new generation of multi-storey houses to put people in all over again. The Guardian journalist Lynsey Hanley has wondered:

'...how much of the stubborn rigidity of the British class system is down to the fact that class is built into the physical landscape of the country. It began as no more than a hunch: it seemed to me that we are divided not only by income and occupation, but by the types of home in which we live ... a decision was made to bolt homes together rather than build them brick by brick. By the 1970s the further entrenchment of the class system through housing was complete. You could no longer look at a council estate without knowing that it was one... You

¹²¹ BBC news report by Jon Kelly, dated 12 July 2007. Available at www.bbc.co.uk accessed in December 2011.

¹²² BBC news report by Jon Kelly, dated 12 July 2007. Available at www.bbc.co.uk accessed in December 2011.

¹²³ *Evening Standard*, 8 July 2010.

¹²⁴ Cited in Holmes, C (2003), *Housing, equality and choice*, p. 39.

¹²⁵ As we saw above, for example, Trelick Tower in London was badly vandalised in its first year.

can take this social stratification further... if [council tenants] live above the fifth floor of a local-authority block in England and Wales, they are more likely not only to be working class, but also to be from an ethnic minority.¹²⁶

Despite gargantuan public investment, the provision of social housing through tower blocks and slab-blocks has actually served to entrench social division. It has built an almost literal wall between the haves and the have nots. For example, during the post-war rebuilding period the population density of Southwark (home to the Aylesbury Estate) actually *decreased* by two thirds.¹²⁷ Much of this was intentional. The old network of small terraced houses, streets, squares and alleys was ripped up to build slab-blocks such as the Aylesbury and the Heygate.¹²⁸ But has this reduction in density been compensated for by increasing relative wealth? It has not. Quite the opposite.

Studying the physical space now taken up by the Aylesbury Estate and comparing it to Charles Booth's *Life and Labour of the People in London* produces a very startling and important conclusion. The area that is broadly now physically covered by the Aylesbury Estate was in 1898–9 more socially diverse than it has been over the last few decades.¹²⁹



Physical space now occupied by the South of the Aylesbury Estates as shown in Charles Booth's map of 1898–9 – most of it was 'fairly comfortable'¹³⁰

For example, Albany Road which lines the south of the Aylesbury Estate was colour-coded pink by Charles Booth and his team. This means it was 'fairly comfortable. Good ordinary earnings.' This is the third most prosperous coding with only red ('middle class. Well to do') and yellow ('upper-middle and upper classes. Wealthy') featuring above it. Almost all the (long since destroyed) network of decently proportioned terraced houses behind Albany Road were also pink: Boyson Road (completely destroyed), Westmoreland Road (partly surviving but all houses replaced by multi-storey housing), Queen's Road (ditto), Phelp Street (ditto), Smith Street (completely destroyed) were all pink as were many others. A few streets, such as Mount Street (completely destroyed) and part of Red Lion Row (surviving in name only) are colour-coded light blue which signifies 'Poor.

126 Hanley, L. (2007), *Estates – an intimate history*, pp. 18–19, p. 99.

127 Coleman, A. (1985) *Utopia on trial*, p. 82.

128 Ibid. p. 82.

129 The maps and surveys are available online thanks to the London School of Economics at www.booth.lse.ac.uk

130 © London School of Economics and Political Science.

18s to 21s a week for a moderate family.' A few others, such as Portland Street (still present but with little original housing at its southern end) and part of Merrow Street (still existing), are colour-coded purple which signifies 'Mixed. Some comfortable others poor.' Walworth Road itself though was red and 'middle class. Well to do.'

It transpires that the physical space that covers the heart of what is now the Aylesbury Estate was in 1898–9 for the most part 'fairly comfortable' with 'good ordinary earnings.' It was certainly not a sink estate. There were pockets of poverty but they were far smaller than the post-war town planners managed to create. Similar patterns can be observed elsewhere. Seen over the long-term, pulling down the dense network of streets which covered this part of south London has been an unmitigated social and economic disaster. There are fewer residents. Those that remain are relatively poorer. Whatever your politics or views on town-planning, this is a bad deal. Although there are obviously many other factors involved, it is also striking that as expenditure on social housing provision has increased, social mobility has actually decreased.¹³¹

¹³¹ Many separate studies have found this but to cite just one, Blandon, J., Gregg, P., and Machin, S. (2005) 'Social Mobility in Britain: low and falling' in *CentrePiece*. This article compared two boys born to rich and poor parents in 1958 and 1970. Those born in 1958 were more equivalent than those born in 1970.

5

Create Streets and Houses that Work

Housing which does work

There is another way. For many hundreds of years, architects, builders, joiners or developers (the jargon of house-building changes over the centuries) have been building beautiful, cheap and profitable houses in streets that people want to live in. To name but a few, the 1720s terraced houses facing Clapham Common; the 1820s South London arterial roads (Brixton Road, Clapham Road, Camberwell New Road); much of the social housing between the wars or the cottage estates built after the Second World War; some of the private developments of the 1970s such as Eric Lyons's Span housing.

A few very clear themes emerge from successful housing developments. Almost all are capable of lasting generations and are solidly and properly built from materials that age gracefully rather than concrete and plaster board. Social housing developments which ignored the brutalist desire to turn streets on their heads are now relatively sought after, purchased and invested in. Examples include the red brick of the Millbank Estate or the yellow brick of the Peabody Estates. It is a reminder that places have a huge impact on our lives and quality of life, regardless of whether they are social or private housing, and regardless of whether we live in them or just near them.



Grosvenor Estate, Westminster – Lutyens's elegant, innovative and simple social housing

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All these successful places are tailored to how people actually want to live. Above all, most are houses or low-rise flats in streets or squares. There is a place for buildings that shock, dazzle and dare with their weirdness and novelty. For most of us, however, that place is not our home. Around 90% of us want to live in conventional homes in conventional streets. You might almost say we want to live in the type of house a child would draw. Many of the poorest have been denied this choice, not through lack of income, but through bad policy. Successful social housing designs give their inhabitants precisely those same streetscapes. The Queen's Park Estate was developed between 1874 and 1882 by the 'Artisans Labourers and General Dwellings Company' which had been set up to provide decent working class housing. It provided cottage-style housing with gardens and a very distinct character (yellow brick, two storey cottages in tree-lined streets embellished with porches, turrets, gables and arches). Successful developments which are flats rather than houses, such as the Grosvenor Estate designed by Edwin Lutyens in Westminster, keep below five or six stories and look out onto properly defined public spaces – conventional courtyards or terraces – not huge concrete wastelands. Most have been smaller in scale, less atomising, better plugged into the city and better built.

Private and social housing developments should not be afraid to copy from the best of the past (this could be the recent past). Successfully simple and attractive is the former Duchy of Cornwall Estate in Kennington. Built just before the First World War, the cottages of Denny Street, Courtenay Square and Cardigan Street followed the gentle aesthetic of early nineteenth century cottages. Cheap to build due to minimal ornamentation, their squares and streets mirrored the similar squares of a hundred years previously. Sold in the 1980s to a Housing Association, those that have been sold on into the private sector currently sell at a substantial premium to the local average.



Courtenay Square, Kennington – selling at a premium after 100 years not pulled down after 40

Terraces not towers

Post-war rebuilding could very easily have taken this direction. The influential inter-war writer, Elizabeth Denby, visited some important European developments such as the huge Viennese block of flats, the Karl Marx Hof. But with their communal gardens and equally communal bathrooms, she felt they were utopian and alien. Despite her admiration for them, Denby felt they would never work in a country so used to private houses and privacy.

‘Why not return for inspiration to the traditional English squares and terrace cottages with small gardens, built during the early nineteenth century at thirty and forty to the acre in the centre of the town? Holland still builds in this way with great success, Sweden and Germany are both experimenting in this type of urban development. Every European country looks at the old parts of Bermondsey, of Chelsea, of Cheltenham, with admiration and envy. On the Continent ... the manual worker hankers for a cottage of his own as stubbornly as many an English slum-dweller clings to his central worn-out cottage in preference to the sanitary efficiency of a new tenement flat.’¹³²

Flats, Denby explained, need only play a small part in achieving necessary densities. She also complained that the concept of large scale social housing and the idea of zoning was creating too great a ‘caste’ divide between large houses and small ones.

‘Instead of the mixed development usual in England until mid-Victorian days, where the difference between expensive and inexpensive dwellings was one of size and not of planning, pleasantness or locality, we now have “zoning”, in which whole regions are allocated to be developed at one house to the acre, or four houses or twelve houses – a deplorable system which inevitably divides families according to their incomes.’¹³³

With the creation of the large post-war estates these physical divides have got far worse. Had we re-built streets after the war, not bulldozed them, this could have been avoided. The town planner, Thomas Sharp agreed with Denby. He proposed in his best-selling 1940 book, *Town Planning*, that the right way to improve the housing of the poor was not to build into the sky as it was too expensive and likely to prove unpopular. Nor was it to replicate the spread out suburbs. Instead he proposed a middle way – the model of denser urban development. He cited the squares of London and the terraces of Exeter or Durham as worthy of emulation. They could provide dense housing, elegantly, cheaply and at high quality.¹³⁴ Had this route been taken the required housing densities would have been met without problem. In 1980 the architect Walter Segal pointed out that two storey terraced houses in streets would easily have fulfilled Britain’s post-war targets for housing density.¹³⁵ Yet much of the planning community and government bureaucracy turned their backs on this thinking.

This is the path that future development should take. In order to avoid the errors we are starting to make again we must make it easier for the planning and design process to build good houses and low-rise flats in nice streets. This can provide high density, high quality housing that ceases to ghettoise the poor. It is also cheaper to build and more profitable for landlords in the long-term (they can release houses in the private sector at a decent premium). Social housing should

132 Denby, E. (1938), *Europe re-housed*, p. 264.

133 Ibid. p. 265.

134 This was in fact was precisely why terraces had been built as they were in the first place. Georgian jobbing builders and speculators needed to turn a profit. Sharp, T. (1940), *Town Planning*.

135 Segal, W. (1980) ‘The Housing Crisis in Western Europe’ in *Architecture for People: Explorations in a new human environment*, p. 173.

‘look like’ the rest of the city. This would remove the stigma of social housing. It would be more popular. It would remove the perils of bringing up children away from gardens and of high levels of crime associated with multi-storey housing. It would reintroduce a human scale. And it would make it possible for social tenants to ‘move up’ without having to ‘move out.’

There are already many examples of social tenants in ‘normal’ houses (divided into flats if necessary). In Camden, for example, there are about 6,500.¹³⁶ The expectation should be that these properties are being continually recycled back into the private or partially privately owned sector as some social tenants become

“The least environmentally friendly thing to do to a building is to keep knocking it down and building it again from scratch”

financially more stable or prosperous, or where the properties are extremely valuable and become vacant. These would fund the construction of other houses and streets. Support should be given to the person rather than tied to the idea that a certain property must

for all time be socially-owned. All commentary on this approach is positive. For example as tower block construction ceased in Camden in the 1970s one local historian wrote approvingly: ‘Many of the houses originally acquired in the early 1960s with a view to demolition are now being done up and re-let to council tenants, which pleases both the prospective tenants and middle-class conservationists. The number of 19th century houses now in council ownership is far greater than a casual observer would suppose.’¹³⁷

Of course, this is not to say that replacing failed estates with streets and houses would immediately end all the problems that we face. It would not. But it would at least stop stacking the dice against us.¹³⁸ As the failed estates of London are rebuilt over the next thirty years they should be rebuilt with streets and squares. Existing residents who wish to should be rehoused in the new re-born streetscape and their existing tenancies honoured. Others units could be sold or rented in the private sector to help finance the rebuild. The evidence suggests that the value of such homes would only appreciate.

There are other advantages. We have already seen how terraced houses on normal streets would meet the challenges of building to sufficient density. High density terraced houses are also correlated with lower crime.¹³⁹ They are also likely to be more environmentally friendly. Terraced housing can also be very environmentally efficient due to excellent modern insulation and more effective heating systems. Above all, only 50% of walls are externally facing and they don’t face the high winds of high-rise housing. Shorter distances between houses also encourage near neighbours to walk to see each other rather than drive. If the current generation of high-rise developments were to prove even half as unsuccessful as their predecessors the environmental argument for creating streets will be even stronger. The least environmentally friendly thing to do to a building is to keep knocking it down and building it again from scratch. All the evidence suggests that streets are less likely to need levelling and re-building after only 40 years.

¹³⁶ Camden Association of Street Properties, www.camdenassociationofstreetproperties.com

¹³⁷ Cited in Holmes, C (2003), *Housing, equality and choice*, p. 41.

¹³⁸ Of course ‘normal’ housing developments can fail too. Seven of the 20 unpopular estates monitored by Ann Power’s over ten years were cottage style estates. Those that do fail are typically physically remote from the rest of the town. As Lynsey Hanley put it, ‘I wonder what the point was of moving people ten miles away from the city they knew only to put them in hatches that were barely any bigger than the slums they left.’ Hanley, L. (2007), *Estates – an intimate history*, p. 36. See Power, A. and Tunstall, R. (1995) *Swimming against the tide: Polarisation and progress on 20 unpopular council estates, 1980–1995*.

¹³⁹ CABE (2005), *Better neighbourhoods*, p. 12.

6

Streets are More Viable than Multi-storey Estates

The evidence against multi-storey estate style development is overwhelming. Except for a few exceptions and a handful of people, they are unpopular and bad for their residents. They often engender a cycle of decline as those who can move out choose to do so.

The case for multi-storey estate style development rests heavily on the preference of some planners and architects for them. Their case is buttressed by two myths. First is that streets are less 'viable' than estate developments. This is not the case. Street developments are cheaper to build and run, and tend to provide a better long term return. Multi-storey estates impose a cost on their surrounding area that developers do not have to pay. This is an unfair burden on the rest of society that the planning system is not currently taking account of. This chapter discusses this. The next chapter discusses the second myth, that multi-storey estates are the only real way to achieve higher density housing.

Multi-storey housing is much more expensive to build

First of all, multi-storey housing costs a lot more to build. As we saw above, many of the post-war tower blocks were only viable due to high subsidies specifically aimed at high-rise building. Despite this, building high was still a very expensive option. Designers and contractors therefore adopted ever cheaper 'industrialised methods'. Many multi-storey blocks were essentially prefabricated with the same standardised parts and construction. This is why so many up and down the country look so similar and have no specifically named architect. Designers also reduced non-essential costs to a minimum. Early high-rise developments had included generous community facilities. For example, a pioneering block built before the war (Kensal Green) had club rooms, a nursery school, play areas and allotments. By the time the massive Red Road scheme was built in Glasgow in 1966 such was the need to save money that it was provided with no play equipment or enclosed space for children. There was one shop. The nearest health clinic was a mile away. The nearest bus stop half a mile away. This was for an estate built for 4,700 inhabitants. These were not the result of bad planning, but the necessary outcome of the fact such multi-storey estates were very costly to build.

Despite penny-pinching allied to poor standards and subsidies for building high, the expected economies of scale from building large multi-storey blocks never materialised. The industrial prefabricated approach was economically irrelevant. It probably saved between three and 5% of costs, possibly briefly as much as 10%.¹⁴⁰

140 Towers, G. (2000), *Shelter is not enough*, pp. 60–1. Dunleavy, P. (1981), *The Politics of mass housing in Britain*, p. 86.

And according to the main academic study of British mass housing, it continued to take on average 1.33 times as long to build a flat in a block as it did to build a single house. Completion times even increased during the industrialised building drive of the 1960s.¹⁴¹ Slower building times translated into higher costs. During the 1960s the building cost per square foot was between 1.65 and 1.80 times as great for a multi-storey flat as for a house. The cost per dwelling was between 1.57 and 1.33 times as great for a multi-storey flat as a house. This was despite the fact that houses were generally larger and had desirable private gardens.

These numbers may seem rather dry but they are quietly astonishing. Despite the official subsidies for building high which led to a huge surge in building unpopular high-rise and slab-block estates, it remained significantly and consistently cheaper during the high-rise boom to build houses in streets. The whole policy was built upon a lie. One academic has estimated how many extra homes could have been built with all the money that was needlessly frittered away in building unnatural high-rise estates. He concluded that ‘between 1960 and 1973 ... 293,400 houses could have been built for £753 million, a housing gain of 78,000 dwellings.’¹⁴² We would have had both more and better homes.

Despite some changes in construction methods since the high-rise building boom of the post-war period, there has been no huge change in relative construction costs. It is still very much more expensive to build high-rise developments. In one piece of research in 2005 a series of interviews with market professionals was undertaken to update these figures. They revealed that the typical build cost rose from:

- between £1,200 to £1,800 per square metre for a building of five storeys
- between £1,400 to £1,900 per square metre for a building of ten storeys
- between £1,500 to over £2,000 per square metre for a building of twenty storeys
- between £1,700 to £2,300 per square metre for a building of thirty storeys
- between £1,900 to £2,600 per square metre for a building of forty storeys
- between £2,100 to £2,700 per square metre for a building of fifty storeys.¹⁴³

The greater cost challenges of building high normally more than compensate for the economies of scale of building big. A ten-storey building is 10% more expensive to build than a five-storey building per square metre. A fifty-storey building is 60% more expensive per square metre. The cost rises are greatest between twenty and forty storeys. By contrast the most iconic towers in the recent high-rise boom only carry a value premium of 36% over their local new build markets.¹⁴⁴

Although there are few published figures on this subject (build costs are obviously commercially sensitive) all professional commentary we have found backs this up. The leading literature on construction planning states boldly that ‘the construction costs of tall structures are greater than those of low-rise buildings offering a similar amount of accommodation.’ Three other studies (none of which give detailed figures) estimate that construction costs per square metre start rising beyond five to six, three to four or two storeys respectively.¹⁴⁵ Houses, however, are always found to be the cheapest form of dwelling to build per square metre.

141 Dunleavy, P. (1981), *The Politics of mass housing in Britain*, p. 60, p. 63.

142 Ibid. pp. 84-7.

143 Kunze, J. (2005), *The revival of high-rise living in the UK and the issue of cost and revenue in relation to height*, University College London, p. 27.

144 CBRE Q1 2012, *UK Residential View Point*, p. 2.

145 Kunze, J. (2005), *The revival of high-rise living in the UK and the issue of cost and revenue in relation to height*, University College London, p. 26.

It is clear why high storey buildings are inevitably more expensive. First of all, constructing tall buildings is logistically more complex. There are more safety requirements. Huge cranes need to be on site. Temporary lifts need building. Workers need rest facilities at high levels to reduce travel time. All this costs money. Secondly, the buildings themselves are more complicated and demanding. Foundations must be deeper. Superstructures must bear more weight and resist more wind. Even the façade must be stronger. Thirdly, there are a limited number of engineers, companies and individuals who have the necessary expertise. This relative lack of competition pushes up prices. Fourth, the cost, volume and complexity of the service infrastructure also increases as buildings become higher. Fire fighting equipment and the speed, power and number of lifts required all push up costs.

As buildings get taller their 'efficiency ratio' also decreases. 'Efficiency ratio' is a measure of the net size of the building over the gross size of the building – what can be sold or let over what needs to be built. (Lifts and communal halls need to be built, but are not an increase in habitable space). The same academic survey of professionals cited above on costs found that a standard 'efficiency ratio' of about 85% for a five storey building reduced to between 70 and 75% at 50 storeys. The 'efficiency ratio' for a house is of course 100%. You sell or rent the whole thing. Fifth, the required non income-producing land-holding period during construction is much greater for larger more complex or higher buildings. Finally, if the unforeseen happens a standard 'low-rise' housing development can normally be stopped half way. That final street is just not built. It is not possible to part finish a large or high building. There is consequently greater financial risk involved in the whole project. Investors therefore require greater returns to justify this risk. In 2005 this was around 30% return on investment for high-rise as opposed to about 15% for medium-rise.¹⁴⁶

Multi-storey housing is much more expensive to maintain

Not only are multi-storey buildings and above all tower blocks more expensive to build, they are also far more expensive to run. This is clear from several studies over a thirty year period. By 1964, high-rise schemes were already costing 53% more to maintain than low-rise schemes. By the mid 1970s, as labour costs rose and as the buildings aged, this cost differential had increased to 100%.¹⁴⁷ In 1980 the architect Walter Segal calculated that the cost of planning, building and maintaining a flat in an average tower block was (depending on circumstances) 50 to 100% more than the equivalent cost for a house.¹⁴⁸ Very recent research on the renaissance of high-density, medium or high-rise buildings for social tenants strongly corroborates this and shows how these extra costs can be pushed onto tenants. A 2012 study by the Cambridge Centre for Housing and Planning Research found that nearly 95% of new-build flats (as opposed to 62% of new-build houses) had service charges and that service charges for flats were both higher and rising as densities increased. During the three years from 2005 to 2008 the percentage of flats with service charges over £10 per week rose from 40% to 58%. Ironically, they concluded 'despite the preference of most tenants for a house rather than a flat' flats often cost tenants more to rent than houses due to the high charges.¹⁴⁹

146 Ibid. pp. 27–29.

147 Dunleavy, P. (1981), *The Politics of mass housing in Britain*, p. 89.

148 Segal, W. (1980) 'The Housing Crisis in Western Europe' in *Architecture for People: Explorations in a new human environment*, p. 173.

149 Jones, M. (2012) *High density housing – the impact on tenants*, pp. 2–3.

This cost differential is for several largely unavoidable reasons. Firstly there are just more communal areas (corridors, stairwells etc) that need to be maintained. This costs money and by definition cannot be done free as DIY by owner-occupiers. It must be paid for. As noted earlier, communal areas are more often damaged or defaced than private spaces. This is therefore not just a 'hidden' cost but an increased real cost, as damage occurs and must be repaired more frequently. Secondly, flats are harder to service. Many of the operations on a house performed by a relatively low-cost janitor with a toolbox or a ladder (mending a pipe, cleaning a window, painting a window-frame etc) will require a skilled and expensive engineer in a block of flats (mending a lift, repairing an unexpected problem on the tenth floor etc).

Multiple storey housing does not just cost more to maintain physically. It costs more to maintain socially as well. The high income apartments that function well do so because money is ploughed into protecting them through human presence. Most non-social high-rise housing in Manhattan, for example, have doormen and resident superintendents. The same is true of many of the recent high-end apartment developments in central London. High annual service charges pay for this. But most people cannot afford such charges. As we have seen most surviving post-war multi-storey developments now also have some combination of entry-phones, CCTV, barriers and (often) a full time concierge. The former must be monitored and repaired. The latter needs to be salaried by the landlord. Self-evidently, if these costs are not met then the cost of maintaining the buildings will mushroom as common areas succumb to the vandalism of a small minority.

In the UK in the recent past, high running costs have also been due to shoddy building. This has required consistent major repairs. Failure to budget for this has meant that repairs were delayed in some cases for many years – increasing the final cost. In many cases, the collapse of many estates (socially and physically) has made the endeavour a financial disaster with high demolition costs and the need to rebuild or refurbish within one generation. The very last thing any landowner with a rational eye to the long-term future should wish for is to create large multi-storey housing projects. The real costs of this decision are large and unknown. Often government expenditure has been required to pick up the shards. Future planning policy should take account of these past failures.

Building attractive streets provides the best returns for the long term landowner

Building streets is not just cheaper. It is also in the long term interests of landowners and landlords. A report carried out by Savills for the Prince's Foundation for the Built Environment, compared land values and residential sale values in three types of streetscape in three separate towns in Buckinghamshire, Dorset and Scotland. It found that the value per hectare of the 'sustainably' developed neighbourhood to a high density was 32% higher than that of more typical lower density developments. There was a great deal of value to be had in building the kind of streets we have outlined. Value per hectare was £8.25m as opposed to £6.26m for a more typically suburban recent private estate development. It was even 10% higher than the nearby historic town centres (£8.25m vs. £7.51m). Nor was this just due to greater density. The actual price per square foot was greater. The price per square foot across the three schemes was 9% greater compared to standard

suburban style development. It was 27% higher per square foot than the nearest town centre.¹⁵⁰

Put differently, people were prepared to pay more for a modern house in a high density traditionally and compactly designed town centre style development. Perhaps this should not be surprising. The MORI survey cited in Chapter Two found that Victorian terraces were a more popular form of housing than modern semis. The implications of this for the redevelopment of any of Britain's failed estates are very important. As long as there is a long-term landlord (such as a Housing Association) either keen to own or prepared to own at least some land over the medium term then the high density and potential value uplift can make the scheme at least as remunerative as standard commercial development. So we know that these types of development are clearly a viable option and that they can be a more viable option than typical lower density developments.

Create Streets' own private financial modelling agrees with the thrust of all the evidence presented in this chapter. In preparation for actual development discussions with landowners and potential funders, Create Streets has developed a financial model to compare the financial returns from different combinations of houses and medium-rise flats on small and medium sized plots.¹⁵¹ This model is based on many years' experience developing a range of residential, commercial and mixed developments. It takes account of reasonable assumptions on build cost per square metre, efficiency ratios, current sales values, cost of sale and developers' required profit margins. In the example below we have used it to compare three possible developments in a notional 1,250 square metre plot in a less prosperous inner London suburb. These are:

- A terrace of 10 three bedroom houses
- An eight storey development of 32 flats, and
- A four storey development of 16 flats.

We assume that these developments are in the normal market. The findings are set out below. 'Landowners' profit' which essentially measures residual land value does not imply that the landowner necessarily exits the development by taking all residual value rather than reinvesting it. For example, a housing association may use this value to build houses elsewhere or invest in wider social infrastructure. As building houses in streets generates a higher residual value, this permits a greater 'fund' for such subsidies or investments. So building houses would allow more social housing to be built and improve a council's cash flow. This corroborates the finding cited above that more social housing could have been built post-war had houses and low rise flats been favoured instead. We have not taken account of the fact that the much higher running costs of medium-rise building would further weight the economic case even more firmly toward houses.

The terraced houses also leave the landowner with a residual value of £1.2m. By contrast, the eight storey build leaves him with very little residual value due to the lower sales values and higher build costs of flats versus houses. Houses are worth more because more people want to live in them.¹⁵² A four storey apartment block provides a compromise though not a very attractive one. The landowner is left with a small (£390k) residual value and probably houses fewer tenants (270 per hectare) than by building a conventional street (300 per hectare).¹⁵³

150 Prince's Foundation for the Built Environment, (2007), *Valuing Sustainable Urbanism*. See especially pp. 81–96.

151 I would like to pay particular thanks to John Moss and Heneage Stevenson for making possible this analysis based on their deep professional experience of property developing.

152 Indeed, some very minor changes in our assumptions would actually mean the landlord would need to subsidise the build if the developer is seeking a standard commercial return.

153 In this model the underlying drivers for the greater economic returns from the terraced housing are due to its greater value on the open market and to the higher build costs and financing costs of medium-rise developments.

Table 6.2

	Terraced house	Eight storey flats	Four storey flats
Finance fees, %	14.5	16.5	16.5
Units	10	32	16
Units/hectare	80	256	128
Sale value per unit, £k	400	250	250
People/hectare	300	540	270
People/unit	3.75	2.1	2.1
Developers' profit, £k	600	1,200	600
Landowners' profit, £k	1,200	170	390
Units with private gardens	10	4	4
Communal space, sq. metres	0	785	800

However, while landowners profit from building streets rather than houses, for the developer the position is rather different. The most profitable development is the largest and most complex, namely the eight storey flats. Unsurprisingly, developers are incentivised to push forward flats as 'the most viable' development. And this, not unreasonably, is what they do.

However, for the landowner streets are worth more in the long term, and the net value for society as a whole is higher with street-based developments. We are in danger of being bounced into multi-storey estates because they benefit big developers rather than society as a whole. There is a commercially viable alternative to returning to the dead end of multi-storey housing. We can build houses and streets instead. What is encouraging the construction of multi-storey slab blocks is an alliance between developers and the planning system. Citizens and long term landowners suffer.

Plugging into the rest of the city improves economic returns

Not all streets are created equal. New streets or sections of streets need to plug effectively into the city around them, not be cut off by slab-blocks, walkways or cul-de-sacs. Some further research by Savills shows how long term value is positively correlated with well connected streets. They examined the two nearby areas in Battersea and Clapham in South London. Both are on the fringes of central London. Both are near large green spaces. They found that the layout of the area and type of housing was crucial to the value of the property in the two areas:

'Area 1... is poorly integrated into its surroundings. It has just a handful of access points onto major surrounding routes, taking little advantage of its situation close to Battersea Park. A typical estate of this era, cars and pedestrians are separated, houses turn their backs to the street. Average residential selling prices here at the peak of the market in 2007 were significantly lower than surrounding areas. By contrast, the area marked 2 on the map above enjoys excellent connectivity to its surroundings. A traditional London Street formation, it has multiple through-routes and connections to the major arteries that surround it. The area supports a number of retail and commercial uses... The area benefits from, and draws on, higher residential values. These lessons from the past further highlight the relationship between connectivity and residential value.'

Figure 6.1: Neighbourhood layout and value

Comparison of conventional and ill-connected streets

They also presaged many of the arguments in this paper, noting that:

‘a new vernacular design for urban housing needs to deliver high-density housing in a tradition street-layout – akin to that identified in area 2. Like the Georgian Townhouses that came before, it forms handsome streets and can be clustered around garden squares. It is these layouts that both make maximum use of space (and hence land value) but also provide the more desirable and high-value living environments.’¹⁵⁴

Creating Streets is not just right from an aesthetic and social perspective. It actually makes the most economic sense in most circumstances in London.

Savill’s findings are backed up by academic research. In an important programme Professor Bill Hillier, at University College London, and the firm Space Syntax, led by Tim Stonor, have over many years studied the correlation between the arrangement of street networks with movement patterns, space use, crime levels and land value.¹⁵⁵ They have developed a measure for ‘spatial accessibility’ of individual street segments. This is a algorithmic measure of how each segment connects into the overall network of streets in the city. It measures how likely it is that a person will pass down a particular street when travelling from one place to another and how easy it is to get into that street from the surrounding area. This permits Space Syntax to create actual maps of accessibility. In the map below

154 <http://www.rationalhouse.com/assets/Spotlight%20on%20Development%20Layout%20Nov%2010.pdf>

155 All the data in this section is drawn from presentations made by Tim Stonor on 8th March 2011 and 26th April 2012 and available at www.slideboom.com. Accessed in June 2012. See also, Hillier, B. and Hanson, J. (1984), *The social logic of space*.

the red areas are the best connected and blue areas are the least accessible. When spatial accessibility is plotted against observed pedestrian and vehicle movement it is highly predictive. Space Syntax have calculated that 60–80% of actual usage of streets would appear to be due to spatial accessibility.¹⁵⁶ In short, more accessible places get more people.

Figure 6.2: Map of spatial accessibility of central London



Source: Space Syntax.

The number of ways in which a street interconnects with the rest of the city and the nature of links to other streets are critical. Higher connectivity creates a cascade of good things. Not surprisingly shopkeepers like busy streets. In central London 80% of shops are located in the 20% most spatially accessible streets. People create shops where they know people will come. This creates value. The most accessible streets are the most expensive. A correlation between spatial accessibility and rateable value per square metre finds a correlation of 88%. City-dwellers want to live near the shops if they possibly can. Anyone who has looked for a house knows the nearer shops and transport you are, the higher the price that you will pay.

Busy streets, on average, also see less crime than neighbourhoods that are cut off from the rest of the city or which are connected in the wrong way. As Space Syntax's studies in Perth and London have shown, the best 'geometry' of connection appears to be a simple network of terraced houses 'looking out'. There are no exposed garden walls or back alleys which offer a simple route through to the kitchen window. The worst arrangements are either houses far apart in complicated arrangements (the cul-de-sac of the 1980s) or a complex array of over-permeable estates with multiple back routes to everywhere (the 1960s estate).

The Brookings Institute in the US has made parallel findings. In 2012 they published a study that compared 201 places by their 'walkability' which is worth citing at length. They found that:

- **'Places with higher walkability perform better commercially.'** A place with good walkability, average, commands \$8.88/sq. ft. per year more in office rents and \$6.92/sq. ft. per year higher retail rents, and generates 80 per cent more in retail sales as compared to the place with fair walkability holding household income levels constant.

¹⁵⁶ Or, put mathematically, when you perform regression analysis of spatial accessibility against pedestrian and vehicular movement, as shown in the charts. R-squared equals 0.589 and 0.702 respectively.

- **Places with higher walkability have higher housing values.** For example, a place with good walkability, on average, commands \$301.76 per month more in residential rents and has for-sale residential property values of \$81.54/sq. ft. more relative to the place with fair walkability, holding household income levels constant.
- **Capitalization rates are lower in places that qualify as walkable urban places than in those that do not, especially in the period after the Great Recession.** Development in places with higher walkability has lower capitalization rates. The underlying value of real estate assets in walkable places is higher, facilitating private market financing. On average, before the recession (2000 to 2007), retail and office space in walkable urban places had a 23 per cent premium per square foot valuation. During the recession (2008 to 2010) that premium nearly doubled to 44.3 per cent.¹⁵⁷

In short, if landowners want to build developments that are likely to prove busy, valuable per square metre, popular and relatively crime-free they should create streets that are not sequestered from but plugged into the rest of the city. But they should not create unpoliceable permeability where routes are hidden from friendly eyes. In practice this means more terraced houses and fewer detached ones. It means streets that link into arterial roads not turn their back on them. It means fewer and longer streets not more and smaller ones as these streets criss-cross each other and by connecting to one another improve the flow of people and traffic. It means straightish streets and open grids that bend and mould to the land and orientate sensibly to local destinations. It means gentle crescents and squares not enclaves, staircases, overhead walkways and cul-de-sacs.

Multi-storey estates impose a cost on the neighbourhood

The case for multi-storey estates is even worse once you account for all the hidden costs. Part of the costs created by poor design is passed on to those who live near badly designed developments. If you lived in an area which was cut off from the city as a whole due to surrounding estates that blocked off the traditional cityscape, you will have found that the value of your property was less than it otherwise would be, to say nothing of your lower quality of life.

The study by Savills referenced above noted that “the more permeable the street networks of a neighbourhood, the greater the choice of routes through it, the higher the property value” and “neighbourhoods that were only connected at a local level, rather than their wider surroundings, were worth less as residential locations.”¹⁵⁸ The Space Syntax research also clearly shows areas that are closed off will diminish the value of neighbouring streets as their own connectivity is, in turn, reduced.

Multi-storey estates affect the value of the surrounding neighbourhood. By closing certain routes off, they reduce the permeability of the area. They force surrounding neighbourhoods to become more closed and spatially segregated. This has a major impact on the value of properties and the quality of life in the areas that they are next to. The cost is not paid by developers but those nearby, a situation analogous to pollution.

In addition to this there is the fact that people strongly dislike multi-storey housing. The lack of connectivity such estates create is made worse for those living nearby due to the fact that the housing styles are deeply unpopular. The number one quality people look for in an area, according to separate polling, is

¹⁵⁷ Alfonso, M. and Leinberger, C. (2012), *Walk this way*, p. 9.

¹⁵⁸ <http://www.rationalhouse.com/assets/Spotlight%20on%20Development%20Layout%20Nov%2010.pdf>

‘neighbourhood’.¹⁵⁹ Separately, 82% of people said the appearance of an area was very or fairly important to them when they bought their home, 84% are very or fairly interested in how the built environment in their area looks, and 85% said better quality buildings and public spaces improve their quality of life and the quality of the built environment makes a difference to how they feel.”¹⁶⁰

So the layout of an area and the quality and type of housing in an area in turn impact the quality of life of those living within and the value of properties in nearby areas. This is something that should be taken into account when considering the value of multi-storey estates. Even if there is a slight gain to the landowner and developer, the cost to the wider area is likely to be negative. It is both economically flawed and morally wrong to allow big developers or planners to impose a cost on local communities. Once this cost to those who live nearby and the wider city is factored in, the already shaky economics of multi-storey estates look even worse.

The hidden drivers— high land prices and government intervention

Of course that is not to say that it cannot be very remunerative to build multi-storey and high-rise developments. It can. The designers, engineers and construction firm all do well from the process. In limited circumstances, property developers can do very well too. This is normally when the development is at the luxury end of the market and particularly if land values and dwelling densities are very high. One analysis using information privately held by developers and construction firms has calculated that it can make economic sense to:

- build a fifty storey building as opposed to a five storey one when the density is doubled or the purchase value per property is increased by about 60%; or
- build a forty storey building as opposed to a five storey one when the density is tripled or the purchase value is increased by about 30%; or
- build a thirty storey building as opposed to a five storey one when the density is increased by about 30% or the purchase value is increased by about 20%.¹⁶¹

Clearly it is easier to make these types of sums work if density and prices are high. This is why up to now most flats in the new tower block renaissance (94% up to 2005) were mid or top-end.¹⁶² But now there is a general push for higher densities across London in general. This is both economically mistaken and not what most people want. Multi-storey estates also have a negative impact on those who own property or live nearby.

Create Street’s financial analysis based on up to date sale values, recent property developers’ financial modelling and other recent data is unambiguous. If density-targets were not pushing very high density there would be much less multi-storey development. Once the wider impact on surrounding areas is taken into account, this level of multi-storey development would reduce still further.

The economics of building high and huge, which impose wider costs, are only attractive in patches. It only works in some circumstances of very high density, very high land values and very high sale prices. Ironically, the very high land values that exist are created and to some extent maintained by the planning system

¹⁵⁹ <http://www.policyexchange.org.uk/images/publications/cities%20for%20growth%20-%20nov%202011.pdf> p57

¹⁶⁰ Morton, A. (2011), *Cities for Growth*, p.53.

¹⁶¹ Kunze, J. (2005), *The revival of high-rise living in the UK and the issue of cost and revenue in relation to height*, University College London, pp. 31–2.

¹⁶² Ibid. p.25.

(and to a small extent the developers). The fact that London is not allowing enough land with planning permission to come through ensures that land values for the small amount of land that comes through remain very high. This supports developers who have land banks, or options on land. The system as a whole does not release enough land, which makes unattractive multi-storey estates more viable than a sensible policy of large scale redevelopment would. We are in danger of building uglier and less attractive, as well as less affordable, towns and cities.

There is a better way. If we redeveloped all of our unattractive post-war multi-storey estates in the next decade the value of the land for sale would fall, and this would make high-rise multi-storey development less viable. It would also increase the quality of housing that was built. This issue is explored in other Policy Exchange reports such as *Cities for Growth* and *Why Aren't We Building Enough Attractive Homes?* But what it means for the Create Streets context is that we could build a huge number of streets and houses rather than a few very high density developments with insufficient attractive green space. And we can do it while increasing London's housing stock.

“If we redeveloped all of our unattractive post-war multi-storey estates in the next decade the value of the land for sale would fall, and this would make high-rise multi-storey development less viable”

7

Creating Streets Can Build the Homes London Needs

Terraced housing can improve the density of the post-war estates

Streets with houses can provide homes at sufficient densities to match or even improve the post-war multi-storey developments. It is a myth post-war estates were needed to house a larger London population or increase the population density. It was the will of the planners and councils, often against local wishes, that created these developments.

It is not necessary to build high in order to match or even beat current housing densities. It is often stated (for example in parts of the London Plan), that high-rise housing is necessary to achieve high densities. This is simply not true. It is true that the very highest densities are only achievable with high-rise building. Clearly a town composed entirely of tower blocks of 40 storeys is going to be hard to beat. Kowloon in Hong Kong reaches 1,250 units per hectare and around 5,000 people per hectare.¹⁶³ But most of the post-war developments in Britain were influenced by the Le Corbusier ideal of shared spaces. This meant that they surrounded their tower blocks and linked slabs with large open communal spaces. The consequence was that many British developments actually *decreased* housing density. For example, during the post-war rebuilding period the population density of Southwark, (home to the Aylesbury Estate discussed earlier) and the borough that built more high rises than any other comparable area, (9,640), actually *decreased* by two thirds.¹⁶⁴ In Newham the population fell by 20% from 1951 to 1971 as the council built 6,740 tower block dwellings.¹⁶⁵ We can *improve* current densities while *reinstating the traditional street pattern*. The current route is to do a few developments where nearly all green space, communal space or private gardens, are removed in order to shoe-horn in as many people as possible. This is the route currently being taken.

According to at least eight different sources, terraced houses can easily match and should increase the housing densities (about 75 units/hectare) of existing multi-storey housing developments. In many cases terraced housing can beat this density of housing provided by a large margin.

- Widely cited analysis by the architects and planners, Andrew Wright Associates, quoted by the 1999 Urban Task Force report showed how a 'typical' UK high-rise development in landscaped gardens had a density of 75 units/hectare. This was readily matched (in the same analysis) by

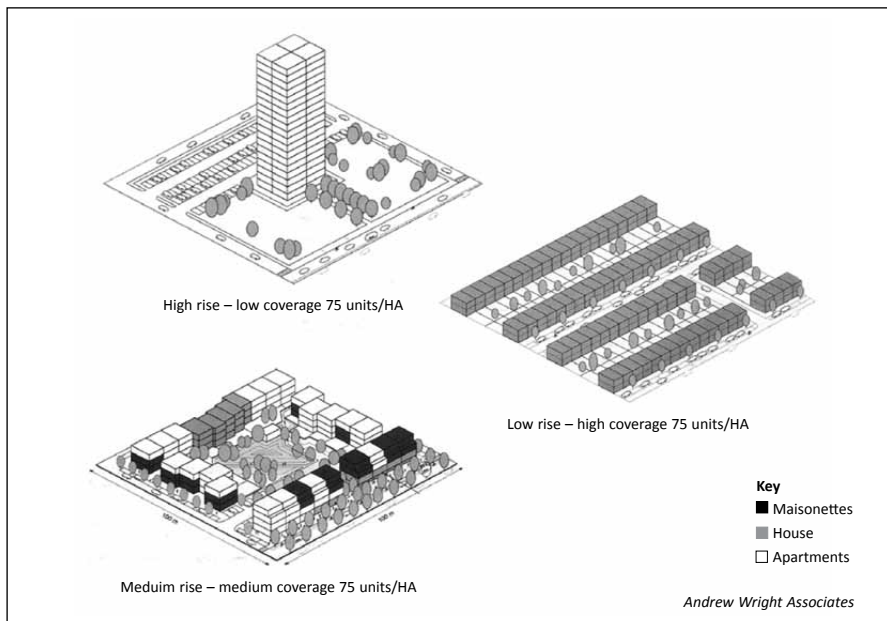
¹⁶³ CABE (2005), *Better neighbourhoods*, p. 7.

¹⁶⁴ Coleman, A. (1985) *Utopia on trial*, p. 82.

¹⁶⁵ Dunleavy, P. (1981), *The Politics of mass housing in Britain*, p. 48, pp. 205–7.

standard urban terraced housing which easily reached 75 units/hectare.¹⁶⁶ This is achieved through different ways of configuring land use, as the diagrams below show.

- A comparison made by the Commission for Architecture and the Built Environment (CABE) in 2005 agreed. It compared some 'typical' Victorian/Edwardian terraced houses in Hertfordshire with 80 units/hectare and 320 people/hectare to the zones planned by the post-war planner, Sir Patrick Abercrombie. His typical 'medium density' zone only reached a density of 84 units/hectare and 336 people/hectare despite high-rise building.¹⁶⁷



- The London School of Economics reached a similar conclusion that conventional style terraced housing could easily reach required densities: 'Notting Hill, Lancaster Gate and Earl's Court with five and six storey houses ... are among the most densely populated neighbourhoods in the country, but prove that density can be achieved without very tall structures.'¹⁶⁸
- Analysis by the planners MJP Architects in 2005 also showed how very conventional streetscapes of terraced housing, mews housing, terraced maisonettes and mews housing with flats and maisonettes could perfectly easily reach densities of 77, 87, 111 and 120 units/hectare respectively.¹⁶⁹ Further work by the same firm demonstrated how terraced homes could easily reach 100 units/hectare and match 12 or 4 storey apartments. They concluded that, 'combinations of house types and layouts can achieve densities often thought to require flats. The inclusion of non-family accommodation in flats can raise density further or increase the ratio of public open space as green infrastructure'.¹⁷⁰
- The 2011 London Housing Draft Supplementary Planning Guidance notes some of the most valuable and successful parts of London are high density streets: 'housing developments in Maida Vale, Notting Hill, Belgravia or Bloomsbury often reach over 200 dwellings per hectare and three-storey Victorian and Edwardian terraces around outer London's town centres can be as high as 100 dwellings per hectare.'¹⁷¹

166 Cope, H. (2003), *Capital gains: making high density housing work in London*, p. 23.

167 CABE (2005), *Better neighbourhoods*, p. 7.

168 Cited in Kunze, J. (2005), *The revival of high-rise living in the UK and the issue of cost and revenue in relation to height*, University College London, p. 12.

169 MJP Architects (2005), *Redefining Suburbia*, pp. 9–12.

170 MJP Architects, *Further Studies by MJP Architects*, pp. 4–5. <http://www.sustainablesuburbia.co.uk/webpages/Presentation7.html>. Accessed December 2012.

171 Mayor of London, (2011), *Housing Draft Supplementary Planning Guidance*, p.29.

- A report by RIBA agreed with these findings and realised that the critical reason generously proportioned Victorian houses were often as dense as 80 units/hectare was because 'houses were built in straight lines, often in terraces, which maximises plot coverage. Roads were narrower and houses built alongside each side – in contrast to many newer schemes where the 'distributor-and-cul-de-sac' model results in a lot of unused space within the road layout.'¹⁷²
- Even Lord Rogers, a strong advocate of multi-storey living, has noted that 'in central London, we are still building at an average density of 78 dwellings per hectare. This is around half the density of the Georgian terraces of Islington and Notting Hill'.¹⁷³ This would imply density of 160 units/hectare is dependent on a mix of houses used as houses and houses used as flats. However it is over double the 75 homes a hectare that post-war estates typically achieve. The Urban Design Compendium supports this with typical densities for mixtures of terraced houses and flats in an urban setting ranging up to 175 units/hectare.¹⁷⁴
- Finally, a study conducted at Cambridge University concluded that, 'high density housing can be provided in built form similar to the scale of the larger Georgian terraces, with three to five storey buildings around shared open space. Acceptable developments of this type can be designed within a range of densities generally between 300 and 400 habitable rooms per hectare.'¹⁷⁵ This again involves reliance on flats as well as houses but equates to around 100–175 units per hectare.

In addition, within a general house-based streetscape of housing we can achieve a slightly higher density by allowing some modest blocks of flats. With modern amenities such as lifts, these could be pepper-potted throughout a new street based area. This should mean that we should be able to achieve a higher rather than a lower density while retaining a street-based feeling and atmosphere.

These are very important findings. They mean that *reinstating the traditional street pattern can notably increase the existing density*. In most cases, due to their unpopularity and low occupation levels, replacing post-war estates with streets would lead to a rise in occupancy which would enhance this impact.

Because terraced housing is flexible and can be easily either divided into flats or kept as whole houses, they are a better long term investment. Areas often change from mature family living, which often requires whole houses, to young professional living or families with very small children, which require maisonettes, and back again. By creating a flexible stock we ensure that an area can respond to this change as it occurs rather than needing to rebuild an area as the demographic shifts. It ensures that families can have access to green space as their children reach the age when they can be allowed outside. Creating streets would allow a major increase in housing. But it would also allow much better and more flexible housing.

How many homes could this allow in London?

We believe that the principles set out in this report are applicable to the whole of the UK. However, the housing crisis is greatest in London, which is also where many of the councils undertook large scale redevelopment and built large multi-

¹⁷² RIBA (2009), *Improving housing quality*, pp. 9-10. The report argued that this was no longer possible due to the need to 'provision for car parking.' However, this seems misguided on two levels. Firstly, many Victorian terraced streets seem to have perfectly adequate space for car-parking in the streets. Secondly, even if it is accepted that on-street parking is not ideal (which is arguable) abandoning the most successful, most popular, most economic housing model on this alter seems to be an extreme example of putting the cart before the horse, or at any rate the car before the house.

¹⁷³ *Housing for a Compact City*, Greater London Authority, 2003

¹⁷⁴ *Urban Design Compendium* (2007, 2nd ed), p.48.

¹⁷⁵ Jones, M. (2012) *High density housing – the impact on tenants*, p. 14.

storey estates. We believe that a programme of redevelopment of multi-storey estates to streets would help solve London's housing crisis in a popular way.

It is impossible without considerable further research to produce a detailed estimate of how many homes this could allow. However, we can make an educated guess. In the period of the multi-storey estate, roughly from 1951 to 1981, around 4 million social homes were built.¹⁷⁶ Not all of these were in multi-storey estates. And, clearly the vast majority were not built in London. But a 1981 study estimated that from 1951 to 1981 around 5% of all social homes were built in medium storey estates and another 20% were in high-rise estates. 36% of all multi-storey estates were built in London.¹⁷⁷ Given these ratios then around 360,000 multi-storey homes were built in London.¹⁷⁸

If we use different estimates about how many extra homes could be built by redeveloping the sites that these estates were built on then we can project how many homes redeveloping these estates might provide. The results of this are shown in the table below. Because redeveloping multi-storey estates allows higher densities this is the *additional* housing this programme would create. This would be on top of rehousing the existing tenants. This additional housing could be sold privately to pay for the redevelopment of these sites.

Table 7.1: Increase in homes achieved through Creating Streets using different assumptions

Scenario	Level of dwellings that could be replaced	Additional homes due to increase in density if redevelop estates with 75 dwellings a hectare			
		100 units h/a	120 units h/a	140 units h/a	160 units h/a
A	260,000	86,580	156,000	223,600	293,800
B	360,000	119,880	216,000	309,600	406,800
C	460,000	153,180	276,000	395,600	519,800

These are very high level estimates which need further work. As a consequence the estimated range is very high. Yet the mid-range of these estimates, between 216,000 and 309,600, would be that they could provide around 260,000 additional new homes as well as rehousing the current tenants. Given that the level of new homes that the London plan calls for is 32,000 new homes a year, this is roughly eight years of housing supply – or enough to take us up to 2020.¹⁷⁹

The highest estimate is over half a million homes, and would provide the London Plan's required level of housing for over a decade and a half. Moreover these housing figures do not rely on levels of density or a type of dwelling (such as the high rise or multi-storey estate) that local people are provably most likely to oppose. They would be a popular way to increase the number of homes being built in London. Even if this programme just built 100,000 new homes, this is worth three year's need in the London Plan and nearly five year's worth of supply at the current rate. Creating streets can clearly help with our housing crisis.

176 Based on data from Table 244 House building: permanent dwellings completed, by tenure, Gov.Uk website.

177 Dunleavy, P. (1981), *The politics of mass housing in Britain*, pp. 40–48.

178 In reality the number was almost certainly greater as high-rise constructions were more prevalent in cities than in towns.

179 Mayor of London, (2011), *Housing Draft Supplementary Planning Guidance*, p.14.

8

Policy Recommendations

Current policy does not allow streets and houses to happen

This report has shown building streets and houses to replace our crumbling multi-storey estates would be:

- Better for those living there.
- Much more popular with the public.
- Viable.
- Able to substantially increase the level of housing.

This is not to say there are no cases where we should build multi-storey flats. Policy should not go from one extreme to the other. For example, a canal or river acts a barrier to traffic and often enhances value. A multi-storey set of blocks situated in such locations may be appropriate and popular while not cutting off neighbouring streets or houses. Similarly, in an area which already has many warehouses or multi-storey blocks, another one is likely to make little difference. But these are specific cases.

Policyholders need to accept that in most areas people want streets with houses. We should design a system that supports instead of subverts this. Multi-storey apartments should be allowed in the specific locations where they are likely to be popular and to fit with the existing architecture.

“Policyholders need to accept that in most areas people want streets with houses. We should design a system that supports instead of subverting this”

Instead, policy actually makes the most popular form of development very difficult, if not impossible, to build. The London Plan and local plans continue to make it hard to build houses in streets.

As we saw in chapter one, the London Plan is still setting incredibly high density targets. These all but demand multi-storey housing far denser than is typical in London. Such ‘Manhattanesque’ targets do not permit developers to build something that looks like London but rather the banks of the Hudson or Pudong.

National policy also should change. Buildings regulations are preventing what people actually want. Over the years a host of detailed building and planning regulations have been interpreted so as to make it impossible to build tight terraced housing. Demands that 100% of parking be off street, that there be minimum space between houses and against steps up to the front door are

perverse. And they are antithetic to functioning communities. Almost uniform on-street parking does not make Chelsea a slum. Near 100 per cent terraced housing in Pimlico does not blight its residents' life chances. And steps up to many Notting Hill houses do not prevent the elderly living there very happily.

Much of the most successful parts of inner London and certainly most historic terraced housing and Mansions Blocks would fail the London Housing Draft Supplementary Planning Guidance. These make on-street parking hard and forbid lower ground floor kitchens, living room windows too near the floor and steps to the front door. They require lifts for four storey buildings with flats, dedicated cycle storage space, potential for a stair lift on all stairs and a ground floor WC and potential shower.¹⁸⁰

These requirements are individually hard to object to. Of course as many houses as possible should be liveable for the elderly or disabled. Of course cycling should be encouraged. Yet their net impact is to prevent developers building terraces of houses and low-rise flats. They are doing more harm than good. A more limited number of new homes could be guaranteed as appropriate for the disabled or infirm. What is crucial is that where they want to, neighbourhoods should be able to override these regulations.

The Mayor of London should champion this approach

The housing crisis is worst and the levels of multi-storey estate highest in London. We believe this offers a golden opportunity to City Hall. There is an urgent need to build more housing by 2020. The London Plan calls for 32,000 homes just to keep up with immigration to London. Yet in the last year, (October 2011–September 2012) London saw starts on new housing hit just 16,000 or so homes.¹⁸¹ In other words, London started to build in the last year just half of the homes needed just to stay in line with population increases – let alone try to reduce sky high rents.

We believe that the Mayor of London should seize this opportunity to create streets and deliver a huge increase in housing that is both realistic and popular. The first issue is to undertake more detailed work on how many homes this agenda could deliver.

- **Commission a full study of how street-based London development opportunities could viably deliver a large increase in housing by redeveloping our multi-storey estates into streetscapes by 2020.**

This would help identify the total increase that might be possible by redeveloping our estates into streetscapes. This should be undertaken with outside support to help challenge entrenched thinking. It will help to crystallise support for these reforms. It should also discuss in detail how the viability of this approach could work and how issues around decanting (temporary accommodation while areas are redeveloped) operate.

Once this has reported there will be a need to make sure that current policies do not block the creation of new street-based developments. There will be a need to redesign the London Plan explicitly to support street-based developments. As a minimum the following changes are needed in order to make redevelopment a viable option.

¹⁸⁰ Mayor of London, (2011), *Housing Draft Supplementary Planning Guidance*, pp.49–70.

¹⁸¹ Table 217 House building: permanent dwellings started and completed, by tenure¹ and region (quarterly) and Table 253a House-building: permanent dwellings started and completed, by tenure and district, September quarter 2012 from www.gov.uk

- **The 2011 London Plan still has housing density targets unchanged from 2004. These density targets should be removed immediately and be replaced with a requirement that new housing at least matches the average density of the housing being replaced.**
- **The London Plan and the Housing Draft Supplementary Planning Guidance should be amended as soon as possible in order to allow the development of streetscapes. Where rules in the London Plan make this difficult they should be abandoned or it should be specified that neighbourhood plans can overrule them.**
- **The Mayor's offices should set up a feed-in group with central government in order to ensure that barriers to creating streets that might remain embedded in national policy are able to be removed as soon as possible.**

These changes however will not be enough. This merely removes the formal barriers to creating streets. The biggest barrier can often be an unhealthy collusion between the big developers and local planners. London needs to empower its residents in order to make sure what is built is acceptable.

- **The London Plan should use the information from the London-wide survey to identify where redevelopment of multi-storey estates could take place and encourage redevelopment of these sites.**
- **The London Plan should require that all large scale estate redevelopment should go through a neighbourhood plan and referendum process.**
- **There should be a 'right to override' local planners where what is being proposed is not supported by local people. Should local planners try to impose something that is not supported by local people then there should be a right to create a new neighbourhood plan in a set period of time if a majority in an area vote against what is proposed.**
- **The London Plan should clearly set out that social tenants will not be required to move or see changes to their tenancies as a result of redevelopment.**

Some recent 'consultations' have been a sham where all the real decisions about density, massing and scale have already been dictated by central targets or made by councils and planners. We are aware of several recent 'consultations' where the options given involved little more than where tower blocks should be cited and how many trees to plant. This is not acceptable. This is why we believe that there needs to be a 'right to override' what is being proposed, with a period after initial proposals come forward available for those who can bring forward neighbourhood plans that actually reflect what local people want.

Finally, London needs to do better for the next generation. The design of multi-storey estates makes it easier for gang culture to evolve. We need to ensure that children growing up in London are able to live in areas that look like the homes and places that most of us want to live in, regardless of their income.

- **Based on the data set out in this report Inner London should set an aim that by 2020 it will have reduced the number of households with children living on or above the second floor in multi-storey accommodation in social housing to a figure in line with the national average.**

This is a major undertaking as it would require that the current total of 31% in Inner London, for example, is brought down to 2.7%. But it is the right policy for London, and would help spur the redevelopment of our post-war estates, reduce social problems, and improve the housing of Londoners.

National policy changes in order to create streets

The National Planning Policy Framework (NPPF) is a step in the right direction. Further changes are necessary to be able to build the streets we need.

- **The government must overhaul many of our restrictive building codes that prevent us from creating desirable neighbourhoods and streets.** At the very least, it should ensure these codes can readily be overruled by neighbourhood or local plans in those areas outside those governing basic construction standards.
- **Based on the data set out in this report, the government should set as a long term aim reducing the number of households with children living in multi-storey accommodation to a figure in line with the average in the owner-occupier and privately rented sectors.** Based on the 2001 data, this would in practice mean that the 100,503 households with children living in social tenancies on or above the second floor should reduce to around 11,500. The 20,122 with children living in social tenancies on or above the fifth floor should reduce to around 1,100.

Local authorities could also support this agenda

If the Mayor's office does not take this forward, local councils should try to implement this agenda. We believe local councillors are often individually opposed to multi-storey estates but feel obliged to support them due to density targets or officials. We hope the data in this report shows them that they should not. Local plans should be amended so that:

- **Local authorities should ensure that wherever possible, all estate redevelopment should go through a neighbourhood plan and referendum. The process must involve true resident consultation, not one where all the real decisions have already been made.**
- **The expectation of local plans should be that new housing at least matches the average density of the housing being replaced or of the neighbouring streets.**
- **Local authorities should encourage developments that can 'plug into' the rest of the city rather than being large, inward-looking monoliths.**

Neighbourhoods should not be afraid to argue in favour of streets

Not everything in politics should come from the centre. We hope that the evidence in this report will encourage local people and those who are creating neighbourhood plans to ensure that what we build is attractive and combines with the overall city, rather than multi-storey estates that do not connect London and Londoners. Neighbourhoods should have the confidence that to argue for streets is not to be unimaginative but to be deeply rational. Wanting to build

streets is the logical response to the empirical data about what works for most people in the long term.

- **Neighbourhoods creating neighbourhood plans should make use of the arguments in this paper to argue strongly for streets with houses on streets in place of multi-storey housing.**
- **Neighbourhoods should take advantage of the NPFF's partial support for design codes to develop local design codes which can encourage development by making specific building requests easier to agree.**

Design codes are precise and technical instructions on how to construct buildings in a certain area. They typically set out buildings' required size, proportions and design detail as appropriate to their location. They were common in the eighteenth century. Indeed Georgian terraces owe much of their uniformity to statute.¹⁸² However, they fell out of the use in the mid-nineteenth century (as you can tell from the far greater variety of late Victorian buildings) and played almost no role in twentieth century British planning. They are now used extensively in Germany, Netherlands, Scandinavia and the USA. RIBA actively supports their greater use in the UK.

Their advantage is that by ensuring that all buildings complement the existing character of a neighbourhood, they boost a sense of place, create local buy-in, reduce opposition and, not surprisingly, allow for quicker and thus more profitable development. Everyone wins. By abolishing national prescriptions this will clear the way for local people to set design codes on the issues that really matter to them through neighbourhood planning.

A competition to help us create streets

We believe that the vision set out in this report is a compelling one. It is a London that is more pleasant for everyone, and where those on low incomes are not forced to live in places that are bad for themselves and their families. It is a London that is actually delivering the homes that we need rather than overseeing an ever worsening housing crisis.

We believe that as well as the major survey recommended earlier a competition should be held by either the Mayor's office, or a major institution with a London-wide standing, (e.g. the *Evening Standard* newspaper). This would seek entries that architects, local people, planners or developers believe:

- Would redevelop a multi-storey estate.
- Would gain the support of local people in a neighbourhood plan.
- Would inspire people and make London a more beautiful place.
- Would show that high density living can be achieved through terraced streets.

We think that the prize for this should be a commitment to funding to steer this through the neighbourhood plan process as well as a small cash prize. This is the perfect opportunity for the Mayor to commit and engage with this agenda. We hope he would be able to personally present this award some time in 2013.

We call on Londoners within the architectural and planning permissions community to come forward with their plans to help create streets and

182 It is a common misconception that Georgian London was built by the pure free-market. It was not. Or at least not entirely. Development was characterised by a highly developed free market of builders and speculators. However, they operated within (in modern parlance) a rigorously consistent design code set out by primary legislation. The 1667, 1707 and 1774 Acts set out requirements for proportions, height, window design and overall size in order to control fire risk (Georgian health and safety regulations) but also so as to ensure streets were harmoniously proportioned. Cruickshank, D. (1975), *London: the art of Georgian building*, pp. 22–29.

policymakers to support them. This agenda is pro-housing and pro-growth, and would create a more beautiful and better London. We cannot allow a minority with vested interests to defeat it.

Creating streets and houses on failed multi-storey estates is one of London's greatest opportunities over the next couple of decades. It must not be missed.

Create Streets

Create Streets have defined six core principles to help achieve the redevelopment and homes we need. We believe we should create streets to replace estates that are:

- Capable of lasting generations.
- Realistic and commercially viable.
- Environmentally friendly.
- Aesthetically beautiful.
- Tailored to how people want to live.
- Ensuring social housing and market housing are side by side.

Create Streets will campaign for social (and indeed all) housing developments to be focused on creating streets with houses and low-rise flats. We aim to persuade local communities forming neighbourhood plans to support this. We also aim to start the process by engaging in real developments, particularly in south and inner-London.

Through argument we will make the case. And on the ground, we will facilitate real redevelopment. If you would like to know more, either as a policy maker or as a member of the public, please visit our website at www.createstreets.com and find out more about our work and how you can help.