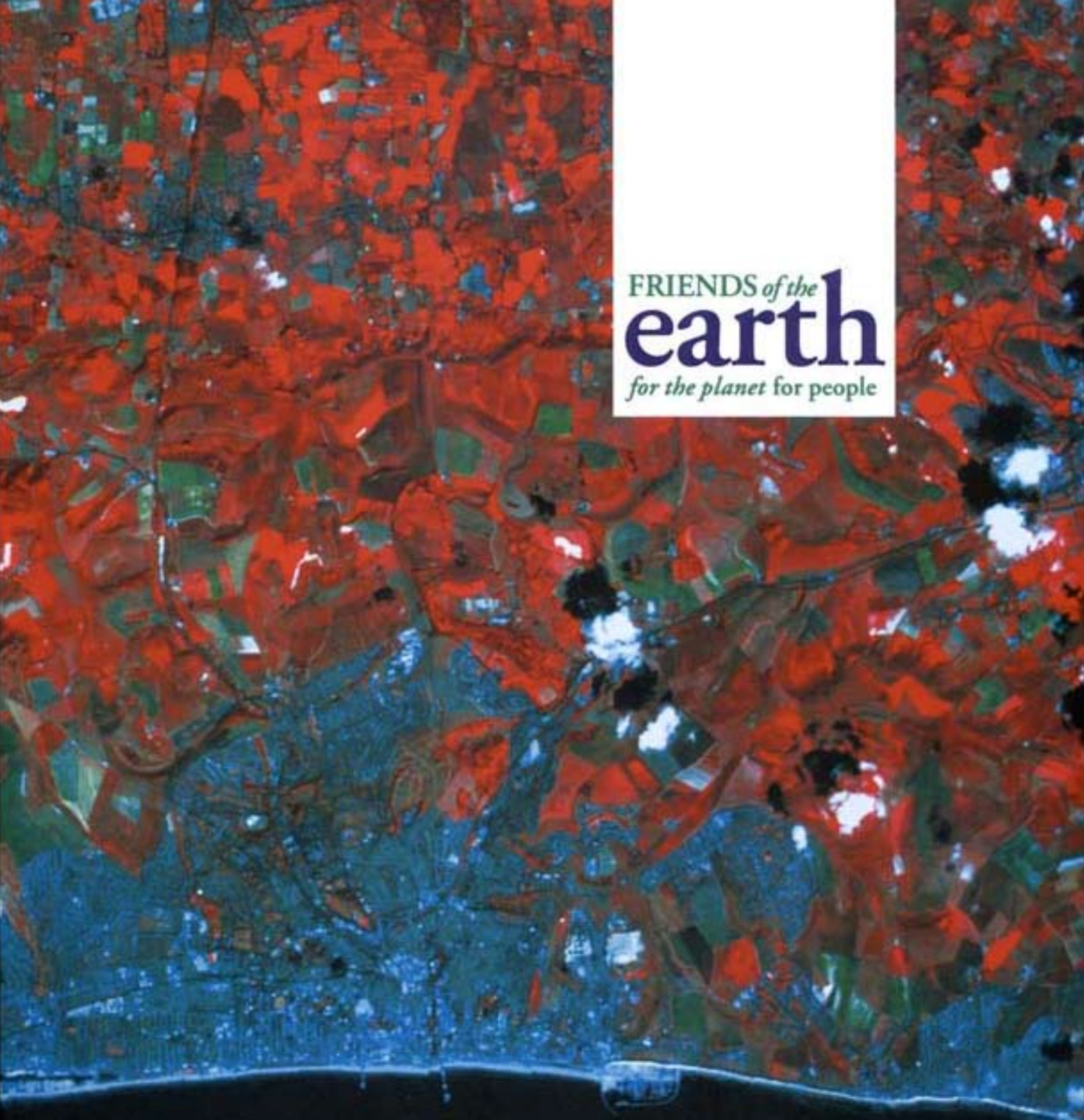

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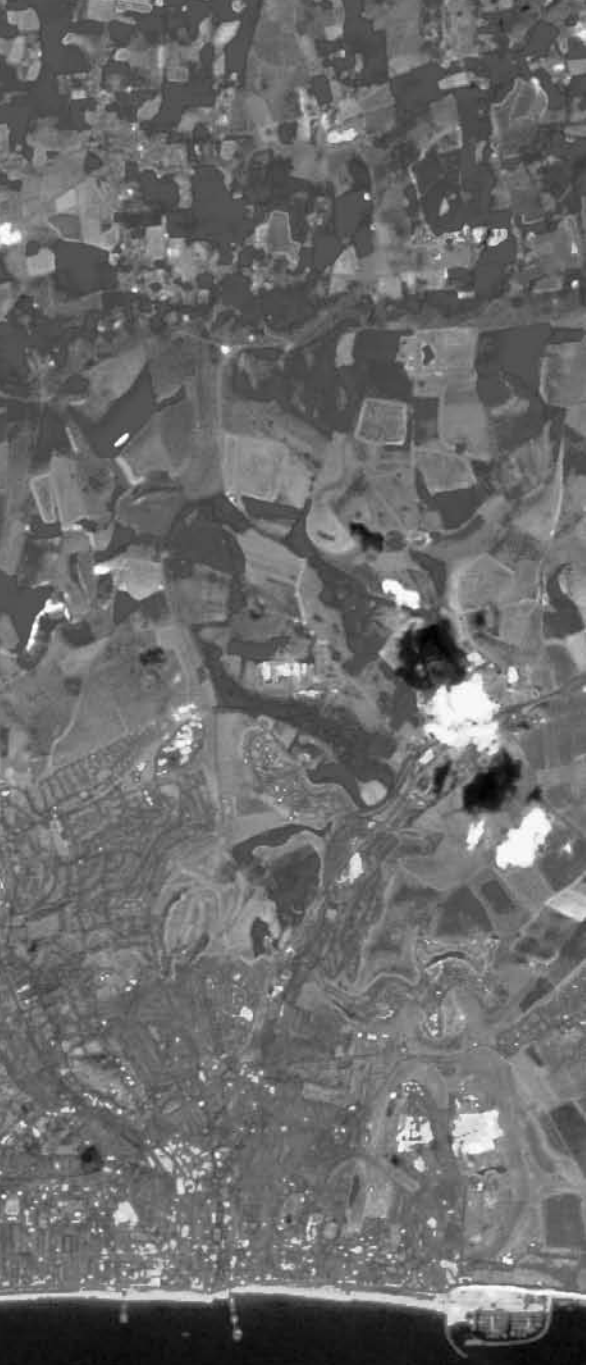
Tomorrow:
a peaceful path to urban reform

The feasibility of accommodating 75% of new homes in urban areas

David Rudlin - URBED



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Tomorrow:
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This report has been written by David Rudlin with additional research by Nick Dodd, Kieran Yates and Dr. Nicholas Falk. It has been managed for Friends of the Earth by Dr. Simon Festing and for Wise by Alan Kipps.

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Cover photograph: Satellite image of the Sussex coast showing Brighton and Worthing photographed in the infrared range so that vegetation appears in red and urban areas in blue.
CNES, 1986 Distribution spot image/Science Photo Library.

Tomorrow:
a peaceful path to urban reform

The feasibility of accommodating 75% of new homes in urban areas

It is 100 years since Ebenezer Howard published his seminal book, 'Tomorrow: A peaceful path to real reform'. Howard saw cities as 'ulcers on the very face of our beautiful island' and for much of the intervening century many people in Britain have tended to agree with him. The reforming zeal of planning pioneers to provide decent homes away from the smoke of the city chimed with the mood of the times – but times have changed. We cannot continue to reject urban areas if we are to accommodate household growth while protecting the countryside and promoting more sustainable patterns of growth. We must develop a new agenda for our towns and cities – a peaceful path to urban reform.

This report has been commissioned by Friends of the Earth to test the viability of the suggestion, made in February 1997 by the UK Round Table on Sustainable Development, that 75% of all new homes should be accommodated within urban areas. It starts by exploring the implications of household growth, the nature of new households and their geographical spread. It then assesses the capacity of urban areas by looking at the historic rate of building on recycled land, the loss of population from urban areas and at some of the recent urban capacity studies that have been undertaken. It goes on to collate national data on various forms of urban housing capacity, concluding that, in theory at least, there is the space to accommodate 75% of new households within England's towns and cities.

However, the issue is not so much the physical capacity of urban areas but the willingness of people to live there, of developers to build there and of planners to allow it to happen. The report explores these barriers to urban development and sets out a series of recom-mendations to bring about change. These concern the workings of the planning system, fiscal measures such as a greenfield tax and initiatives to promote urban areas. We conclude that there is a need to alter the financial balance between greenfield and urban development by taxing the former and promoting the latter.

Household growth: In Chapter 1 we explore the implications of household growth. The government has projected an increase of 4.4 million households between 1991 and 2016 although it is anticipated that this may increase to 5.5 million. To this should be added half a million homes to meet existing unmet housing need and from it should be subtracted the homes built since 1991. We have therefore assumed a need to accommodate 5.1 million homes by 2016, more than five times the number accommodated by the entire post war new town programme.

While household growth at the start of the century was due to the emergence of the nuclear family, in the future 80% of new households will be single people. Just as the housing of the twentieth century reflected the rise of the nuclear family so the housing of the next century will be influenced by its decline.

By using the projections as the basis for regional housing allocations, governments have accepted the trends for population to drift from north to south and from larger cities to smaller towns and rural areas. Yet, having done this, they have set targets for the proportion of households to be accommodated in urban areas. Growth is therefore concentrated in the districts with the least urban capacity while surplus capacity in cities has remained unused.

While household projections need to be accommodated we need not accept the geographical spread of growth or the rates of urbanisation that they imply. These are legitimate concerns of government and can be influenced by policy.

The Urban Dimension: If we are to accommodate a significant proportion of household growth within towns and cities we must confront the poor image that we have of urban areas. English people have been abandoning cities in their droves for over a century. This is why people have been able to argue that it would be wrong to force new housing into existing urban areas, both because it is not what people want and because it runs counter to very powerful professional ideologies and market forces.

Since the industrial revolution the city has been seen as bad and the countryside good so that people with the power to do so have moved out of urban areas leading to urban sprawl and inner city decline. Cities now struggle, not with growth, but with decline. It is poverty, urban decay, crime and traffic congestion which causes 'respectable' society to shun urban areas. These areas must be transformed if people are to be attracted to live there.

Three reasons have been put forward for building more housing in urban areas; the reduction of car use, the regeneration of urban areas and the protection of the countryside. To these we have added the wider implications of sustainable development. We review each of these arguments, concluding that, on balance, it is clear that urban development has more benefits than suburban sprawl.

Finding the capacity: How much housing could be accommodated within urban areas? This question is addressed in Chapters 3,4 and 5.

In Chapter 3 we look at the historic rate of building on brownfield land. If we are already building almost half of all new housing on recycled land, why could we not build more? We conclude that there are a number of problems with this assumption and that data on the previous use of land developed for housing does little to illuminate the future housing capacity of cities. We also look at the population that has been lost from urban areas in the past. While we speculate that the replacement of these lost urban populations could go a long way to accommodating household growth the data is inconclusive and it is not to these urban districts that household growth is being directed.

In Chapter 4 we review the three leading studies which have sought to identify additional housing capacity in urban areas; in Hertfordshire, the North West and London. We conclude that they are a huge improvement on past approaches, but uncover only part of the capacity required or indeed represented by past building rates. The relevance of these studies rests on whether the capacity uncovered is additional to existing rates of infill.

Sources of urban housing capacity: We cannot therefore base an estimate of urban housing capacity on either past trends or recent capacity studies. In Chapter 5 we therefore review national data on various forms of urban housing capacity in order to produce a national estimate of the capacity of the urban areas of England.

- **Recycled land:** Based upon derelict and vacant land data we estimate that there are 45,000 hectares of vacant land in urban areas and that, if past trends continue, this could increase to 75,000 hectares by 2016. If this was all to be developed for housing at urban densities – which admittedly is unlikely – it could accommodate almost 3.5 million homes.

- **The redevelopment of Council Estates:** Contrary to popular belief, many high-rise council estates were often built to quite low densities. The redevelopment of these estates could provide 22,500 additional homes.

- **The development of car parks:** Traffic reduction measures could release town centre car parks for housing. Up to 200,000 homes could be provided in this way.

- **The conversion of empty commercial space:** The conversion of historic buildings and modern offices to housing could provide up to 100,000 homes.

- **Living over the shop:** There is very considerable scope for the use of vacant space over retail premises. Using shopping floorspace data we estimate that the capacity could be 1 million homes.

- **The subdivision of existing housing:** Based on occupation density figures the potential from the subdivision of large houses could be 6 million homes although, at most, 30% of this is likely to be practical.

- **The intensification of existing housing areas:** As household size declines, it should be possible to increase housing density without increasing population density. We estimate a capacity of around 280,000 extra homes from this source.

- **The better use of the existing housing stock:** There are presently 767,000 empty homes in England just under half of which could be brought back into use.

These figures add up to a total potential urban capacity of 7.2 million homes of which, we estimate, that 3.8 million is achievable if the right policies are put in place. We make no claim for these figures other than that they give some order of magnitude to overall capacity levels.

Barriers to unlocking the capacity: This theoretical capacity is of little value if people do not wish to live there,

if developers refuse to build there, if the housing is not viable or if the planning system will not allow it. Each of these issues is considered in Chapter 6. We discuss surveys of suburban and urban residents as well as the attitudes of developers and the market for urban housing. We look at the economy of urban areas and whether there will be jobs for people living in cities, before reviewing the concerns about town cramming and the attitudes of local planners.

We conclude that these are formidable barriers to the development of urban housing. While markets and attitudes will take time to change, there are signs that this is starting to happen and the role of public policy should be to encourage and accelerate these changes.

Unlocking the Capacity: The limits on capacity are defined as much by the market, public attitudes and planning policy as by physical capacity. We therefore outline in Chapter 7 a set of policy recommendations to maximise the development of housing in urban areas under the following headings.

The planning system

- A presumption against green field development until all alternatives have been considered, should be a central pillar of national planning policy.
- A sequential test for developers is probably unworkable but a sequential test should be applied to local authority land allocations.
- Local authorities should be able to manage the release of housing land on an annual basis and to specify that a certain level of brownfield development takes place before greenfield releases are considered.
- Specific land allocations should be made for social housing.
- There should be a democratic mechanism within regions to direct a higher proportion of household growth into urban areas with surplus capacity.
- Where this is not possible, regions should be able to under-provide for household growth by up to 5%, with ministerial approval.
- Planning policy guidance should be amended to promote higher density development.
- Local authorities should be encouraged to take a proactive approach to urban development.
- A national good practice programme should be instigated to share experience between local authorities.

Fiscal recommendations

- There is an important role for grant subsidy in regeneration areas and on sites with abnormal costs.
- VAT rates on new-build and conversions of existing buildings should be harmonised.
- A greenfield tax should be considered to make urban development more financially attractive.
- The revenue from this should be hypothecated to promote urban development.

Promoting urban areas

- Urban Priority Areas should be designated to promote urban housing and to provide tax relief on housing development.
- Social housing investment should ensure that it avoids social exclusion and creates mixed communities.
- Initiatives should be targeted to improve inner city schools.
- Government sustainability policy should be focused on urban areas.
- Transport policy should reduce car travel to out-of-town facilities and use income from traffic restraint measures to invest in urban public transport.
- Mixed-use development should be promoted as a way of attracting employment back to urban areas.
- Models for urban development such as the Millennium Village should be used to promote urban living.

Conclusion: To accommodate household growth within urban areas we will have to use every option available to us. This report suggests that it is feasible to aim for a 75% target for new homes in urban areas by developing a new agenda for the renaissance of urban Britain. This is partly about the physical capacity of urban areas but it is much more about our attitudes to cities and our willingness to challenge historic trends. At the end of the millennium the time is right to bring about these changes.

Contents

Introduction

This report has been produced for Friends of the Earth and funded by WISE to assess the feasibility of accommodating 75% of new homes in urban areas as suggested by the UK Round Table on Sustainable Development. We outline below some of the background to this issue and the aims of this report.

A hundred years ago this year a stenographer produced a small book that was to transform Britain. His name was Ebenezer Howard and the book, *Tomorrow: A peaceful path to real reform*[1], was later republished as *Garden Cities of tomorrow*. Like many of his generation, Howard was concerned about the explosive growth of cities which he considered 'ulcers on the very face of our beautiful island'. He put forward the garden city as a model which combined the best of the city and the countryside. So powerful was this idea that it has dominated much of the thinking about cities for the intervening hundred years. As we approach the end of another century we are still wrestling with the implications of growth. However today the growth is not in population but households, it is being driven not so much by housing need as housing demand, and the pressure is being felt not in cities but in the countryside. New visions are now required if we are to accommodate household growth while making settlements more sustainable – a peaceful path to urban reform.

New visions are now required if we are to accommodate household growth while making settlements more sustainable – a peaceful path to urban reform.

This report has been commissioned by Friends of the Earth and funded by WISE to explore the viability of accommodating 75% of all new housing within existing urban areas. This was a target suggested in February 1997 by the UK Round Table on Sustainable Development[2] in order to support urban areas, prevent loss of countryside and reduce the need for infrastructure and energy consumption. This target is higher than that set by the previous government which in the 1995 Housing White Paper[3] set the target that 50% of all new housing should take place on previously used urban land by 2005, a target recently increased by the current government to 60%[4].

The accommodation of household growth has been the subject of intense debate in political, professional and academic circles and has spilled out onto the national media with newspaper headlines that the green belt is 'up for grabs'. The reason is that the numbers of new households projected in the next twenty years – currently 4.4 million – is so large that the stakes are very high. If development is not accommodated in urban areas we face the loss of large areas of countryside, something that will be fiercely resisted not only by rural interests, but by a large section of society which cares about the environment and cherish our countryside. Yet the accommodation of the majority of new homes within urban areas would run counter to trends which date back more than a century and raises concerns about the quality of life in cities.

A great deal of work was done on this issue by the previous Government which was particularly sensitive about the unpopularity of building on greenfield sites and

Our hope is that this report will help to clarify the debate rather than to be just one more stone tossed over the barricades between the opposing camps.

did much to champion housebuilding on recycled sites. The Labour Government, which has traditionally had a more urban base, initially seemed more cautious because of concerns about the effects on existing urban areas. Nick Raynsford, both as shadow minister for housing and now as minister with joint responsibility for planning, has voiced concerns about the risk of town cramming and a repetition of the housing mistakes of the 1960s[5], while Richard Caborn was criticised for seeming to suggest in an interview on Radio Four's Today programme that the green belt was up for grabs. The initial response of the government, in November 1997, was to stick to the 50% target that the previous government had already suggested could be increased to 60%. The issue was brought to a head by decisions to allow greenfield housing development in Stevenage and Newcastle, causing widespread public alarm which was reflected in the media. The government's response to these concerns was the announcement by the Environment Secretary John Prescott to the House of Commons on 23rd February[6]. In this he announced a 60% target for housing on 'recycled' land and signalled a move away from the 'predict and provide' approach to household growth and to the imposition of housing figures on local authorities. He also established a task force under the chairmanship of Lord Rogers to identify the amount of previously developed land available for housing. In announcing these changes John Prescott said: 'With our new policies in place, we expect local planning authorities to be able to raise the national proportion of new homes to be built on previously developed land to 60% over the next ten years. As for the 75% target, I believe that 60% is difficult enough to achieve. We need to assess how many recycled sites are available before we can judge how the policy is working. I have set that work in hand'.

The household projections have led to a rather perverse situation whereby rural interests are lobbying hard for urban development while many planners argue that the scope of this is limited and the only solution is to build in the countryside[7]. The debate is becoming increasingly bad-tempered especially in the shire counties where much of the growth is currently projected. The strength of feelings raised was demonstrated by the Countryside March in London earlier this year. Suggestions that such manifestations of support for the countryside are unrepresentative, or mere 'NIMBYism' (not in my back yard) fail to recognise the extent of opposition to the loss of countryside. Self-interest may be a powerful factor, and is certainly something that politicians ignore at their peril. However we should not allow distaste for the NIMBY factor to undermine the legitimate arguments against building in the countryside being put forward by local groups up and down the country.

Many of the contributions from both the proponents and critics of urban development appear designed more to fight their corner rather than to take an objective view of the evidence and options available to us. The passion of groups defending the countryside has been matched by the opponents of development within towns. For example Professor Peter Hall has suggested that 'we are witnessing self-interest dressed up as environmentalism… We tend to care about newts but not humans'[8]. The Housebuilders Federation in a recent Panorama programme echoed these views when they referred to those 'poor' people who live in cities. The implication is that it is cruel and inhuman to make people live in British cities which, when you think about it, is an extraordinary thought.

Friends of the Earth, in commissioning this report, is concerned about the environmental impact of the housing projections and particularly their impact on the countryside, resource consumption and car use. Their view is that the accommodation of more housing within towns will play an important role in reducing the environmental impacts of meeting the household projections. This however will only be achieved if it is possible to accommodate a significant proportion of household growth within existing urban areas - in other words if the land is available, if the market will support it, if people will accept it and if it does not create unacceptable problems in urban areas. This report has been commissioned to answer these questions on the basis of the published literature and research on the subject.

The report has been prepared by URBED (the Urban and Economic Development Group) who for 20 years have been promoting the social, economic and environmental benefits of urban development, most recently through the Sustainable Urban Neighbourhood Initiative[9]. This report, however, is not intended to add to the acrimony of the debate or as a polemic on the benefits of urban development. The aim is rather to ask whether the 75% target is feasible, what benefits are likely to flow from this, and what action is required to achieve it. It seeks to disentangle and test the strands of the argument. As such our hope is that this report will help to clarify the debate rather than to be just one more stone tossed over the barricades between the opposing camps.

1 Household growth

In which we explore the scale of household growth and suggest that we need to accommodate an extra 5.1 million households by 2016. We also look at the changing nature of these households and the growing numbers of single people, before examining the geographical distribution of household growth and how much land it will require. We suggest that, by perpetuating past trends, housing allocations have reinforced urban sprawl and concentrated growth in the counties least able to accommodate it within their urban areas.

The accommodation of household growth has become the great planning issue of our time. This came to the fore in 1995 when an increase of 4.4 million households was projected between 1991 and 2016[1]. This represents an increase of 23% and suggests that there will be 23.6 million households in England by the year 2016. While the projections have been criticised for overestimating household growth, the evidence is that the opposite is in fact the case. The 1995 population figures suggest that household growth is running ahead of the projections and that the 4.4 million households may have to be increased to 5.5 million. In addition to this the Joseph Rowntree Foundation has estimated that a further 480,000 houses are required to meet the existing backlog of unmet housing need[2]. The housing requirement between 1991 and 2016 may therefore be as much as 6 million. If we discount this by the 850,000 homes built since 1991, it means that we may need to accommodate an additional 5.1 million households. It is therefore this figure that we use throughout this report.

There has been a great deal of debate about whether household growth should be translated directly into housebuilding. It has been argued, for example, that household formation is affected by rates of housebuilding so that the projections become self-fulfilling and that the projections represent demand for housing rather than housing need. We have however assumed in this report that projected household growth will be accommodated.

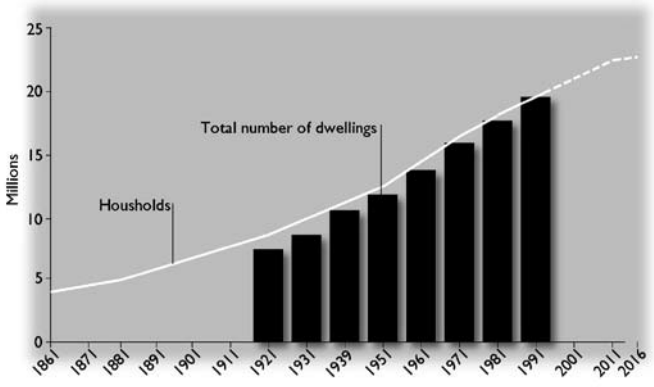
To put this into some sort of perspective, there are currently 2.8 million households living in Greater London[3] and the entire new-town programme since the war only accommodated about a million households[4]. Indeed to meet the projections through new-town building we would have to build more than 45 cities the size of Milton Keynes. This begs a number of questions: why is the projected household growth so large; what will be the nature of the new households; where will the growth take place and how much land will be required?

> To accommodate the household projections through new-town building we would have to build more than 45 cities the size of Milton Keynes.

Why so many households?

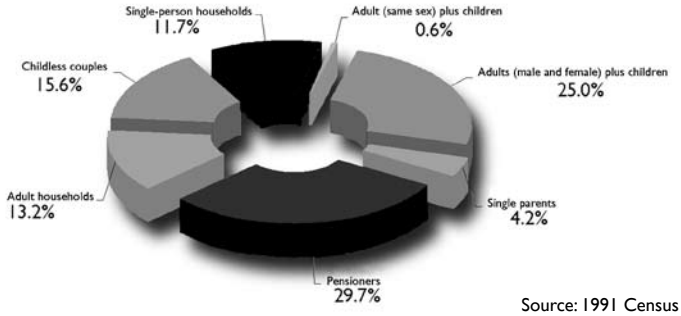
Having followed the debate you might be forgiven for thinking that the household projections represent an explosion in the number of households in the England. This however is far from the case, as illustrated by Exhibit 1. The average household size in England fell from 4.6 persons in 1901 to 3.1 in 1961 and to just 2.4 in 1993[5]. Until 1921

EXHIBIT 1: Housing & household growth since 1900



Source: Household growth: where shall we live? November 1996

EXHIBIT 2: Household composition 1991



Source: 1991 Census

the increase in household numbers broadly kept pace with population growth. However since that time the number of households has outstripped population growth. Between 1921 and 1961 household numbers increased by almost 1.8% per year whereas the projected increase to 2016 is just under 1% per year and only rises to 1.25% per year if we use the higher figures suggested above. In an historical context, the projections therefore look quite modest. It also means that our problems are nothing new and that the number of households we must accommodate over the next 25 years is no greater than, for example, we accommodated between the wars. However the nature of household growth today is very different to that of the 1920s – which brings us to the second of our questions.

> 80% of new households will be single people.

Who are the new households?

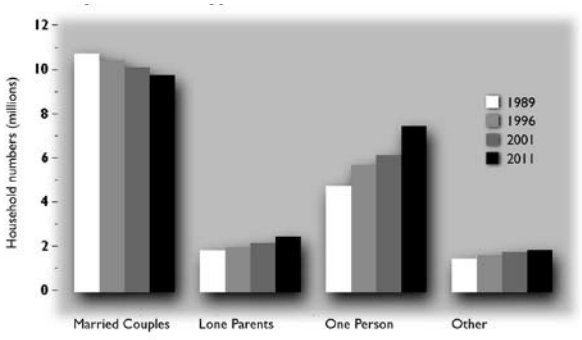
While the reduction in household size has been a constant factor throughout the century, the reasons behind this reduction have changed. The fall in household size after the First World War was due to evolution from the extended Victorian household to the nuclear family. Poorer families were having fewer children and more affluent households were shedding servants so that both gradually evolved into the nuclear family[6]. The suburban housing built between the wars reflected this. An equally dramatic change is currently taking place in the British household. Ask people today what the predominant household type is in the UK and the answer will probably be the family with children. Yet as Exhibit 2, illustrates the nuclear family now accounts for just one in four households and only 30% of all households have children. By contrast 40% of households are made up of childless adults and a further 30% are pensioners.

Unfortunately the household projections do not break down household growth by the same categories. Instead the projections are based on married couples, one-person households, other multi-person households, cohabiting couples and lone parents. While married couples with children made up just 20% of households in 1991, 55% of all households were married (including couples without children and the elderly). The household projections show that this proportion will decrease to 42% of households by 2016. While there will be small increases in single parents, cohabiting couples and multi-person households, 80% of the increase will be single people.

This does not mean that the family is in terminal decline. It rather reflects the fact that people are having fewer children later in life and being left as what the advertisers call 'empty nesters' in their fifties. These trends, along

EXHIBIT 3: Household estimates and projections in England 1971-2016 (thousands)

	Mar'd couple	Cohab couple	Lone parent	Multi person	One person	Total
1971	11,249	204	378	1,168	2,944	15,942
1981	11,012	500	626	1,235	3,932	17,306
1991	10,547	1,222	981	1,350	5,115	19,215
1996	10,341	1,377	1,122	1,512	5,824	20,177
2006	10,118	1,499	1,243	1,852	7,185	21,897
2016	9,945	1,579	1,257	2,240	8,577	23,598



Source: Household projections 1991-2016 published 1995

with the high divorce rate and the increasing numbers of elderly people, mean that the typical twenty-first century household will be very different to the nuclear family that has dominated the twentieth century. As the UK Round Table on Sustainable Development suggests: 'there is a growing number of single person households, particularly male, whose needs and aspirations will differ from those of the traditional family unit'[7]. Just as the housing of the twentieth century reflected the rise of the nuclear family, so the housing of the next century will inevitably be influenced by its decline.

A second element to the question of who are the new households is tenure. There is little point catering for household growth predominantly with private houses if a significant proportion of new households is not able to afford them. Research by Alan Holmans for the Joseph Rowntree Foundation[8] has estimated that 37-44% of new housing needs to be social housing, which is more than three times current social house building rates[9]. If current spending limits make it unrealistic to fund this level of social housing, why are we asking councils to allocate land for these homes? Since councils find it difficult to allocate housing land by tenure, it is likely that private builders will take up these allocations while social housing need will remain unmet.

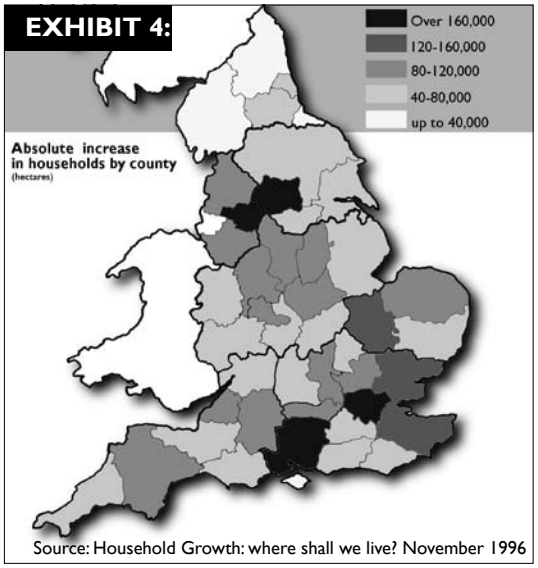
Just as the housing of the twentieth century reflected the rise of the nuclear family, so the housing of the next century will inevitably be influenced by its decline.

Where will household growth take place?

In many respects the most important and contentious aspect of the household projections is their geographical spread. The greatest absolute increases are in Hampshire and the metropolitan centres of London, Greater Manchester and West Yorkshire (Exhibit 4). This reflects existing centres of population, which would be expected to grow because 60% of people move within the same local authority district. There are also large absolute increases (more than 120,000 households) in the counties of Cambridgeshire, Essex and Kent. In percentage terms (Exhibit 5) the increases are most acutely felt in a band of counties from Somerset to Cambridgeshire, what Peter Hall has called the 'Golden Belt'[10]. It is therefore in the shires of England that the impact of household growth will be most keenly felt and where the battle lines are already being drawn.

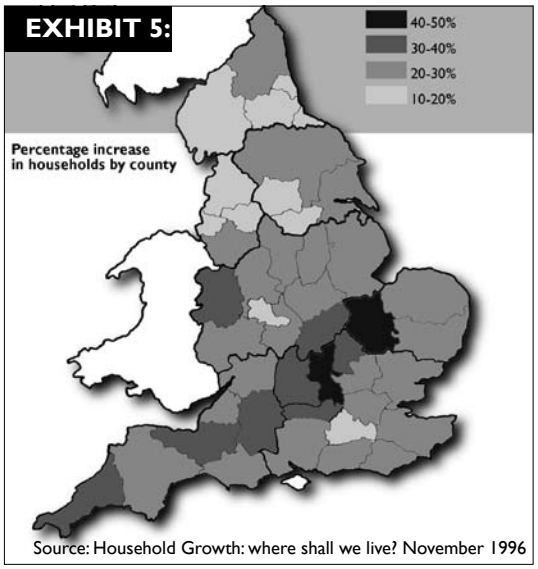
The geographic distribution of household growth brings into the sharpest focus one of the main weaknesses of the 'predict and provide' approach to the

EXHIBIT 4:



Source: Household Growth: where shall we live? November 1996

EXHIBIT 5:



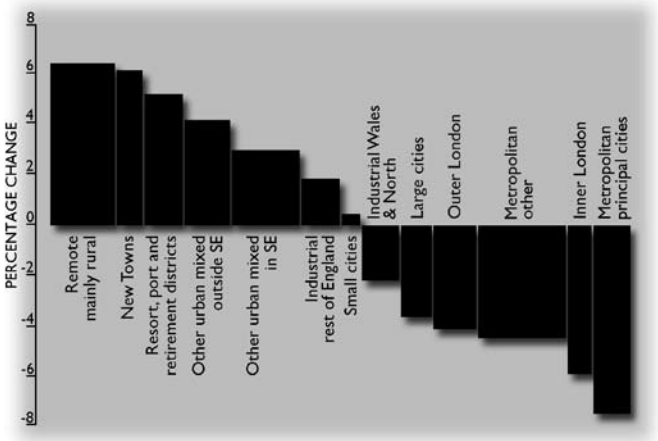
Source: Household Growth: where shall we live? November 1996

EXHIBIT 6: Household growth by region 1991-2016
(thousands)

Region	H'sholds in 1991	Proj'd in 2016	Total growth	% growth	Adjusted for migration
North East	1,047	1,213	166	16%	1
North West	2,156	2,568	412	19%	-8
Merseyside	564	635	71	13%	-42
Yorks & Humber.	1,993	2,380	387	19%	28
East Midlands	1,596	2,014	418	26%	122
West Midlands	2,042	2,410	367	18%	-68
Eastern	2,035	2,617	582	29%	190
London	2,842	3,471	629	22%	-310
South East	3,036	3,843	807	27%	257
South West	1,903	2,448	545	29%	357
Totals	19,215	23,599	4,384	23%	

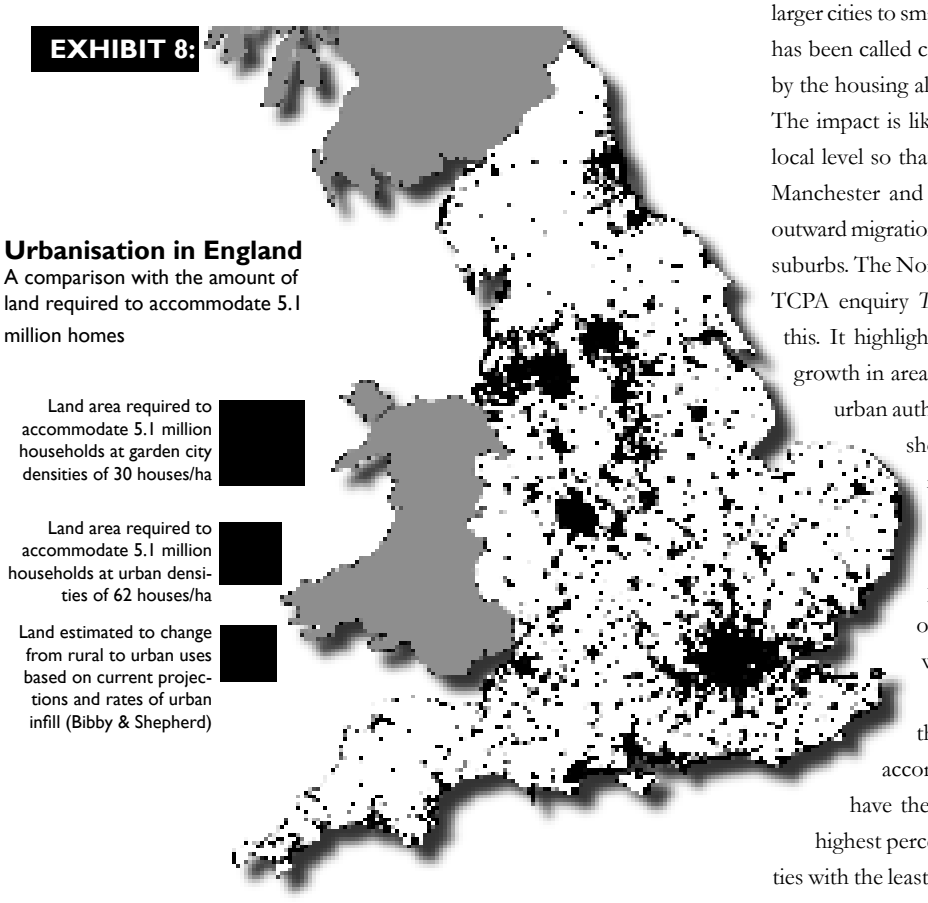
Source: Household Growth: where shall we live? November 1996

EXHIBIT 7: Counter urbanisation trends



Source: OPCS (1992) from Browers 1993

EXHIBIT 8:



location of housebuilding. The projections are based on current trends and thus are a prediction of what is likely to happen if policy does not change, rather than a statement of what is desirable. However by using the projections as the basis for regional housing allocations, governments have accepted that past trends will continue into the future. It is, of course, possible to conclude that the predicted geographical distribution of household growth is not in the national interest and to put in place policy measures to influence the distribution of house building. The recent announcement by the Environment Secretary John Prescott that the government intends to change the system of regional housing allocations is therefore to be welcomed.

One factor that influences the distribution of household growth is migration. The underlying trends are for population to drift from north to south and from larger cities to smaller towns and rural areas. This migration has been called counter-urbanisation[11] and is perpetuated by the housing allocations as can be seen from Exhibit 7. The impact is likely to be even more pronounced at the local level so that high absolute growth levels in Greater Manchester and West Yorkshire, for example, mask an outward migration from the built-up areas to the peripheral suburbs. The North West Regional Paper prepared for the TCPA enquiry *The People: Where will they go?*[12] illustrated this. It highlighted how authorities are struggling with growth in areas like Cheshire and the Wirral, while the urban authorities were arguing that their allocations should be increased to reflect their success in stemming migration.

This highlights a significant anomaly in past responses to the housing projections. The geographical distribution of household growth both between and within regions has been accepted, yet national targets have been set about the proportion of new households to be accommodated within urban areas. Attempts have therefore been made to accommodate the highest percentage households increases in the counties with the least capacity to accommodate growth within their urban areas. At the national level it may be difficult to shift household growth from Cambridgeshire, for example, to the industrial north. However we might question why, in the industrial conurbations, we are accepting the migration of population to the rural fringe districts when the neighbouring cities have surplus capacity.

Attempts have been made to accommodate the highest percentage households increases in the counties with the least capacity to accommodate growth within their urban areas.

How much land will be required?

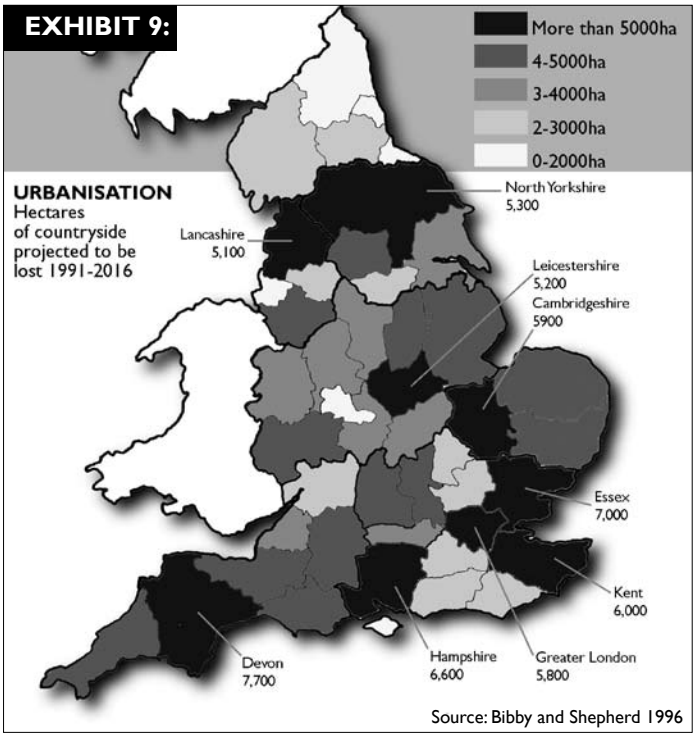
The final question to arise from the projections is how much land will be required to accommodate the household growth projections. In general terms the amount of land needed for 5.1 million homes can be estimated by applying broad-brush density guidelines. Let us assume for the moment two broad densities of 30 and 62 houses to the hectare. The former is the traditional garden city density advocated in 1912 by Raymond Unwin[13] although it is higher than much current suburban development. The latter has been suggested by the RIBA[14] as an optimal urban density allowing for a combination of houses and flats. These are net densities and exclude the roads, facilities and open space that would be associated with new housing development. Work by URBED[15] has estimated that these correspond to gross densities of roughly 13 to 27 units to the hectare. This suggests that the land required to accommodate 5.1 million households is approximately 400,000 hectares at suburban densities and 190,000 at urban densities. The relative scale of this land requirement is indicated on Exhibit 8. To put these figures in perspective, the current urban area of London is approximately 116,000 hectares. At suburban densities the land take of 5.1 million households is three times the size of London or equivalent to the combined urbanised area of the six largest metropolitan counties in England.

Much of the work on the amount of land required to accommodate the household projections has been based on research by Peter Bibby and John Shepherd[16]. The total land area of England is just over 13 million hectares of which just under 1.4 million hectares (10.6%) was in urban use in 1991. Bibby and Shepherd estimate that this will increase by 169,400 hectares by 2016 as a result of household growth. This however does not mean that they have assumed that all development will take place at urban densities. Indeed they estimate that average net residential density of new development between 1985 and 1992 was around 22 units per hectare. Their estimate of urban growth is calculated by looking at the number of houses built between 1985 and 1992 and the amount of land that changed from rural to urban uses over the same period. This showed that in England, for every 1,000 houses built, 40 hectares of land changed to urban use. However this land-take varied from 20 hectares in metropolitan areas to more than 60 hectares in some rural counties.

This has the effect of exaggerating the regional impact of the household projections since the counties with the steepest rise in households tend to be those which require more land for every thousand houses. The impact of these figures is illustrated on Exhibits 9 and 10

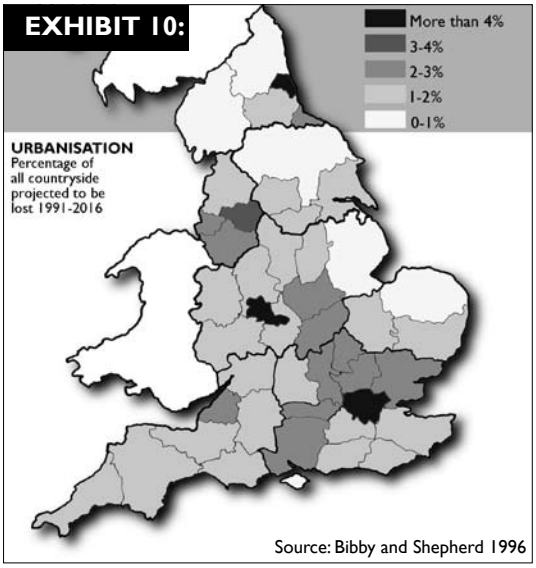
At suburban densities the land required for 5.1 million households is equivalent to the combined urban area of the six largest metropolitan counties in England.

EXHIBIT 9:



Source: Bibby and Shepherd 1996

EXHIBIT 10:



Source: Bibby and Shepherd 1996

which are adapted from Bibby and Shepherd and show the amount of rural land potentially under threat in each of the English counties. Exhibit 9 illustrates that the pressure is concentrated in the 'Golden Belt' from Somerset to Cambridge and that large amounts of land are also under threat in Hampshire, to the east of London, Devon, North Yorkshire and Lancashire. The latter cases are due to the size of the counties. Exhibit 10 therefore shows the amount of land under threat as a percentage of the remaining rural land area in the county. This highlights the metropolitan centres because they have the least rural land but also confirms the pressures in the shire counties. London is a particular case since it combines strong household growth with a small area of non-urbanised land, only partly offset by high rates of infill. This means that almost 14% of all non-urban land in Greater London would be taken (three times the percentage of any other region). This is virtually all land in Greater London that is not designated as green belt or protected in some other way. This unprotected land is often not available or suitable for development so that the London figures suggest substantial incursions onto the green belt unless even greater use is made of urban capacity.

It should be stressed again that these are trend-based projections and represent what would happen if current rates of urbanisation continue into the future. Just as policy measures can influence the location if not the overall rate of household growth, measures to promote urban infill and increase development densities could significantly reduce the amount of rural land loss.

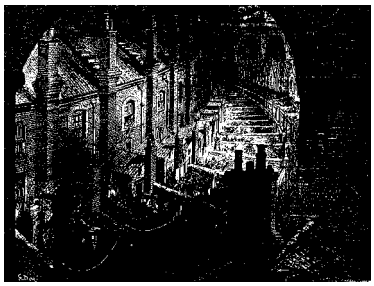
It seems clear that current household projections need to be accommodated and indeed are probably an underestimate. However this does not mean that we need to accept the geographical spread of the allocations or indeed the rates of urbanisation that they imply. These are legitimate concerns of government and can be influenced by policy. The projections are based on past development trends and therefore enshrine in policy counter-urbanisation trends. However the desirability and sustainability of these trends is increasingly being called into question. In the next chapter we therefore discuss these trends in more detail and outline the case for change.

2 The urban dimension

In which we discuss why we have such a negative image of urban areas, how this has driven the dispersal of population and the way in which it has often been reinforced by public policy. We explore the four main reasons for building within urban areas: reducing car use, urban regeneration, the protection of the countryside and the sustainability of settlements. We conclude that, while these arguments are not always as strong as some of the proponents of the compact city suggest, the balance is still firmly in favour of urban development.

The household projections have revived a debate that is as old as the planning system, perhaps as old as cities themselves. In Britain we have a very poor image of urban areas and have been abandoning them in our droves for over a century. This is why people are able to argue that it would be wrong to force new housing into existing urban areas, both because it is not what people want, and because it runs counter to very powerful professional ideologies and market forces. Yet in recent years there has been a resurgence of interest in urban living driven largely by the issue of environmental sustainability. In order to assess the capacity of cities to accommodate household growth we must understand both why we so hate cities and why they may provide our environmental salvation.

EXHIBIT 11: The Industrial Revolution continues to shape our views of the city



The image of pollution, overcrowding, chaos, and dark satanic mills so powerfully portrayed by Dickens and painted by L.S. Lowry has coloured our views of the city ever since.

Why do we so hate cities?

The industrial revolution started in Britain. In the nineteenth century this made Great Britain a world leader and the impacts of technological and social developments on this small island were felt the world over. The age of empire may be over but the shock waves of what happened a hundred and fifty years ago still resonate, not least in our attitudes to cities and the way that they are planned.

The industrial revolution was an urban phenomenon. British cities became economic powerhouses dominating world trade. As a result rural populations flocked to cities for work and economic advancement so that they became, in the words of H.G. Wells, 'great surging oceans of humanity'. The environmental and social consequences of this were devastating. A German visitor to Bradford in the 1850s described being in the town as 'like being lodged in no other place than with the devil incarnate'. This image of pollution, overcrowding, chaos, and dark satanic mills so powerfully portrayed by Dickens and painted by L.S. Lowry has coloured our views of the city ever since. It was this that started the engine of suburbanisation as people moved out to new suburbs to protect their families from the evils of urban life. Since that time the city has been seen as bad and the countryside good such that everyone with the power to do so has moved out of urban areas and now measures their status by how much distance they can put between themselves and the city[1].

EXHIBIT 12: Areas like Roupell Street in Waterloo may be valued today but many similar areas were swept away by slum clearance

These trends were given intellectual underpinning by writers like John Ruskin and Ebenezer Howard. They became enshrined in the philosophy of the emerging planning profession as well as national and local housing policy. They also influenced attitudes to cities in the English speaking world as the British Garden City was exported to the US where the extremes of suburban sprawl and urban decay stand as a stark warming about the consequences of allowing current trends in the UK to go unchecked[2]. The English Channel proved a more formidable barrier to these ideas than the Atlantic and continental cities have largely remained compact and lively. They provide an attractive alternative model to many people in the UK. However continental cities are the result of a very different set of economic and social forces and cannot simply be transferred to the UK[3].

At the end of the twentieth century, UK cities have changed out of all recognition, as they struggle, not with the consequences of uncontrolled growth, but with decline. Yet attitudes to the city have not changed. They are still regarded as overcrowded, polluted, and dangerous even though in most cases this is no longer the case. However new urban evils have replaced those of the industrial revolution. The satanic mills may now be heritage centres, but it is poverty, urban decay, failing schools, crime and traffic congestion that cause 'respectable' society to shun urban areas. Like the elemental forces of the industrial revolution, these new urban evils often seem beyond our control. They have improved little over the last twenty years despite huge effort and billions of pounds of investment in the inner cities. The reason is that the root causes of this decline have not been tackled. Even when we have created jobs in urban areas, a proportion of the people who get these jobs have used their new-found economic power to do what people with such power have always done – they move out to the suburbs. They are replaced by people without economic power or a choice over where they live, so that while the individual is helped, the problems of the city remain as intractable as ever.

At the end of the twentieth century, UK cities have changed out of all recognition, as they struggle, not with the consequences of uncontrolled growth, but with decline.

Far from working to counter these trends, many areas of public policy have actually reinforced them. British town planning has always had an equivocal attitude to cities and urban sprawl. It has sought to control the dispersal of British cities but at the same time has seem most aspects of urbanity as bad and has sought to tame and control the city. The main tool to prevent urban sprawl, and the greatest success of modern town planning, has been the green belt that has been wrapped around urban areas and fiercely guarded from development. However while this may have checked sprawl, it has not persuaded people or developers to remain within cities. Rather development has leapfrogged the green belt to smaller towns and remote

rural areas. Many towns and cities have grown up to the edge of the green belt so that most urban growth now takes place not on the urban fringe, as is often assumed. It is estimated that for every hectare of land developed on the urban fringe almost four hectares is developed away from urban areas in villages, hamlets or as single dwellings[4]. Indeed the green belt was originally designed, not to prevent urban areas from depopulating, but to protect the countryside from a process of urban depopulation that was seen as inevitable and indeed desirable.

It is this depopulation which has led to urban decline as cities have been robbed of spending power and economic activity and abandoned to those without the means to escape. The planner, the highway engineer, the architect and the housing officer in their quest to bring order to the chaos of urban life have replaced mixed-use streets, designated as slums, with the high-rise flat and the urban motorway. Meanwhile the private housebuilder, building societies and other private investors have taken advantage of public investment in improved roads to extend suburbia outwards. The disfigured, decayed urban fabric that this has created is not inevitable; we have made it the way it is and we have it within our power to mould it in another image.

The debate about accommodating household growth must take account of these trends and attitudes. It is true that we cannot force people, against their will, to live in the blighted urban areas that characterise many UK cities today. These areas must be transformed and this transformation will only take place if more people can be persuaded – not forced – to return to urban areas. The debate about urban land capacity is therefore not a numbers game about the amount of land available and how much housing can be shoehorned onto it. It is rather about how we can influence urban trends that date back more than a century. We have come to believe that these trends are inevitable. However a radical change from an urban to a suburban society took place at the end of the last century, prompted by the growth in the nuclear family and the mobility afforded first by public transport and then by the private car. There is every reason to believe that an equally radical change is possible at the turn of the millennium as the dominance of the nuclear family wanes, and as mobility is constrained by congestion and measures to reduce car use.

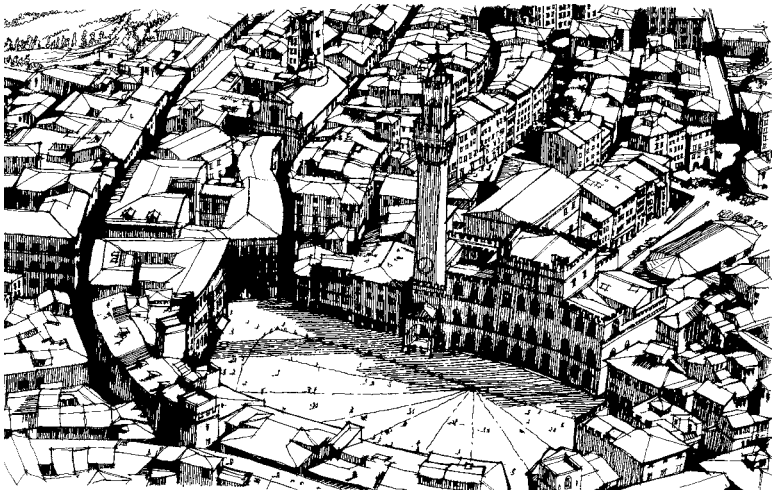
The rediscovery of Cities

While the concern today is with accommodating household growth, the renewed interest in cities predates the household projections. The 1990s have seen a growing movement of what, in America, is called 'new urbanism'. This can be seen in the UK in the work of the Urban Villages Forum and was given an important boost in 1990 with the publication of the European Green Paper on the Urban Environment[5]. Despite the hostility to many European initiatives by the previous government, the green paper has been very influential. It concluded that 'the city offers density and variety (and) the efficient, time-and-energy saving combination of social and economic functions'. It sets out a vision of the compact city - some would say based on unachievable models like Siena[6] - as the most sustainable form of development. While the green paper is not part of any European policy or directive, it was the first official report to make the link between urban development and sustainability.

The disfigured, decayed urban fabric that we have created is not inevitable; we have made it the way it is and have it within our power to mould it in another image.

The impetus for this interest in the urban environment stemmed from concerns about energy use, CO^2 emissions and pollution from transport and particularly the private car. Much of the initial effort on environmental sustainability in the 1970s and 1980s focused on improvements to the energy efficiency of buildings. However as URBED illustrated in work for the Joseph Rowntree Foundation[7], energy saving in the home can be eclipsed by the extra energy used in importing materials and in getting to and from basic facilities, if housing is built in remote locations. Even if people grow their own food, generate their own energy and are able to work from home, they will still find that there is a range of facilities that require travel. While this sort of low impact living may place fewer demands on the environment, the rural land required to accommodate a significant proportion of the population in this way – even if they could be persuaded to do this – would be

EXHIBIT 13:
The Italian hill town of Siena is an inspiration to urban designers. But was it really an appropriate model for the European Green Paper on the Urban Environment?



Many environmental issues relate to transport and particularly the private car.

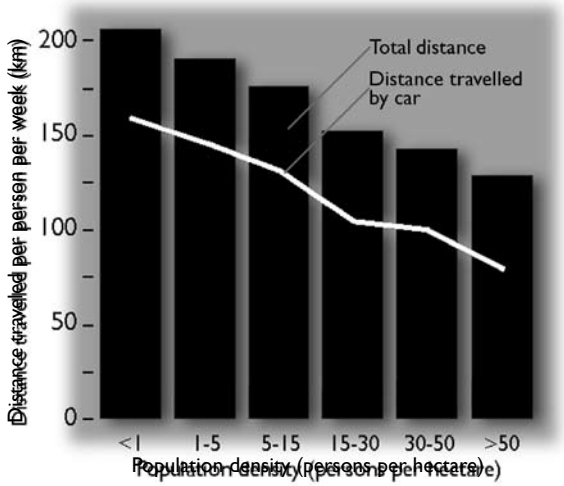
far greater than anything suggested in the projections of urbanisation. The environ-mental debate is not therefore between eco-communities and urban development but between developing within existing built-up areas and expanding into the countryside.

The ideas which seemed so radical in the 1990 European Green Paper have therefore been taken up by governments in the UK, US and Australia who have concluded that the key to environmental sustainability lies in urban development to reduce energy use in transport. In the England where land is less plentiful, two further reasons have been added: the regeneration of urban areas and the protection of the countryside[8]. We will take each of these reasons in turn.

The compact city and transport

The idea of sustainable cities may seem a contradiction in terms. Cities after all are seen as the cause of environmental problems, not the solution. However many environmental issues relate to transport and particularly the private car. While many of the environmental villains of the past are gradually being bought to book, the private car seems impervious to control. Governments across the English-speaking world have therefore seen the location of new development as an important means of reducing the demand for car use.

EXHIBIT 14: Travel distances and the density of development



Source: ECOTEC 1993

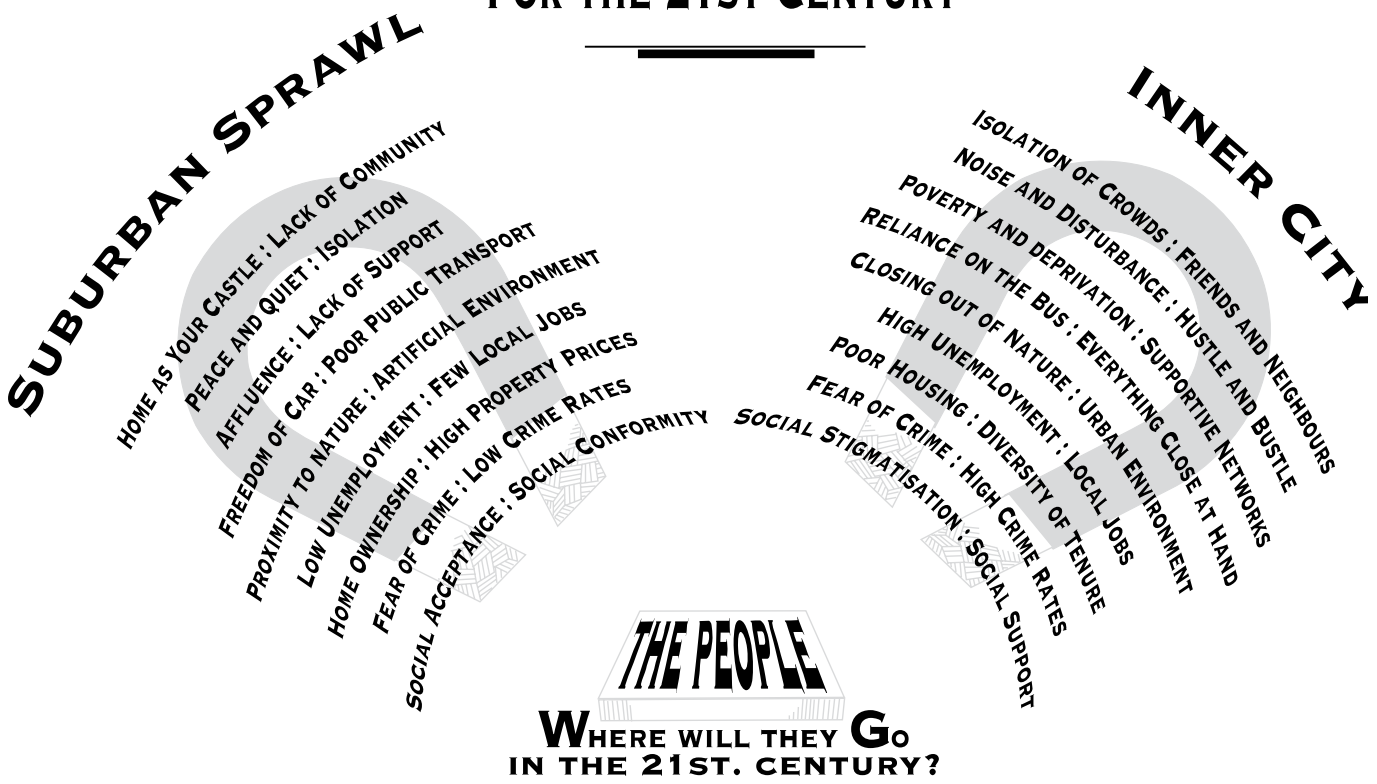
This approach is based on seminal research by Newman and Kenworthy in the late 1980's[9] which analysed 32 cities across the world. They found a strong correlation between density and energy use in transport, demonstrating that US cities have twice the petroleum consumption of Australian cities and four times that of European cities and that this was directly related to the compactness of urban form. In the England, research by ECOTEC[10] in 1993 reinforced these findings. They demonstrated that people in the UK living at the lowest densities travelled twice the distance by car as the people living at the highest densities (Exhibit 14). This seems to be a convincing case for the effectiveness of densities in reducing transport energy use, although the findings have been heavily criticised.

Gordon and Richards[11] have argued that lower population densities often correspond with the decentralisation of employment so that commuting distances have actually fallen in some American cities. They, along with others, also suggest that the directing of population growth into cities is authoritarian and incomp-atible with western democracy and doubt whether governments are willing to make the massive investment in public transport required to make the policy work. Gomez-Ibanez[12] in the US and Gordon and Breheny in the UK have also questioned Newman and Kenworthy's analysis, suggesting that it ignores factors such as household incomes and fuel prices. They also suggest that the correlation between density and fuel use is much less clear if the exceptional cases of Hong Kong and Singapore are excluded from the analysis. Indeed Gordon and Breheny calculate that if these factors are taken into account, the effect of doubling density is to reduce fuel use by 15% rather than half. They contrast this to a 40% reduction that would result from doubling fuel prices.

Michael Breheny[13] has used the ECOTEC figures to calculate the saving in energy use if densities were to be increased. His analysis shows that even if all of the UK population were to live at the population densities of metropolitan areas, it would only save about 34% of the energy used in transport. This, as Breheny points out, is not something that even the most zealous proponents of the compact city would advocate. A better estimate of savings, he argues, can be calculated by looking at the rates of decentralisation over the last 30 years. If this had not taken place the transport energy savings would have amounted to just 2.5%. This, he suggests, is the most that future urban containment policies are likely to achieve and does not justify the draconian policies that would be required to bring it about.

From this analysis we might conclude that all the efforts of government to promote urban compaction and to set targets for housing on recycled land are based upon a mistaken premise. They imply a great deal of pain

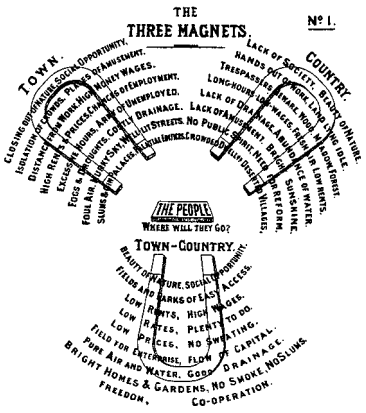
The
Three Magnets
For the 21st Century



The Sustainable Urban Neighbourhood

After Ebenezer Howard's Three Magnets
From - Tomorrow: A Peaceful Path to Real Reform

Three Magnets for the 21st Century. An updated version of Ebenezer Howard's famous diagram prepared as part of the Sustainable Urban Neighbourhood Initiative to show how the balance may be swinging back in favour of cities.



for very little gain compared, for example, with the impact of raising fuel prices. But is this really the case? Peter Headicar[14] has challenged Breheny's analysis and shown that travel distances are growing much more rapidly in smaller settlements than larger cities. The extent of the pain is also open to question, something that we return to in Chapter 6. It is also clearly unrealistic to conclude that we should do nothing to control transport. It is universally accepted that the projected growth in car use in the UK is unsustainable and will be constrained, if not by policy, then certainly by rising levels of congestion. The government is currently consulting on an integrated transport strategy and it seems likely that the result will be significant constraints on the use of the private car. This may well include road pricing, increases in fuel prices and the taxation of various aspects of car use, such as parking spaces and company cars. Indeed this process was started in the government's first budget when the fuel price accelerator (the amount by which fuel taxes are increased above the rate of inflation) was raised to 6%. This means that in real terms the price of petrol could double within the timeframe of the household projections, which, as suggested above, could lead to a 40% reduction in transport energy use.

What will this mean for dispersed settlement patterns? In the short term people would still live in the same place and need to travel to the same locations for work and other services. There are a number of likely responses. The first will probably be huge resistance to the changes since people will not be able to avoid paying the increased costs and will be reluctant to give up their car. It is also likely to act as an impetus to manufacturers to produce more efficient vehicles and to develop alternative fuels. There is also likely to be a modal shift to public transport although this will only be possible where people have access to decent services. This is where we come around again to the issue of urban form. The Local Government Management Board's Manual on sustainable development suggests that net densities of 100 persons per hectare are required to support a viable bus service[15] which is significantly higher than the average density of current development. Measures to make car use more expensive will therefore reduce the attractiveness of low density remote development. This may mean that more people choose locations that reduce their need to use a car.

Development is likely to become denser, not because of planning policy, but as a result of inevitable constraints on car use.

It is therefore likely that the density of the cities studied by Newman and Kenworthy was the result, rather than the cause, of low per-capita fuel consumption. This may mean that development is likely to become denser, not because of planning policy, but as a result of inevitable constraints on car use. Indeed, Gordon and Breheny come to a similar conclusion and say that 'in these circumstances (planners) would have the great advantage of playing with rather than against market forces'. This does however raise a significant question about the household and urbanisation projections since they are based on past trends when the price of car use was less of an issue. Should future planning policy really be founded on an assumption that our car-based culture will continue unchecked when this is clearly unrealistic?

Urban Regeneration

We have already described how inner city decline is a result of the migration of people from cities. As population and investment abandon inner urban areas, demand falls along with property values and rental levels and it becomes unviable to invest in building so that they fall into disrepair and vacancy. It tends to be the able who leave and the poor who have no choice but to stay, so that the inner city becomes a sink for poverty and deprivation. As Robson[16] has pointed out, the government has spent billions of pounds on inner city initiatives since 1975 yet the problems remain as intractable as ever. The government's recent discussion paper on regeneration programmes states that 'it is unacceptable in an otherwise prosperous society to have large areas or numbers of people at a substantial and often growing disadvantage'[17]. Yet while certain targeted initiatives such as City Challenge have been successful, there remains a frustration about our lack of success in addressing inner city problems.

Inner city policy has been beset by confusion about people-based and area-based regeneration. It has always been the case that towns have had undesirable areas where the poor have become concentrated. In the medieval city these were the areas beyond the city walls whereas in Britain and the USA it is in the inner city that deprivation has become concentrated. Regeneration policies must address both the deprivation of inner city populations and the unpopularity of the environment. If the former is addressed without the latter, the result is that it will give people the power to leave the inner city. Yet if the latter is done without the former, as for example in some docklands redevelopments, the result will simply be to displace deprivation to other areas.

This geographical distribution of deprivation in the UK is immensely wasteful. It means that large amounts of money are spent on inner cities with few tangible re-

sults whilst the human and social resources of inner city populations are squandered. It also means that the land, buildings and infrastructure in inner urban areas continue to decline while huge amounts of resources are spent on new buildings and infrastructure to extend urban areas onto the countryside. It is in the inner city where there is the greatest potential to accommodate urban growth in a way that does not fuel car use. Polices to attract people back to cities therefore have the potential to kill three birds with one stone. They could reduce the loss of country-side and promote more sustainable patterns of develop-ment, while at the same time addressing the root cause of urban decline by making the inner city into somewhere which people no longer wish to escape. This of course needs to be handled with care, to prevent gentrification and the displacement of deprivation to other parts of the city. However the experience of areas like Hulme in Manchester and Crown Street in Glasgow show that this is possible.

The Loss of Countryside

The final reason put forward by the proponents of urban compaction such as the Council for the Protection of Rural England (CPRE) is the protection of the countryside. The government has estimated that the rate of loss of rural land is about 5,000 hectares a year while the CPRE has suggested[18] that the current rate is more like 11,000 hectares a year. They estimate that almost 600,000 hectares of rural land has been lost between 1945 and 1990. As we saw in the last chapter Bibby and Shepherd estimate that a further 169,400 hectares of rural land will be lost between 1991 and 2016, equivalent to the land area of Surrey.

In the past, concerns about the loss of rural land have centred on the loss of agricultural capacity. While it is true that the land under greatest threat is often of high agricultural value, it is often of poor ecological value. Agricultural trends have been to increase yields so that less land is required to produce the same volume of food. This has led to set-aside, making it difficult to sustain an argument that the absolute protection of rural land for agricultural purposes justifies huge effort and expenditure on urban development. We should not however assume that set-aside land is available for development. The importance of rural land lies in its wildlife and landscape as much as its agricultural value. Set-aside provides the opportunity to increase the ecological diversity of the countryside and, as Friends of the Earth have argued, we should be moving to less intensive, organic farming techniques which will require more, not less, land. While the projections of urbanisation represent a relatively small loss of rural land in percentage terms, our approach should surely be to enhance what we have, rather than to allow it to be eroded by development.

our approach to rural land should surely be to enhance what we have rather than to allow it to be eroded by development.

While the national loss of rural land may not be great in percentage terms, this is little consolation to the residents of a rural village in the green belt faced with accommodating thousands of new houses. Large areas of the countryside are under threat in counties such as Cambridgeshire, Essex, Kent and Hampshire. In these counties, the percentage of rural land under threat is up to six times the national average – much of which will be green belt. This will have a far-reaching effect on the character of the countryside, which will feel more urbanised, even where it is not developed. The projections therefore imply a significant change in the character of rural areas in the south east where the balance of the argument tips much more firmly in favour of urban development. The problem of course is that these areas have the least capacity for urban development, which raises again wider issues about the planned distribution of household growth.

Urban sustainability

The arguments for urban sustainability are not confined to transport, urban regeneration and the loss of countryside, even though they have been the focus for much of the debate. There are a growing number of environmental campaigners who are focusing on the city as a key to sustainability. Some, like Herbert Giradet, argue that because half of the world's population lives in cities, urban areas must now become the focus for environmental action[19]. His view however remains that cities are fundamentally damaging to the environment but that they are inevitable and must therefore be reformed. Others such as Robert and Brenda Vale[20] and the Manchester 2020 research project[21] have taken a slightly different line by arguing that cities are potentially less damaging to the environment than other forms of development. This was probably best summed up by Roger Levitt when he was at the Scottish Development Agency when he said that 'with the exception of food-growing, virtually everything can be done more greenly within cities'[22].

This argument rests on an understanding that it is not cities that consume resources and energy and produce waste but the people who live in them. It is easy to look at the pall of pollution which hangs over a city like London, the congested streets, the barges carrying waste to landfill sites and the diminution of water resources and to conclude that there can be no less sustainable way of life. But these

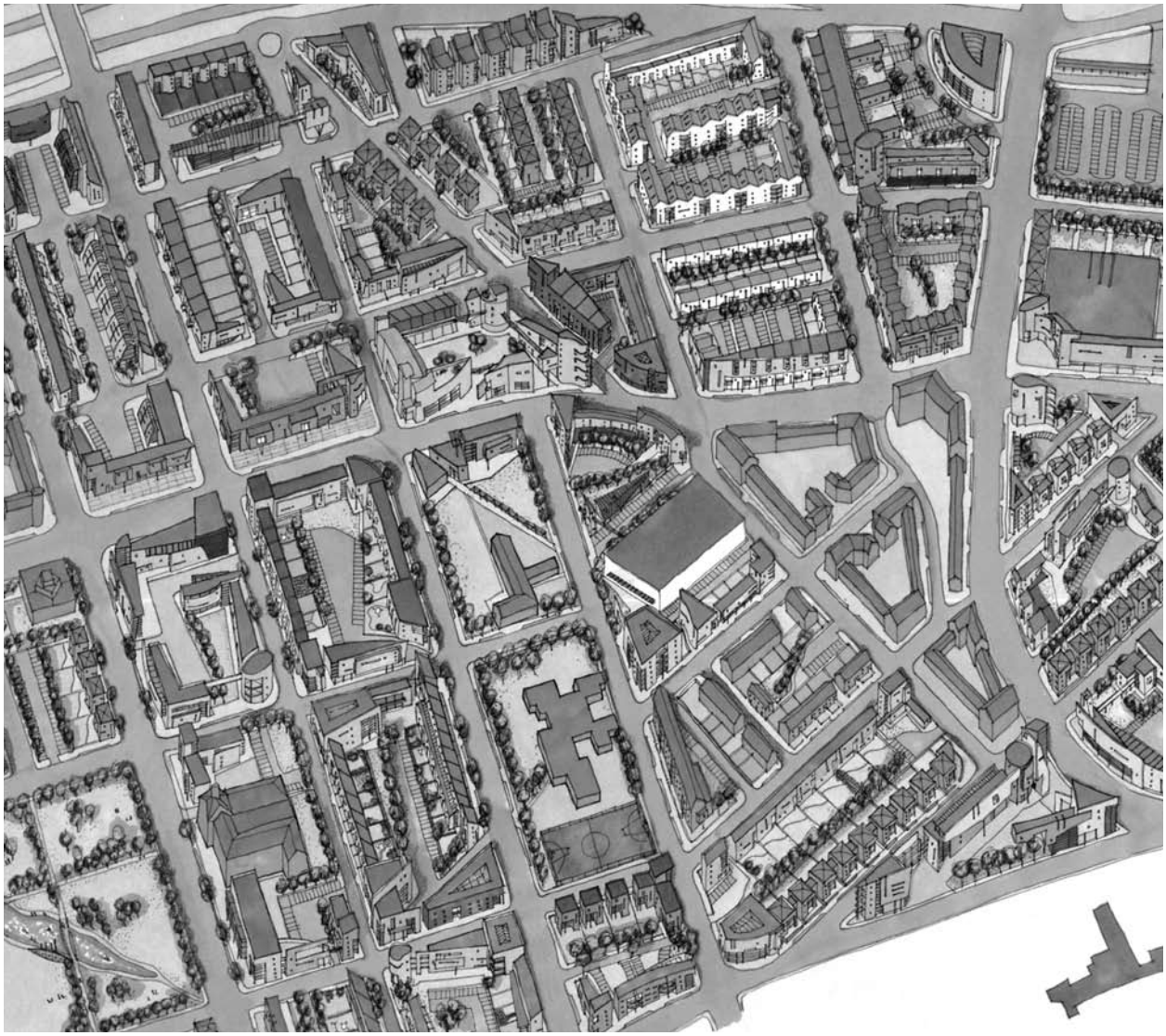


EXHIBIT 15: A hypothetical neighbourhood developed by URBED as part of the Sustainable Urban Neighbourhood Initiative to illustrate the principles of sustainable cities.

environmental impacts can be seen because of the size of London's population. While they may be more visible they are no greater – indeed may be considerably less – than the environmental impact of a similar population living at rural densities.

One of the reasons for the lower environmental impact of urban populations was recognised by Jane Jacobs in the 1960s. In her book *The Economy of Cities*[23] she describes how cities could become the 'mines of the future'. Rather than extracting raw materials from hillsides and rainforests, she envisaged a future when raw materials would be mined from urban wastes. Indeed cities have always been great recyclers of waste through commercial activities like charity shops, second hand furniture stores and scrap yards. It is the markets created by the density of urban populations that cause these activities to thrive and which also sustains public transport, municipal recycling and innovations like combined heat and power systems[24]. The compactness of cities means that walking and cycling is possible and also that the transport distances involved in the distribution of goods and the disposal of waste are minimised. It is for these reasons that cities may hold the key to future sustainability.

In the context of the household projections we should also remember that resource consumption is based as much upon households as individuals. A one-person household will use less resources than a five person household but not five times less. Resources will be required to build the 5.1 million homes and to serve them with roads, schools, shops, sewage works, and clean water. Reusing existing housing as well as vacant commercial and industrial buildings would reduce the resources needed for construction and make use of existing urban infrastructure.

The density of urban populations sustains public transport, municipal recycling, means that walking and cycling is possible and that transport distances are minimised.

Once built the 5.1 million new homes will each consume resources. Each will be heated and equipped with domestic appliances. True, the new homes are likely to be more energy efficient, but declining household size means that the same number of people will be accommodated in a larger number of homes, which can only increase domestic resource consumption. This has been demonstrated by a recent ERCS research project into the environmental impact of different development scenarios for Swindon[25]. This found that the savings in resource consumption from urban compaction were almost cancelled out by household growth. We may not be able to avoid building the extra homes but we must at least ensure that they are as resource efficient as possible. It is therefore important to consider urban terraces and flats which have fewer heat loss walls than detached dwellings, which are built in locations which makes walking and public transport a viable option and which are sufficiently dense to support local shops, efficient combined heat and power systems and waste recycling. In short housing which is more urban in form than that which has characterised much of this century.

In this chapter we have reviewed the sustainability arguments for and against urban development. The situation may not be as clear cut as some of the advocates of the compact city would suggest. However, on balance, it is clear that urban development treads more lightly on the environment than suburban sprawl. This indeed is accepted by most of the critics of urban development, who concede the environmental benefits, but contend that these are outweighed by the problems, costs and unacceptability of forcing people against their will back into cities. They further argue that urban containment is a futile attempt to reverse powerful market forces and that it is impractical because there simply is not the capacity within urban areas to accommodate significant household growth. The argument is therefore not so much about the gain, but about the extent and acceptability of the pain involved. It is this that we address in the following chapters.

3 Can cities take it?

In which we review the historic rates of housebuilding on recycled land and conclude that these do little to illuminate future potential. We also examine the loss of population from urban areas in the past and suggest that this implies that our older towns and cities have significant capacity to accommodate future household growth.

Let us assume for a moment that people can be persuaded to live within towns and cities and that developers are falling over themselves to build housing there. Just how much housing could be accommodated within existing urban areas? While this question has been hotly debated, the answer is that no-one really knows because the research has not been done. In this context, targets for the percentage of housing to be built within urban areas have been set in a vacuum because there is no clear evidence about whether they are achievable. This provides an easy target for the critics of urban development who are able to conjure up pictures of precious parks and playing fields being swallowed by housing and of congested urban areas crammed with development. The debate about where to accommodate household growth must therefore be founded on an understanding of the capacity of urban areas to take that growth.

Two arguments put forward to justify building housing within urban areas are the historic rate of development on recycled land and the loss of populations from urban areas

This, however, is a difficult task. The towns and cities of England cover a huge land area and are made up on a complex mix of uses, buildings, sites and ownerships. Planners often assume that they can understand, quantify and order these complex urban systems. Yet towns and cities are more like living organisms than machines. There are no simple levers that can be pulled to achieve desired results. We must instead look at the correlation between cause and effect, much as happens in biology or sociology. The assessment of urban land capacity runs headlong into this dilemma. As soon as we start looking in detail at urban capacity we run into levels of complexity that make the task both time-consuming and of questionable accuracy. One response to this has been to examine what has happened in the past rather than to predict what might happen in the future. Two of the main arguments that have been put forward to justify building housing within urban areas are based on past trends. The first is the historic rate of development on recycled land and the second is the urban capacity implied by the historic loss of populations from urban areas.

EXHIBIT 16: Previous use of land developed for housing

	1985 total	%	1988 total	%	1991 total	%	1993 total	%
Rural uses	4,495	52	3,919	51	2,141	44	2,145	39
Urban uses:	4,150	48	3,766	49	4,220	56	3,355	61
of which…								
'Redeveloped'	2,335	27	2,229	29	1,266	26	1,320	24
Vacant, previously developed	951	11	845	11	876	18	1,375	25
All urban previously developed	3,285	38	3,074	40	2,141	44	2,695	49
Vacant: not previously developed	864	10	692	9	584	12	660	12
TOTAL	8,645	100	7,685	100	4,865	100	5,500	100

Source: DETR 1996, adapted by Breheny 1997

If we have done it before we can do it again

One way of assessing the proportion of new housing that we can accommodate in cities is to look at what has been achieved in the past. This is what the previous government did in 1996[1] when it suggested that the 50% target could be increased to 60% based on data[2] which illustrated that between 1985 and 1996 the percentage of housing land which had previously been developed had risen from 38 to 49% (Exhibit 16). From this the government concluded that the 50% target was too 'soft' which, on the face of it, seems a reasonable conclusion. However these figures need to be treated with care for three reasons.

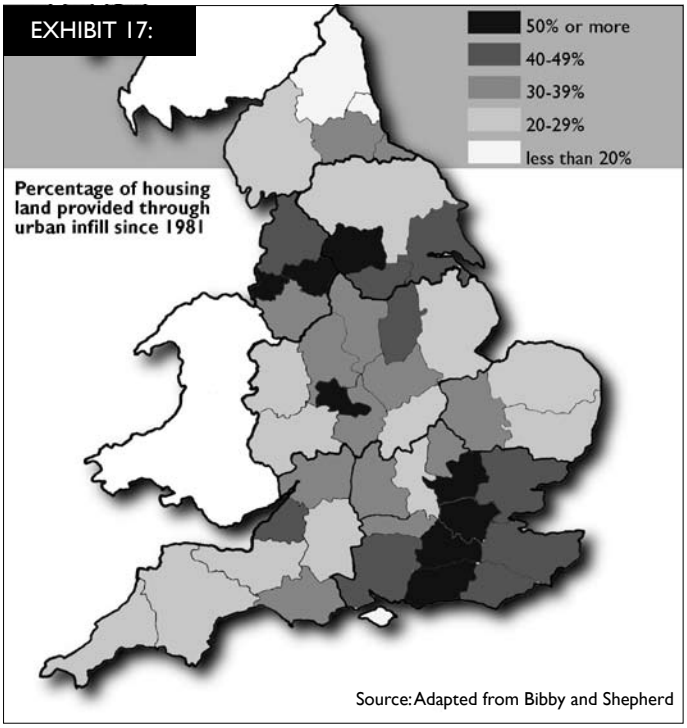
The first is the regional distribution of development. The average figure of 49% of housing land which had previously been developed masks wide regional variations. Greater London and Merseyside exceeded even the UK Round Table's target with percentages of 83% and 76% respectively. By contrast the percentage falls to 32% in the East Midlands and South West. This suggests that national targets for housing on urban land are something of a blunt instrument and will be easily exceeded in some areas while other places will struggle.

The second note of caution is the definition of urban land. This refers to the previous use of land rather than its location. Much of the previously developed housing land may not actually be in urban areas. It includes redundant Ministry of Defence facilities or hospitals which can often be in quite remote areas. 48% of all derelict land, for example, is in rural areas[3] and yet would be counted as urban land because of its previous use. This may not matter if our prime concern is the loss of rural land. It is however important, if our concern is the sustainability of compact city forms, since an isolated former airfield is hardly the most sustainable location for a new housing estate. A better estimate of the proportion of housing developed within urban areas is provided by Exhibit 17. This shows the amount of housing developed within urban areas whether or not the land had previously been developed. It will therefore include some 'green pores' within urban areas but exclude all brownfield land outside these areas. This illustrates that only eight counties met or exceeded the 50% target but 16 counties achieved less than 30% of new housing within urban areas.

A third note of caution is sounded by Michael Breheny who has converted the percentage figures which so

Between 1985 and 1996 the percentage of housing land which had previously been developed rose from 38 to 49%.

EXHIBIT 17:



Source: Adapted from Bibby and Shepherd

Many have pointed to the population loss of major cities as evidence that there is huge potential to accommodate housing growth within urban areas

impressed the government into absolute figures[4] (see Exhibit 16). This shows that the increase in housing on urban sites took place in the context of falling housing output. The area of urban land developed for housing has, in fact, fallen – the percentage only rose because other categories declined more rapidly. While he concedes an absolute increase on recycled sites from 951 hectares to 1,375 hectares he points out that this is hardly a picture of steady progress towards the 50% target. Breheny concludes that urban land is becoming more scarce and its development more difficult. However the real point is that the apparent progress towards the government's target has more to do with the depressed housing market than the effect of policy. As the housing market picks up it is likely that the percentage of non-urban housing land will increase once more, unless measures are taken to restrain it.

An analysis of what has been achieved over the last decade therefore does little to illuminate the future housing capacity of cities. Indeed it would be surprising if it did, since policies are not yet in place to effect a significant shift in the distribution of household growth, and current household projections perpetuate historic counter-urbanisation trends. We should not therefore assume that historic rates of urban development in recent years represent the maximum that can be achieved.

Putting back what has been lost

Another way of assessing the capacity of towns and cities to is to look at the populations that they accommodated in the past. Many of the advocates of urban repopulation such as Richard Rogers[5] have pointed to the population loss of major cities as evidence that there is huge potential to accommodate housing growth within urban areas. However an analysis of census data over the last 85 years shows that this is not as clear cut as it at first seems. Between 1911 and 1961 metropolitan areas in England continued to grow, albeit at a slower rate than they had done at the end of the nineteenth century. During this period the six metropolitan counties of England along with Greater London grew by 16.5% peaking at 19.7 million in 1961. Since that time they have lost around 7.7% of their populations or just over 1.5 million people.

EXHIBIT 18: Population change in the urban areas of England 1911-1994

	Population (thousands)								% change	% change
	1911	1931	1951	1961	1971	1981	1991	1994	1911-61	since1961
Greater London	7,161	8,110	8,197	7,977	7,529	6,806	6,890	6,967	11%	-13%
Inner London	4,998	4,893	3,679	3,481	3,060	2,550	2,627	2,662	-30%	-24%
Outer London	2,162	3,217	4,518	4,496	4,470	4,255	4,263	4,305	108%	-4%
West Midlands	1,780	2,143	2,547	2,724	2,811	2,673	2,629	2,628	53%	-4%
Birmingham	526	1,003	1,113	1,179	1,107	1,021	1,007	1,008	124%	-15%
Greater Manchester	2,638	2,727	2,716	2,710	2,750	2,619	2,570	2,578	3%	-5%
Manchester City	714	766	703	657	554	463	439	431	-8%	-34%
West Yorkshire	1,852	1,939	1,985	2,002	2,090	2,067	2,085	2,104	8%	5%
Leeds	446	483	505	710	749	718	717	724	59%	2%
South Yorkshire	963	1,173	1,253	1,298	1,331	1,317	1,302	1,305	35%	1%
Sheffield	455	512	513	581	579	548	529	530	28%	-9%
Merseyside	1,378	1,587	1,663	1,711	1,662	1,522	1,450	1,434	24%	-16%
Liverpool	746	856	789	741	610	517	481	474	-1%	-36%
Tyne and Wear	1,105	1,201	1,201	1,241	1,218	1,155	1,130	1,134	12%	
Newcastle	112	267	286	292	336	312	384	278	161%	-5%
Non-Metropolitan Cities										
Kingston-upon-Hull	278	314	299	302	288	274	267	269	9%	-11%
Leicester	227	239	285	286	285	283	285	293	26%	2%
Nottingham	260	269	308	311	302	278	281	282	20%	-9%
Bristol	357	397	443	436	433	401	397	399	22%	-8%
Plymouth	207	215	225	240	249	253	254	254	16%	6%
Stoke-onTrent	235	277	275	276	265	252	253	254	17%	-8%

Office for National Statistics - Regional Trends 32 - The Stationary Office - 1997

EXHIBIT 19:
Figure ground plans of Hulme in Manchester. Left in 1930 when the density was 150 units per hectare. Right after the 1960s redevelopment when the density fell to 37 units per hectare

Tony Champion[6] has charted the migration of population from metropolitan counties. He has illustrated that Greater London and the metropolitan counties sustained a net outward migration of over 1.25 million people between 1981 and 1994 almost half of which was accounted for by London. The scale of migration peaked in 1987 followed by a sharp fall which led many people to suggest on the basis of the 1991 Census that urban population loss was being stemmed. However since 1990 the rate of outward migration has started to increase again.

This however disguises more local trends of urban depopulation as illustrated in Exhibit 18 which contrasts population change at the county level with that of the core metropolitan district. The overall increase in metropolitan counties in the fifty years to 1961 masked a decrease in the population of inner districts. This rate of loss has increased sharply since 1961 with over 1.5 million people being lost to inner London and the six other metropolitan cities since that time, a fall of over 20%. The reason for this is that people have been moving from the centre of cities to the edge but remaining within the metropolitan county. It should be remembered that the metropolitan counties contain large amounts of countryside (three-quarters of the land area in West and South Yorkshire) so that there has been plenty of scope for cities to depopulate without the population of the metropolitan counties falling.

The situation is at its starkest in London and the older industrial cities. Greater London grew by 11.4% between 1911 and 1961 but this masked a 30% fall in the population of inner London and a doubling of the population of outer London. Since 1961 the inner London population has fallen further by almost 24% while outer London has also declined. This means that London has lost over 1 million people over the last 35 years which represents perhaps 400-450,000 households. The same is true of Manchester and Liverpool which have lost more than a third of their populations since 1961, between them accounting for half a million people or perhaps 200,000 households. Birmingham, Newcastle and Sheffield are slightly different since they grew rapidly between 1911 and 1961 but since then have followed the same path of decline albeit at a slower rate. Between them they have lost 236,000 people since 1961, perhaps 100,000 house-holds. The exception is Leeds, which has maintained a modest growth rate at both the city and county level since 1961. This may be because the city has been more successful at stemming depopulation but it is more likely to mean that

There has been plenty of scope for cities to depopulate without the population of the metropolitan counties falling.

suburban expansion has taken place within the district boundaries.

Even this does not paint the whole picture as can be illustrated from the specific example of Hulme in Manchester, an inner city district just to the south of the city centre. In 1931 Hulme had a population of 130,000. The area was redeveloped in the 1960s with six deck access estates, which supported a population of just 12,000 people[7]. This was achieved by moving thousands of people out to Wythenshawe, a garden city estate within the city boundaries so that massive depopulation in the inner city was not reflected in an overall loss of population for the district. This is an extreme example of the depopulation, which has taken place across inner cities in Britain and which is not captured by the figures described above. This may explain why the population of Leeds has grown slightly despite the loss of populations from its inner city. It illustrates the cascade effect identified by Tony Champion with progressive population loss down the urban hierarchy. Inner urban areas have experienced an absolute loss of population but the loss in less urban areas has been balanced by gains from their more urban neighbours.

We do not suggest that we should go back to the overcrowded cities of the Victorian age. However British cities were not generally overcrowded in the 1960s and 1970s and there should not, in principle, be any difficulty in replacing the population which has been lost since then. The above analysis suggests that Greater London plus the inner urban areas of Manchester, Liverpool, Birmingham, Sheffield and Newcastle have lost several million people in the last 35 years. To this should be added the loss from smaller metropolitan towns and cities like Bolton, Bradford and Coventry as well as cities outside metropolitan areas like Bristol, Hull, Stoke-on-Trent and Nottingham.

We would therefore speculate that the replacement of these lost urban populations could go a long way to meeting the 75% target for housebuilding within urban areas. It is however not to these urban districts that household growth is being directed, and local authorities do not have it within their power to switch household growth from one district to another. Liverpool for example has lost something like 111,000 households over the last 35 years and yet the whole of Merseyside is only projected to take 71,000 of the new households by 2016.

It is therefore difficult to judge the feasibility of the 75% target for housing on recycled land either on the basis of past building rates or historic population loss from cities. The former gives some comfort that the market is not averse to development on recycled land and will take it up when market conditions make this economically attractive. The population figures also suggest significant capacity in inner urban areas, but not in the peripheral districts or in small cities and towns which are better matched to where household growth is predicted. We therefore need other methods of assessing urban land capacity which are reviewed in the next chapter.

4 Attempts to find the extra capacity

In which we review the attempts that have been made to measure urban housing capacity. We start by looking at traditional land availability studies, before reviewing the three most important recent capacity studies in Hertfordshire, the North West and London. If the capacity uncovered by these studies is additional to past rates of urban infill, they suggest that it is possible to exceed the 60% target for housing in urban areas set by government.

While the analysis in the last chapter tells us something about the potential capacity of cities to accommodate increased populations, it tells us little about their physical capacity to take the extra housing. It is not after all the case that when people moved out of cities, the land occupied by their home remained undeveloped. It may have been redeveloped at lower densities, used – often very wastefully – for road-building and commercial development, or transformed into valued open space. However over the period described above, towns and cities have not only lost population, they have also lost other activities such as heavy industry, retailing and warehousing. The land and buildings formerly occupied by these activities is also potentially available for new housing development. We also need to find housing land in smaller towns and cities that have not experienced population loss. This raises the question of urban land capacity and how it is measured.

There are a number of weaknesses in the approach to urban housing capacity adopted by many local authorities.

Traditional approaches

Local planning authorities are required by PPG3[1] to identify a five year supply of housing land in their local plans. So the task of identifying potential land for housing development should be something that they are used to. As part of the UK Round Table on Sustainable Development report[2], Llewelyn-Davies reviewed a number of capacity studies by local authorities which sought to go beyond the traditional land availability study. From this they concluded that there are a number of weaknesses in the approach adopted by many local authorities:

- The tendency has been to identify only the large sites and to make projections about the land available from other sources (known as windfall sites) from past trends. It is clear from URBED's work in smaller towns that many authorities ignore sites with capacity for less than 10 houses and therefore miss the majority of their housing capacity.
- Authorities have generally accepted current land allocations, such that land allocated for employment use has been excluded even though there may be little demand for its development.
- Sites have been excluded because of perceptions about the lack of market demand to build and live in certain areas.

Local authorities have tended to perpetuate current housing trends by failing to question market and policy preferences for what are essentially suburban solutions.

- Sites have also been excluded because of assumptions about contamination, or site constraints such as access and ownership.
- Having identified the land available, authorities have then tended to underestimate their housing capacity by assuming low density development of single family housing.
- They have also not questioned planning policies such as parking standards and overlooking distances.

Because of these weaknesses, local authorities have tended to perpetuate current housing trends by failing to question market and policy preferences for what are essentially suburban solutions. They have also confused capacity – which is the potential to accommodate housing – with supply, which is the amount of this potential released by the market within policy constraints. While the urban land capacity studies reviewed in the UK Round Table report sought to overcome some of these problems, they were still seen as flawed and unlikely to uncover the true capacity of urban areas. Indeed, some were designed not to find additional capacity but to prove that existing allocations were too high. As a result of this, many local authorities are substantially underestimating the potential capacity of their urban areas and assuming a requirement to take far more greenfield land than is actually justified.

We therefore need new methods of assessing the housing capacity of urban areas. This is a relatively new science (perhaps art would be a better word) and practice is still evolving. However we review below three of the leading studies which have attempted to develop a methodology to assess the housing capacity of urban areas.

The Hertfordshire Study

One of the most thorough urban capacity assessments to be reviewed in the UK Round Table Report was the Hertfordshire study undertaken by Urban Initiative and Chestertons[3]. This was based on the idea that, since it was not the population of the county that is growing so much as the number of households, it should be possible to increase the housing density of urban areas without increasing the population density.

EXHIBIT 20: Generic development types used in Hertfordshire

	Location	Form	Plot size m²	Density/ha	%roads	Dwelling potential index
Victorian and Edwardian terraces	ST	T	125	80	18	1.00
Garden city estate	E	T/SD	650	20	16.5	1.01
Inter-war estate	E	T/SD	200	30	15.7	1.00
Post war council houses	E	SD	260	30	18	1.14
Post war council flats	E	B	7500	95	14	1.12
New town corp. estate	E	T	120	64	10	1.30
60/70 private sector development	ST	SD/D	250	25	17	1.00
80/90 private sector development	F	T/SD/D	90/250	30/49	14	1.01
Low density detached	SU	D	1500	5	5	1.72
Bungalows	ST	SD	380	24	15	1.07
Market town centre	U	O				
New town centre	U	O				
Old industry	U	O				
Business estate	U	O				
Older office development	U	O				

Key
ST Street
E Estate
F Fringe
SU Suburban
U Urban

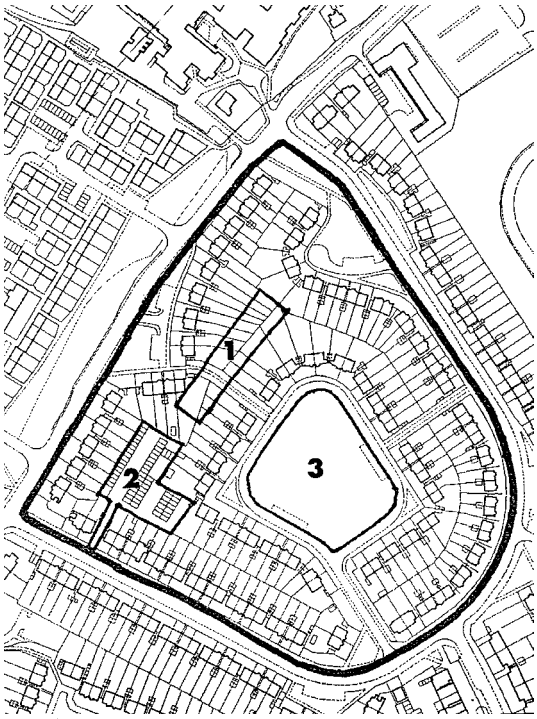
Key
T Terrace
SD Semi-detached
D Detached
B Block
O Other

The study sought to identify the potential for urban intensification in the county based upon generic development types. Fifteen development types were identified as typical of districts within the county (Exhibit 20). These included ten types of housing area as well as two town centre categories and three for commercial areas. Representative areas of each generic type were sampled to assess built form, density, plot size, parking etc. Design exercises were then undertaken to assess the potential for intensification through the subdivision of properties, infill development, redevelopment and replanning. Each design exercise produced an estimate for the amount of additional housing that each area could accommodate.

The design exercises were analysed for viability by comparing the costs of the new housing with the value that it would create. Of the 32 design exercises undertaken, 17 produced negative values and were therefore considered to have no market potential for intensification. Consultation was also undertaken through a series of public meetings, where concerns were raised about the 'cramming' of the areas. Each of the 10 residential areas was then given an index, to reflect its potential to accommodate intensi-fication without harm to its quality and character. So, for example, the inter-war estate had the potential to accommodate 57 additional dwellings but none were viable so it was given an index of 1.0. The post-war council housing area, by contrast was able to accommodate 39 extra houses (an increase of 14%), all of which were viable so that it was given an index of 1.14. These indices were then combined with a number of assumptions about other types of capacity:

- **Flats over shops:** That a third of space over shops was vacant and that a third of this space was suitable for housing.
- **Town Centre:** That town centres would generate on average 1.1 residential units per acre (excluding the redevelopment of car parks)
- **Industrial sites:** That existing industrial uses would not be redeveloped and that 50% of vacant sites would be suitable for housing.
- **Offices:** That 25% of older office space and 10% of modern space was suitable for residential conversion.

The study produced an unconstrained capacity of 34,693 extra homes.



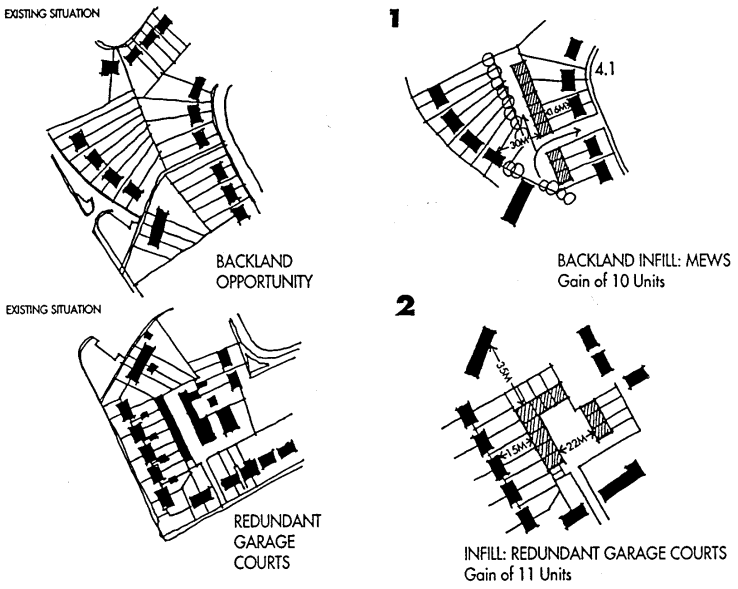


EXHIBIT 21:
Top: An inter-war estate, one of the generic study areas used as part of the Hertfordshire Study. Below: An example of one of the design exercises undertaken to assess housing capacity.

These figures were then grossed up by categorising all built up areas in the county into one of the 15 generic types and applying a combination of the indices and the above assumptions. This produced an unconstrained capacity of 34,693 extra homes. These figures were then discounted to take account of local characteristics. In conservation areas, for example, the figures were reduced by 60% and similar assumptions were made for issues like the amount of infill in the past, the level of private ownership etc. An estimate was also made about the capacity likely to be brought forward within the Structure Plan period. This reduced the capacity to 11,079 extra houses. To this was then applied two scenarios. A pessimistic scenario assumed that land assembly would be difficult, market conditions would worsen and that the policy would be subject to delays. This further reduced the capacity to 7,522

EXHIBIT 22:
A figure ground plan from URBED's work in Barnsley showing clearly the 'shatter zone' around the town centre

extra houses while an optimistic scenario saw it increase to 16,500.

These figures suggest that 12-28% of Hertfordshire's allocation of 60,000 households by 2016 could be accommodated through intensification. This broadly compares to the scale of the current proposals to extend Stevenage into the green belt. It does not however represent the total potential for housing in urban areas since it excludes recycled sites. Indeed between 1981 and 1991 Hertfordshire achieved more than 50% of all new housing within urban areas. If we assume a similar rate of infill in the future and that the Urban Initiatives/Chesterton's figures are additional to this, the potential would appear to exist for Hertfordshire to meet the 75% on the optimistic scenario.

While the Hertfordshire Study is probably the best of its kind and represents a huge improvement on the traditional land availability study, it suffers from some of the same weaknesses. It does not, for example, question existing planning policies which as Llewelyn-Davies point out 'are the very factors which produce the current layout forms and density'[4]. It also makes assumptions about market demand and deliverability so that five of the fifteen types of area studied were considered to have no additional capacity. Another drawback is that the work was confined to homogeneous urban areas, which is where there tends to be the least capacity. Much of the capacity in urban areas tends to exist in the interface zones between different types of use and the 'shatter zones' around town centres, and yet these would have been excluded from the study. This is the area where there is the most potential to improve the technique as illustrated below.

Much of the capacity in urban areas tends to exist in the interface zones between different types of use and the 'shatter zones' around town centres.

The North West Regional Association

Llewelyn-Davies have led the field in urban capacity assessments and have now developed a technique which is considered to be current best practice. This was developed through a study for a consortium of 46 local authorities in the North West[5]. The aim was not to assess the capacity of the region but to develop a method so that the local authorities could do it themselves.

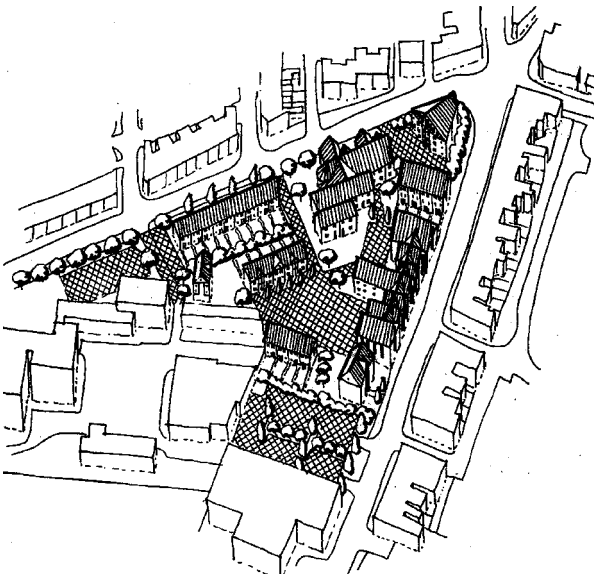
The essential components of the approach are to define the urban area of each local authority and to discount sites that are not suitable for housing such as parks or nature reserves. This urban area is then classified into four different types:

- town or city centres
- housing areas
- employment areas
- interface zones

The most important are interface zones which are transitional areas between two different types of development, mixed-use areas or areas of economic and physical decline. They are typically found around town centres as illustrated in Exhibit 22. It is here that the greatest housing capacity is to be found. The technique then identifies one-off development opportunities in the housing and employment areas. 'Focus locations' are then defined. These are areas which are well served by public transport or close to facilities (town and city centres) and are therefore areas where lower parking standards and more intensive development may be considered. The manual suggests addressing capacity under three development scenarios. These affect both the selection of sites and the approach taken to those sites.

- **Scenario 1** - Which includes only those sites which would currently be acceptable for housing or mixed-use development and which applies current planning policies and standards.

- **Scenario 2** - Which includes the same sites as Scenario 1, but identifies sites within focus locations where different planning policies and standards



At suburban densities the land required for 5.1 million households is equivalent to the combined urban area of the six largest metropolitan counties in England.

may be applied and where higher densities may be acceptable.

- **Scenario 3** - Which includes all sites in the focus locations even if they are currently designated for other uses. This scenario is intended to seek out the maximum potential capacity by looking at what might be possible through a proactive approach to site assembly and regeneration and the use of higher densities.

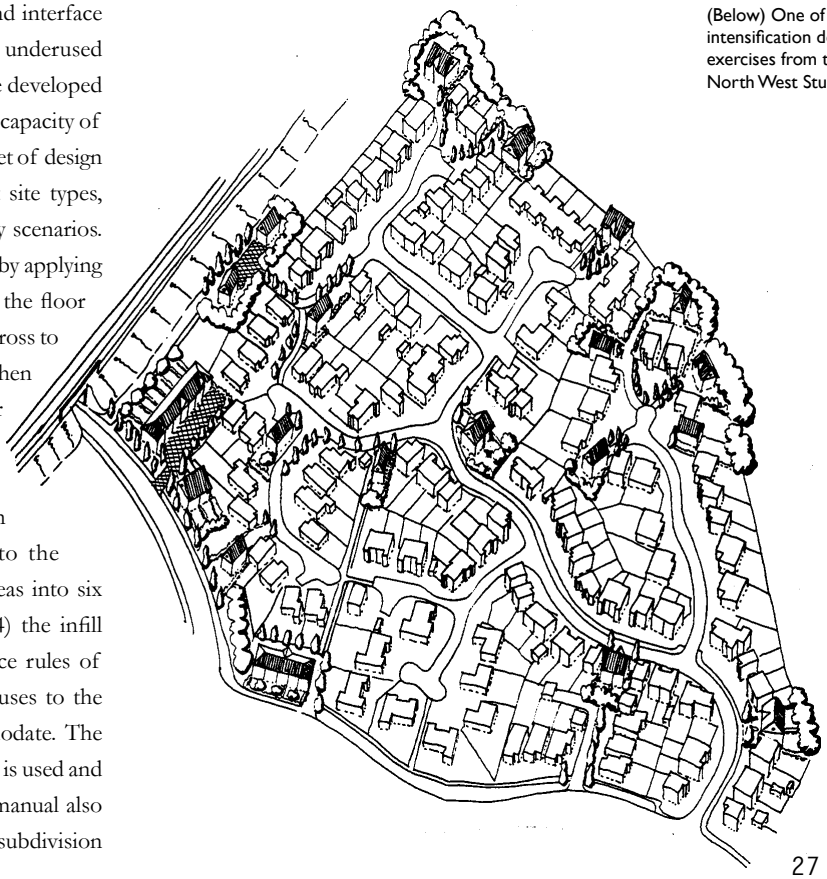
A detailed street survey of the town centre and interface zones is undertaken to identify all vacant or underused sites, regardless of constraints, which could be developed for housing, based on the three scenarios. The capacity of each site is then estimated by comparing it to a set of design exercises (Exhibit 23). These cover different site types, configurations, sizes as well as different policy scenarios. The capacity of existing buildings is estimated by applying a rule of thumb which assumes that 80% of the floor area is usable, 60% in deep plan buildings (the gross to net ratio), assesses parking requirements and then divides the remaining floor area by 50m^2 for one-bed flats and 65m^2 for two bed flats.

The manual also includes guidance on estimating the potential for intensification in existing housing areas. This is similar to the Hertfordshire study and classifies housing areas into six types. Based on design exercises (Exhibit 24) the infill potential of each type is estimated to produce rules of thumb for the potential number of extra houses to the hectare that each housing type can accom-modate. The actual levels selected depend on which scenario is used and a judgement about local circumstances. The manual also gives guidance on estimating the potential for subdivision of existing dwellings based on housing with more than seven habitable rooms or floor areas of over 120m^2 where there are occupation rates of less than two persons per dwelling. The capacity for conversion is estimated either by looking at design exercises or by referring to previous conversion schemes. To this is then added the potential from vacant housing by identifying those areas with vacancy rates above the regional average of 4.4%. These guidelines are applied to case study areas which are then grossed up to give an estimate for the whole borough.

This process, like the Hertfordshire Study, gives an unconstrained housing capacity. However this capacity is entirely unconstrained and will be far higher than the capacity that is likely to be seen as acceptable under current policy, commercially viable or implementable due to practical constraints. The final stage therefore explores the amount of this capacity that is likely to be released if different policies are pursued. Rather than discounting capacity as in Hertfordshire, the North West method

EXHIBIT 23:
(Above) One of the urban infill design exercises undertaken for the North West Study

EXHIBIT 24:
(Below) One of the intensification design exercises from the North West Study.



While the current focus is on the outrage of people faced with green-field housing, urban intensification is also likely to encounter considerable resistance.

illustrates, to decision makers, the impact on capacity of policies such as protecting employment land, parking standards and density policies (the difference between scenarios 1 and 2) as well as the potential which might be released by a proactive approach to regeneration (scenario 3).

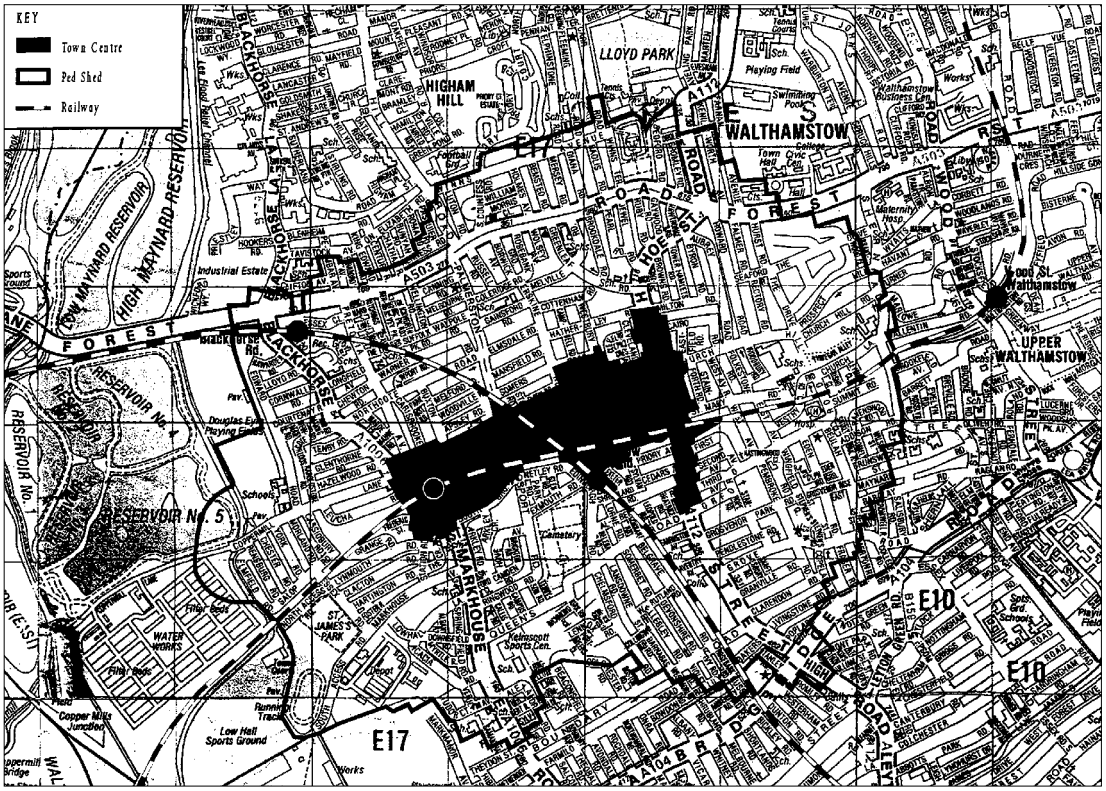
A further stage then estimates the take-up of this potential by the market. Sites are graded by the likely abnormal costs of development and the value created. This allows housing potential to be divided into three types: sites likely to be taken up by the market; sites which are marginal but could come forward with a small amount of help and sites which are unlikely ever to be developed. This enables an assessment of the scale of capacity likely to be released by the market as well as the impact of different market conditions and the effect of potential grant regimes.

Like the Hertfordshire study, this methodology seeks out potential rather than measuring what can be easily identified. As such it will be of little interest to authorities which wish to use urban capacity work to show that they are not able to accommodate additional household growth. The manual was only published in late 1997 and the authorities of the North West are only just starting to work through its intricacies. However it already seems that it is being taken up more enthusiastically by the urban authorities of Greater Manchester and Liverpool than by rural districts in the Wirral, Cumbria and to a lesser extent Lancashire and Cheshire. Perhaps it is seen more as a tool to promote urban development than to illustrate an ability to accommodate household growth. It is also apparent from the design exercises that, while the current focus is on the outrage of people faced with greenfield housing, urban intensification is also likely to encounter consid-erable resistance. This was illustrated by the Hertfordshire public meetings, as urban residents face the prospect of views being developed, open space being built upon, and streets becoming more congested with parked cars. This may be another reason why rural authorities are cautious about applying it to their urban areas that have not experienced the depopulation of the big cities.

The LPAC Study

The North West Study has only been applied in small case study areas and puts no figures on urban housing capacity. We must therefore turn to the study recently completed for the London Planning Advisory Committee[6] for an indication of the capacity likely to be uncovered by these approaches. This study was also undertaken by Llewelyn-Davies and applied a method similar to that described above to Greater London. The study however focused more on what, in the North West, were called

EXHIBIT 25:
An example of a 'Ped Shed' used in the LPAC Study



'Focus Locations', but in the London study were called 'Ped Sheds', a term borrowed from Australia. These were based on 800m (10 minute walking distance) catchment areas around each of London's local centres. Ten case study centres were selected, surveyed and subjected to design exercises in a similar way to the North West study. The study also looked at small sites outside the 'Ped Sheds', at the potential for backland development in existing housing areas and the subdivision of existing properties.

The findings from the analysis of 'Ped Sheds' showed that the potential housing land varied markedly depending on the size of the centre and the nature of land use. However 60% of the capacity was found to be in the 'interface zones' between different uses, despite the fact that these covered only 15% of the land area. The study also applied three design scenarios, or options, based on parking and local planning policies. The first option applied existing planning policies, the second reduced parking to one space per unit with no visitor parking and the third removed all parking requirements. In broad terms the study found that site capacity increased by 50% with Option 2 and 100% with Option 3. It further concluded that design options 2 and 3 produced development more in keeping with the surrounding area as well as a better return on investment. Indeed development values on Option 2 and 3 were between 91% and 164% higher than Option 1. These results were grossed up to cover all 'Ped Sheds' in London to produce an estimate that under Option 1 they would accommodate 52,000 new units, under Option 2 - 77,000 and under option 3 - 106,000.

The capacity of small sites outside the 'Ped Sheds' was also estimated. This however was more limited, first, because the study suggests that there are fewer of these sites and second, because lower levels of accessibility to public transport meant that Option 3 could not be justified. Existing planning permissions existed for 4,500 dwellings outside the 'Ped Sheds' and it was estimated that this would increase by 2,300 if Option 2 were applied. Intuitively this finding seems strange since, although the 'Ped Sheds' in inner London often overlap, in outer London there is more land outside 'Ped Sheds' than within. While much of this will be made up of consolidated housing and employment areas, it seems likely that the 'interface' zones will also be larger. The study implies that much of the capacity identified within the 'Ped Sheds' was new and not subject to existing planning consents. It is therefore questionable that the capacity outside the 'Ped Sheds' should be based solely on sites with planning consent.

A total of 1,400 hectares of potential backland sites were also identified, mostly in outer London. It was however estimated that the difficulty of unlocking this land, and the fact that most of it was only appropriate for low density development, meant that even with a favourable planning regime the potential was only 2-300 units per year. In contrast the potential from the sub-division of existing houses was very significant. It was estimated that more than a third of houses in London with 7 or more habitable rooms are occupied by 1 or 2 people. This could represent 350,000 houses suitable for conversion and could create just under a million flats, a net gain of 630,000 new dwellings. However a large part of this capacity will never

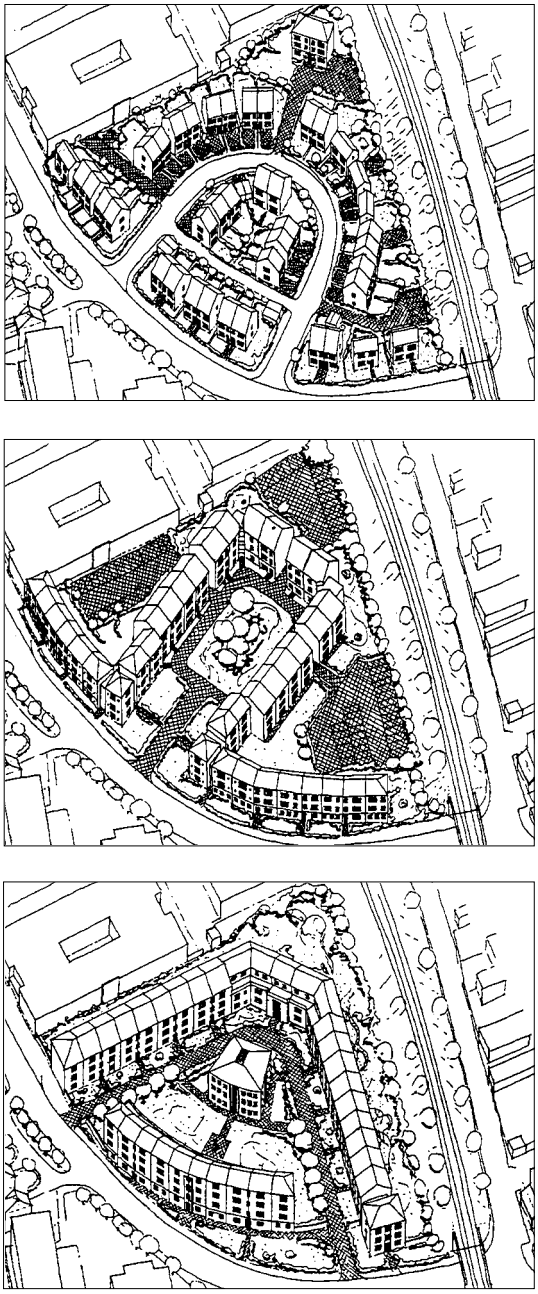


EXHIBIT 26: Unban infill design exercises undertaken as part of the LPAC study showing the three options considered

60% of the capacity was found to be in the 'interface zones' between different uses, despite the fact that these covered only 15% of the land area.

be released and 250,000 of these properties would probably not get planning permission under current policies.

The study was never intended to give a full picture of the housing capacity of London but rather to discover the additional capacity that could be unlocked in the 'Ped Sheds'. It should be remembered that between 1990 and 1993 the percentage of new housing in London on recycled sites was over 80% and the capacity uncovered by Llewelyn-Davies may be effectively additional to this. Excluded from the remit of the study were sites of more than one hectare which have been the subject of a separate report by Halcrow Fox[7]. This found that 50,000 homes had been developed on large windfall sites between 1991 and 1996 compared to a prediction of just 12,000 homes. This was described by John Lett of LPAC as a 'colossal breakdown in the planning system's ability to anticipate what might come forward'[8]. On this basis it was estimated that future projections could be increased from 48,000 to 200,000 units. A further study of the capacity of space over shops is also being undertaken by the Civic Trust, which will be available in April.

However if one adds the figures from the LPAC study for 'Ped Sheds' to the sites outside these areas and the estimate for backland development one comes to a maximum additional capacity figure of 112,500 units over the term of the household projections. Over this period the number of households in London are projected to grow by 629,000 so the capacity uncovered by the study represents about 18% of projected household growth. If this capacity is additional to that which would otherwise have been released and we make assumptions about the other sources of supply then it might just be possible for London to accommodate all of its household growth on previously developed land.

We may question why it is possible in London – with relatively high absolute levels of household growth – to accommodate such a high proportion on previously developed land when this is proving so difficult in other parts of the country. There appear to be a number of reasons. The first is that there is strong demand to build and to live in London so that development is more viable. The LPAC Study, for example, did not see it as necessary to rule out sites through a viability assessment as in the Hertfordshire and North West studies. Developers will therefore seek out capacity in London, in contrast to northern cities where there may be more capacity but where housing values do not justify the extra costs and hassle on many urban sites. It also reflects the fact that Greater London has lost a million people since 1961 as well as other uses, particularly industry along the river. It therefore has land on which urban housing can be built despite the fact that it still has a higher population density than other parts of the country. By contrast smaller towns may have market demand for housing but have not lost population and industry and therefore have less scope for urban infill.

The urban capacity assessments reviewed in this chapter give some cause for optimism that the 60% target for new housing built on recycled land can be exceeded. The Hertfordshire study shows that the potential for infill is comparable to that of a new settlement. The North West Study outlines a methodology for seeking out this extra capacity, although the only large scale application of this to date has been in London which is not typical of the rest of the UK. If we assume that the capacity discovered by these studies is largely additional to the existing rates of building on recycled land, it does potentially make up the difference between the 50% and 75% targets. At present this is a very speculative conclusion and will not be confirmed until a great deal more urban capacity work has been undertaken. It also rests on the assumption that existing rates of recycled land development can be maintained. We therefore review in the next chapter the available data on this and other sources of urban housing capacity.

5 Sources of urban housing capacity

In which we bring together the available data to make an assessment of the housing capacity of the urban areas of England. We review recycled land, the redevelopment of council estates, the development of car parks, the conversion of empty commercial space, living over the shop, the intensification of housing areas, the subdivision of larger houses, and the better use of the existing housing stock. We conclude that the total potential capacity of urban areas may be very significant and that it may be feasible, with the right policy regime, to accommodate 75% of housing within urban areas.

The aim of the urban capacity studies reviewed in the last chapter has generally been to find additional capacity over and above land already allocated for housing. The results therefore tell us how much additional capacity might be released if we look harder for housing development opportunities within towns and cities. What they do not necessarily tell us, is the total capacity of urban areas and therefore whether the 75% target for housing in urban areas is feasible. They do however indicate the likely sources of capacity and in this chapter we review these sources and seek to assemble national data on the contribution that they are likely to make.

The scale of the task

The first step in doing this is to define what level of housing would need to be accommodated in urban areas to meet the target, what type of housing this would be and how much land would be required. We suggested in Chapter 1 that we should be planning for 5.1 million extra homes by 2016. The 75% target would therefore mean that we must accommodate 3.8 million households within urban areas of which just over 3 million will be single people. Therefore while we need to find capacity for 3.8 million households within urban areas we should not assume that these will be built at suburban densities or as large single family homes.

The 75% target would mean that we must accommodate 3.8 million households within urban areas of which just over 3 million will be single people.

We review in this chapter the main sources of urban housing capacity that might accommodate these households. However before doing so, we should give a health warning. The figures in this chapter are, what Llewelyn-Davies would call, unconstrained capacity. They should not be taken as an indication of what is viable under current policies or market conditions. The figures do however give an idea of the maximum capacity that might be realised in the future and considered under the following headings:

- recycled (brownfield) land;
- the redevelopment of existing housing areas;
- the development of car parks;
- the conversion of empty commercial space;
- living over the shop;
- the intensification of existing housing areas;
- the subdivision of existing housing, and
- the better use of the existing housing stock.

Recycled land

Much of the debate about urban land capacity has focused on brownfield land. It is therefore important to assess how much of it there is, where it is located, and what constraints it places on development. Michael Breheny has argued[1] that our success in building on recycled land means that the 'easy' sites have been developed and opportunities for future development are likely to be more limited. The image of recycled land conjures up a picture of derelict industrial and mining sites and while this is not the whole picture, it is where we will start.

Derelict Land: The Survey of Derelict Land in England 1993[2] gives an overall picture of the extent and nature of derelict land. This shows that in 1993 there were 39,600 hectares of derelict land in England. This had decreased by 900 hectares since 1988, although during that period 9,500 hectares had been reclaimed, in other words, the rate at which land is becoming derelict is only marginally less that the rate at which it is being reclaimed. The rate of change for different types of dereliction is detailed in Exhibit 27. This shows that the greatest progress has been made with derelict mine and railway land whereas the 'other' category, which includes general industrial dereliction, is the only category to have increased consistently since 1974. Indeed general industrial dereliction is now the most important type of derelict land, accounting for a quarter of the total.

It is important not to fall into the trap of assuming that all derelict land is in urban areas. Exhibit 28 shows that the proportion in urban areas is just over 50% (20,479 hectares) and only 13% is in the inner city. However rural dereliction tends to be associated with mining and military operations whereas the majority (78%) of general industrial dereliction is to be found within urban areas. Most derelict land in urban areas also justifies reclamation whereas the same is true of only three-quarters of rural derelict land. It is less easy to determine the amount of this land that is contaminated or indeed how this affects whether reclamation is deemed to be justified. In its evidence to the Environment Committee in 1996 the Environment Agency[3] suggested that up to 20,000 sites were likely be contaminated but were not able to estimate the hectarage of these sites.

The regional distribution of derelict land is shown in Exhibit 29 which is almost a mirror image of the maps for household growth. The region with the largest amount of derelict land is the North West where three quarters of it is within urban areas. The South West by contrast has just 800 hectares of derelict land and 86% of it is in rural areas. If we were to assume that derelict land in urban areas which justifies reclamation is potential land for housing, it would produce 19,759 hectares of housing land nationally although this would not generally be located in areas where there is demand for housebuilding.

The survey also includes details of the size of derelict

The regional distribution of derelict land is almost a mirror image of the maps for household growth.

EXHIBIT 27: Changes in the amount of derelict land by type of dereliction (hectares)

	1974	1982	1988	1993	Change 1974-93
Spoil Heaps	13,100	13,300	11,900	9,191	-30%
Excavations & Pits	8,700	8,600	6,000	5,807	-33%
Military dereliction	3,800	3,000	2,600	3,275	-14%
Railway land	9,100	8,200	6,400	5,615	-38%
Other*	8,600	12,500	13,600	15,713	+83%
TOTAL	43,300	45,600	40,500	39,600	-9%

* Includes mining subsidence, general industrial dereliction, and other forms of dereliction.

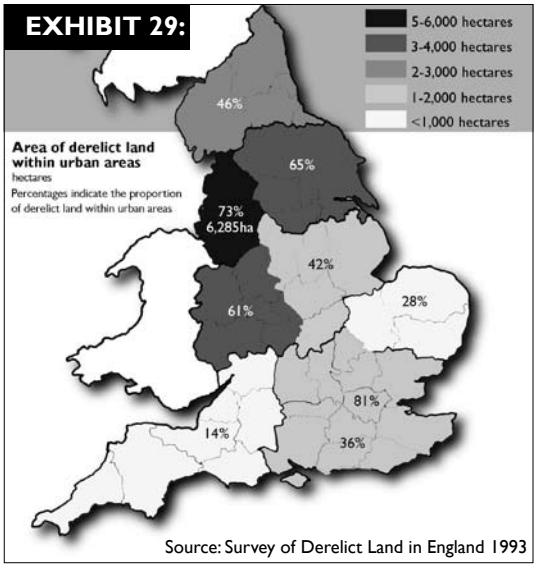
Source: Survey of Derelict Land in England 1993 - DOE

EXHIBIT 28: Urban/rural split of derelict land

	Inner city		Other urban		Rural		Total	
	Ha	%	Ha	%	Ha	%	Ha	%
Derelict Land	5,243	13%	15,236	38%	19,121	48%	39,600	100%
Area justifying reclamation	5,060	15%	14,699	43%	14,807	43%	34,566	100%

Source Survey of Derelict Land in England 1993 – DOE

EXHIBIT 29:



Source: Survey of Derelict Land in England 1993

sites. The average size of derelict sites ia 3.8 hectares. However within this there is a large number of small sites making up a relatively small amount of the land area. The survey indicates that 83% of all derelict sites are less than 5 hectares but these make up only 28% of the total derelict area. However most of these smaller sites are within urban areas which contain 52% of the derelict land but 63% of the derelict sites, and where the average site area falls to 3.1 hectares.

Other vacant land: This is not the total extent of recycled land. The definition of derelict land is 'land so damaged by industrial or other development that it is incapable of beneficial use without treatment'[4]. It is therefore clear that there is a great deal of vacant land in urban areas that would not be considered derelict by this definition. This includes derelict land which has been reclaimed for 'soft uses' such as landscaping, vacant land which has never been used, 'land left over after planning', and land which is still occupied by vacant buildings.

An indication of this is given by the data on the uses for which derelict land has been reclaimed. Of all the derelict land reclaimed in urban areas between 1988 and 1993, 39% was for 'soft uses', the majority of which was for public open space or recreation and a further 11% had no end use. Some of this land will have become a valued resource to local people, but much of it will have been transformed into the savannah grasslands which now characterise many of our old industrial areas, like East Manchester, and could be available for housing. If we were to assume that half of the urban land reclaimed for

It is clear that there is a great deal of vacant land in urban areas that would not be considered derelict.

soft end uses and all of the urban reclaimed land without a use, was available for housing, this would add another 2,008 hectares to the stock of urban land potentially available for housing.

The first, national survey of vacant land in urban areas was undertaken in 1990[5] based on Ordinance Survey mapping data of urban areas with a population of more than 10,000. All vacant land was identified including sites awaiting development, previously developed land, urban land which had never been developed and land which had been reclaimed for public open space. The report did not assess the development potential of this land and pointed out that some had possible value 'as recreational land and amenity open space'. The survey identified 49,000 hectares of vacant land in urban areas with more than 10,000 people and extrapolated from this that the national stock of vacant land in all urban areas was around 60,000 hectares, 'an area the size of a small county such as Cleveland. This represents roughly 5% of the urban land area and it was estimated that 43% of this land had previously been developed.

Half of these sites were between 0.2 and 0.4 hectares and only 25% were larger than a hectare. The survey also found significantly higher proportions of vacant land in Urban Programme Authorities (ie. inner city areas), which would support our suggestion that it is these areas which have lost the greatest amounts of population and activity. However both of these findings are at odds with the derelict land data, where the size of sites was

EXHIBIT 30: Type of vacant urban land by region (hectares)

	Urban area	Derelict land	Vacant previously developed	Vacant not previously developed
Northern	56,200	960	1,980	3,300
North West	146,400	1,880	2,140	5,990
Yorkshire & Hum.	96,900	1,180	1,780	3,590
East Midlands	68,000	570	1,210	2,430
West Midlands	122,000	1,760	1,970	2,460
South West	74,800	510	390	1,850
Eastern	104,600	680	840	3,250
Greater London	131,700	610	1,140	1,870
South Eastern	146,200	550	1,020	3,190
TOTAL	936,700	8,690	12,470	27,930

Source: The national survey of vacant land in urban areas in England 1990 1992

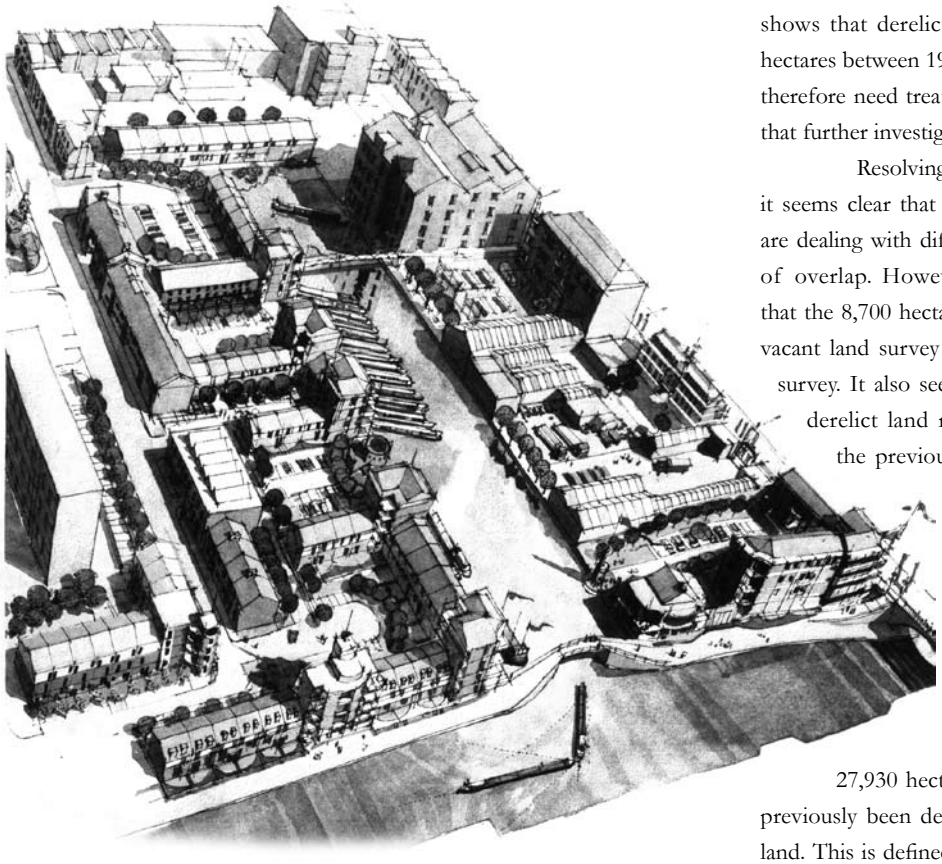


EXHIBIT 31: Infill housing development at Kingsland Basin in Dalston. This is taken from URBED's work in the area and illustrates how derelict land, some of it contaminated, can be developed for high quality housing, particularly next to water.

considerably larger and the greatest concentrations were in outer urban areas.

There is however a more important discrepancy between these two surveys which the National Survey of Vacant Land discusses in some detail. The vacant land survey identified 8,700 hectares of derelict land in urban areas, less than half the 20,000 hectares identified in the 1988 derelict land survey. Two main reasons were suggested to explain this. The first was that significant amounts of derelict land exist in smaller industrial towns with populations of less than 10,000, which were excluded from the survey. The second was that the vacant land survey applied a more tightly drawn definition of urban areas than that used by local authorities in the derelict land statistics. The derelict land data therefore includes large tracts of derelict land on the edge of urban areas, which were excluded from the vacant land survey. It is also suggested that in London, the difference is accounted for by the amount of derelict land developed in areas like Docklands - in other words the total amount has fallen between 1988 and 1990. Yet the 1993 derelict land survey shows that derelict land in London increased by 485 hectares between 1988 and 1993. The vacant land figures therefore need treating with care, and the report admits that further investigation is required in these areas.

Resolving these discrepancies is not easy and it seems clear that the derelict and vacant land surveys are dealing with different data sets, albeit with a degree of overlap. However it seems reasonable to assume that the 8,700 hectares of derelict land identified by the vacant land survey is also included in the derelict land survey. It also seems likely that the 3,244 hectares of derelict land reclaimed since 1988 is included in the previously developed land figure. We have therefore subtracted these figures from the vacant land survey figures leaving a further 9,226 hectares of vacant previously developed urban land that could be added to the total of land potentially available for housing.

The survey also demonstrates that 27,930 hectares of vacant urban land has never previously been developed which is 57% of all vacant land. This is defined as land which is within urban areas but which has not been developed and is not in agricultural use. It also excludes land with amenity value such as playing fields, landscaping and parks. This is likely to include land within urban areas which has been bypassed by development for various reasons, and while it will not all be available or suitable for development, it could represent a significant source of housing land.

Future brownfield land: The above figures relate to the amount of vacant and derelict land in 1990 and 1993 when the surveys were undertaken and take no account of land which has fallen vacant or been developed since then. The vacant land survey was a one-off exercise and contains no data on historic trends. We can however look at the data on derelict land since 1974 and come to a view about whether the supply of recycled land is drying up, as Breheny suggests. The level of derelict land has remained relatively stable over this period despite work to promote reclamation and reuse. The only significant fall in the national total was between 1982 and 1988, associated with the development boom of the 1980s, and the figures since then show reclamation work broadly keeping pace with new dereliction.

It is possible that the amount of vacant and derelict land is a result of a process of industrial restructuring which is now coming to an end. There are few mines left to close and much of the heavy industry

The level of derelict land has remained relatively stable despite work to promote reclamation and reuse.

and warehousing which once dominated urban skylines has now gone, so we might assume that levels of vacancy and dereliction will decline. However, urban areas and the economies that sustain them are constantly evolving and vacant land is a natural result of this process. Vacant land today is as likely to be the result of institutional closures due to policies like 'Care in the Community' as of industrial closures. It is not easy to predict what the sources of vacancy might be in the future - perhaps the hectares of land devoted to car parking - but it is reasonable to assume that vacant and derelict land will continue to be a feature of urban areas and a potential resource for new housing development. If we were therefore to assume that past trends of vacancy and dereliction will continue into the future, it is likely that almost 30,000 additional hectares of urban land will become vacant over the period of the household projections.

Recycled land capacity: From the data reviewed above, we have assumed the amounts of land within urban areas that may potentially be available for housing on Exhibit 32. We have then applied our broad-brush density figures of 30 and 62 units to the hectare to these totals. These are net densities and take no account of roads and other facilities. They would therefore apply to small sites but not to large sites of say more than a hectare. For simplicity, we have therefore applied a net density figure to half of the land under each category and gross densities of 12 and 27 units to the hectare to the remainder. This suggests that the total potential housing capacity of current vacant urban land is just over 0.9 million units at garden city densities and 2 million at urban densities. If you add to this the land likely to become vacant or derelict by 2016, these totals rise to 1.6 million and 3.4 million respectively, suggesting that there may be the capacity to accommodate a significant proportion of household growth on urban recycled land.

> Urban areas and the economies that sustain them are constantly evolving and vacant land is a natural result of this process.

As part of the preparation of this report we have sought the comments of a range of experts. The figures detailed in Exhibit 32 have been a focus for many of the comments. On the one hand it was felt that they overstated the capacity from recycled land. However it has also been suggested that the higher density guideline of 62 units to the hectare is lower that we should be aiming for on many urban sites and that in some cases densities of 94 units to the hectare would be appropriate. It should be stressed that these are maximum – or unconstrained – figures, and do not represent the land area where housing is viable, practical or in line with current planning policy. If we were to achieve this, it would mean that we would have virtually eliminated vacant land from our cities by 2016, which seems unlikely. However the advice from the urban capacity studies reviewed in the last chapter is to start with the unconstrained capacity and then to assess the effect of different policies on the amount of this capacity that can be unlocked. The above figure therefore represents

EXHIBIT 32: Estimate of potential recycled land available for housing within urban areas

		Capacity at net densities of..	
Source	**Area (ha)**	**30units/ha**	**62units/ha**
Derelict urban land justifying reclamation	19,759	415,000*1	879,000
Half of all reclaimed derelict land since 1988 in 'soft uses'	1,236	26,000	55,000
Urban land reclaimed since 1988 with no end use	772	16,000	34,000
Vacant urban land which has previously been developed	9,226*2	194,000	411,000
Vacant urban land not previously developed	13,965*3	293,000	621,000
SUB TOTAL	44,958	944,000	2,000,000
Urban land likely to become derelict 1993-2016	19,800*4	416,000	881,000
Urban land likely to fall vacant 1993-2016	9,245*5	277,000	573,000
SUB TOTAL	29,045	693,000	1,454,000
TOTAL	74,000	1,637,000	3,454,000

*1 All capacity figures assume that half of the land will be large sites and therefore subject to gross densities of 12 and 27 units/hectare rather than net densities. All figures are also rounded to the nearest thousand and may not sum to the independently rounded totals
*2 Based on the figure from the 1990 survey of vacant land discounted to take account of reclaimed derelict land
*3 We have assumed that half of the vacant previously undeveloped land could be brought forward for development.
*4 Based on the annual rate of land becoming derelict in urban areas and justifying reclamation between 1982 and 1993.
*5 Based on the same rate of increase as that for derelict land

Many estates will have to be redeveloped but, far from creating 'overspill' households, they are a potential source of additional urban land capacity.

the maximum figure but, to achieve it, government would have to invest considerably more than at present on land reclamation and financial incentives to development on recycled land. It would also have to redirect the regional allocations of household growth to the areas where the brownfield land is concentrated and local authorities would have to review planning policies. The question is whether the difficulty of doing this outweighs the problems of greenfield development. Recycled land is not however the only source of housing capacity as reviewed below.

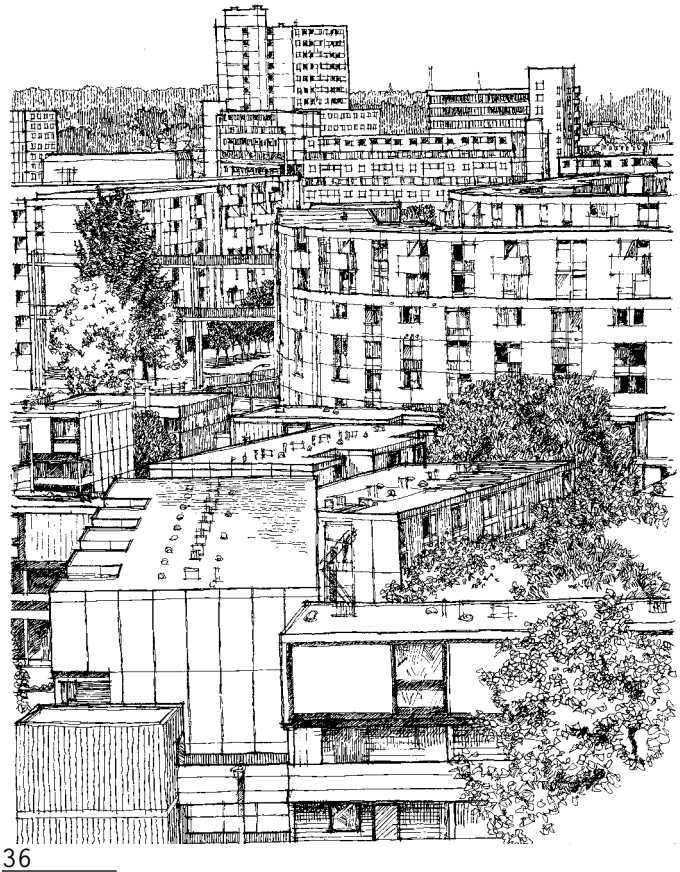
The redevelopment of council estates

One of the reasons for the loss of population from inner urban areas has been the redevelopment of terraced housing areas with high-rise housing estates. While these estates are often perceived as being built to very high densities, this is often far from the case, because of the large amount of open space which tends to surround high rise blocks. Indeed, these estates often combine the worst of both worlds – they look and feel too dense but their population density is insufficient to support local shops and services and to make them feel safe. This was a point made by Alice Coleman in *Utopia on Trial*[6] when she said 'flats certainly cram in more litter, crime and vandalism to the acre… But they do not, in Britain, pack in more dwellings to the acre'. This, however, is still not recognised by many experts. David Hall writing in Town and Country Planning in September 1997[7] said, for example, '..it should not be forgotten that there are still many thousands of high-rise flats.. which within the timescale of the household growth projections will very likely have to be pulled down. High density housing is the least preferred by people when they have the choice. Thus there will be an "overspill" population from these flats'.

It is true that some of these estates will have to be redeveloped but, far from creating 'overspill' households, they are a potential source of additional urban land capacity. In Chapter 3 we cited the example of Hulme in Manchester, which in the 1930s had a density of 150 dwellings per hectare. Following the redevelopment of the 1960s this fell to just 37 dwellings per hectare. Exhibit 33 demonstrates this, and shows how the area is currently being developed at densities of between 75 and 87 dwellings per hectare, effectively doubling its housing capacity. The same pattern can be seen in other redevelopment areas such as the Gorbals in Glasgow where the Crown Street Redevelopment Project is also doubling densities[8].

The situation is slightly different in London, where land was less available so that estates in the 1960s

EXHIBIT 33: Hulme, in Manchester, which has been redeveloped over the last five years. While the area may have appeared to be crammed it was actually built at just 37 units /hectare. (see map on page 20). The current redevelopment is being undertaken at 75-78 units/hectare as illustrated by the plan below right.



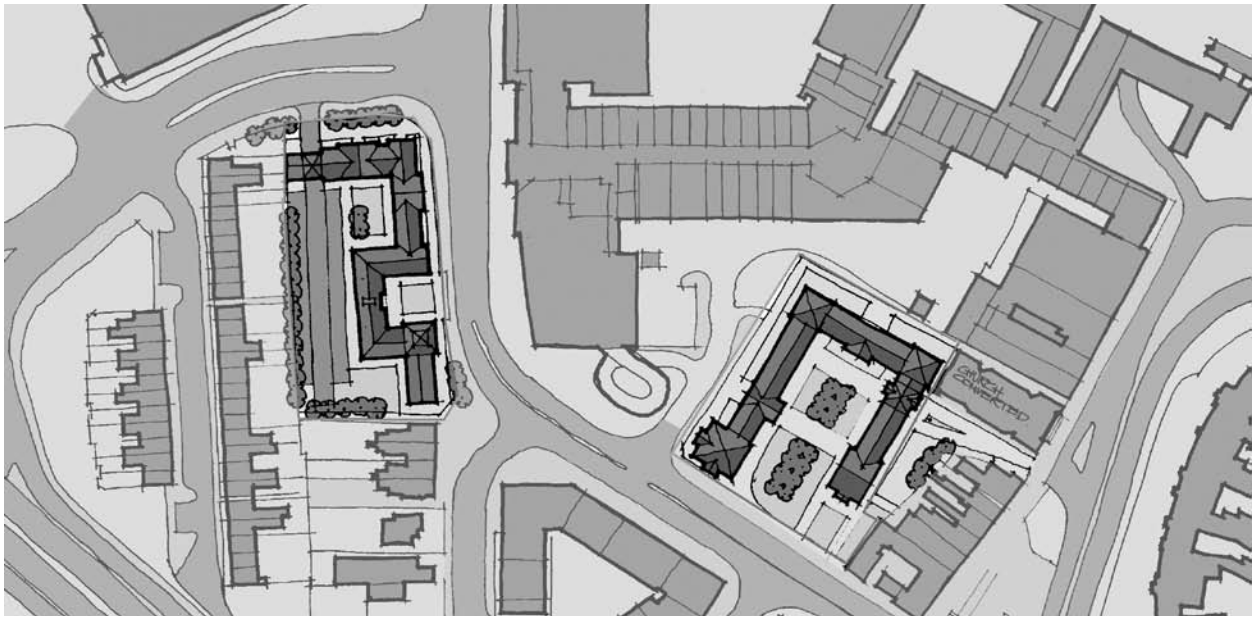


EXHIBIT 34:
A plan from URBED's recent work in Coventry City Centre. This explored the redevelopment of a series of car parks for housing as part of a strategy to accommodate 1,000 houses within the inner ring road, 355 of which were accommodated on car parks alone.

were built to higher densities. Holly Street in Hackney, for example, included 1150 units on 11 hectares (104 dwellings/hectare) in a combination of high-rise and deck access blocks[9]. However even here, the recent redevelopment has achieved densities of 94 dwellings per hectare, despite demolishing all but one of the tower blocks, developing nothing higher than four storeys and giving all families traditional houses with gardens.

These recent redevelopment schemes are far from unique. Similar redevelopments are taking place across the country and there are many other estates that are likely to be redeveloped in the next twenty years. It is however difficult to estimate the potential housing capacity that might be unlocked by these redevelopments. This is partly because it is impossible to say how many might be redeveloped. The Joseph Rowntree Foundation Action on Estates Programme estimates that there are 2,000 deprived council housing estates in the UK[10] although these will vary enormously in terms of their size and the level of problems that they face. Many will be refurbished or transferred to other landlords so that only a relatively small proportion will be redeveloped. Figures on redevelopment and refurbishment undertaken through the Single Regeneration Budget also do little to illuminate capacity. In the first two rounds of SRB 163,668 properties were improved or constructed[11] although only about 20% of these were new homes and this figure was more than matched by the number of homes demolished. Indeed the economic problems of many estates are being exacerbated by redevelopment projects that seek to lower densities further thus aggravating problems of isolation and insecurity.

The capacity to redevelop estates to higher densities is probably limited in London but significant in other parts of the country. If we were to make a conservative assumption that 30 such redevelopments will take place in the period up to 2016 and that each will unlock an additional housing capacity of 750 units, this would give a total contribution from this source of 22,500 homes.

The development of car parks

A further source of housing capacity, particularly in and around town centres, is land used for car parking. PPG 13[12] states that 'the levels of parking can be more significant than levels of public transport provision in determining means of travel'. Friends of the Earth have suggested[13] that maximum parking standards should be applied to new developments and that, 'existing parking spaces will need to be reduced, not only in town centres but throughout urban areas'. To be effective in reducing traffic levels, they suggest that such a policy would need to reduce parking capacity by 30-40% and could represent an important source of land for new housing. This is confirmed by the initial results of research being undertaken for Friends of the Earth into the usage of car parks[14]. This has estimated that 50,000 to 200,000 homes could be accommodated by redeveloping car parks and that the higher figure should be aimed for, as part of a traffic reduction strategy.

This is likely to be a contentious issue, as many town centre businesses believe that they are at a competitive disadvantage with out-for-town facilities because of the availability and price of town centre parking. This is important because if trade is driven out-of-town by parking

A further source of housing capacity, particularly in and around town centres, is land used for car parking.

Since the mid-1980s there has been a growing market in the conversion of commercial buildings particularly in areas like London's Docklands and in older industrial cities.

policies the effect will be to increase rather than reduce traffic volumes. However the experience of continental towns that have given more space over to pedestrians and less to cars is that vitality and trade have been increased. Studies by Carmen Hass-Klau[15] have illustrated how, in cities like Copenhagen, parking spaces are being reduced by 3% per year as part of a traffic reduction policy. This has been confirmed by town centre health checks[16] which have shown that many town centres rely heavily on public transport (30% of all shopping trips in Bristol for example) and towns with a perceived lack of parking often have underused car parks. When a building is demolished the tendency is to turn the land over to car parking. The costs of this are minimal and even if there is only a modest level of usage, the land will generate a healthy income. This may initially be seen as an interim use but when development appraisals are done, it is often the case that the return from parking exceeds alternative uses. In Manchester, for example, a surface car park in the Smithfield area generates an income of more than £400,000 a year and yet only costs £15,000 per year to operate[17]. As a result, the edges of many town centres have become a wasteland of underused surface level parking but this land is not recorded as vacant. In some places like Cirencester, pressures to find housing land and to recreate traditional streets is causing the council to consider the development of car parks on the edge of the town centre and it is likely that other councils will follow suit.

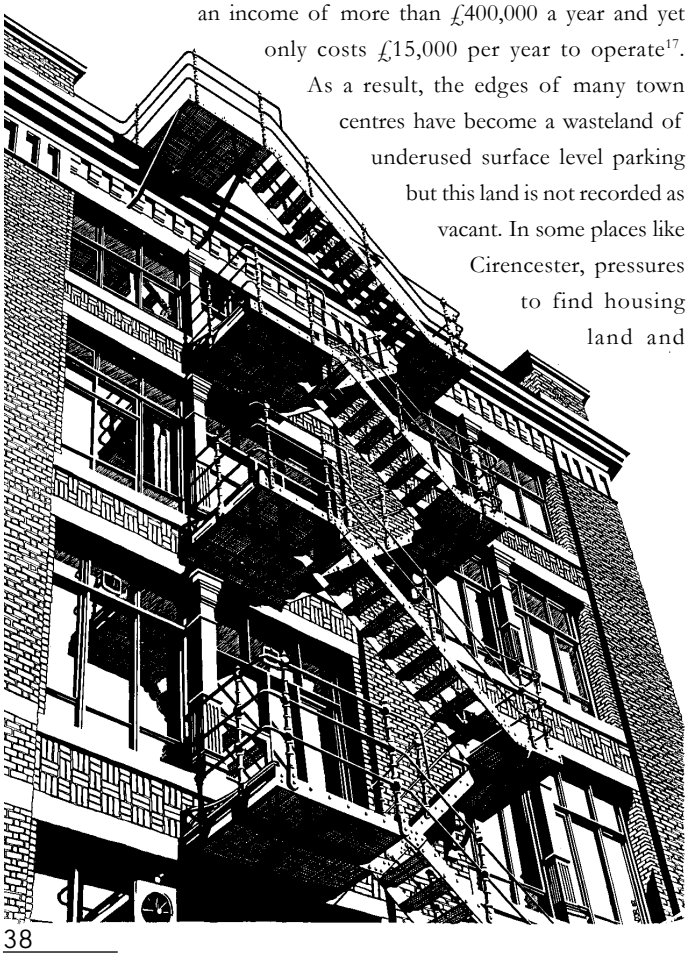


EXHIBIT 35: On Whitworth Street in Manchester City Centre ten warehouses have been converted to create more than 1,000 flats. A residential community has been created in a part of the city which only 15 years ago was home to just the occasional caretaker.

The conversion of empty commercial space

In addition to the capacity of vacant land, we should consider the capacity of vacant buildings. This broadly falls into two categories. The first is the conversion of historic mills and warehouses. These are often buildings of considerable character, which are no longer suited to modern commercial needs. Since the mid-1980s there has been a growing market in the conversion of these buildings particularly in areas like London's Docklands and in older industrial cities. The second category is the conversion of more modern office space to housing where the driving force is not the character of the building, but the fact that residential conversions provide an economic use for buildings that are unlikely to be let commercially.

Much of the progress that has been made in attracting housing back into town centres has been achieved through the conversion of historic industrial buildings. In the 1980s the image of the yuppy warehouse apartment became part of popular culture and an aspiration of many young people. This is significant because traditionally in Britain the middle-classes have shunned flats yet in the 1980s the warehouse apartment became established as a housing form able to compete with the attractions of traditional suburbia, at least for a section of the population. This happened not just in London but also in industrial cities like Glasgow and Manchester and even smaller towns like Chesterfield, Ipswich and Devizes, where warehouse conversions have been undertaken both by private developers and housing associations. Private warehouse flats have generally outperformed traditional housing, in terms of resale value, and indeed outside London continued to increase in value throughout the housing market slump of the late 1980s.

In Manchester more than a thousand flats have been created in city centre warehouses (Exhibit 35). A similar picture can be seen in Glasgow where 1,200 flats have been created in the City Centre about 500 of which are in converted buildings, many in the Merchants City. Similar developments can be seen in the Calls area of Leeds, the Lace Market in Nottingham and the docks in Bristol and a huge number of residential conversions have taken place in London. Research is currently being undertaken for the RICS to quantify the potential capacity from the conversion of both older industrial buildings and offices in London

and the main provincial cities, although the results are not yet available.

The conversion of office space for housing is a more recent phenomenon, and has so far been largely confined to London where the greatest demand for housing is combined with the greatest oversupply of office accommodation. James Barlow[18] has shown that in 1992 there were 3.2 million square metres of available office space in London, representing a vacancy rate of 20%. The situation was not much better in the 16 largest provincial cities, which he estimated had vacancy rates of around 15%. A proportion of this is Grade 1 space that has been recently developed in good locations. As office markets have recovered in recent years, this space has generally been let and indeed is still being developed. By contrast Grade 3 space in older buildings or in poorer locations is unlikely ever to be let. In 1992 Herring Baker Harris Research[19] estimated that by the mid-1990s there would be 500,000m^2 of this unlettable office space in London alone, representing a 'Permafrost layer' of low grade accommodation. A number of developers have also gone into liquidation leaving buildings in the hands of investors and banks who are keen to receive at least some compensation for their investment.

This led to interest in the idea of converting vacant office space to housing and two studies were undertaken in the early 1990s: *The Home/Office Report* (1992)[20] and *Offices into Flats* (1993) published by the Joseph Rowntree Foundation[21]. Both concluded that the potential was huge, particularly in London and was likely to grow in the future. However they questioned how much of this capacity was realisable because of the deep floor plans of some buildings, restrictive planning policies and the viability of office housing conversions suggesting that the amount of this potential that would be released was relatively limited.

This however has not been borne out by experience since then. The financial equation has changed and housing conversions have become more attractive (although this may change again if the office market recovers). As a result, the number of office conversions over the last few years has been higher than the pessimism of the early research would have suggested. In 1997 LPAC estimated that there was capacity for up to 54,000 from office conversions and current research being undertaken for the RICS will give a better picture of the capacity at the national level. However, at this stage, we have assumed that the capacity nationally from both older industrial buildings and office conversions is in the order of 100,000 homes.

EXHIBIT 36:
West Hampstead Housing Association is a pioneer of living over the shop. On Kilburn High Road they have undertaken 15 projects, housing several hundred people. Using commercial leases that enable the owner to regain empty possession, the association has converted and repaired the interior, while the property owner is responsible for external work.

Living over the shop

There is also considerable scope for the use of vacant space over retail premises. In many respects this is not a new source of capacity, since most traditional shop units were built to provide living accommodation for the shopkeeper. However as national retail chains have come to dominate high streets, much of the space above shops has become vacant or is used for storage. Yet living over the shop has not entirely disappeared. The 1991 English House Condition Survey[22] identified around 414,000 flats over shops that were currently or had recently been in residential use. Of these 6.3% were vacant (26,000 properties) so that there is a significant amount of existing residential accommodation over shops that could be brought back into use relatively easily.

The Living over the Shop (LOTS) Project at the University of York estimates that the total capacity is at least 500,000 properties[23]. While there is no national data to substantiate this, a study is currently being undertaken by the Civic Trust for the LPAC that will give a clearer picture of the situation in London. However the Hertfordshire study reviewed in Chapter 4 put forward a yardstick for estimating the potential for living over the shop in a town

As national retail chains have come to dominate high streets, much of the space above shops has become vacant.

The conversion of larger houses to flats has traditionally been the way that accommodation has been provided in urban areas for single people.

centre. This suggests that the potentially convertible space represents about a third of the retail floor area and that about a third of this (11% of the total) is likely to be available and feasible for development. We have therefore applied this yardstick to floor space data from the top thousand shopping centres in the UK. These centres contain just over 100 million square metres of retail space (excluding the large out-of-town developments) of which 63% is occupied by independent retailers and 37% by multiple chains[24]. If we take 11% of this, apply an average gross to net ratio of 75% and assume one bed flats at 50m^2 and two bed flats at 65m^2, this would suggest that there is potential capacity to accommodate 1.5 million one bed flats or 1 million 2 bed flats. This is only in the top 1,000 town centres and excludes the thousands of smaller district centres and shopping parades throughout the county. While these are very broad-brush figures, they suggest that the LOTS estimates may be a considerable underestimate.

While the potential housing capacity above shops may be very significant, our track record of unlocking this capacity is relatively poor. Both the Housing Corporation and the Department of the Environment (now DETR) have run programmes to fund living over the shop schemes. The DoE programme funded 38 schemes between 1992 and 1995 to produce 1,436 flats and the Housing Corporation has funded 74 schemes producing 436 flats[25]. While Anne Petherick of the LOTS project estimates that some 10,000 flats have been created in total across the country[26], it is clear that the scale of what has been achieved represents only a fraction of the potential.

The reason is that living over the shop schemes can be difficult. Shop units are in a variety of ownerships and gaining agreement, developing schemes and securing funding can be a time-consuming process, with the benefits sometimes being only a handful of flats. While some housing associations such as West Hampstead have made considerable progress, others regard such schemes as not a cost-effective use of their time. However there are reasons to believe that we may be more successful in the future. The LOTS Project[27] has developed a mechanism that overcomes the concerns of property owners. This is a two-stage leasing arrangement in which the owner grants a commercial lease to a housing association, which then grants assured shorthold tenancies to residents. This insulates owners from managing residential property and maintains the investment value of their assets. The LOTS Project believes that the greatest potential is with retail properties controlled by national companies, and efforts should focus on winning them over at the boardroom level, as they have done with the National Westminster Bank and a number of pub chains. It is also significant that the General Development Order now permits space above A1 (shops) and A2 (financial and professional premises) to be converted to flats without planning permission. While there are few local authorities which would resist such schemes in principle, the fact that they do not require planning consent means that restrictions cannot be imposed, for example, through parking requirements.

EXHIBIT 37: Under-occupation of dwellings 1995-96

	Stock of dwellings	Percentage Under-occupied*	Number Under-occupied*
North East	1,100,000	25%	275,000
North West	2,281,000	30%	684,300
Merseyside	589,000	32%	188,480
Yorkshire and Humberside	2,087,000	31%	646,970
East Midlands	1,709,000	33%	563,970
West Midlands	2,146,000	33%	708,180
Eastern	2,196,000	34%	746,640
London	2,993,000	22%	658,460
South East (GOR)	3,223,000	34%	1,095,820
South West	2,048,000	34%	696,320
TOTAL England	20,372,000	31%	6,315,320

* Under-occupied dwellings are defined as those with two or more bedrooms above the ONS's bedroom standard which calculates the number of bedrooms required by each household.

The subdivision of existing housing

A similar picture emerges from the limited data available on the potential for the subdivision of larger houses to create flats. The conversion of larger houses to flats has traditionally been the way that accommodation has been provided in urban areas for single people who are not able to buy their home, but are not a priority for social housing providers. While it would be wrong to assume that all of the 3 million additional single-person households to be accommodated in urban areas fall into this category, a significant number

EXHIBIT 38:
There are many older properties in urban areas which were built in an era when most families had servants. The subdivision of these properties into flats has, for many years, provided a supply of flats.

will. The subdivision of property is an important way of reconciling the dilemma that the majority of new households are single, yet the majority of new homes are family dwellings. These large new homes will only help to address the demand from new households if they help to release larger properties that can be subdivided into flats.

Work undertaken by Llewelyn-Davies for LPAC[28], The North West Association[29] and the Joseph Rowntree Foundation[30] suggests that the capacity from the subdivision of homes can be assessed by looking at properties with more than seven habitable rooms with an occupancy of less than 0.5 persons per room. On this basis, their work for the Joseph Rowntree Foundation found that in the three local authority areas studied (Lewisham, Newcastle and Cheltenham) there was the potential from conversion for a net gain of 34,000 houses – which was four times the potential from land allocated for housing. The LPAC study also reviewed research by the London Research Centre[31] into residential conversions in London, which found that 120,000 flats were created out of 39,000 houses in the 1980s. This was used to suggest that the future potential net gain from subdivision of larger houses could be as much as 630,000 homes.

It is clearly a huge leap to apply these figures to the whole country. However a sense of the potential capacity can be gained by looking at the occupation density figures produced by the Office for National Statistics (Exhibit 37). This uses a formula to calculate the number of bedrooms required by each household (the 'Bedroom standard') and compares this to the number of bedrooms in the house. The exhibit shows the number of properties by region which are under-occupied by 2 or more bedrooms by this standard. If we were to assume that there was a net gain of one home from the subdivision of each of these properties, then the figure for London would be broadly similar to the above estimate. If we scale up these figures to a national level there could be a potential capacity of more than 6 million extra homes.

It is however clear that nothing like this figure will ever be released. Many of these properties will be occupied by families who enjoy the extra space and have no intention of subdividing their property. There are also significant amenity and planning constraints, particularly

There is 'significant headroom within the existing stock for conversion of houses to flats'.

Intensification is likely to prove the most contentious area of urban housing capacity, since it impacts directly on the quality of life of existing residents.

with parking, since conversions will lead to more on-street parking and the loss of gardens. Indeed Llewelyn-Davies suggest that 70% of the properties in London with potential for conversion would not get planning permission on parking grounds alone. Nevertheless, they suggest there is 'significant headroom within the existing stock for conversion of houses to flats'. Research is being undertaken for the DETR to explore the process by which houses are converted to flats, to be published later in 1998. This will help to illuminate the level of the potential capacity that is likely to be brought forward. However for the sake of this exercise, we have assumed that a third of these six million homes could potentially be brought forward.

The intensification of housing areas

A further potential area of capacity that has received a great deal of attention is the intensification of existing residential areas. The basis for this is that as household size declines, it is possible to increase the housing density of an area without increasing the population density. There are broadly four ways in which this can be achieved:

- The development of backland areas which are often used as garage courts or for long gardens
- The development of back garden corner sites where new housing can front onto a road.
- The development of small areas of 'land left over after planning' which characterise many post-war housing estates.
- The redevelopment of existing housing at higher densities.

This was studied in some detail in the Hertfordshire study reviewed in Chapter 3, where it was concluded that the main areas of potential were low-density detached housing areas and post-war public sector housing. It is almost impossible to gross these up to the national scale. However some idea of the potential can be gained by applying the 'Potential dwelling indices' used in Hertfordshire to the total stock of council housing built between 1945 and 1964. There are currently around 1.5 million council properties built during this period[32] and the average Hertfordshire index for this type of property was 1.19 (ie. the potential to accommodate 19% extra homes). This would suggest that the intensification of these areas alone could produce up to 280,000 extra homes. This of course excludes other types of housing, and indeed the properties within these council areas that have been sold through right-to-buy. However it is at least possible in these council estates to envisage the local authority having the power to pursue intensification, which is likely to prove much more difficult in private housing areas.

Intensification is likely to prove the most contentious area of urban housing capacity, since it impacts directly on the quality of life of existing residents. It is also clear that the potential is not as great as other areas of capacity and it may be that the problems involved outweigh the potential gains. However in areas of the South East where vacant land is scarcer, it will remain significant. At present it is held back as much by the views of local planning authorities as by the resistance of local residents. If it became known that local authorities would take a more sympathetic attitude to the development of back gardens, for examples, it may be that many householders would take the opportunity to make a significant capital gain.

The better use of the existing housing stock

The final area of capacity is the stock of empty homes which presently exists in England. The Empty Homes Agency estimates that there were 767,000 empty properties in England in April 1997 representing 3.7% of the total housing stock[33]. The majority of these are in the private sector, where there were 640,000 empty homes in April 1997. This figure had decreased from 804,000 in April 1995 largely as a result of the recovery of the housing market. However within this figure there were 250,000 homes which had been empty for a year or more.

While the initial concern about empty homes in the 1980s focused in the inefficiency of local authorities, the vacancy rates in the public sector are much lower than the private sector. They have however risen from 1.9% of council stock in 1992 to 2.4% in 1997 representing 81,200 empty homes. A similar picture can be seen with housing association stock, albeit with much lower total numbers. It is likely that the increase in vacancies in the public sector has more to do with the unpopularity of social housing than the inefficiency of councils. The Empty Homes Agency reports that, in parts of Northern England, there is effectively no demand for public sector housing and councils like Leeds and Manchester are demolishing hard-to-let properties without plans to replace them. Indeed many housing associations were reporting difficulty in

letting new property and were effectively competing with local councils for tenants.

The workings of the housing market and the lettings systems of social landlords means that we will never eradicate empty homes. There will always be property standing empty because it is on the market, being improved or awaiting new tenants. This suggests that there is a base level of vacancy and the potential housing capacity is the difference between this base level and the actual number of empty homes. The 1995 White Paper 'Our Future Homes' set a target of 150,000 new homes brought back into use by the end of the decade[34]. The potential capacity is however likely to be higher than this and will include the 250,000 private homes which have been empty for more than a year, the 20% of vacant Ministry of Defence property and the 22% of Department of Transport property which is empty, as well as a proportion of council and housing association vacancies. This suggests a total capacity of 300-350,000 units.

Unlocking this capacity will not, however, be easy. In the private sector, the introduction of Assured Shorthold Tenancies in February 1997, along with empty homes strategies and the National Approved Lettings Scheme, are likely to have an effect in helping owners to rent out their empty property. Improvements in the housing market are also likely to help although, as the Empty Homes Agency suggests, real improvements will not happen until VAT levels are harmonised between housing renovation and new house building.

> We would not make any claim for our figures other than that they give some order of magnitude to overall levels of capacity.

The situation in the public sector is somewhat different. It is difficult to reconcile the fact that many councils have no demand for their housing and are considering reducing their stock through demolition, at a time when the national debate is focusing on how to provide more homes. This partly reflects the loss of population from certain areas. However it is also due to the residualisation of social housing where a council or housing association tenancy has become a badge of disadvantage.

EXHIBIT 39: Summary of potential urban housing capacity
(thousands of units)

	Unconstrained capacity		Policy target	Adjusted capacity	
Net densities (units/hectare)	**30**	**62**		**30**	**62**
Current and reclaimed derelict land	457	968	60%	274	581
Previously developed vacant land	194	411	80%	155	329
Vacant urban land not previously developed	293	621	70%	205	435
Land likely to fall vacant 1993-2016	693	1,454	60%	416	872
Redevelopment of large council estates	22	22	100%	22	22
Redevelopment of underused car parks	100	200	80%	80	160
Conversion of industrial buildings and offices	100	100	80%	80	80
Living over the shop	1,000	1,000	40%	400	400
Subdivision of larger under-occupied property*1	1,900	1,900	20%	380	380
Intensification	280	280	80%	224	224
Bringing empty homes back into use	325	325	100%	325	325
TOTALS*2	5,364	7,281		2,561	3,818

*1 To give a realistic figure the capacity from the subdivision of existing property is based upon the 30% of properties which Llewelyn-Davies suggested could get planning permission

*2 Similar estimates of urban housing capacity have been made recently in 'Tomorrow's World', published by Friends of the Earth in 1997. Based on comparable assumptions, and adapted from the UK to England, those figures suggest capacity for approximately 3.5 million dwellings in towns and cities, but propose greater additional potential for the planned regeneration of urban areas towards the end of the household projection period.

Note that figures are rounded and so the columns may not sum exactly.

Adding up the capacity

In this chapter we have sought to quantify the various levels of housing capacity at the national level. This is inevitably a rough and ready exercise and we would not make any claim for our figures other than the fact that they give some order of magnitude to overall levels of capacity. We would also stress that these figures represent unconstrained capacity and there are many formidable constraints that will prevent us from realising this capacity. It would truly be remarkable if we were to build on every acre of vacant land, put flats above every shop, bring every vacant property back into use and subdivide every under-occupied dwelling.

However we do not need to do this. We started this chapter by outlining the scale of the task. If we are to accommodate 75% of the 5.1 million households within urban areas, we must find the capacity for 3.8 million new homes. As illustrated in Exhibit 39, the unconstrained capacity that we have estimated in this chapter is considerably greater than this. If we assumed that vacant land is developed at urban densities of 62 units to the hectare, the unconstrained capacity is potentially 7.2 million homes and at more suburban densities 5.3 million. In order to get a better idea of what we might be able to achieve in practice, we have adjusted these figures. The central column includes a percentage figure in an attempt to reflect the difficulty of unlocking the capacity in each of these areas. So, for example, the redevelopment of council estates and the conversion of commercial properties are conservative estimates which are likely to be relatively easy to achieve. They are therefore multiplied by 100%. By contrast the estimate for the subdivision of property is likely to be very difficult and so has been multiplied by just 20%. These percentage figures could be used as policy targets as part of a strategy to promote urban housing. This produces a very rough estimate of constrained capacity of 3.8 million homes at urban densities and just over 2.5 million at suburban densities. Insofar as the data allows us to come to a figure, these are our best estimates of the potential capacity of urban areas in England.

The review of data sources in this chapter suggests that the 75% target for homes built in urban areas may theoretically be achievable although it is likely to be very difficult. It will require the exploitation of all potential sources of urban housing capacity, although the most significant areas are the redevelopment of recycled land, living over the shop and the subdivision of under-occupied larger property. It would also mean building at urban densities. It should however be noted that this analysis does not take account of regional variations and it is likely that much of the capacity will be in areas where there is the least household growth. This capacity will also not be unlocked without significant changes to the property market and the planning system. We therefore turn in the next chapter to the likely constraints on this capacity being unlocked.

6

‘It can’t be done’

In which we look at the issues raised by building more housing in urban areas. It is said that people do not want to live there, developers do not want to build there, that it is not viable to build, that there are not enough jobs and that it will lead to town cramming. We examine each of these issues along with the attitude of planning authorities, concluding that they present major barriers to housebuilding within urban areas. There are however signs that this is changing and that there is some cause for optimism in the future.

The information in the last three chapters suggests that there is potentially the capacity to accommodate 75% of household growth within urban areas. This is not however to say that unlocking this capacity will be easy. We have given some idea of the potential capacity of urban areas in England, but this is of little practical value if people do not wish to live there, if developers refuse to build there, if the land is too expensive, tied up in different ownerships or inaccessible. It is also of little value if the environmental and social consequences of taking up this capacity would be profoundly damaging to the social and environmental quality of life in urban areas. The TCPA recognises this when it calls for consideration of the social and environ-mental as well as the physical capacity of urban areas[1]. In this chapter we therefore review some of the issues raised by the repopulation of England’s urban areas and the reasons put forward to suggest that it may not be possible.

Much of the acrimony in the debate over the household projections is due to a perception that people will be forced, against their will, to live in dirty, dangerous and overcrowded urban areas.

‘People don’t want to live there’

Much of the acrimony in the debate over the household projections has been due to a perception that people will be forced, against their will, to live in dirty, dangerous and overcrowded urban areas. If people do not wish to live in these areas, why should they be forced to do so? More fundamentally it is doubted whether government has the ability to force people to live where they do not wish and that residential preferences for suburban and rural environ-ments will undermine efforts to promote urban repopulation. These views were summed up by Michael Breheny in *The Compact City* thus: ‘Clearly there are groups of people – of particular ages, occupations and levels of income – who may choose high density, urban living. Likewise there are high density urban areas – usually historic, architecturally interesting and socially exclusive – that remain popular through time. However these people and these areas are very much the exception’[2]. He goes on to suggest, correctly, that many people living in cities are not doing so by choice, and that most urban areas provide anything but high quality environments. However he argues that the reason that cities are so unsatisfactory as living environments, is that past urban containment policies have pushed development pressures back onto cities and therefore led to them becoming ‘town crammed’. This is where the arguments get confused. On the one hand it is suggested that government is impotent to force people to live in urban areas yet, on the other hand, that historic containment policies have achieved just this with negative

The idea of your home as your castle in 'your own little world' has a powerful attraction and has been driving the suburbanisation of English cities for many years.

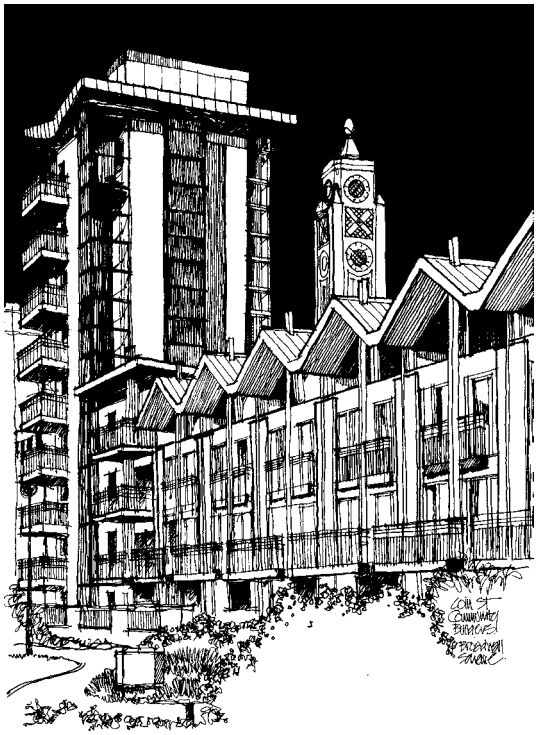
results. The reality, as we described in Chapters 2 and 3, is that cities can be pretty unpleasant places, but that this is because they have lost population, not because they have been forced to take too much. This distinction is crucial. If Breheny is right, then urban repopulation will only serve to make urban areas even more unpleasant as living environments. However if we are right, urban repopulation is the only way in which urban living environments will be improved.

This creates an awkward chicken-and-egg situation. We must reform urban areas if we are to make them attractive places to live, but will not do this unless we can persuade more people to live there. This begs the question about whether, even with urban reform, it is possible to change residential aspirations. As research for the Countryside Commission[3] has suggested, residential preferences have as much to do with the 'pull' factors of the countryside as the 'push' factors of urban decline. This appears to be confirmed by research in 1995 for the Housebuilders Federation[4]. Of the 818 households surveyed, 76% rejected the idea of living in urban areas, citing as their reasons the hostile environment, traffic, noise, bustle and dirt. They were concerned about crime and saw urban areas as a poor environment in which to bring up children, particularly due to the poor quality of local schools. There were also worries about the density of urban living, particularly in relation to the size of houses, gardens and parking spaces. Indeed these attitudes were even more pronounced amongst the lower social groups and those people who had lived in cities in the past. The attitudes in the survey are summed up in some of the quotes from respondents; 'We liked the area. It's a nice cul-de-sac, not close to shops or pubs'. 'You're just away from everything. You're in your own little world'.

The survey makes depressing reading for anyone advocating the repopulation of urban areas. The idea of your home as your castle in 'your own little world' has a powerful attraction and has been driving the suburbanisation of English cities for many years. It expresses a desire for separation not only from irritants such as the shops and pubs but also from other people, particularly people who are not like yourself. The survey makes clear that this way of life is made possible by the private car. Most of the respondents owned a car (almost half owned two) and 91% travelled to work by car while less than one in twenty travelled by public transport.

However the survey was confined to a very specific group of people, namely families who had recently bought 'brand new' suburban housing. In the publicity, which accompanied the launch of the survey, the Housebuilders Federation claimed that 64% of all households were families so that their findings were applicable to a large section of the population. However they arrived at this figure by adding married households to lone parents and cohabiting couples. Yet this figure includes childless couples and pensioners and the proportion of households with children is just 30%. Furthermore, the survey was of people who had recently bought a newly constructed home on a suburban housing estate. This puts them in a small minority even of housebuyers, most of whom buy second hand property. It was not surprising that they should express a preference for the sort of housing

EXHIBIT 40:
Will people continue to be drawn to traditional suburban housing areas such as Hampstead below left or will there be a greater willingness to consider urban housing such as Coin Street?



that they had recently decided to purchase.

We can contrast this survey with another undertaken by Brian Robson at Manchester University of residents living in Manchester City Centre[5]. This was, of course, equally unrepresentative since it focused on a group who had recently decided to move to a city centre apartment, although it does illustrate that there are people who enjoy urban living. Of the 170 households surveyed, 40% were single people, just over half were made up of two adults and only five had children. The sample was evenly split between private owners and private renting and nearly two thirds had all their adults in employment, predominantly in professional occupations. The majority worked in Manchester with 43% working in the city centre. Almost a third of the respondents had not previously lived in the North West and just over two thirds of the owner-occupiers were first time buyers.

The debate about whether people can be persuaded to live within cities rests on an assessment of relative size of the two markets suggested by these very different surveys. If it is true that the Manchester sample represents a small niche market and that the majority of the population shares the aspirations expressed in the Housebuilders Federation survey then our task is indeed difficult. However as Robson points out, the mix in the Manchester survey is 'precisely the kind of household that will form the bulk of the new household demands of the coming decade'. Indeed the Housebuilder (the journal of the Housebuilders Federation) suggested in a recent editorial; '..reversing the trend of the 1960s and 1970s, affluent and usually young professional buyers are suddenly discovering the attractions of the urban lifestyle'[6]. URBED has argued[7] that a fundamental change is taking place in the residential property market in Britain. The decline of the nuclear family and the limits on mobility by private car will fundamentally affect the residential aspirations of a significant section of society. This will not entirely undermine the attraction of suburbia but, as new demographic groups emerge, it is likely to appeal to a smaller section of the population.

There do however remain some fundamental barriers to attracting more people back to cities. Foremost amongst these is education and the quality of inner city schools. While it is true that the poor quality of many inner city schools is due to the nature of their catchment populations, this is little comfort to parents faced with the choice between an urban and a suburban school. It is no coincidence that the people who have returned to cities are largely childless and it is likely that many of them will find their commitment to urban living sorely tested when their children reach school age, particularly secondary school age. If a far wider cross section of society was living in cities, the problem with schools would be greatly reduced. However the quality of urban education will be one of the major impediments to achieving this.

The numbers of people who want to live in cities is growing. At present the only real progress has been in and around city centres, where the challenges are not so great as they are in the inner city. However there are signs that private development is making inroads into the inner city through the work of developers like Bellway, Countryside and Miller Homes. Their experience has been that new housing will sell if the price is right and if it creates an attractive urban environment. It is therefore too early to say whether it is possible to attract very large numbers of people back to urban areas, but the initial signs are promising.

'Developers don't want to build there'

The willingness of developers to build in urban areas is, of course, based upon whether people want to live there. Housing developers are private companies supplying a product and are generally happy to cater for demand where it exists and where there are profits to be made. Similarly housing associations are increasingly concerned about the lettability and popularity of their new housing and will seek to build where they perceive their tenants want to live. There has, as a result, been considerable developer interest in urban areas like London, Central Manchester and Glasgow where residential markets have been established. In many of these areas developments are now taking place without grants and major housebuilders have been attracted into the area.

However in other urban areas (particularly the inner city) the response is more often that developers will not build because they believe that the demand does not exist. This leads to a 'Catch 22' situation whereby developers see no market, yet a market will not develop until some houses have been built. However, markets evolve and it is likely that this vicious circle will be broken. Commentators like FPD Savills[8] have stated that housebuilders 'who cease to repeat the same tired formulas that they used in the 1970s and 1980s will continue to do well. Roofs over heads are still required but by different types of household'. They suggest that the future lies not in 'bulk estates for mortgage reliant families' but in imaginative solutions such as urban regeneration, brownfield sites and the conversion

'Reversing the trend of the 1960s and 1970s, affluent and usually young professional buyers are suddenly discovering the attractions of the urban lifestyle'.

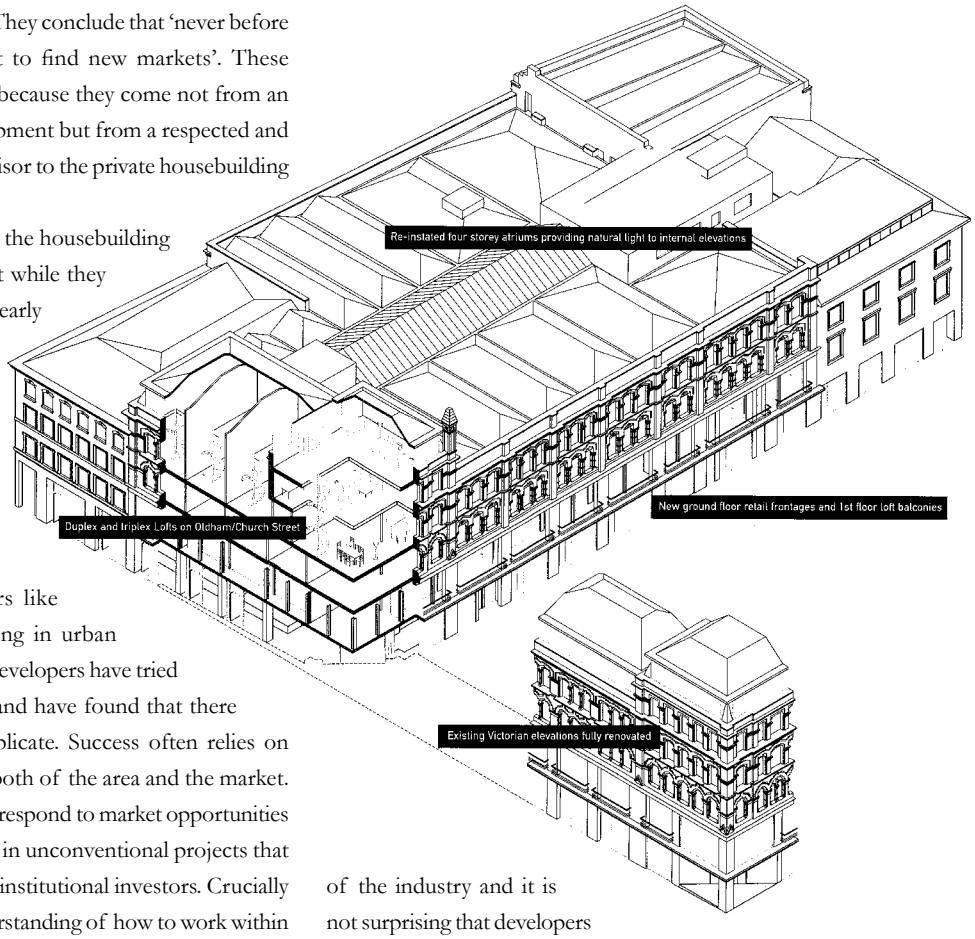


EXHIBIT 41: Developers like Urban Splash have prospered by creating urban apartments for single people in mixed-use buildings.

of commercial buildings. They conclude that 'never before has it been so important to find new markets'. These comments are significant because they come not from an advocate of urban development but from a respected and generally conservative advisor to the private housebuilding industry.

Indeed some in the housebuilding industry have realised that while they struggled throughout the early 1990s, certain developers were doing very well. These included small independent companies such as Urban Splash in Liverpool and Manchester and St. Georges in London, as well as larger builders like Bellway who were working in urban areas. Many of the larger developers have tried to emulate these models and have found that there is no easy formula to replicate. Success often relies on detailed local knowledge both of the area and the market. It depends on flexibility to respond to market opportunities and a willingness to invest in unconventional projects that would not be attractive to institutional investors. Crucially it also depends on an understanding of how to work within public /private partnerships and how to access grants.

These approaches do not come naturally to many of the larger housing developers as illustrated by a recent survey of 85 housebuilders completed for the Town and Country Planning Association[9]. The 39 companies that replied indicated that 60% of their current completions were on greenfield sites although this proportion was falling. However their building programme depended on holding a 'land bank' of sites and most were not prepared to hold on to contaminated land. 70% of them stated that they had not undertaken schemes involving grant, citing the slow speed and uncertainty of the grant-making process. At a more fundamental level, URBED[10] has suggested that, unlike its continental counterparts, the UK housebuilding industry makes its profits from the trading of land - and in particular the uplift in value which results from a residential planning permission - rather than the building of houses. Land banking is therefore a fundamental part of the industry and it is not surprising that developers are reluctant to invest in the damaged product that they perceive brownfield land to be, when green fields are available so cheaply.

The workings of the housing market also influence the type of housing that is built. While healthy values have been achieved for town centre developments such as loft apartments, the public and mortgage lenders are generally more comfortable with a conventional product that is guaranteed to keep and increase its value. In this respect, houses in urban areas which do not conform to the suburban standard are seen as less attractive. This reduces the attraction of urban sites and means that where they are developed, it is often with an imported form of suburbia, typified by the 'Brookside' close. Residents may well ask why they should buy such housing in the city when they could be buying the 'genuine' article in greenfields. This also has implications for density and the capacity of sites in urban areas.

While the way forward has been mapped out by a number of pioneering developers, it is not clear whether the majority of builders are either willing or able to follow their lead. However the views of market commentators such as FPD Savills suggest that the larger developers will either have to change or risk being overtaken by more nimble and imaginative competitors, and that over time the attitudes of the industry are likely to change.

While the way forward has been mapped out by a number of pioneering developers, it is not clear whether the majority of builders are either willing or able to follow their lead.

'It is not viable'

While developers need a market for their housing they also need a return on their investment. The viability of urban housing is therefore critically dependent on the relationship between the costs of creating the housing, the value for which it can be sold and the risks involved. In urban areas it is clear that costs are generally higher and values are lower than on greenfield sites and that this is only partly offset by the fact that land is sometimes cheaper (at least where it is not competing with commercial uses). Added to this is the greater risk of building in urban areas, where costs may increase due to problems on site and where values are less certain. The result is often a funding gap that makes urban housing unviable. In this context it is not surprising that developers are attracted to the certainty and guaranteed return that comes from obtaining planning permission on a greenfield site.

The funding gap can be addressed in a number of ways. The value of the site can be discounted to take account of abnormal costs, although this will generally only happen if the site is in public ownership. Grant subsidy can also be used to close the funding gap and to make the development profitable. This however means that the public sector is effectively paying private developers to build within urban areas. While this may be justified in regeneration areas, many urban areas are not eligible for grant, and the scale of funding required to subsidise 75% of household growth would be enormous.

The only long-term solution is to change the market so that the value of urban housing rises sufficiently to make development attractive without public subsidy. In the TCPA survey described above, the developments on derelict land in areas of high demand such as west London and Hertfordshire did not require grant despite very high abnormal costs. The key to making urban housing financially attractive is therefore to stimulate the market. While we have argued that in the medium term this market change is likely to happen, there is a place for public subsidies in the short term to accelerate (or pump-prime) this process. Carefully targeted grant or tax incentives can be used to stimulate the local market so that in a period of five to ten years, housing developments can become viable without grant as has happened in Central Manchester. Indeed this would have wider regeneration benefits as suggested by the DETR in its recent consultation paper on economic regeneration which states; 'there is good evidence dating back to the early 1980s, that combining housing and regeneration can achieve lasting, beneficial results'. This process can also be assisted by changes to the tax regime that could tip the economic balance in favour of urban development, much in the way that the fossil fuel levy has made renewable energy such as wind power viable.

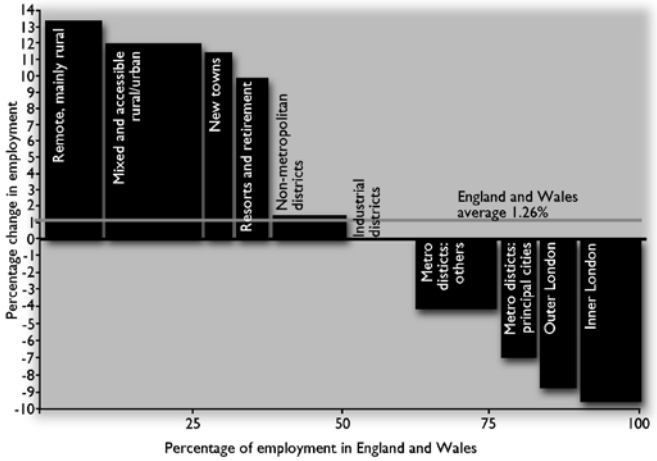
The only long-term solution is to change the market so that the value of urban housing rises sufficiently to make development attractive without public subsidy.

'There are no jobs'

One of the criticisms made of urban repopulation is that it ignores the economic realities of where jobs are based and where companies want to locate. It is suggested that urban economies can no longer supply the jobs that would be required by large increases in population. The migration of jobs from cities has followed a very similar trend to population loss, as illustrated by Exhibit 42[11]. It can however be difficult to separate cause and effect. Part of the reason for the loss of jobs within cities is the decline of traditional industries, which were largely based in cities, and the growth of sectors such as high-tech manufacturing and distribution which tend to prefer the environment and space that greenfield sites can offer. Another important trend is the growth of out-of-town shopping, leisure activities and business parks, which have either transferred jobs out of urban areas or undermined the viability of urban employment centres such as high streets. It is undoubtedly true that many people have followed these jobs out of town and also migrated in search of work or better career prospects from the north to the south.

This however does not entirely explain the outward migration of population. Despite the loss of

EXHIBIT 42: The loss of employment from urban areas in England and Wales 1981-91



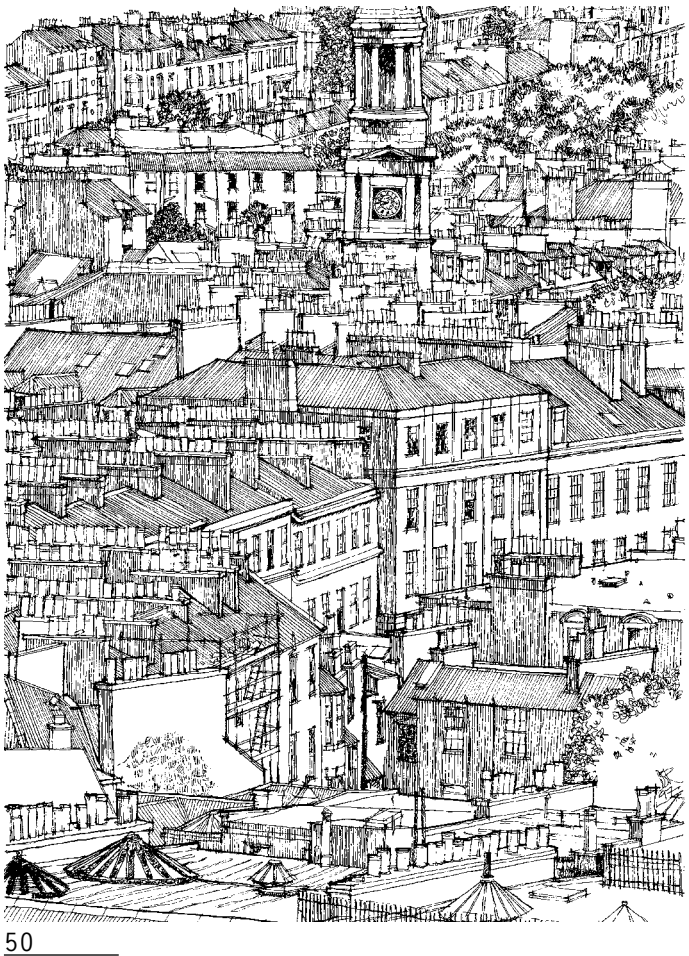
Source: NOMIS

Economic decline in urban areas may be a result of population loss rather than its cause.

economic activity, towns and cities remain important employment centres. A large proportion of public sector employment in the civil service, local authorities, health authorities and universities remains based in urban areas. The same is true of the arts, and town and city centres also remain important retail and leisure markets despite the growth in out-of-town facilities. Yet employees in these sectors have also been leaving the cities and trading the hassle of a long commute into work against the better home environment that they can achieve outside urban areas. It is therefore untrue that there are not jobs in urban areas or that economic decline is the sole reason for the loss of population.

The opposite may in fact be the case. Economic decline in urban areas may be a result of population loss rather than its cause. This can be illustrated with a simple example. The city of Liverpool has lost 267,000 people in the last 35 years. Let us assume that this represents around 100,000 households and that the disposable income of these households averages £10,000 per year. This would mean that the city is losing £1 billion per year as a result of its lost population. It is not of course true that all of this money would have been spent in the city. However a prop-ortion of it would, including hundreds of millions of pounds of Council Tax and spending in local shops and leisure facilities, which in turn would support thousands of local jobs. Indeed the loss of spending as a result of migration, dwarfs government and European spending programmes on urban regeneration.

EXHIBIT 43: Areas like Edinburgh New Town illustrate that high density housing can create an attractive and desirable environment



However, even this is not the total economic im-pact of population loss. By and large it is the affluent and the able households who have left, and their average income is likely to have been substantially higher than £10,000. It is also likely that this group would have included many people who might have started new businesses or contributed to the growth of existing companies. In short, outward migration has sapped, not only spending power, but also brainpower and an important stimulus for economic growth. Measures to repopulate urban areas will do much to stimulate economic growth and job creation not only for the incoming residents but also for the existing population. Indeed Martin Crookson has suggested that, in the future, urban areas will compete for household growth to revive their economies in the same way that they have in the past competed for a Japanese car plant.

'It will lead to town cramming'

One of the concerns expressed about urban repopulation is that it will lead to town cramming. This is a concept that crops up time and time again in the literature on the compact city and while it has never really been defined everyone accepts that it is something that we should be avoiding. However, since it has not been defined, there has been a great deal of confusion about what is meant by town cramming. Throughout the history of town planning, the concepts of densities, overcrowding, and cramped living conditions have been confused. Overcrowding was one of the main motivations behind much of the slum clearance work in the 1960s. Even though overcrowding refers to the number of people occupying each house, it was often misinterpreted as the number of houses to the acre. In a similar vein people such as the Housebuilders Federation[12] and academics like Alan Holman[13] have equated high density housing with small flats and cramped living conditions. Yet one only need look at the affluent residential districts of Bath and Bloomsbury to see that very spacious dwellings are compatible with high net residential densities. While this confusion exists, there will always be resistance to urban development and we need to disentangle some of the issues involved.

Ernie Scoffhan and Brenda Vale[14] have drawn a useful distinction between the density and the intensity of development. Density is a quantitative measure of the amount of housing, people or other activities within a

EXHIBIT 44: The density gradient

	Units/ Ha.	Persons/ Ha.	Source
Low density detached – Hertfordshire	5	20	Urban Initiatives
Average net density Los Angeles	15	60	Newman and Kenworthy
Milton Keynes average 1990	17	68	Sherlock
Average density of new development in UK 1981-91	22	88	Bibby and Shepherd
Minimum density for a bus service	25	100	Local Government Management Board Sustainable Settlements Guide (assuming that the housing is occupied to capacity)
Private sector 1960s/70s – Hertfordshire	25	100	Urban Initiatives
Inter-war estate – Hertfordshire	30	120	Urban Initiatives
Raymond Unwin 1912	30	120	Nothing gained by overcrowding
Tudor Walters 1919	30	120	Local Government Board's Manual on the preparation of state-aided housing schemes
Private sector 1980s/90s – Hertfordshire	30	120	Urban Initiatives
Hulme – Manchester 1970s	37	148	Hulme guide to development
Average net density London	42	168	Newman and Kenworthy
Ebenezer Howard - Garden city 1898	45	180	Tomorrow: A peaceful path to real reform
Minimum density for a tram service	60	240	Local Government Management Board Sustainable Settlements Guide
Abercrombie - Low density	62	247	Greater London Plan 1944
RIBA	62	247	Homes for the future group
New town high density low rise – Hertfordshire	64	256	Urban Initiatives
Sustainable Urban density	69	275	Friends of the Earth
Hulme – Manchester Planned	80	320	Hulme guide to development
Victorian/Edwardian Terraces – Hertfordshire	80	320	Urban Initiatives
Abercrombie – Medium density	84	336	Greater London Plan 1944
Central accessible urban density	93	370	Friends of the Earth
Holly Street – London 1990s	94	376	Levitt Bernstien Architects
Holly Street – London 1970s	104	416	Levitt Bernstien Architects
Abercrombie - High density	124	494	Greater London Plan 1944
Sustainable Urban Neighbourhood (maximum)	124	494	URBED
Hulme – Manchester 1930s	150	600	Hulme guide to development
Average net density Islington - 1965	185	740	Milner-Holland
Singapore planned densities 1970s	250	1,000	Scoffham and Vale
Kowloon actual	1,250	5,000	Scoffham and Vale

1. The grey boxes show the source figure from which the density has been calculated
2. An average dwelling size of 4 bedspaces has been assumed throughout this table although it should be noted that this is higher that the average household size in the UK.

given area. Intensity, by contrast, is a subjective measure of 'built-up-ness' or how busy a place feels. They point out that many of the environments that we regard as being intensely developed, such as high rise estates, are in fact built to relatively low densities, whereas seemingly spacious, uncluttered environments can actually be quite high density. This is illustrated on Exhibit 43 that collects together and ranks the densities of actual and planned development from a variety of sources. This shows that high-rise estates like Hulme in Manchester that appeared to be crammed, were in fact built to lower densities than that advocated by Ebenezer Howard for the garden city. By contrast there are some attractive residential environments at the upper end of the density scale such the Victorian/Edwardian terraces in Hertfordshire and Islington. Milton Keynes barely manage a density greater than Los Angeles, and the average residential density for new development is less than the minimum required to run a viable bus service.

Scoffham and Vale conclude that prescriptions about residential density are irrelevant, suggesting that 'the same density can conceal a variety of built forms which both psychologically and physically may be either compact or

> Seemingly spacious, uncluttered environments can actually be quite high density.

Policies developed with the best of intentions have conspired to sap the vitality of many urban areas.

loose, urban or suburban, intense or diffuse'. They suggest that the optimum building form to maximise density, while reducing the feeling of intensity or cramming, would be three storey town houses and flats arranged around squares and open spaces. If we define town cramming as small substandard properties, crammed together with poor sound insulation along streets packed with parked cars and without access to greenery or open space, then we can all agree that it must be avoided. However we should not fall into the trap of assuming that this rules out high density housing. Throughout this report we have used notional densities of 30 and 62 units to the hectare for suburban and urban densities. The above analysis suggests that these are reasonable and indeed that there is the potential to increase urban densities beyond this, without running the risk of town cramming. It is therefore clear that we can accommodate more housing within urban areas without running the risk of town cramming.

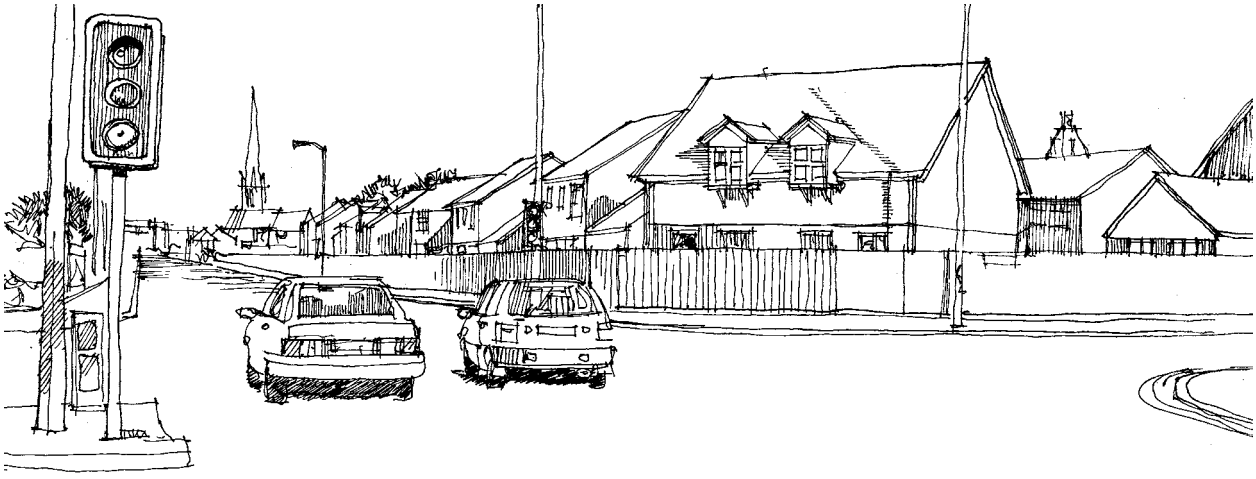
'The planners will not allow it'

Town cramming has been a focus for the concerns expressed by the planning profession about the scope for more housebuilding in urban areas. As we described in Chapter 2, the town planning profession has always had an equivocal attitude to urban areas, seeking to protect them while at the same time working to smooth off their rough edges, organise and tame them. Policies developed with the best of intentions have therefore conspired to sap the vitality of many urban areas and to undermine the potential for urban development. This means that the deeply ingrained attitudes and policies of the very professions charged with promoting urban repopulation may be one of the barriers to its achievement. It relates to everything, from the legal basis of the planning system and national policy, down to the detailed decisions made by development control officers on a day-to-day basis.

At the national scale, there have been significant policy shifts in recent years. These have been articulated through Planning Policy Guidance Notes (1, 6 and 13)[15] which promote higher density development, a mix of uses, urban villages and action to direct retail development into existing town centres. The government has also taken a significant step in setting targets for the proportion of houses to be built on recycled land. However as we suggested in Chapter 1, this policy context has not yet influenced the geographical allocation of household growth. Since household allocations have been based on the extrapolation of past trends, they have become increasingly out of step with other aspects of national planning policy, since they imply a continuation of urban dispersal. It is therefore very welcome that the government has accepted this point and indicated that it intends to move away from the 'predict and provide' approach to household allocations. It is still unclear, however, how an alternative system will work in practice and whether it will serve to redirect household growth to the urban areas where the capacity exists.

At the more local level, the allocation of land for housing is undertaken through the local planning system based upon the provision of a five year supply of housing land. As we described in Chapter 4, there are also significant weaknesses with this system which are leading local authorities to underestimate substantially the capacity of their urban areas to accommodate household growth, leading to greater pressures to build on the green belt. This is partly because of weaknesses in traditional land availability studies which tend to focus only on larger sites, relying upon historic trends to assess the amount of land likely to come forward through 'windfall sites'. It is also because authorities do not question historic

EXHIBIT 45: Ill conceived planning policies means that low density suburban forms are being imported into the city. In this case suburban housing backs onto a main street creating a dead frontage.



land allocations, particularly for employment uses, even when there is little prospect of this land being developed. Assumptions are also made about the attractions of infill sites to developers and the practical problems of development. The result is that many sites are excluded from consideration on the basis of assumptions that are never properly tested. What is more, once a five year supply of housing land has been designated, there is little to prevent developers from cherry picking the greenfield sites in the early years or from developing the majority for private housing when a significant element of the demand is for social housing. Local authorities in the West Midlands[16] have suggested a 'trigger' mechanism to ensure that urban sites are taken up before greenfield sites and in Dorset,[17] attempts have been made to allocate land for social housing.

Even when infill sites are identified, their capacity is often underestimated through the application of inappropriate planning policies at the most local scale. These can include policies on parking provision – which in some areas still require more than two off-street parking places to be provided for every house – maximum density guidelines, overlooking distances, highway standards, design policies, incompatible use guidelines and standards for the subdivision of existing properties. Many of these policies have been developed for very good reasons, however their cumulative effect is to promote low-density suburban solutions. The effect of this on urban housing capacity was demonstrated by Llewelyn-Davies who, in the LPAC study, demonstrated that parking policies alone halved the capacity of many urban sites[18].

It is therefore clear that planners along with highway engineers, environmental health officers and architects, have an important role to play if potential urban housing capacity is to be realised. They need to change the attitudes that assume that high-density development is undesirable and is the result of greedy developers seeking to 'over-develop' their site. At a more fundamental level, this also raises questions about the nature of a planning system, which is designed to prevent the unacceptable rather than to promote the desirable. It is a system that is reasonably well suited to controlling the development of greenfield sites, where pressure for development means that planners can dictate what should and should not be brought forward. It does not, however, have the tools to promote development on sites where there is little development pressure. What is more, when development does come forward on these sites, there is little prospect of refusal in which event planners have virtually no power to influence the form of the development.

There are some formidable barriers to the development of more housing within urban areas. These relate to the workings of the housing market and deep-seated prejudices about urban living but they are also reinforced by parts of the policy framework for urban areas. At present they will significantly limit the take-up of potential housing capacity. Markets and attitudes will take time to change, although there are signs that this is starting to happen. The role of public policy should be to encourage and accelerate these market changes. As the first step in this process public policy – particularly in local government – should be checked to ensure that it does not obstruct these changes. The next step will be to look at more positive policy measures to promote urban repopulation, which are reviewed in the final chapter of this report.

7 Unlocking the capacity

In which we consider a range of measures that would be required to unlock a greater proportion of the potential housing capacity identified in this report. We look first at national and local planning policy before considering fiscal measures to bring about a change in the housing market and looking at initiatives to promote urban areas.

The evidence reviewed in this report shows that there is theoretically the capacity to accommodate 75% of new housing in urban areas. The limits on this capacity are not so much physical, but the market, public attitudes and planning policy. In this final chapter we outline a set of policy recommendations to maximise the development of housing in urban areas.

The issues reviewed in the last chapter highlight the huge difference between the unconstrained capacity described in Chapter 5 and the capacity likely to be brought forward by the market within the current policy context. However, in different conditions, market pressures can mean that any objective measure of urban capacity will be vastly exceeded. An extreme example of this can be seen in Hong Kong, where limited space and huge development pressures conspire to create development densities beyond anything that even the most ambitious urban capacity assessment in the UK would dare to assume. The same has been true in Britain in the past when our cities were growing and development pressures mean that sites were brought forward for development that today would not be considered viable. The market is therefore the key to unlocking capacity and any policy that tries to work against the market is destined to fail, or at least to have limited impact. As we have described, the market for any type of development is based on a combination of cost, value and risk. While these areas may appear outside the control of government, they are in fact intricately tied up in the workings of the planning, grant and taxation system. It is therefore here that we should start.

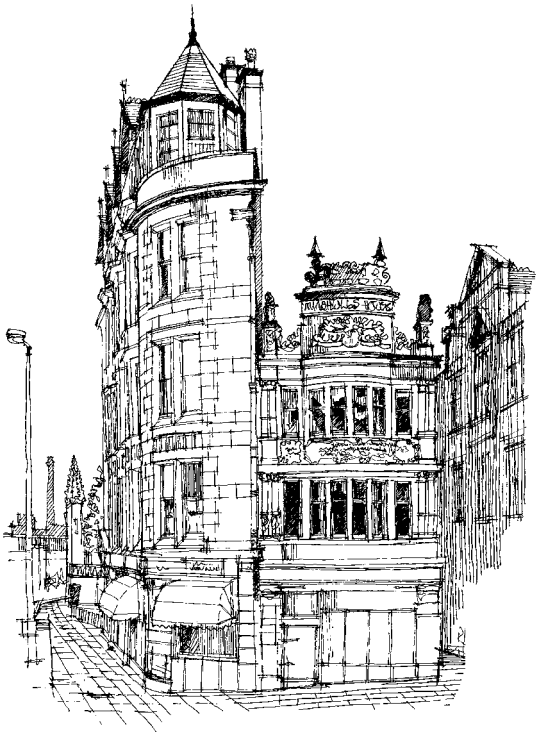


EXHIBIT 46: When there is intense pressure for development, developers will build on sites which no capacity assessment would ever identify.

> The limits on capacity are not so much physical, but the market, public attitudes and planning policy.

National planning policy

The traditional means by which development has been controlled is through the planning system. In theory it is within the power of the government to use planning to prevent any further greenfield development, as has been done with large out-of-town shopping facilities. However housing is a more complex issue than shopping, and policies to regulate its development are prone to unforeseen results. Greenbelt policy is a good example of this since it was introduced to prevent cities from sprawling and yet has sometimes meant that development has leapfrogged the greenbelt to take place in smaller towns and remote rural areas. While it may be possible for future policy to overcome these problems, there may be further problems. It is possible, for example, that a tighter policy on greenfield development will push up urban land values and price certain groups out of the market. It is also possible that housing would find it difficult to compete against commercial uses as suggested by a recent study in Swindon[1] which could therefore lead to housing shortages in parts of the country. If people are unable to find a home near to their work and family, they may be forced to move to other urban areas, which could increase commuting distances. It is also likely to reduce the attractiveness of certain districts to inward investment because of labour shortages or a lack of housing for key employees.

Such a policy is likely to be painful and unpopular. In the short term at least, it may create housing shortages, affect the profitability of companies in high demand locations, and lead to accusations that people are being forced to live in degraded urban areas. It is however unlikely to lead to a national under-provision of new homes. A more likely result is a change in the market both in terms of the location of new development and the density at which it is developed. For example, locations which employers currently find attractive will become less so, because land values will be higher and employees more difficult to attract. They may therefore choose to locate in areas of lower housing demand. Indeed the decision of Japanese and Korean companies to go to Wales and the North East (notwithstanding the availability of grant) may be an example of this process at work. The same may be true of housing developers, who are unlikely to respond to the loss of greenfield sites by reducing their programmes, but are likely to look more carefully at urban sites. It is therefore possible that a more restrictive planning policy could have a significant impact on the location of housing, although the impacts would be unpredictable.

It is, however, easier to prevent any housing on greenfields, than to require that it is limited to a certain proportion of new housing, as government is suggesting. If a proportion of housing is to be developed in urban areas, it follows that a proportion will be built in rural areas (even with a 75% target, this would amount to 1.1 million new homes in the countryside). Government policy must therefore strike a balance by reducing the level of greenfield development without preventing it completely. One option suggested has been a sequential test similar to that introduced for retail development in PPG6. This could require housing developers to prove that there was no scope to build within urban areas, before they could get permission to build on green fields. It is however difficult to see how this would work in practice on the thousands of applications for residential development, compared to the relatively limited number for large retail developments. A sequential test may however make more sense if applied to local authorities, as the government appears to be suggesting. This would require local authorities to demonstrate that they have maximised the potential for urban infill before being allowed to release greenfield sites. Another suggestion has been a credits system by which developers are given points for developing on recycled sites which can then be traded in for permissions to develop in greenfield sites.

It is possible that a more restrictive planning policy could have a significant impact on the location of housing, although the impacts would be unpredictable.

However the root of the problem is the requirement for local authorities to provide a five year supply of housing land without the ability to manage the release of this land. The solution lies in powers to phase the release of housing land on an annual basis and to tie the release of greenfield land to the achievement of targets for development within urban areas. This is similar to the system suggested by SERPLAN[2].

The other aspect to national policy is the regional distribution of household growth. We have already questioned the logic of making rural counties shoulder the burden of household growth, and then requiring that they accommodate a proportion of this in their relatively limited urban areas, when larger cities have surplus capacity. The only way to address this is through regional allocation of household growth where the government has already signalled a move away from rigid allocations based on past trends. The key element must be an ability to shift household growth from rural to urban districts within regions. In the North West, for example, part of the solution to accommodating household growth is to allow some of the demand in Cheshire to be taken up in Liverpool and Manchester. This would do much to relieve

the pressures in most of the English regions. The exception is the South East because of the scale of household growth and the more limited capacity of London, as the main urban centre, to accommodate substantially higher growth. In this case, there is an argument for allocating a lower level of housebuilding than suggested by the current projections. As suggested above, this would have two possible effects. It would either cause developers to squeeze more capacity out of the existing urban areas in the South East, or cause some of the pressure to be displaced to other regions. Neither consequence will be attractive to developers, but these are better solutions that the widespread loss of greenbelt land. The new approach to housing allocations announced by the Environment Secretary John Prescott makes this possible, provided that local authorities monitor house prices, homelessness and other indicators to ensure that demand is being met.

EXHIBIT 47: Summary of recommendations for the planning system:

- A presumption against green field development until all alternatives have been considered, should be a central pillar of national planning policy.
- It is probably not realistic to implement this through a sequential test for developers similar to that introduced for retail development.
- A sequential test should however be applied to local authority land allocations by requiring that they demonstrate that all aspects of urban housing capacity have been fully explored before releasing greenfield sites.
- Local authorities should be able to manage the release of housing land on an annual basis.
- They should also be able to specify that a certain level of brownfield development takes place before greenfield releases are considered.
- They should be required to make specific allocations for social housing.
- The allocation of household growth should not just replicate past trends. There should be a democratic mechanism within regions to direct a higher proportion of household growth into urban areas with surplus capacity.
- Where it can be demonstrated that this is not possible, regions should be able to under-provide for household growth by up to 5%, with ministerial approval. Where this happens the growth should be redistributed to other regions.
- Planning policy guidance should be amended to promote higher density development, for example by requiring maximum rather than minimum parking standards.
- Local authorities should be encouraged to take a proactive approach to urban development including urban capacity assessments, planning briefs, and land assembly.
- A national good practice programme should be instigated to share experience between local authorities.

Initiatives to bring about change at the national level need to be co-ordinated with changes to local planning policy.

Local Planning Policy

Initiatives to bring about change at the national level need to be co-ordinated with changes to local planning policy. While local development plans are co-ordinated through the enquiry system, there remains considerable variation in policy and a significant time lag between national policy changes and their adoption in local plans. This is illustrated by research by Alan Rowley into mixed-use development[3] and a review of density policies by Michael Breheny[4]. There are however some examples of good practice such as the recently relaunched Essex Design Guide[5] and the Manchester Guide to Development[6] which could be replicated more widely.

Government influences local planning policy through the system of Planning Policy Guidance notes. These have been gradually revised over recent years in line with an aspiration to promote urban development. However, they do not yet adequately cover issues such as parking standards and density. We would suggest that there would be value in reviewing again Planning Policy Guidance notes 3 and 13, for example to encourage the use of maximum parking and minimum density standards.

It is also important for local authorities to take a more proactive approach to urban development. Although this is second nature to councils who have been promoting regeneration initiatives for many years, it is new territory in places more used to fending-off development and in rural districts, which are often politically hung and lack specialist staff. A proactive approach to planning is important because many urban housing sites will be in a variety of ownerships, and may have access difficulties or involve contaminated land. They are therefore unlikely to be brought forward by the development industry alone without the involvement of the local authority. Councils should start with the identification of sites using the type of urban land capacity assessment described in Chapter 4. Planning briefs are also important, to give a lead to developers and a degree of certainty about what is acceptable and likely to take place on surrounding sites. In some cases, it will also involve the use of compulsory purchase powers to assemble different ownerships. Local authorities have a particularly important role to play in promoting development by smaller developers. Some of the most important urban sites will be too large and risky for smaller developers who tend to be more open minded to different forms of urban development. Local authorities can help by establishing a planning framework, parcelling

land into manageable sites, and taking on some of the risk by developing infrastructure or supporting a social housing component to the development.

Changing the market

There is an important role for the planning system in constraining and directing the market. However the history of planning suggests that its powers to reverse powerful market trends are limited. It is therefore also important to consider measures that will encourage a wider change in the market so that it moves in the same direction as planning policy. To do this, it is important to consider fiscal measures such as the use of subsidy and incentives.

Subsidy: The most immediate tool available to government to promote development in areas where there is little market demand is public subsidy. This has been the basis for much urban regeneration policy where programmes such as City Grant have been used to close the gap between the costs of development and the values created. Such grants have been used to promote urban housing development particularly in Urban Development Corporation and City Challenge areas. The aim of grant in this context is as a short-term measure to bring about a change in the market in a particular area or for a particular type of development. Grant initiatives such as City Challenge, Urban Development Corporations and now Single Regeneration Budget programmes have therefore been time limited, with the intention that on completion of the project, development will be viable without the need for further subsidy. While there are instances where this has happened, it is almost impossible to change markets in the five or so years for which these initiatives tend to run. As a result there is often the need for continuation funding to prevent the areas falling back into decline.

This suggests that there may be limited capacity for the use of subsidy on a large scale to change the market dynamics of urban housing. First of all, the current grant regime is focused largely on the Single Regeneration Budget. This only relates to specific problem areas, and has to address a host of economic and environmental issues alongside housing. Secondly, the level of resources required to bring about a national change in the housing market would be substantial and would beg questions about why the government should be devoting large sums of money to private housing when there are so many other pressing needs. Thirdly, the commitment would be open-ended and there would be no guarantee about when funding could be withdrawn. While there will always remain a role for grant to overcome abnormal development costs, such as access problems or contaminated land, there is probably little scope to use subsidy to bring about a widespread change in the housing market.

Taxation: There is more scope to use fiscal measures to make urban housing development more financially attractive. Two areas have been promoted in recent months; the harmonising of VAT rates on new-build housing and conversion, and the possibility of a greenfield tax.

It is anomalous that VAT should not be charged on new-build housing whereas it is on the conversion and improvement of existing buildings. This has the effect of reducing the capacity from areas such as living over the shop, the subdivision of existing property, the conversion of commercial and industrial floorspace and the refurbishment of vacant housing. As a result the Empty Homes Agency have been lobbying for a change in the VAT rules to harmonise rates for all forms of housing development. The government has confirmed that under EC legislation it does have the power to reduce VAT on work to existing properties to 5% for social housing. However it announced to the Commons on 12th March this year that it had not been persuaded of the case for this[7]. The case however remains compelling for the harmonisation of VAT rates for all types of housing. If it proves difficult to reduce VAT on works to existing buildings then the only option may be to charge it on new building.

The idea of a greenfield tax has also received a good deal of attention. Two broad suggestions have been made. The first is for a charge to be levied on every new house built on a greenfield site. This has been suggested by the Town and County Planning Association[8] and would replace current ad-hoc planning gain arrangements through Section 106 agreements. The justification for a charge is that it would reflect the true cost to the public purse of

EXHIBIT 48: Summary of fiscal recommendations:

- There is an important role for grant subsidy in regeneration areas and on sites with abnormal costs. It is not, however, the means to bring about widespread change in the housing market.
- VAT rates on new-build and conversions of existing buildings should be harmonised.
- A greenfield tax should be considered to make urban development more financially attractive.
- The revenue from this should be hypothecated to promote urban development.

A greenfield tax would have the potential to alter the relative financial attraction of urban and rural housing.

Government intervention in urban areas is justified where market failure is wasting a scarce resource – in this case land.

greenfield development. Greenfield development often requires the provision of new infrastructure by the public sector, be it to increase road capacity, provide school places or to extend public services. While developers will often contribute to this through planning gain packages, these will rarely cover the entire cost, particularly when the cumulative effect of greenfield development is taken into account. Yet at the same time, much of this infrastructure already exists within urban areas with unused capacity. A local authority may therefore be faced with the need to close schools in one area due to falling rolls, while at the same time needing to increase capacity in another due to housebuilding. A greenfield charge would therefore help meet these hidden costs.

The second proposal is for a tax to be levied on greenfield development to alter the financial balance between greenfield and brownfield sites. A number of suggestions have been made. The Town and Country Planning Association has suggested a 50% Capital Gains Tax on the increase in land values resulting from a residential planning consent. The Civic Trust[9] have suggested a greenfield tax based on the average price of greenfield residential land within a region less the price of agricultural land. This would apply to all development land where there has not been development since 1947, including green sites within towns. It is suggested that the levy should initially be set at 10% and that the proceeds should go to the regional development agencies for housing-led regeneration. A further possibility is that VAT be charged on all new greenfield housing.

There are a number of questions to be resolved about the idea of a greenfield tax. It needs to be designed, for example, to ensure that the tax is discounted from the price paid for the land rather than being added to the price of the housing. It should be recognised that the uplift in rural land values as a result of a residential planning consent can be enormous, and that a greenfield tax set at just 10% of this figure would not necessarily be a disincentive to development. There is however the question of whether the revenue generated should be hypothecated to promote urban development. It is also important not to make a new tax too complicated or difficult to collect. There is a long history to this in the planning system. Indeed the 1947 Town and Country Planning Act included the concept of betterment as a tax on the increase in land values arising from a planning consent. This was also part of the Community Land Act in the 1970s, but in both cases the tax was dropped because it was unworkable. However we would suggest that a greenfield tax would have the potential to change the relative financial attraction of urban and rural housing.

Promoting urban areas

Government intervention in urban areas is justified where market failure is wasting a scarce resource – in this case land. It will take time to change attitudes so that it is important to consider a range incentives to promote urban development alongside planning and fiscal measures. The scale of this is probably beyond the scope of the Single Regeneration Budget and research by URBED into town centres[10] has suggested that a better approach would be an adaptation of the Priority Areas which have been used so successfully in Ireland. There, the government designates areas which then benefit from tax relief on both capital investment and the revenue stream from the completed development. This has largely replaced regeneration grant funding in Ireland and has been credited with transforming the residential market in inner Dublin and other Irish cities.

We would suggest that a similar system be introduced in England with Urban Priority Areas being put forward by local authorities and approved at the regional level as part of decisions about housing allocations. The designation of these areas would be limited to ten years, like Enterprise Zones, and they would be targeted at parts of towns and cities with high levels of vacancy, which are close to facilities or well served by public transport. Tax incentives would be available for new development in these areas and they would also be a focus for a range of other initiatives to make them attractive places to live. These initiatives would be set out in a development strategy as part of the designation, and would include streamlined powers for compulsory purchase of land.

Such an initiative cannot be divorced from wider policies to regenerate and enhance urban areas. While housing development will do much to revive urban areas, it cannot do it alone, and government policy must focus other policy areas on the regeneration of urban areas so that they are seen as fit places to accommodate household growth. This impacts on many areas of public policy including crime, social exclusion, education, environmental sustainability, transport and economic development. Many of these areas will require public investment, which is where the hypothecation of greenfield taxation may play an important role. While it is not our role to review the entirety of government urban policy, there are a number of areas which are particularly relevant.

There is the potential to bring together many areas of public policy with initiatives to address household growth to set a new agenda for urban areas in England.

Social exclusion: Many of the problems of urban areas are due to the geographical concentration of poverty. This concentration of deprivation leads to social exclusion, and is a major factor in reducing the attraction of urban areas to new households. If these problems are to be overcome, it is clearly important to strike a balance between avoiding the creation of ghettos and preventing the displacement of deprived groups through a process of gentrification. This impacts on initiatives to improve or redevelop council estates and the development of new social housing. An important principle is the creation of more balanced communities with a mix of tenures and social groups. The promotion by the Housing Corporation of the concept of Housing Plus has an important role to play in this respect.

Education policy: The problem of inner city schools is a microcosm of the wider problems of urban areas. While there are many excellent schools in inner urban areas, their results are affected by the nature of their catchment populations. Low league table positions then dissuade 'middle class' families from sending their children to these schools, which both drives these people out of urban areas and entrenches the position of the schools. The government is devoting a great deal of effort and resources to this area, which is to be applauded. However the solutions are not easy, and there is a case for initiatives targeted at the Urban Priority Areas suggested above. If the mould can be broken, there would be benefits to all children and success in specific areas would provide a model which could be replicated elsewhere.

Sustainability: An important aspect of urban development is its potential to promote more sustainable lifestyles. This could help to overcome some of the negative perceptions about urban living, and tap into public consciousness about sustainability issues. This may include initiatives such as combined heat and power plants to reduce energy costs, and municipal segregated waste collection for recycling. The proposals for the Millennium Village in Greenwich could play an important role in promoting urban sustainability as a powerful selling point for urban living.

Transport policy: We reviewed in Chapter 2 the relationship between urban development and transport. While the compact city may be one of the measures used to reduce car use, it cannot do it alone. The car must be controlled, and it is possible that the reduced mobility that results from this, will make urban living more attractive. This will only happen if urban areas are able to provide efficient and attractive public transport and if they are not strangled by congestion. Measures to promote urban housing must therefore go hand in hand with investment in public transport and traffic restraint measures such as road pricing, reductions in highway capacity and greater controls on parking. Such policies must be framed to ensure that urban areas are not placed at a competitive disadvantage compared to out-of-town facilities.

Economic development: Clearly if housing is to be attracted back to urban areas, it is important to tie this into the location of economic activity and employment. The control of out-of-town shopping is welcome in this context, however it is also important to consider the location of business parks and leisure activity. A key aspect of this should be the promotion of mixed-use development so that employment and housing can exist side by side in urban areas.

There is the potential to bring together these areas of policy with initiatives to address household growth to set a new agenda for the urban areas of England.

EXHIBIT 49: Summary of recommendations to promote urban areas

- A system should be introduced to enable the designation of Urban Priority Areas as a focus for initiatives to promote urban housing. These would benefit from tax relief on housing development and would also be a focus for a range of other initiatives.
- Social housing investment should ensure that it avoids social exclusion and creates mixed communities.
- Initiatives should be targeted to improve inner city schools and to encourage a wider range of parents to send their children there.
- Government sustainability policy should be focused on urban areas.
- The forthcoming integrated transport policy should reduce car travel to out-of-town facilities and use income from traffic restraint measures to invest in urban public transport.
- Mixed-use development should be promoted as a way of attracting employment back to urban areas.
- Models for urban development such as the Millennium Village should be promoted to sell the benefits of urban living.

It is widely accepted that to accommodate all of the projected household growth, we will have to use every option available to us. This report has concentrated on development in urban areas but it is clear that it may never be practical to accommodate all household growth in this way and there will continue to be development outside urban areas. The argument is not about absolutes, but about the balance between different solutions. In this report we have suggested that the balance could be tipped more firmly in favour of towns and cities. To do this we must develop a new agenda for the renaissance of urban Britain. If this can be achieved it will protect the countryside from development, promote more sustainable patterns of settlements and regenerate our towns and cities. It is partly about the physical capacity of urban areas to accommodate growth, but it is much more about our attitudes to cities and our willingness to challenge historic trends. While there is much that we can do through the planning system to promote these changes, at the end of the day they cannot be imposed in the face of public opinion and market realities. We will only succeed if we can change the market and in this respect fiscal measures are just as important as planning policy.

At the end of the millennium, and a century after Ebenezer Howard's influential book, the time is right to bring about these changes. A range of issues are coming together which must cause us to look again at the way that we plan for our urban areas. Concerns about social exclusion, sustainability, transport, economic development, demographic change and household growth could all be addressed by the regeneration of England's towns and cities. While it may be the rural interests who are marching on the streets of London, it is the urban areas that hold the key to our future.

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