

ALTERED ESTATES 2

How to address changing
priorities in estate regeneration



Levitt Bernstein
People.Design

Pollard
Thomas
Edwards

PRP

2022

ALTERED ESTATES 2

How to address changing
priorities in estate regeneration

Front and rear covers show before and after of Aberfeldy Street by Jan Kattein Architects for Poplar HARCA and EcoWorld. A creative programme of high street works, events and business support aims to build common ground on Aberfeldy Street as Poplar changes around it.

Contents

Foreword

Andy von Bradsky

Introduction

Andrew Beharrell

Recommendations

Themes

Planning for social value
Building community support
Supporting lifetime neighbourhoods
Giving pride to place
Addressing climate change
Delivering responsible regeneration

Viewpoint

Brendan Sarsfield

Case studies

Summary of case studies
12 case studies
Review - 30 years of regeneration in the Gorbals

Altered Estates 2016: Summary of recommendations

About the authors

Credits and references

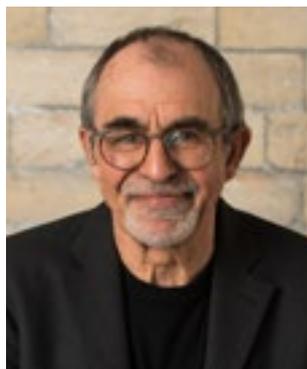




This guide illuminates the new and continuing challenges to successful estate regeneration

Foreword

Andy von Bradsky



Revisiting Altered Estates

Regeneration of our cities and towns and increasing supply of new affordable housing remains as urgent, and contentious, as ever. This report, which brings fresh new insight and advice to the new pressing issues facing housing providers today, including the transition to net zero, building safety and effective community engagement, could not be timelier.

As its name suggests *Altered Estates 2* builds upon an earlier report written in 2016 by the same four leading housing practices and experts in regeneration.

At the time of its publication, regeneration policy was under a great deal of scrutiny. Government had been pursuing the potential to redevelop all run-down housing estates in London to much higher densities, substantially increasing the number of private homes on publicly owned land. Despite good intentions, the approach was greeted with consternation by experts as it was perceived it could displace or marginalise existing communities, and lead to poor super-dense, urban design outcomes.

It took an independent panel of advisers, chaired by Lord Heseltine, to develop a strategy that put local people at the heart of estate regeneration and to draw on some well-established tenets of best practice. *Altered Estates* contributed positively to a sensible and respected outcome.

The national policy it helped shape, both in the government's Estate Regeneration National Strategy¹ and for London, Better homes for local people, The Mayor's Good Practice Guide to Estate Regeneration², means it remains just as relevant today as it did when it was written. Thus, can architects with a depth of knowledge and experience make an impact on policy.

The original report, *Altered Estates* put the needs of existing communities at the centre, involve residents throughout the process and advocated a design approach, for new and refurbished development on estates, which would stand the test of time.

But while the underlying principles remain, much has changed since 2016. The Grenfell tragedy has led to a wholesale review of the sector, not just the building safety implications, but also the quality of design and construction and means of redress for occupants. There has been a renewed emphasis in the planning system on the design quality of new homes and places. Addressing environmental sustainability is centre stage through the introduction of new standards and a renewed interest in retaining rather than demolishing existing buildings. The renaming of the housing department to the Department for Levelling up, Housing and Communities is a significant indication of the importance now attached to addressing left behind places across the country and especially in areas of low value. And of course, the huge impact the pandemic has had on lifestyle and behaviours, with a fresh focus on health and wellbeing in the urban and natural environment.

It is time to revisit the original report to assess the implications these changes have on estate regeneration policy, especially in the national context. There is much more now to say on good practice – how to bring forward the voice of the community, the social benefits arising from regeneration, ensuring safety of residents before, during and after regeneration and how to address climate change and the pathway to net zero. We need to reconsider approaches to low environmental impacts and how embodied and whole-life carbon affects decisions. Similarly, we need to focus on stewardship – how places are designed for low maintenance and how communities can play a role in ongoing management regimes.

Sadly, investing in estate regeneration has not been a priority for successive central governments. Councils have had to rely on private sector investment to lead recovery. That has meant places with good accessibility and high land values have benefitted, while many places have been left behind. Urgent projects that require some public sector pump priming remain on the drawing board. There is now a strong case for increasing public sector investment to deliver regeneration without recourse to hyper-dense development or poor pattern book housing solutions.

This report addresses the challenges. It offers recommendations for government, councils, housing associations, developers and consultants. It aligns with the government's push for greater involvement by communities in shaping their built environment, for

better quality outcomes, a focus on environmental sustainability and the natural environment, and on safety.

The report also aligns with the current focus on regenerating left behind places. It stresses that successful estate regeneration is about much more than providing more and better homes, and improving the physical environment. It is about a holistic strategy for improving people's wellbeing and their economic prospects. By raising the living standards and the prospects of the residents of current and former council estates, regeneration strategies should have a transformational effect on the surrounding area.

It is a rich resource, offering transferable knowledge for policy makers and clients involved in all aspects of regeneration, housing policy and delivery.

Six years on, I hope *Altered Estates 2* will make a similar impact as the original.

Andy von Bradsky

Consultant, former Head of Architecture,
Ministry of Housing Communities and Local Government,
2016-2021

Introduction

Andrew Beharrell



How to use this guide

This guide aims to illuminate the new and continuing challenges to successful estate regeneration. The four practices behind it each has over 45 years' experience of working with communities to improve social housing estates, and we have used that knowledge to set out recommendations for successful estate regeneration and to illustrate our guidance with case studies.

It is aimed at a broad audience: central and local government; housing associations and housebuilders; contractors and other industry colleagues; architecture and planning professionals and students.

Some may have a particular interest in one or more of the themes. Others may be primarily interested in the case studies. The document design aims to make it easy to dip in, although we aspire, of course, for you to read from cover to cover. Either way, we hope you take away some positive and useful messages, and that you continue to debate and practice successful estate regeneration.

For readers who are new to estate regeneration, we recommend looking at the original 2016 edition of *Altered Estates* for a broader understanding of the background and best practice – as well

as the various national and regional government publications mentioned below. Others may at least like to refresh their memories by reviewing the original recommendations reproduced here on page 98.

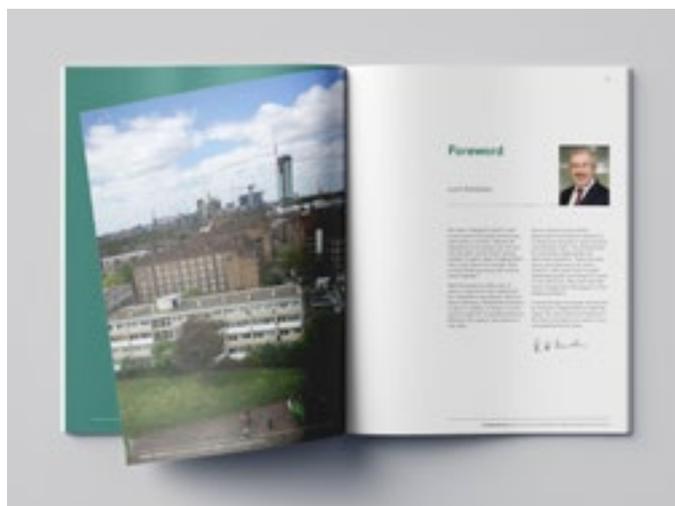
You can also read the full report at www.alteredestates.co.uk.

Altered Estates – whose estate is it anyway?

Our 2016 report *Altered Estates – How to reconcile competing interests in estate regeneration* opened with the controversial question 'whose estate is it anyway?'

We wrote: "There has always been tension between the priority to be given to the wishes of existing residents and the potential of estates to provide a greater range of housing opportunity for the wider population, but now this has become politicised and polarised into two fiercely opposed positions."

We declared, and still believe, that estate regeneration, approached with care, patience and respect, can both improve the lives of existing residents and also help solve the housing crisis by making more effective use of public land.



Altered Estates – How to reconcile competing interests in estate regeneration

Our report was launched in June 2016 at the Housing Forum National Conference, the Chartered Institute of Housing in Manchester, and various other events.

Soon afterwards what was then the Ministry of Housing, Communities and Local Government (MHCLG) published its Estate Regeneration National Strategy (December 2016), closely followed by the (rather modest) Estate Regeneration Fund to kickstart improvements to 100 estates.

In London, the Greater London Authority (GLA) published *Better homes for local people, The Mayor's Good Practice Guide to Estate Regeneration* (adopted in July 2018). This included the mandatory requirement for community ballots.

Both these policy initiatives contained broadly similar advice to the guidance in *Altered Estates*. From 2016 to 2021 one of our authors Andy von Bradsky moved to the MHCLG, and until recently held the post of Head of Architecture at the ministry, where he continued to use his extensive hands-on experience of estate regeneration to influence government policy, including measures to rebuild trust in the local community following the Grenfell Tower disaster.

Consequently, it seemed there was a broad consensus in central and local government and within the housing, planning and development movements, around best practice in estate regeneration. Why then does it remain so controversial and so difficult? Why do some communities continue to feel that regeneration is something imposed on them, and why does the media constantly challenge the motives behind it, conflating 'regeneration' with 'gentrification' and 'social cleansing'?

What has changed in six years?

The challenges and solutions set out in the original *Altered Estates* remain just as relevant today, and all of our recommendations still stand. However, there have been significant changes of priority since 2016, in part triggered by momentous events: the Grenfell disaster

in June 2017; exiting the European Union in January 2020, closely followed by the global pandemic; climate change awareness and activism, including the Extinction Rebellion protests from November 2018; and increasing public disquiet around diversity and social division, including the Black Lives Matter movement, which gained global traction in 2020. Most recently, we are seeing steep increases in energy prices, which will hit most residents of estates hard, and general increases in construction costs, which will affect the viability of all regeneration schemes.

Meanwhile, the government continues to press for a long-overdue rebalancing of opportunity towards 'left behind' parts of the country, including disadvantaged housing estates in the Midlands and North of England. MHCLG has been rebranded as the Department of Levelling Up, Housing and Communities (DLUHC) and the Levelling Up White Paper was published in February 2022.

Altered Estates 2 aims to set estate regeneration in today's context by exploring the following key themes.

Planning for social value

The relatively new phrase 'social value' promotes a well-established, but sometimes neglected, principle of estate regeneration: that it is not just about physical change and providing better homes, but about a holistic and interwoven range of desired outcomes: a sense of belonging, health and wellbeing, education, and economic security and opportunity. We look at the wider planning context for estate regeneration and the criteria for considering intervention in a particular estate. We consider how the National Design Guide and the National Model Design Code can help direct regeneration agencies towards successful outcomes.

Building community support

The question 'whose estate is it anyway?' seems to have been clearly answered by central and regional government with the recommendation (and in London, a mandatory requirement) for community ballots before

major regeneration initiatives can proceed. Policy now firmly puts the needs and wishes of existing residents first. We look at whether and how ballots are proving to be successful, in endorsing the wishes of the people and diffusing tensions. We also show how the pandemic has accelerated the move towards digital democracy in estate regeneration and away from traditional face-to-face engagement, and we promote learning from post occupancy evaluation to keep on improving the outcome for residents.

Supporting lifetime neighbourhoods

A 'lifetime neighbourhood' is a place where people can stay and thrive throughout their lives, and where young and old are equally at home.

We consider the balance between social mobility and social cohesion on housing estates, and we make the case for supporting existing communities while also widening diversity by attracting incomers to the neighbourhood. Some politicians and commentators like to assert a division between 'people from somewhere' and 'people from anywhere': when it comes to estate regeneration, both are important and both should be valued.

We look at demographic changes, shaped by those who stay in their neighbourhood and those who move in, who are often more affluent than existing residents. We consider the special contribution of young people and our ageing population, and we show how good design and management can accommodate change and diversity.

Giving pride to place

Our original report showed how a combination of housing targets, planning policies and funding mechanisms was dramatically increasing the density of regenerated estates and fuelling resistance from existing communities. We show how, in many places, this trend has continued, while in others there has been a strong shift away from comprehensive redevelopment towards infill and remodelling. The placemaking agenda focuses on public open space, and especially green space, and it intersects with other important trends: public appreciation of good quality local open space demonstrated during lockdown; biodiversity and urban greening as a response to climate change; long-term changes in movement patterns, including homeworking, reductions in car ownership and promotion of walking and cycling.

Addressing climate change

Central and local governments are introducing radical measures to combat climate change, including a change of direction in energy provision and distribution, and a stronger focus on embodied carbon. We look at how

these may impact on estate regeneration, and the residents of housing estates, differently from other forms of housing. The high level of embodied carbon in new buildings has given birth to the RetroFirst campaign, promoted by the *Architects' Journal*, and endorsed by many professionals, which insists that retention of existing buildings should be first choice. This trend provides further encouragement to estate infill and remodelling, as opposed to redevelopment. We compare examples of all three strategies and aim to cut through the confusion around embodied carbon and lifetime costs.

Delivering responsible regeneration

Lessons in safety: The Grenfell fire has had a seismic impact on the housing movement and construction industry. It has exposed deep-seated flaws in the prevailing ways of designing, procuring, constructing, regulating, and managing housing. Government has responded with multiple measures including tighter Building Regulations, endorsement of the 'Golden Thread' of responsibility promoted by the Hackitt Review, and publication of the Construction Playbook. We look at the special circumstances of estate regeneration, including the vulnerable nature of many residents, and ask to what extent new and emerging measures are helping or hindering the process of providing robust and safe homes and places.

Viability and funding: Our original report highlighted progressive reductions in grant funding, and increased reliance on cross-subsidy from homes for sale, as a major cause of extreme densification and consequent community unrest. We urged a rethink of public investment and more sensitive local application of policies like Right to Buy and the (now defunct) Starter Homes Initiative. Since 2016 we have seen an increase in targeted subsidy, and greater encouragement of local authorities to engage in direct development, partly funded through borrowing and the Community Infrastructure Levy (CIL). We look at current and potential funding models and their implications for the design, construction, and management of estate regeneration projects.

Case studies

The report features 12 new case studies to illustrate the themes above. These cover a wide range of interventions: remodelling and renovation of existing buildings; infill development and extensions; demolition and redevelopment. They include high density urban projects and lower density suburban estates. For our Endpiece, we feature the 30-year regeneration story of the Gorbals in Glasgow.

A call for more targeted funding

The case studies include projects in Rochdale and Milton Keynes, and we conclude with a commentary on the Gorbals in Glasgow, one of the longest running estate regeneration programmes in Britain. However, many of our case studies are in, or close to, London, and this in part reflects the limitations of the prevailing cross-subsidy model of estate regeneration, which relies on market sale values to fund replacement and additional affordable housing, with strictly limited input of subsidy. Projects in less prosperous areas, where property prices are low, struggle to achieve viability. The development appraisals in more affluent areas are also coming under increasing pressure from construction cost inflation.

Even in the context of the post-pandemic national debt and the many competing claims on government funding, there is a need for more investment in housing and to rebalance reliance on cross-subsidy from the market. Without more injection of public funds – a return to truly ‘mixed’ funding – it is hard to see how the admirable promise of levelling up can be matched by action.

In higher value areas we will continue to see redevelopment, infill and radical remodelling funded largely through cross-subsidy from private market housing supplemented by local authority borrowing. We urge that these projects take note of our recommendations to balance respect for existing communities with sustainable densification.

Lower value areas will need substantial subsidy to achieve lasting improvement. We need to avoid squandering limited funds on isolated short-term improvements to poor quality building stock. Instead, we need to combine funds allocated to single issues, such as fire safety, energy poverty, social problems, health and education, and plan for holistic and lasting regeneration. For example, fuel poverty is going to be a growing priority: there is an opportunity here to implement long-term solutions to a wider range of environmental issues, embracing affordable warmth and healthy homes.

Andrew Beharrell

Senior Advisor, Pollard Thomas Edwards



Recommendations

Altered Estates 2 is arranged into six themes covering key aspects of estate regeneration where there have been significant changes of emphasis and direction since we published the original report in 2016. From each theme we have distilled a series of recommendations, which are summarised here and explained in the relevant chapters. Meanwhile the recommendations from the earlier report also remain relevant and topical: these are reproduced on page 98.



Planning for social value

1. Use the National Model Design Code to help shape the early stages of design and community engagement. Disseminate lessons learned.
2. Within local plans identify estates for potential regeneration and engage early with communities before appointing delivery partners.
3. Ensure residents are widely and closely involved in decision-making, from assessment of early options through design, construction and management.
4. For new projects, establish a separate social value brief at the start, tailored to local needs rather than national policy, measured, monitored and regularly reviewed.
5. Join up funding streams for local health, education, policing and social initiatives, to deliver a holistic and coordinated social value programme.



Building community support

1. Enable communities across the country to determine their own future by extending the use of mandatory ballots beyond London. Reduce the threshold to 50 additional homes, including infill development.
2. Ensure ballots are based on comprehensive information and effective engagement by following Better homes for local people: The Mayor's Good Practice Guide to Estate Regeneration.
3. Widen and deepen participation by combining traditional face-to-face engagement techniques with online communication and digital tools, such as virtual reality.
4. Learn and improve by effective, early and continuing use of post occupancy evaluation. Surveys should cover the widest range of relevant criteria and follow a recognised methodology such as the RIBA toolkit.



Supporting lifetime neighbourhoods

1. Enshrine the right to remain in all estate regeneration programmes, and encourage people to stay by supporting affordable local services alongside homes.
2. Plan for a sustainable balance of existing and new residents, and avoid excessive densification arising from over-reliance on cross-subsidy.
3. Provide centralised and modern community hubs appealing to the whole spectrum of residents and offering affordable space for working, learning, exercise and social life.
4. Encourage older and less able residents to stay within the neighbourhood by making all homes accessible and adaptable (to Building Regulations Part M (4)2 standard) and providing dedicated homes for downsizers.
5. Prioritise engagement with teenagers to develop inclusive and welcoming places, which combat exclusion, crime and anti-social behaviour.



Giving pride to place

1. Provide at least five square metres per person of accessible and useful shared open space for the planned population of every regenerated estate – and where possible aim for at least 10 square metres.
2. Provide private gardens or balconies for every new home on estates across Britain in accordance with London Plan standards. Wherever possible, extend this standard to existing retained homes also.
3. Prioritise public realm management by residents, including opportunities for employment and volunteering, within the social value strategy for every estate.
4. Monitor changing travel patterns and plan for a future reduction in car ownership by designing parking areas for potential conversion to open space or other beneficial uses.
5. Implement ‘quick win’ strategies for temporary community use of open space and buildings awaiting regeneration in programmes of five years or more.



Addressing climate change

1. Social landlords need to conduct a holistic appraisal of the long-term future of every estate, including a comparison of the costs and benefits of alternative energy efficiency and climate change mitigation strategies.
2. Government and social landlords need to prioritise alleviating fuel poverty and providing affordable warmth for low-income households by upgrading the energy performance of existing stock.
3. Government should scrap the VAT levelled on renovation and remodelling to bring it in line with new build. The recent announcement of a 0% VAT for five years on PVs, insulation and heat pumps does not go far enough.
4. Government needs to set out a comprehensive long-term funding programme for energy efficiency and climate change mitigation works to existing social housing and private stock.



Delivering responsible regeneration

1. Promote continuity of client stewardship so that the client’s design quality aspirations remain undiluted from planning through to building handover.
2. Define and continuously update the responsibilities of the client, Principal Designer, design team and Principal Contractor in relation to building safety.
3. Engage with existing residents with regard to safety where buildings are to be retained.
4. Develop competency programmes within client, construction and design teams to ensure that those working on projects within the scope of the Building Safety Act are appropriately trained.
5. Adopt BIM to enhance the Golden Thread of information and preserve the digital record of new and remediated buildings.
6. Look to optimise costs over the whole life by developing cost models that take into consideration maintenance needs, not just capital costs.
7. Promote open-book cost planning to include the whole design team.

THE PEOPLE SPEAK

NEXT
EVENT =

27TH AUG

ASSEMBLY
LIVE!

POPULAR
UNION 23

27 AUG

OPEN

27 THE PEOPLE SPEAK

COME
IN AND
CHAT!

RESPONSIBLE
DRINKING

10

Assessing the wider benefits of estate regeneration



Planning for social value

Assessing the wider benefits of estate regeneration.

Getting buy-in from residents, funders, local politicians and local authorities means persuading people of the wider value that estate regeneration can bring to communities.

Evaluation of the benefits of an estate regeneration project goes way beyond the number and cost of homes delivered. It needs to look more holistically at a wider range of issues. These include sustainability from environmental and fuel poverty perspectives, reduction of anti-social behaviour and crime, improving life chances and wellbeing, delivering more and better homes that are suited to both current and future lifestyles, as well as viability and cost.

By including a more holistic and long-term approach to social value, projects can help deliver benefits to those living and working on an estate, and also to neighbours, who will not benefit directly from a new or improved home.

In this chapter we examine the wider value of estate regeneration and how to evaluate social value, environmental sustainability and community engagement, all of which are increasingly important factors in the planning system.

We begin though with a look at how other important developments in planning, including a new approach to local plans, will also affect the realisation of estate regeneration.

Planning in flux

Local plans and design codes

Since the publication of *Altered Estates* in 2016 the planning policy landscape has been subject to significant changes. Planning reforms, as announced in the Levelling Up and Regeneration Bill, will impact on how estate regeneration is delivered, much of which would require a more proactive role by local authorities in identifying the cost of affordable housing and local infrastructure needed, assembling land through new compulsory purchase powers and using design codes to enable early community buy-in to change.

Design coding will be developed with residents, providing a means for communities to help shape change.

The Levelling Up and Regeneration Bill focuses on wider use of design coding for phased developments. Authorities are adopting criteria in design codes to specify how design quality, or ‘beauty’, will be measured.

Changes to incorporate beauty are the result of the recommendations of *Living with Beauty*³, the final report of the Building Better Building Beautiful Commission, published in 2020. The government concurrently published a National Design Guide⁴ and thereafter the National Model Design Code⁵, which is now being adopted or referenced by local authorities in newly emerging local plans or supplementary planning guidance.

Very few estate regeneration projects have traditionally been allocated as development sites within local plans, and it often came as a surprise to residents that the place in which they live was subject to potentially extensive change and disruption.

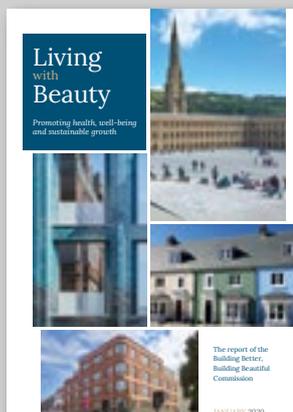
In future, local plans are likely to require extensive front-loaded community engagement in identifying growth sites, and design coding will be developed with residents, providing a means for communities to help shape change within their neighbourhood.

The role of design coding in estate regeneration

Typically, estate regeneration is delivered through a process of early engagement with a developer and their consultants, who work with local planning authorities and communities to define a deliverable and viable proposal that meets all stakeholder expectations and has demonstrable support through consultation prior to the submission of a planning application.

Design codes may have constituted one of the many planning reports submitted as part of a large-scale planning application, but government policy is changing to make design codes integral to local plans, and therefore a much more upfront and strategic requirement, prior to preparing a large-scale planning application. Design coding requires authorities to determine the vision for an area, working with communities and stakeholders, to predetermine design parameters for layout, scale, massing and infrastructure, for example, and adopt suitable criteria in local plans and development plan documents.

As the process for developing a design code set out in the National Model Design Code is now part of the plan making toolkit (irrespective of whether further changes are made to the planning system) it would be timely to test its benefits and limitations on a typical estate regeneration programme from inception.



Living with Beauty



National Model Design Code

Density and character

More emphasis is also being directed at density and character, where we have been seeing a shift in emphasis. Where land values have made it viable, a conventional approach to regeneration has been to build enough new homes on an estate to fund demolishing and replacing outdated housing stock and delivering other improvements. However, local character considerations can and should limit the heights of new buildings, and local communities have become more assertive in opposing plans for tall buildings that may be out of character with their existing environment. In response, the new London Plan omitted the established density matrix, putting more emphasis instead on the suitability of density and height to local context. Similarly, national policy emphasises the importance of local character to determine building heights, and the need to identify in local plans where tall buildings are to be located.

As such, it is important to define the development parameters in a proactive, timely and consultative manner, weighing up the need for preservation of existing context against urgent housing need for more and better housing, with demonstrable local benefits for existing and future residents. The wider and early use of design codes – to set a viable and deliverable vision for the estate and its immediate surroundings – could be very beneficial in this regard.

Community engagement

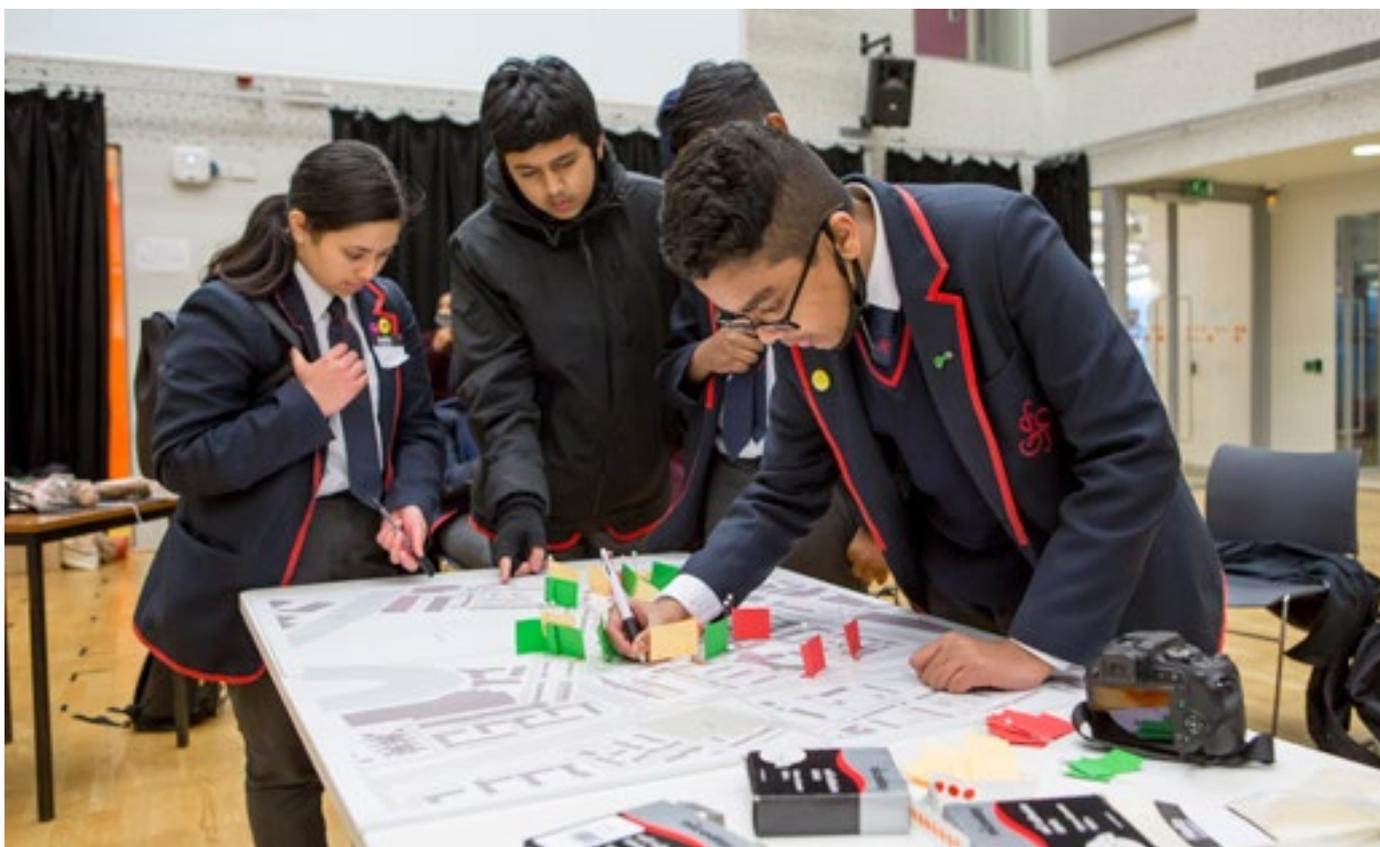
In London, *Better homes for local people*, the Mayor's Good Practice Guide to Estate Regeneration has implemented significant changes in how estate regeneration goes forward, in the wake of political backlash against gentrification and the loss of social housing. This has already resulted in many local authorities in the capital adopting estate regeneration policies in their local plans.

Estate regeneration offers great opportunities to deliver a broad range of long-term benefits to a community.

The guidance applies to cases where GLA funding is sought, affordable homes are being demolished, and more than 150 homes are proposed. The guidance seeks to ensure an increase in affordable housing provision, the full right of social tenants to return to the estate, and a fair deal for leaseholders and freeholders.

As part of the guidance, balloting residents is instrumental to the way projects go forward, safeguarding residents' rights, which is a very positive outcome.

However, ballots can increase project risks due to the uncertainty of the ballot outcome. Residents cannot be balloted until the project is fairly advanced, because



Aberfeldy Street

completed projects have to be recognisable as the one residents voted for and proposals cannot be altered after the ballot. Therefore, development agencies incur significant upfront design and consultation costs before the future of the scheme has been endorsed by the community.

Change for the better

While there is currently some uncertainty as to how any planning reforms will affect estate regeneration outcomes, significant improvements have been made since *Altered Estates*, with planning policies becoming more focused on design quality and preserving social housing. To a degree there is always some tension between whether the planning system is enabling or controlling. However, positive steps are being taken in estate regeneration to enable a community-focused process.

Changes to the planning system should not detract from its fundamental purpose, to improve the quality of the built environment, to lead to societal benefits and create social value for all, both in the immediate area of development and the wider context. Design coding helps to build an aspirational vision to deliver design quality and social value. Estate regeneration must have these objectives at its core.

Delivering wider benefits

The importance of social value

By their size and nature, estate regeneration schemes offer great opportunities to promote and deliver a broad range of long-term benefits to a community, in addition to those traditionally delivered through Section 106 mechanisms (and where applicable the Community Infrastructure Levy). Since the introduction of the Public Services (Social Value) Act in 2012, all UK public sector procurement has had to consider social value in the procurement of goods and services. This has led to social value becoming a core output for consultants and contractors working on schemes involving government funding, and to wider social value benefits being more strongly articulated during the planning process.

It is important for communities to see tangible benefits associated with the development process. Prior to regeneration, for example, the Holly Street Estate in Hackney, East London, suffered from high levels of crime, ill health and high unemployment levels. Over 20 years the estate was largely rebuilt providing over 1,000 new homes. A report by an independent researcher was commissioned by the local authority during the initial development of the masterplan to assess key health, crime and education statistics. Three years after the delivery of the first homes a new assessment of the regeneration impact demonstrated:

- A 75% reduction in the fear of crime in the area
- An 85% drop in reports of damp
- A 30% drop in GP visits
- Approximately 300 people on the estate getting involved in training or job opportunities since the start of the project.

This approach enabled a clear statistical analysis of the effects of the regeneration and demonstrated the wide-ranging impacts that projects can bring to estates.

A summary of key social value opportunities is outlined below and discussed in more detail elsewhere in this report.

Educational benefits

Promoting educational opportunities is already built into many estate regeneration schemes through consultants and contractors offering training, work experience, apprenticeships and mentoring programmes, which often extend well past the completion of schemes. At Sumner Road in Southwark, South London, for example, the contractor sponsored a construction management trainee who worked part time on site whilst also attending a college course.

It is important for communities to see tangible benefits associated with the development process.

Opportunities also exist to improve educational attainment through the design of the new homes themselves by ensuring adequate study space for children without disturbance from other family members. This might require larger bedrooms or separate kitchen-dining spaces and living rooms.

Incorporating increased levels of acoustic control between homes and rooms, and minimising noise from nearby busy roads and railways, is also vital, as data increasingly shows a direct correlation between poor acoustic standards and low academic achievement.

Health and wellbeing

Health and wellbeing outcomes are also increasingly seen as key elements within regeneration projects. These could be met by outdoor gyms and running routes, food-growing areas and safer routes for pedestrians and cyclists. Islington Council's infill scheme at Vaudeville Court, in North London, provides only 13 new homes but managed to incorporate a growing area for both new and existing residents on the estate, managed by the residents themselves through a gardening club.

Increasing the biodiversity of green spaces and providing ready access for all to nature is also widely seen as a key benefit to mental health, particularly as many now work from home.

Ensuring external spaces are safe and accessible for all residents and visitors through good urban design also helps reduce the fear of crime, further aiding mental health and promoting more stable living environments for vulnerable residents.

Strengthening community

Social and cultural ties within communities can be strengthened by creating spaces for meetings and social events. 'Community chests' (Section 106 monies ringfenced for local social initiatives as part of regeneration schemes) offer potential funding to support initiatives and reinforce social stability within a community.

Having clear social value goals can help access a wider range of funding streams to support regeneration goals.

Ensuring residents are involved in decision making during design, construction and management of estates, is also vital so that regeneration proposals reflect the cultural values of the local community and promote a sense of pride and ownership. Increasingly, design teams include members who reflect the cultural make-up of an estate. This may help encourage more open communication with residents and avoid unconscious bias in this process.

Economic benefits

The regeneration process itself offers job and training opportunities in design, construction and housing management.

Long-term employment prospects for residents can be boosted through the provision of more stable and secure housing delivered through a regeneration project.

Ensuring schemes are well connected to local public transport and support affordable and sustainable forms of transport, such as cycling, promotes access to employment opportunities.

Alongside suitable space to work from home, regeneration schemes should consider providing co-working hubs to help grow local businesses and enable residents to take advantage of flexible working patterns.

Environmental benefits

With spiralling energy costs, fuel poverty and overall running costs have become even more critical for the low-income residents of housing estates. There is also greater awareness of the health impact of heat stress on residents as new buildings become super-insulated, with additional passive measures increasingly needed to avoid the use of costly and unsustainable mechanical cooling.

Much debate recently has focused on embodied carbon and the wider impact of buildings on the environment. We cover this topic in Addressing climate change (page 50).

Due to the long timescales involved in estate regeneration projects, the outline design should be flexible enough to enable each phase to adopt the latest and best approach to energy efficiency.

Developing a social value brief

Setting out a clear social value brief at the start of the project can be helpful in identifying how regeneration can better improve the lives of all those affected. Having clear social value goals can also help access a wider range of funding streams to support regeneration goals.

Social value goals and outcomes should reflect local needs rather than generic themes set out in local or national policy and should be reviewed regularly so that they can respond to issues identified through stakeholder engagement processes. The process of setting out a social value brief can in itself help identify a wider range of stakeholders who can contribute to the regeneration process.

Measuring social value

Due to the longer timescales involved in estate regeneration projects, it is important that both quantitative and qualitative measurements are gathered for a wide range of social data at regular intervals to enable lessons learnt to inform later phases. Funders have over many years developed systems to assign financial benefits to social investment, commonly referred to as SROI (Social Return on Investment). Nevertheless, difficulty in measuring and apportioning financial benefits to social improvements has been a key obstacle in gaining funding for social value initiatives.

A range of new and pre-tested social value definitions and toolkits has recently been developed to address this issue, such as the London School of Economics and Political Science (LSE) report Estate Regeneration and Social Value (2019)⁶; the Royal Institute of British Architects (RIBA) Social Value Toolkit for Architecture (2020)⁷; and the UK Green Building Council's (UKGBC) Framework for Defining Social Value (2021)⁸. These



RIBA Social Value Toolkit for Architecture

seek to measure the social value generated by regeneration projects. The Cabinet Office's Construction Playbook (2020)⁹ also addresses this issue but mainly from the perspective of how it can be included in consultant and contractor procurement.

Some social value toolkits feature financial analysis, such as the monetisation clip-on tool within the RIBA Social Value Toolkit for Architecture, which is designed for use with other post evaluation processes such as Arup's Building User Survey (BUS)¹⁰. The housing innovation charity HACT is currently developing a wider range of social return on investment proxies as part of its Social Value Roadmap¹¹.

These can be helpful in supporting access to a wider range of funding streams, which can be critical in regeneration projects where a cross funding model is not viable because of low sales values. They can also be used to argue that existing funding initiatives targeting crime reduction, mental health support, education, and training opportunities could be used to deliver these goals via the regeneration project, rather than in parallel.

Ideally evaluations should be tested against existing criteria carried out prior to regeneration to allow data to demonstrate the degree of change following regeneration. Where this is not possible, particularly for schemes currently underway or even recently completed, data gathering is still an essential tool in helping inform future work, but will often rely on residents' impressions of improvement rather than a measurable metric.

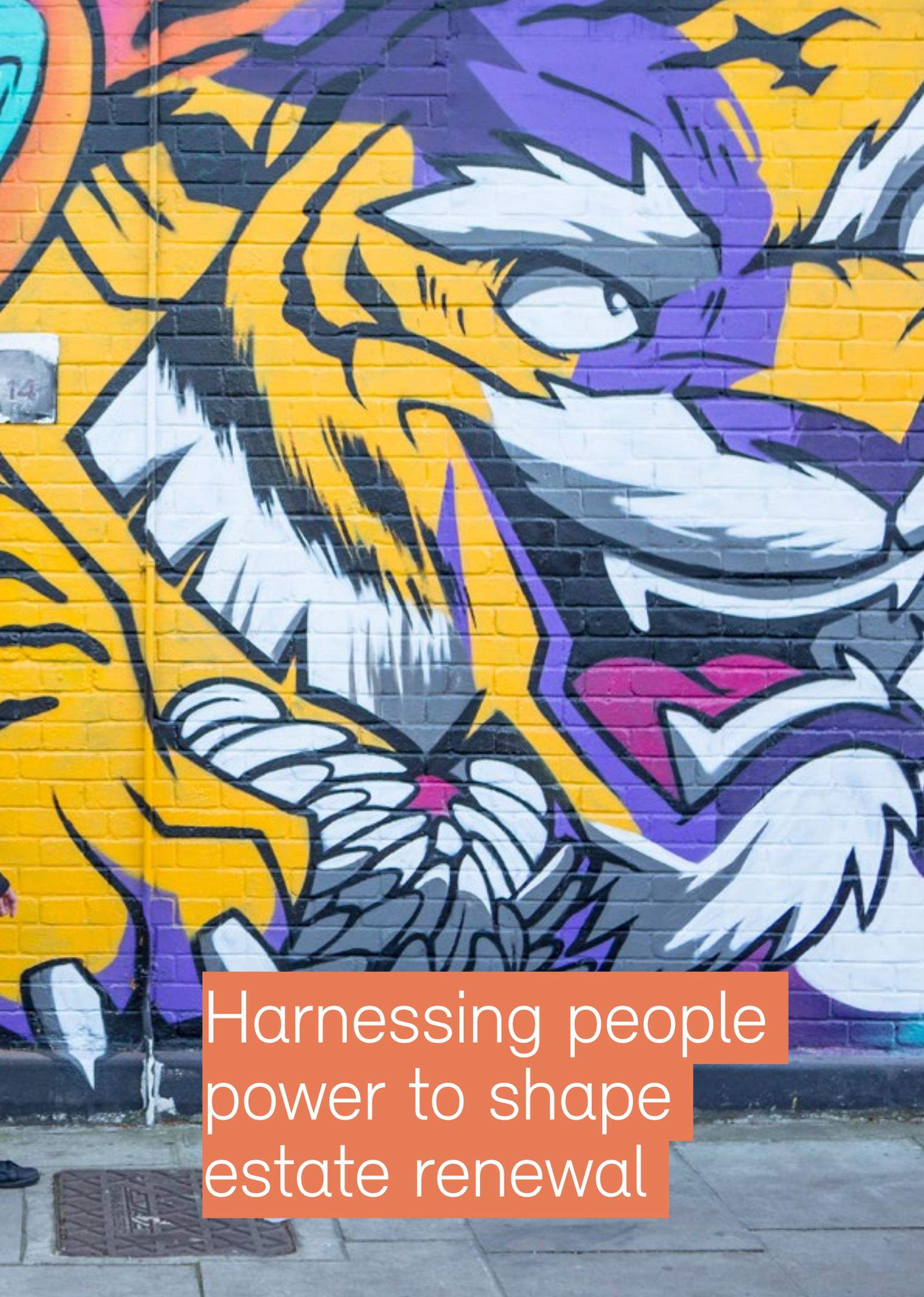
Post occupancy evaluation is discussed in more detail in the next chapter, Building community support.

Recommendations

1. Use the National Model Design Code to help shape the early stages of design and community engagement. Disseminate lessons learned.
2. Within local plans identify estates for potential regeneration and engage early with communities before appointing delivery partners.
3. Ensure residents are widely and closely involved in decision-making, from assessment of early options through design, construction and management.
4. For new projects, establish a separate social value brief at the start, tailored to local needs rather than national policy, measured, monitored and regularly reviewed.
5. Join up funding streams for local health, education, policing and social initiatives, to deliver a holistic and coordinated social value programme.



DEE STREET



Harnessing people
power to shape
estate renewal



Building community support

Why it is important to harness people power to shape estate renewal.

The question posed by the original *Altered Estates* report 'whose estate is it anyway?' seems to have been clearly answered by central and regional government with the recommendation for community ballots before major regeneration initiatives can proceed.

Policy now firmly puts the needs and wishes of existing residents first. In this chapter we look at whether and how ballots are proving to be successful in endorsing the wishes of the people and defusing tensions. We also show how the pandemic has accelerated the move towards digital democracy in estate regeneration, complementing rather than supplanting traditional face-to-face engagement.

Finally, we touch on how to learn lessons through rigorous and wide-ranging post occupancy evaluation.

Empowering communities

The volume and intensity of housing development (on estates and elsewhere) in some areas of London is triggering a backlash from local people against general disruption and specific pressures on open space, streets and local services.

For example, a stand-off between Southwark Council and residents of the Bells Gardens Estate in Peckham over proposals to build new affordable homes on existing open space, attracted national media attention in August 2021. The pandemic lockdown increased overcrowding of open spaces, especially in poorer urban areas, where people have less access to private gardens: some London boroughs even closed parks because of overcrowding. The pandemic emphasised the value people place on open space and the need to maintain convenient access for all in normal times.

On estates, these general objections have been intensified by some of the prevailing regeneration models, which are still perceived to be driven by regional housing targets rather than the needs and aspirations of the existing community.

Partly as a response to growing public disquiet, in December 2016 the MHCLG published its *Estate Regeneration National Strategy*, which recommended a formal ballot of residents as a prerequisite for the replacement of existing homes on estates.

As mentioned in the previous chapter, the GLA published *Better homes for local people: The Mayor's Good Practice Guide to Estate Regeneration* (adopted July 2018). This included the mandatory requirement for community ballots on larger estate regeneration projects involving demolition and new build of 150 homes or more.

These documents both mirror the guidance in the original *Altered Estates*: the chapter on Engaging Communities sets out lots of practical advice on how to facilitate the transparent, inclusive and effective involvement of local people in planning the future of their homes and neighbourhoods, including the potential use of formal ballots.

Ballots are not a new concept. From 1988, and especially after 1997, there was widespread transfer of local authority housing stock to housing associations, and this process requires a formal ballot of residents.

With ballots becoming the norm, there is a growing body of successful examples and best practice to draw on.

Ballots have also been recommended as part of the consultation required from councils before setting up an arms-length management organisation (ALMO). Some local authorities and housing associations have made a wider commitment to use ballots for all large estate regeneration initiatives. While some ballots have been very well conducted, others have left either the proponents or objectors to regeneration complaining that the results were 'unrepresentative'.

The introduction of mandatory ballots initially caused some delays to projects that were already well advanced, and complaints that well-intended policy risked denying people the new homes they had been promised. There has also been controversy around who should have the vote: should it extend beyond long-term residents to include recent and temporary incomers, and beyond those whose homes are proposed for redevelopment to everyone living on, and maybe around, the estate?

With ballots becoming the norm, there is a growing body of successful examples and best practice to draw on. They require rigorous and transparent testing and communication of options, and considerable investment in helping all sections of a community to have an effective say, based on clear information. Few would now question that ballots are, in principle, the best way to provide a strong consensual foundation for the right regeneration solution for each place – or in some cases to leave a community untouched.

Voting on the future of a neighbourhood

As briefly discussed in the previous chapter, in London, ballots are mandatory for redevelopment projects that involve demolition and extensive new build within an existing housing estate. Since this policy was adopted in 2018 there have been 36 ballots in London, of which only two have been negative (based on available figures



Better homes for local people: The Mayor's Good Practice Guide to Estate Regeneration

up to February 2022). In some cases, ballots have been beneficially extended beyond the part of an estate proposed for redevelopment and into neighbouring areas where more modest improvements and limited infill are proposed.

Done well, ballots create a greater sense of agency among residents, and a deeper connection with the regeneration process.

The ballot process requires the local authority or other promoter of change to provide very clear and comprehensive information to residents about the proposed scope of physical change and the resulting housing offer for all tenures. A clear local lettings policy is a key component in the package. The original *Altered Estates* sets out in detail the level of information which should be provided in any effective engagement process for major regeneration.

Done well, ballots create a greater sense of agency among residents, and a deeper connection with the regeneration process. Anecdotal evidence suggests that London's ballot requirement is also raising expectations among communities elsewhere that proposals for their

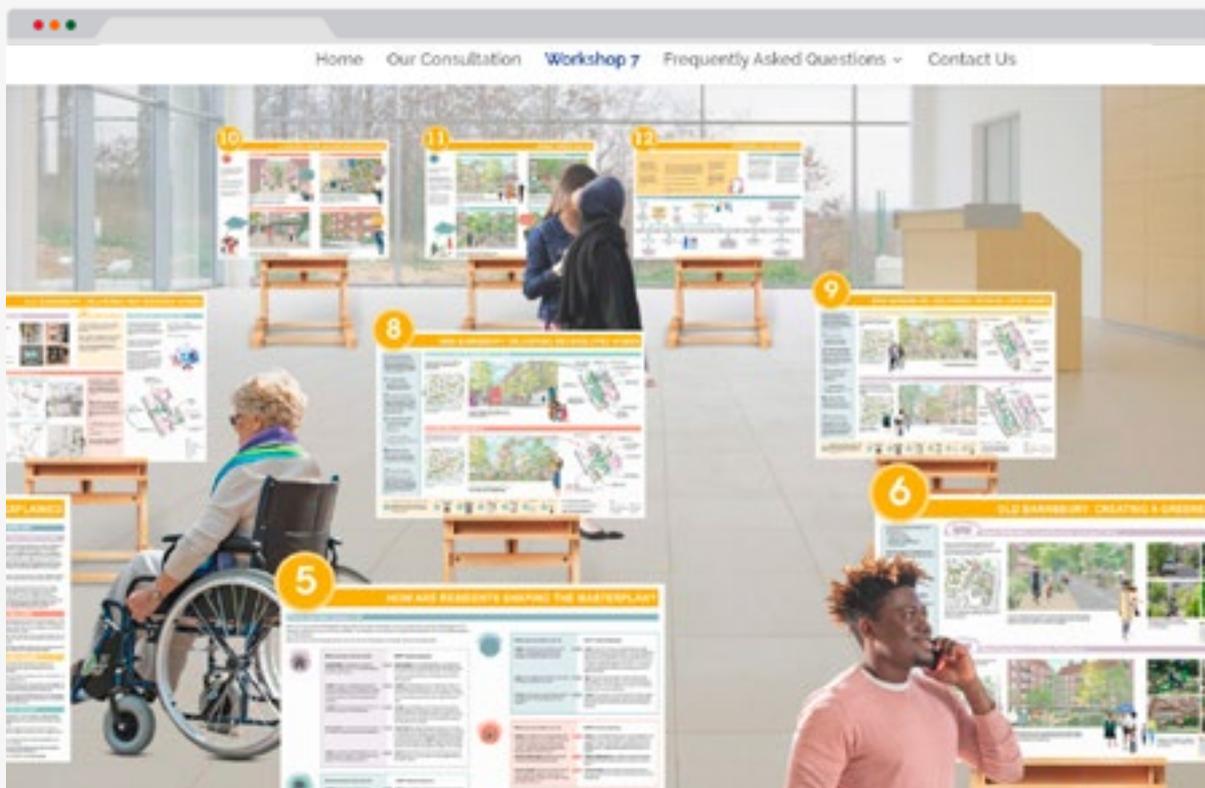
estates should be put to the vote, either by way of a formal ballot or informal test of opinion.

Conversely, infill development does not require a ballot, and could be seen as less 'democratic'. Given the increasingly vocal reaction of local people against loss of open space through infill, there is a case for reducing the 150-home threshold for a ballot. We recommend that ballots are undertaken for all estate regeneration projects for 50 homes and more, and including infill where there is little or no demolition.

Ballots are very significant milestones in the regeneration process, the culmination of an intensive period of consultation, engagement, and negotiation. However, this should not be the end of the engagement process, which should continue through the life of the project, and beyond into post occupancy feedback.

Digital democracy

The pandemic has accelerated a trend towards consulting with stakeholders and the public online that had already begun to establish itself. In the long term it is not likely or desirable that this will entirely replace face-to-face engagement, but digital engagement will offer an evolving set of useful and complementary tools: online surveys and polls, Facebook resident panel groups, virtual workshops, interactive websites,



Barnsbury Estate - online engagement

telephone drop-in and live Q&A sessions. Web-based tools like 'Commonplace' facilitate initial needs analysis by enabling people to 'pin' their likes and dislikes on maps, and to read other people's comments.

The upside of online engagement

The rise of digital engagement during lockdown has had an upside. Previously disengaged residents who would be unlikely to attend public meetings and in-person sessions have been reached via the internet, and others have been prepared to share more private comments online than they would in person.

In short, digital engagement has given project teams a more nuanced understanding of particular communities. 'Lived experience', as opposed to academic or professional knowledge, has a crucial role in revitalising places where people have already lived for many years. A combination of new digital techniques and the most effective face-to-face engagement methods make this lived experience more available to design teams, landlords and residents themselves, significantly improving communication of important but complex information and ultimately the quality of regeneration.

The project website should become the go-to community resource for the emerging proposals. As well as basic project information, the website will include design updates, webinar presentations, drawings and digital models.

While future requirements for social distancing are unpredictable, a flexible and robust approach can deliver an effective engagement process while meeting the wider programme. Experience during lockdown has confirmed that some groups – younger people and full-time workers, for example, as well as the increasing proportion of older people comfortable with digital communication – are capable or often enthusiastic about engaging online, while others do not have the skills, access to computers or cultural encouragement to communicate online.



Barnsbury Estate - walk around with residents

Local democracy in action

In March 2021 residents of the Barnsbury Estate in Islington, North London, voted on an ambitious plan by Newlon Housing Trust to demolish and redevelop 370 homes built in the 1960s and 1970s and to upgrade 273 older homes. 950 new mixed-tenure homes will be built, and all existing residents will have a right to return. All tenants and leaseholders were entitled to vote, as were shop owners within the estate, and from the 683 eligible voters there was a 79% turnout, with 73% voting in favour of the proposals.

This followed an engagement process lasting 17 months, most of it during the pandemic lockdown. We expand in this chapter on digital engagement generally, and at Barnsbury it formed part of a wider response to the pandemic's restrictions, involving socially distanced project tours and face-to-face sessions, with time slots at exhibitions to control numbers.

The project team started by exploring the estate with residents, not just from a technical perspective, but to understand what people value and what they want to see change. Options for refurbishment and various degrees of redevelopment were tested and debated, using online surveys and polls.

The project team was closely supported by a communications agency and specialist residents' advisors. This combination of skills and resources can provide a better service to residents than architects and clients can generally deliver on their own.



Barnsbury Estate

Most engagement processes should therefore be planned as a combination of online and traditional media. A process of timetabled and curated online webinars and workshop events, recorded so they can be made available via the project website, should be supplemented with hard copy leaflets and newsletter updates. These both publicise the process and reach the digitally isolated. One-to-one telephone conversations with individual residents can talk them through visual material posted to them.

Engaging project material

Whether communication is digital or face-to-face, information and proposals must be presented in ways which are easy for non-specialists to understand and enjoyable to engage with. If we want to benefit from the experience of residents and other stakeholders, we must present design, financial and planning information accessibly.

Collaborative co-design, where every resident is treated as a client, has helped to evolve best practice.

Collaborative co-design, where every resident is treated as a client, has helped to evolve best practice in putting the tools and the understanding of a developer into the hands of residents, enabling them to customise their home to meet their unique needs. Although this kind of intensive face-to-face process is impractical for larger projects, digitisation of the tools and methods can enable a similar approach to reach a much larger audience.

Many people struggle to read architectural plans, so alongside traditional drawings and hand sketches, the design team should endeavour to use digital models and animations at every scale, from the neighbourhood to options for home layouts, and including virtual reality walk-throughs controlled by the customer.

Physical models, from three dimensional flats in foam board the size of a shoe box to 1:1 plans taped on the ground, remain a very successful way of making abstract future plans real to the people who will live in them. The various materials are used to take residents on a journey from the general concepts and options through to master planning and more detailed design. This order can be reversed: some people find it easier to start with the home and work outwards from there.

Learning from existing communities

Another important means of engaging and empowering communities and as a tool for learning is to carry out Post Occupancy Evaluation (POE). This typically takes the form of a questionnaire to test the effectiveness of the target social value outcomes as discussed in the previous chapter and can be carried out in parallel with POE on more technical and design-based issues.

Care must be taken that assessments are representative in terms of age, gender, and ethnicity to ensure results are representative of those affected by regeneration. As such, use of independent researchers to carry out POE is increasingly being encouraged to ensure objectivity. We also recommend using a recognised methodology such as the RIBA Social Value Toolkit.



Engagement tools and techniques

We need to understand better how each regeneration programme is performing against a host of social value criteria, including social integration among tenants; between tenants, buyers and shared owners; between occupiers of the new development and their surrounding neighbours.

We need to overcome the reluctance of some estate managers to ask questions, for fear of encouraging complaints.

With many large mixed-tenure regeneration schemes having been occupied for some years now, more commitment is required to assess how well social integration and other social value objectives are actually working, and to learn lessons about how design and management can better promote it. We need to overcome the reluctance of some estate managers to ask questions, for fear of encouraging complaints.

The four practices behind *Altered Estates* have recently commenced a collaborative study for the London Legacy Development Corporation for in-depth technical and social research into one of its new neighbourhoods: this kind of study should become the norm for all large regeneration projects.



Towards Net Zero: a collaborative approach to decarbonising housing and increasing social value

Recommendations

1. Enable communities across the country to determine their own future by extending the use of mandatory ballots beyond London. Reduce the threshold to 50 additional homes, including infill development.
2. Ensure ballots are based on comprehensive information and effective engagement by following *Better homes for local people: The Mayor's Good Practice Guide to Estate Regeneration*.
3. Widen and deepen participation by combining traditional face-to-face engagement techniques with online communication and digital tools, such as virtual reality.
4. Learn and improve by effective, early and continuing use of post occupancy evaluation. Surveys should cover the widest range of relevant criteria and follow a recognised methodology such as the RIBA toolkit.



Enabling people to
settle and thrive





Supporting lifetime neighbourhoods

How successful estate regeneration enables people to settle and thrive.

In this chapter we consider the balance between social mobility and social cohesion on housing estates, caricatured in national discourse as people from ‘anywhere’ versus people from ‘somewhere’, and the social effects of different kinds of regeneration in a range of contexts.

We discuss ‘lifetime neighbourhoods’ as an approach to creating stable and prosperous communities, and we consider the need for special provision for younger and older people. Finally, we look at the importance of ‘third places’ – modern community hubs – in the post-pandemic world.

Maintaining balance

A 'lifetime neighbourhood' is a place where people can stay and thrive throughout their lives, and where young and old are equally at home. This is now a well-established principle within many estate regeneration projects, where new housing is designed to meet current and projected local needs as well as wider regional targets. It can create more balanced communities, by increasing choice and access to those on a range of incomes. This in turn encourages residents to live in a familiar neighbourhood throughout their lives as their needs change.

Arguably the most important residents of lifetime neighbourhoods are the young people, and yet their voices are seldom heard.

The perceived social and economic benefits of mixing up people from different backgrounds in the same neighbourhood with the aim of fostering balanced and integrated communities has long been promoted in the planning system. This approach has dovetailed with the mixed funding model, which has delivered most of the

large-scale regeneration programmes for the past two decades. This model has required increasing amounts of cross-subsidy from market housing to fund improved, replacement and additional affordable homes.

The consequent spiral of higher densities, increased proportion of incoming to existing residents and reduced proportion of affordable homes has radically altered the demographic.

In *Altered Estates* 2016 we said:

“...our cities prosper best as places if we encourage the integration of mixed communities within them... putting low-cost housing at the heart of revitalised estates is a key demonstration of this principle.”

The right of existing residents to remain living on a regenerated estate, if they so choose, is now a given. To maintain community bonds, wherever possible, the phasing strategy should enable such residents to remain in their existing home until a suitable new one is ready, and the process of 'double decanting' (moving twice) should be minimised. Local lettings policies can help those growing up and leaving home to remain in an area, helping strengthen social and community ties.



South Kilburn Regeneration Phase 4

Major regeneration programmes need to plan for a sustainable balance of existing and new residents and avoid marginalising existing communities, rather than allowing the outcome to be driven solely by the logic of cross-subsidy funding. Where conventional mixed funding cannot achieve this, and increased grant funding is not forthcoming, then serious debate is required on the objectives and long-term sustainability of the proposal.

At the Barnsbury Estate designers developed an app, Give My View, which included questions targeted at teenagers.

Even when residents enjoy subsidised housing they can be squeezed out of their neighbourhood by the rising cost of local services, including shops, workspace and leisure facilities, which evolve in response to a wealthier incoming population. Regeneration programmes therefore need to include the retention or creation of affordable facilities, for example through creative business tenancies and the provision of shared community spaces for recreation, learning, socialising and events.

Demographic change

Lifetime neighbourhoods require active planning to provide suitable housing across the full spectrum of age, health, ethnicity, income and household size. This applies to market housing, as well as affordable forms of tenure: for example, the integration of build-to-rent schemes within estate regeneration can provide flexibility for young workers, families and retirees alike.

Growing up

Arguably the most important residents of lifetime neighbourhoods are the young people, and yet their voices are seldom heard at conventional community engagement events. Worse than that, some older residents tend to reinforce existing patterns of exclusion and anti-social behaviour rather than seeking positive ways to include young people in determining the future of their community.

Digital engagement, discussed above under Community, can help to draw teenagers into the process. For example, the Barnsbury Estate project team included specialist designers, who developed an app called Give My View, which included questions specifically targeted at teenagers. Elsewhere, the team has produced a gaming version of house and flat fly-throughs enabling players to score points by developing the best layout.



Aberfeldy Estate



King Square

Ageing

There is great interest currently in the idea of multi-generational or inter-generational developments. Towns, city quarters and villages are home to people of all ages, and we perceive an imbalance not only when, for example, young people are priced out of the places they grew up in, but when developments composed solely of 'starter' homes are deserted during the working day and fail to nurture social networks.

Housing estates first occupied in the 1960s and 1970s often have strong social networks regardless of their physical state. Global Age-Friendly cities, published by the World Health Organisation in 2007¹², evidenced the importance of participation in social, leisure work and learning activity in promoting health at all ages.

It says:

" Because active ageing is a lifelong process, an age-friendly city is not just 'elderly-friendly'. Barrier-free buildings and streets enhance the mobility and independence of people with disabilities, young as well as old. Secure neighbourhoods allow children, younger women and older people to venture outside in confidence to participate in physically active leisure and in social activities."

Enabling older residents to remain active within a familiar social network is key in extending the benefits outlined above to their contemporaries and the wider community, including young children.

Add to this, the knowledge of the neighbourhood gained through decades of lived experience, and the case for ensuring older people have an influential role in the development of estate regeneration proposals becomes irresistible.

In practical terms, too, providing accessible, bright new flats for older residents can unlock land assembly for regeneration by encouraging downsizing and freeing up larger homes for families, as at the Redbrick Estate in Islington. We recommend that the default standard for all new homes on estates should be 'accessible and adaptable' in line with Building Regulations Part M (4)2. As yet only a few local authorities across the country have opted for this within their local plans.

The range (if not the extent) and quality of housing for older persons has markedly expanded over recent years, as seen by the emergence of a dedicated Housing Design Award in 2016 for HAPPI (Housing our Ageing Population Panel for Innovation) housing schemes and the expansion of information networks for specialist

housing such as LIN (The Housing Learning and Improvement Network).

Good design on HAPPI principles¹³ will encourage older residents to become actively engaged in the design of their new homes, and this will give them insights into the ambitions and challenges of the regeneration process that can be shared and discussed with their local networks. For well-functioning and cohesive estates like King Square in Islington, North London, older residents are the most fiercely protective of the qualities of the existing estate that are most valued by residents, the toughest interrogators of the proposed options, and the proudest ambassadors of a successful regeneration project.

Working from home and the need for 'third places'

Although the pandemic has forced us to isolate, it has unexpectedly highlighted the advantages and disadvantages of living together in urban communities. A more connected community culture has emerged: for example, neighbours, who may not have spoken before, have helped each other with food deliveries and prescriptions.

Lettings and benefit policies lead to high levels of occupancy and prevent or penalise possession of a spare room.

On the other hand, tensions around incompatible lifestyles have been heightened: for example, with more people at home more of the time, residents and housing managers report that noise nuisance is a big issue. As more people work from home and more care services are provided to residents in their own homes, acoustic standards matter more than ever. This is a major factor in considering the upgrading or replacement of housing estates, where the acoustic performance of existing stock is often very poor.

Working from home raises questions about the adequacy of space standards in existing estate housing, and future-proofing the brief for new housing. This is especially critical because lettings and benefit policies lead to high levels of occupancy and prevent or penalise possession of a spare room: by contrast wealthier people may afford to buy or rent a larger place or remodel their existing home.

So, as more people work from home, study from home and are cared for in their homes, the need for 'third place' buildings is growing: places that are neither home or workplace, but shared spaces for recreation, learning, socialising and events, like secular church halls for the modern age. This need is especially acute on housing

estates, where homes are generally small and fully occupied, and many people cannot afford to visit cafes, health clubs or commercial co-working hubs.

Covid has also highlighted the need for good local facilities, including community space to allow people to come together for all sorts of reasons – from children's parties and vaccinations to local group meetings, shared bookable workspace and a base for shared resources (drills, stepladders, garden tools, printers – sometimes called a 'library of things').

Designing for mixed communities

Redbrick Estate

At the Redbrick Estate, Islington Council is working closely with older residents who had moved into larger family homes when the estate was first built, but whose children had subsequently moved away during the regeneration of the estate. Larger one-bedroom homes were created within new infill flat blocks on the estate, featuring lift access, extra storage areas and a small hobby room or sleep over space for visitors to cater for residents' needs later in life. This allowed existing residents to move into homes which met their needs without needing to leave the estate, and helped free up existing family homes to be used by new families moving into the estate.

Melfield Gardens

At Melfield Gardens in Lewisham, South London, an inter-generational housing approach is providing affordable homes for residents aged 55 and above, along with a number of four-bedroom homes for eight postgraduate students from Goldsmiths, University of London. In return for being 'good neighbours', the students will be charged a lower rent. Each will spend a number of hours assisting older residents, offering company or participating in the cultural and recreational activities that will take place in the communal spaces.

Aylesbury Estate

At the Aylesbury Estate in Southwark, South London, a dedicated new building will provide 119 units, of which 54 units are extra care above a new community centre for local residents in the wider estate, as part of a much larger regeneration scheme which will eventually provide over 3,500 homes. Estate wide improvements were also carried out to improve access for older persons both within the estate and connections to the wider area. This approach not only significantly increases access to shops, services and neighbours for these residents, but all those with mobility issues such as wheelchair users and families with very young children.



Redbrick Estate



Melfield Gardens



Aylesbury Estate

Recommendations

1. Enshrine the right to remain in all estate regeneration programmes, and encourage people to stay by supporting affordable local services alongside homes.
2. Plan for a sustainable balance of existing and new residents, and avoid excessive densification arising from over-reliance on cross-subsidy.
3. Provide centralised and modern community hubs appealing to the whole spectrum of residents and offering affordable space for working, learning, exercise and social life.
4. Encourage older and less able residents to stay within the neighbourhood by making all homes accessible and adaptable (to Building Regulations Part M (4)2 standard) and providing dedicated homes for downsizers.
5. Prioritise engagement with teenagers to develop inclusive and welcoming places, which combat exclusion, crime and anti-social behaviour.





Creating spaces
between homes that
enhance daily life

Giving pride to place

How the space between buildings can enhance residents' quality of life.

The original *Altered Estates* (Chapter 3 'Getting the design right') highlighted the particular challenges and opportunities for urban placemaking in estate regeneration. It discussed the departure of post-war modernist housing from traditional urbanism, and the process of reintegrating estates with their surrounding neighbourhoods through a process of 'visible mending'.

This theme looks at the spaces between buildings. It looks at how significant shifts in planning policy since 2016, and evolving expectations of residents, has influenced placemaking in estate regeneration.

Useful generic urban design guidance was already well established and widely accepted in 2016 and covered in our original report. More recently the National Design Guide and National Model Design Code have helpfully summarised and codified best practice. This report does not seek to repeat this guidance, but to draw attention to some key topics in relation to estate regeneration.

We explore how the growing prevalence of infill development on housing estates brings with it the opportunity and the need to improve the open spaces throughout an estate, not just the immediate surroundings to newly inserted blocks. Although the scope for change in these circumstances will be different from the comprehensive replacement of existing estates with completely new neighbourhoods, it can be no less transformational for people's lives.

Big plans and small plans

Impact of infill development on communities

Altered Estates explored the growing push-back from communities and the media against the demolition and redevelopment of housing estates. It also discussed the pros and cons of infill development and improvements to existing blocks. We wrote:

“ Infill development can be a successful way to create more and better homes on existing estates, but sometimes it is a short-term pragmatic solution, which then prevents implementation of a bolder scheme for the next several decades. It’s even more difficult to demolish poor quality stock if it is closely hemmed about by newer homes filling every available gap.”

Familiar buildings and places provide us with a sense of orientation and identity.

Daunted by the high risk and cost associated with large-scale redevelopment and influenced by effective community and media campaigns against demolition, many councils and housing associations have focused on infill, or a combination of infill and selective demolition, as easier alternatives. In London, some may also have been motivated to avoid triggering the threshold for a formal ballot.

The trend towards infill rather than redevelopment has received a further push from the renewed emphasis on retention and retrofit of existing buildings as a response to the climate crisis.

The impact of major change on our health and wellbeing is another factor. Familiar buildings and places provide us with a sense of orientation and identity, regardless of whether they are beautiful, convenient or robust. Conversely, widespread demolition can lead to a temporary sense of loss, even when the end result is a resounding improvement.

Another important change came in the regime of permitted development rights, which have been widely expanded since 2020, including the right to build on top of existing commercial and residential buildings built between July 1948 and March 2018. This could be used positively by public sector land owners in adding additional homes to existing estates without the full-scale disruption of demolition. However, experience has demonstrated that these types of developments are often complex and require extensive liaison with existing residents. The cost of fire safety compliance and other technical considerations also impact on the viability of extending buildings above 18m.

For all these reasons, we are likely to see a growing number of hybrid regeneration schemes, combining selective demolition with sensitive infill and replacement, and remodelling of the better existing stock.



Redbrick Estate

Overfilling or realising dormant potential?

Successful infill development has usually been limited to underused and unloved parts of an estate: garages, parking courts, empty shops, tired community centres and neglected patches of open space. Even so, great care is required to replace lost facilities with better ones where these are truly valued and viable.

Currently, we are seeing campaigns of resistance to intensive infill, especially where it results in a significant loss of open space and other amenity (outlook, daylight, sunlight etc) or many more people using the same open space. This kind of opportunistic overfilling can alienate communities and result in poor long-term living conditions for existing and new residents alike.

Intensive infilling can alienate communities and result in poor long-term living conditions for existing and new residents.

Hopefully, recent planning policies (such as the London Plan's urban greening requirements) will prevent overfilling and fully recognise the value of open space for health and biodiversity. Successful regeneration projects use new green spaces and hard public realm to promote social integration by mixing residents of different tenures in the same attractive urban landscape.

The importance of usable hard and soft landscape for both mental and physical health has been amply demonstrated by the pandemic. The increasing densities required to make projects viable under current rules inexorably increase numbers of residents using the same amount of outside space, with consequent negative public health effects. Informal interaction in shared space is an important means of counteracting isolation, which was already recognised as afflicting older people, and which Covid has shown to be equally damaging across all age groups.

Many councils now operate a policy of no net loss of open space. This protective measure can work in urban contexts, but may not be appropriate on suburban estates, where there may be very large amounts of unloved open space, which can legitimately be developed for new homes. We recommend a simpler national benchmark of at least five square metres per person (with an aspirational target of 10 square metres per person) of accessible and useful shared open space for the planned population of every regenerated estate.

Resident-led infill

King Square in Islington, North London, a popular 1960s estate with a proud history, is an example of successful infill with residents acting in partnership with the council. One hundred new affordable homes for social rent have been carefully woven into the fabric of the estate, with a further 42 private homes providing cross subsidy.

At first, local people did not want any development on their estate, but once the potential benefits became clear – more social housing for families and older people, public realm improvements and a new primary school – they began to engage and shape the proposals. They formed a steering group with local councillors, planners and the project development team, and they selected the architects through a competitive design process, choosing “the only ones who had listened to us”.

Working with the community on the type, location and tenure of new homes, while improving connections between new and existing public realm and the surrounding area, successfully avoided both unnecessary disruption and friction between new and established residents. (Case studies page 84).

Infill with surgical demolition

Sometimes a substantial infill site can be unlocked through justifiable small-scale demolition. The original Jolles House in Bow, East London, was a 1930s block of 12 small flats, surrounded by parking and grassed areas inaccessible to the wider estate. A vacant pub next door completed the site assembly, which took years of patient negotiation with residents, publican and council. The outcome is a sensitive infill development of 70 new apartments, integrated with their mid-rise neighbours to create a new landscaped courtyard. Ninety percent of the homes are for affordable rent and shared ownership. Generous access galleries provide social spaces and enable dual-aspect homes.

Wider estate improvements helped win support for the scheme from residents on the surrounding Bow Estate, who benefit from improved open space, including play facilities for all ages.

Old and new combined with public realm improvements for Poplar HARCA in Bow, London



Jolles House

Value of open space

Housing estates, and especially post-war modernist layouts, contain large amounts of open space, but it is often poorly designed, maintained and used – or worse still, abused. Open space was fitted in around the buildings rather than forming a legible urban framework of streets, squares and gardens. Nevertheless, local people become fiercely protective of apparently unloved open space when it is threatened by development.

At the Aberfeldy Estate in Tower Hamlets in East London, the existing green space was much loved but had few redeeming landscape qualities. The proposed scheme was developed around a strong green and blue infrastructure narrative, providing protected high quality open space with play, biodiversity, Sustainable Urban Drainage systems (SUDs) and social gathering spaces.

As discussed above, regeneration proposals which increase the number of homes on an estate should also increase the amount of open space. This is clearly very difficult to square with a process of densification, and it is one reason for the proliferation of tall buildings with small footprints.

Sometimes a reduction of open space can be justified by an abundance of nearby parkland close to the estate, but this should require clear evidence that such parks have surplus capacity.

Whatever the quantity of open space, regeneration must provide for a transformation of its quality and usefulness to the community it serves. It can be helped by the formation of residents' steering groups who may get involved in the design aspiration of these spaces through a co-design process.

Sharing open space

Housing estates, originally mono-cultural places for local authority tenants, have become mixed-tenure places, often with highly diverse residents. This is partly the incremental effect of the Right to Buy and partly the deliberate objective of estate regeneration programmes. It should not be necessary to state that shared open spaces should be open to all, like public streets and parks, but regrettably there have been examples of exclusion of tenants from spaces reserved for wealthier leaseholders. This results from the ill-considered logic of segregated management and service charge regimes. It is clearly divisive and should be prevented through the planning system.

At the Lilian Baylis Estate in Kennington, South London, the developer had originally built a wall dividing the estate, which has since been removed. It was reported that families living in the social housing side were not allowed to use the play area or any communal spaces on the development. Tenure segregated play spaces are now banned in many places.



Everton Mews

Urban stewardship

People are taking more control over changes to their homes and neighbourhoods, and the top-down imposition of change, however well-intentioned, is no longer politically acceptable. The Community theme in this report builds on the earlier guidance in *Altered Estates* around community engagement and empowerment. This process needs to extend beyond the stage of planning and implementing physical changes and into the long-term management of the estate.

Whatever the quantity of open space, regeneration must provide for a transformation of its quality and usefulness to the community it serves.

The Grenfell disaster has highlighted the detachment of conventional management organisations, even those with tenant representation, from the people they are supposed to serve. We need to encourage more locally-responsive ways to manage and maintain estates, which provide residents with a sense of ownership and empowerment. Open space stewardship can offer easy access to management, employment and volunteering opportunities. Local management of open space can help kick start a process of levelling up left-behind estates: it requires modest but dependable levels of long-term central funding.

The cost of managing and maintaining green infrastructure, and its impact on service charges, needs careful consideration from the outset, and can be reduced through active volunteering by local people. It can also be triggered by the formation of residents' steering groups who may get involved in the design aspiration of these spaces through a co-design process.

Providing private open space

Rented homes on housing estates are usually fully occupied, and poorer households tend to spend more time at home than wealthier ones. Therefore, a private garden or balcony is especially valuable here, and even more so in the recent pandemic context and with homeworking likely to be a major long-term social change.

Most local authorities require private open space to be provided for new homes, although standards vary across the UK. The London Plan requires a private garden, terrace or balcony for every house or flat, with the size being proportionate to the maximum capacity of the home. This should be the default minimum standard for all new homes on estates across the UK. Furthermore, regeneration programmes should aim, where possible, to provide a private open space for existing homes: a common quick win is to privatise the curtilage of ground floor flats.

Play areas

Providing a wide range of play opportunities helps promote choice and interaction for children, but play areas must be served by safe access routes if they are to be used fully.

Developing more effective consultation approaches to involve children early on is critical to helping understand how young people view their estate, what they value most and where they play (often not the dedicated play areas). This helps build trust and provides a basis for working with children to plan and design more successful new play areas.

Children's play areas should be provided in all regeneration schemes that will be occupied by 10 or more children.

Meanwhile uses

Estate regeneration programmes usually require several phases of development and the largest can take up to 15 years. Temporary 'meanwhile' uses for buildings and open space can provide quick wins, which benefit residents from the outset of the programme and provide some compensation for the disruption, especially for those residents who may not be around to experience the permanent benefits.

Typical applications may be the repurposing of open space to provide play or amenity for particular age groups or the use of empty flats, car parks or other structures as community centres or workspaces. The process of realising these projects is also a great opportunity for community leadership and engagement, with wider social value benefits.

The Aberfeldy Estate in Tower Hamlets, East London, is currently 10-years into a 20-year regeneration programme.

The meanwhile use strategy here involved a 'Start Here' programme. This involved eye catching but light touch refurbishment works to inactive retail units with support to existing shops and recruitment of new innovative businesses to occupy vacant premises. This promotion is helping to increase footfall and business viability.

Placemaking dividend from the transport revolution

A revolution in how we move about has been triggered by behavioural change, transport infrastructure investment, commercial innovation (such as Uber), technical innovation (such as electric vehicles, including e-bikes and e-scooters) and environmental awareness and regulation. Car use and car ownership on well-connected urban housing estates has reduced greatly, and under-utilised car parks and garages are a prime source of development land for local authorities seeking to increase housing supply.

Larger estate regeneration projects can potentially support a multi-modal transport hub, where bus stops meet scooter hubs, cycle areas and electric car charging points. Click-and-collect points will also reduce vehicular traffic via a reduction in last-mile delivery trips.

However, this process is more limited, and will come much more gradually, on suburban estates remote from town centres and public transport. Here, car parking remains a major factor in the design and management of existing and regenerated places, which often suffer from inadequate parking provision, leading to inconsiderate, visually intrusive and sometimes dangerous over-parking.

Rationalising car parking

Even in these challenging circumstances, estate regeneration offers an opportunity to rationalise car parking and integration with green landscaping – and for an open dialogue with residents to promote more sustainable and healthier ways of moving around. Where high levels of parking are provided, there should be a long-term strategy to monitor actual uptake and convert parking areas to more beneficial uses – homes, open space, community or workspace – where there is a demonstrable reduction over time.

Engagement should be preceded by surveys of movement patterns, parking audits and the actual usage of garages (they're widely used for general storage rather than parking). Existing residents will often demand re-provision of existing parking levels, and it may be right or at least expedient to concede this. However, incoming residents can be required to enter car-free agreements, provided alternative forms

of transport are genuinely available, including car clubs, cycle hire schemes and public transport.

Streets are for people

Post-war estate planning often erased the traditional street in favour of segregated zones for people and vehicles, including raised walkways and 'streets in the sky'. Estate regeneration provides an opportunity to reinstate streets as the primary focus for collective movement, social life, recreation and play. Reduced car dependence, as addressed above, further encourages the reallocation of space away from highways and parking towards shared surfaces, cycle ways, street tree planting and SUDs – some call this 'road dieting'.

At Portobello Square, in Notting Hill, West London, Victorian Streets were re-established, ensuring the development reintegrates with its immediate neighbourhood. (Case studies page 86).

Urban greening

The 2020 London Plan introduced the Urban Greening Factor (UGF) for major development proposals. It is intended to prevent over-development and promote health and wellbeing, and it can provide a useful framework for assessing existing and proposed conditions on estates across the UK.

The UGF provides a baseline for the amount of green cover that a regenerated estate can be expected to achieve. It covers a wide range of elements (including street trees, green roofs, green walls, and rain gardens) and potential benefits to amenity space, biodiversity, sustainable drainage, and the urban heat island effect.



Aberfeldy Estate

Green space supports the ecology and biodiversity of an estate, and are often highly valued by residents. Regeneration proposals should identify and retain existing habitats and other features of biodiversity value, and where possible provide a net gain.

If the overall benefits of regeneration are considered to outweigh harm to the biodiversity of the estate, then mitigation measures will be required. This could include a biodiversity off-set strategy through new or improved habitats elsewhere.

To reduce impacts on existing surface water drainage systems, a Sustainable Urban Drainage strategy needs to be considered from the outset, especially on estates which may be vulnerable to flooding. Avoid thinking about these elements in isolation and consider opportunities to increase the amount of greenery and biodiversity. Play activities can often be integrated into the design of these elements. Early engagement with the relevant water authority is important to ensure that management, maintenance and installation issues can be resolved early on.

Communal food growing can promote healthy lifestyles, social cohesion and learning about the natural world. Where space is tight, consider using green roofs for food production and incorporating food growing areas in community centres and schools.

At Vaudeville Court in Islington, North London, communal gardens surround the scheme. The gardens are shared with residents of the adjacent tower block and are run by the tower's gardening club. As such, the gardens create a means to 'grow' two neighbourhoods together, as well as dealing with ongoing management and maintenance issues.



Vaudeville Court

Recommendations

- 1. Provide at least five square metres per person of accessible and useful shared open space for the planned population of every regenerated estate – and where possible aim for at least 10 square metres.**
- 2. Provide private gardens or balconies for every new home on estates across Britain in accordance with London Plan standards. Wherever possible extend this standard to existing retained homes also.**
- 3. Prioritise public realm management by residents, including opportunities for employment and volunteering, within the social value strategy for every estate.**
- 4. Monitor changing travel patterns and plan for a future reduction in car ownership by designing parking areas for potential conversion to open space or other beneficial uses.**
- 5. Implement quick win strategies for temporary community use of open space and buildings awaiting regeneration in programmes of five years or more.**



The photo shows Robin Hood Gardens in Poplar, an iconic modernist estate which is undergoing a programme of demolition and redevelopment following a long campaign to save it. This story illustrates several themes of *Altered Estates*: the challenge posed by the 'heroic' experimental architecture of the period, now in poor physical condition; the densification required to replace it under a cross-subsidy funding model; the arguments for retro-fitting existing buildings to benefit from their embodied carbon, versus the high operational and upgrading costs to improve their environmental performance. Add to these themes the opposing views of conservationists, who fought to retain the estate, versus residents, who wanted it gone – and the outcome that a fragment has been reassembled in the Victoria and Albert Museum. With climate change and retrofit now much higher up the agenda, it is interesting to wonder what would happen if the arguments were re-run today.



To rebuild or to renovate is a climate change question

Addressing climate change

Climate change and the energy crisis have propelled one question to the top of the estate regeneration agenda – is it better to rebuild or renovate?

Climate change has come into sharper focus over recent years, and since the publication of our first report there has been considerable groundswell to rethink regeneration with a stronger approach to sustainability. The ‘Delivering sustainable outcomes’ chapter in *Altered Estates* focused on a holistic approach to sustainability, and considered the social and economic benefits of regeneration and building new homes, alongside the environmental impacts. Action to mitigate climate change is now an imperative and may need to take priority over other objectives.

Government has enshrined in law the goal of the UK achieving net zero by 2050. Many of local authorities across the UK have declared a climate emergency, with a number focusing on achieving net zero carbon by 2030. Many housing associations meanwhile will need to demonstrate how they will meet the 2050 net zero target through their development and maintenance programmes.

The standards for new and existing homes have been raised above current Building Regulations by many local authorities and housing associations. They are committed to delivering zero carbon, adopting Passivhaus or equivalent standards and, in London, using the London Energy Transformation Initiative (LETI) targets for new build and renovated homes¹⁴.

There is certainly much to be done: at least 20 million of the UK's 27 million homes do not even meet current Building Regulations, let alone the proposed 2030 performance targets. The rising cost of energy has taken over 13% (3.8 million) households in England in fuel poverty,¹⁵ with this number only set to increase as energy costs continue to rise as a result of the war in Ukraine and other factors. A good proportion of these people live in stock owned by housing associations and local authorities.

Meanwhile, the carbon emissions generated in construction and embodied in materials have become a bigger part of the equation, and the agenda has widened to include considerations around embodied or whole-life carbon, and the circular economy.

In looking to provide energy solutions for those on fixed and low incomes, housing providers have to strike a fine balance. They need to find affordable and reliable energy sources, while energy costs are rising rapidly and supply is not secure. Yet renewable energy infrastructure is still relatively expensive, though that is improving as demand increases.

All of this feeds into the debate around replacement versus renovation of homes on estates. In this chapter we examine the arguments on both sides, what landlords and advisers need to consider in making their decisions, and the options to suit different property types.

New-build homes in a redevelopment or infill scheme should exceed Building Regulations and achieve whole-life net zero.

Renovation extends the life of existing stock and should make it more affordable to occupy. It does not usually provide more homes, although remodelling can achieve a modest uplift. If it can be done with residents remaining in occupation, or moving out very briefly, then the disruption is more manageable. This approach contrasts with the typically very long timescales, and inevitable disruption, associated with redevelopment. Just now, the balance may therefore be shifting towards more short-term pragmatic solutions and away from long-term ideal outcomes.

Redevelopment versus renovation

The case for redevelopment

The starting point for *Altered Estates* was the need for more homes, across all tenures, as well as the need to create better homes, and the contribution which estate regeneration can make to meeting local and wider

Sustainability criteria

A comprehensive framework for large-scale projects would include over 40 criteria to test and measure the sustainability of an existing estate and compare this with a range of options for change.

The four main criteria are:

- Operational energy
- Embodied carbon
- Water usage
- Environmental comfort, health and wellbeing

Others include:

- Location and proximity of transport, local services and amenities
- Adaptability and accessibility
- Safety
- Private and shared external space
- Biodiversity
- Noise
- Air quality
- Microclimate
- Flood risk

needs. This is very much our goal in *Altered Estates* 2. The need is only likely to increase as the impact of climate change hits harder on parts of the world where extreme climate conditions are already displacing communities, and our local authorities need to be able to assist in re-settlement.

Local authorities, and some housing associations, hold extensive stock in need of modernisation or replacement. Redevelopment creates an opportunity to provide more homes, and to a significantly higher standard, in terms of energy-performance and many other criteria. New-build homes in a redevelopment or infill scheme should exceed Building Regulations and achieve whole-life net zero. New homes should also provide better environmental comfort, including the mitigation of overheating. This has implications for orientation, layout, ventilation, window sizes, shading, and floor to ceiling heights, some of which may add to the capital costs.

Large-scale regeneration projects will change a place substantially for the long term: increasing the density of homes and the number of residents; in turn creating demand for better commercial and community facilities; improving the street layout; and supporting new sustainable energy infrastructure. Complete redevelopment can mitigate climate change, and can be carbon positive (that is generating a surplus of energy) as well as delivering a wide range of sustainable benefits for communities. Only some of these benefits may be possible with renovation, as the layout and scale

of the existing buildings will substantially limit the scope for change.

Even after renovation, existing buildings tend to continue to emit more carbon dioxide than newly constructed ones. Analysis of some estates concluded that, over a 60-year life, the carbon dioxide emitted per family per year is lower in redevelopment options than in refurbishment options, provided that there is a substantial uplift in the number of homes, and the construction minimises carbon dioxide emissions. In any event, before a redevelopment programme can receive the green light, a detailed analytical report is required, which sets out the case for redevelopment by clearly demonstrating the life-cycle carbon savings from new build over retention.

The case for renovation

It is clearly unrealistic to rebuild all existing homes on estates, which do not meet the targets required to mitigate climate change. The conventional cross-subsidy model cannot stretch to replacing, let alone increasing, our existing affordable housing stock, and in parts of the UK where property values are low, the viability of reconstruction is even more challenging.

A comprehensive funding programme is needed to enable energy efficiency and other climate change mitigation improvements to estates.

Some local authorities and registered social landlords are taking a long-term view, choosing to invest in refurbishing homes and extending their life by many decades, potentially for another 100 years. In London, the 33 boroughs have been working together to develop their pan-borough Retrofit London Housing Action Plan (July 2021)¹⁶. They recognise that there is an imperative to act and meet climate change targets, and that this can also benefit the health and wellbeing of tenants. They also acknowledge that the money for energy saving measures and other improvements will have to come from many funding streams: local authority Housing Revenue Account; central government grants and incentives; private sector investment with Environmental Social and Governance (ESG) targets, including emerging products such as Energiesprong¹⁷. Cross-subsidy from private sales is unlikely to contribute to the cost of full renovation, and will not deal with the problem of leaseholders and Right to Buy owners (who may be absentee landlords), unable to fund or even contribute to a programme of major improvements.

This issue is particularly acute away from London and where property values are low.

Renovation to net zero standards

The regeneration of Woodside Flats, Cedar Street, Glasgow, for Queens Cross Housing Association tackles fuel poverty while exemplifying a shift to renovating high-rise housing. It is an example of holistic renovation which achieves close to EnerPHit¹⁸ net zero carbon standards.

The architects worked with Passivhaus principles as a fabric-first approach to reducing energy demand. Heat and power are provided by grid electricity, and high-efficiency hot water cylinders enable residents to access off-peak tariffs. By renovating rather than demolishing, the associated whole-life carbon is closer to net zero carbon than most new builds.

All three blocks have improved low-energy lighting, new insulation, ventilation, modern controllable heating and hot water systems, and triple-glazed windows. At the request of the tenants, 'winter gardens' were created by enclosing existing balconies to enable use all year round, as well as safe spaces for children to play and for residents' communal activities.



Woodside, Collective Architecture

A comprehensive funding programme is needed to enable energy efficiency and other climate change mitigation improvements to estates. This should run for a minimum of a decade, to enable industry to develop trust in the approach and to scale up its supply chain. Carrying out works piecemeal is technically difficult and expensive.

To achieve long-term benefits in refurbishing existing homes, they should meet at least Energy Performance Certificate (EPC) rating C and aim to achieve an EPC rating of B. Insulating existing buildings is the best way to save residents money, to improve their comfort, to protect them from energy price rises, and to enable them to improve their quality of life in the round. Insulating buildings externally is cheaper, less technically challenging and can be implemented more easily than internal insulation, with less disruption to residents.

However, external insulation and cladding systems do not always improve the appearance of buildings, especially the earlier generation of attractive brick-built homes from the 1920s to 1950s, some of which are now in conservation areas. We need a national discussion and comprehensive guidance on changing



Woodside, Collective Architecture

the appearance of buildings to lessen the risks of climate change.

Funding for leaseholders (and freeholders of houses on estates, acquired under the Right to Buy) needs to be included in the programme, as many don't have the finances to pay for capital works to their property, and this prevents the application of cost-effective measures at scale.

Regardless of the funding source, the cost of renovation and remodelling would be substantially reduced if the 20% VAT rate was reduced or removed from all renovation work. We welcome the Chancellor's commitment to cut the 5% VAT levelled on PVs, insulation and heat pumps to 0% for five years. But this does not go far enough.

How to compare different options

	Maintenance	Renovation	Redevelopment
60 year life	x	x	√
Energy saving	x	√	√√
CO2 emissions	x	√	√√
Overheating	x	√	√√
Water use	x	√	√√
Surface drainage	x	√	√√
Biodiversity	x	√	√√
EV adaptation	x	√	√√
Cycle parking	x√	√	√√
Material use	√√	√	x

Age and type of stock

The decision to replace or renovate existing homes will of course depend on their age, type and condition.

There was a significant programme of extensive refurbishment and remodelling in the 1980s and 90s, and many of these homes now require further upgrading. The second wave of improvements, 'Decent Homes', has come and generally gone. While the 1980s refurbishments aimed to radically modernise much older stock and bring energy performance up to contemporary standards, the Decent Homes programme did not usually address energy beyond replacement of windows with better double-glazed ones (although the typical plastic frames have a limited life). Decent Homes provided residents with new kitchens and bathrooms,

but left many issues still to be resolved. A planned future Decent Homes-type programme may, however, go some way to solving these.

Older solid brick flat blocks are often in sound condition, and suitable for further renovation, but later stock, from the great council house building programmes from the late 1950s to 1970s, is now reaching the end of its planned 60-year life. These homes require significant intervention to provide comfortable energy efficient homes for future generations.

That said, Parker Morris space standards mean that many homes of this era are more popular than later housing from the 1980s and early 1990s when space standards were generally reduced. However, the investment in renovation without an increase in revenue from the upgraded properties, combined with current VAT legislation makes wholesale renovation a difficult choice to make from a financial perspective.

There is a dichotomy between preservation of buildings of merit and sustainable change for climate.

Homes from the 1960s through to the early 1980s built using non-traditional construction methods have many other inherent disadvantages of layout, performance and adaptability which means they are more likely to be demolished and rebuilt than older, traditionally built homes.

Many existing homes are fed by gas heating and hot water systems, and with the planned ban from 2035 on gas boilers being installed (to reduce carbon emissions), it will be prudent to consider futureproofing heating systems during any regeneration project.

Location

Location is another important factor in considering how to minimise whole-life carbon, and create more sustainable places to live. Existing low density homes close to good transport and facilities could be replaced with many more homes at a higher density which will perform much better over a 60-year period. In less well-connected places lower density homes may be worth refurbishing, providing the construction is basically sound – even though such places are more dependent on car travel.

Disruption

A key consideration in retaining and refurbishing occupied homes is the ability to carry out the works without impacting unduly on the daily lives of residents, while making significant improvement to the building performance and extended life expectancy.

External wall insulation, new windows, roofs and communal heating systems can all be installed, but ventilation systems will also be needed which can be more disruptive internally.

From now on, existing homes should be appraised on a whole-life carbon basis and compared to new homes.

From 2025, under the Future Homes Standard, all new homes will be expected to not use gas and be 'net zero ready' in terms of Building Regulations regulated emissions¹⁹, and many local authorities are already demanding it. Our view is that all new housing should aim to be net zero from now onwards, and furthermore it should not just consider regulated emissions, but all related whole-life emissions. This is reasonably straightforward to achieve for street properties. Flat blocks are more challenging, and for urban areas net zero whole-life carbon will likely require additional offsite renewable energy generation, with carbon offset as a last resort.

The circular economy

Minimising wastage by making the most of the significant embodied carbon in the millions of existing homes across the UK, is one step towards achieving the circular economy. If replacement is the best option, projects should assess whether materials from dismantled buildings can be re-used on this site, or others nearby, and recycled. This will reduce future material shortages, and wasting materials in landfill, with its associated costs. Re-using materials can also add to a unique sense of history and character by incorporating recovered materials into the new housing.

However a big issue for reusing materials is the need to prove their performance and provide warranties. At the very least we should be reusing non-contaminated materials in external works: base layers for paths and hard landscape, creating places for play, and integrating seating, planters and other elements created from recycled materials.

Moving towards modern methods of construction, which are designed for disassembly and re-use, will start to make a difference. However, at the moment traditional construction can be more cost-effective than many offsite construction systems. This is likely to change for higher density projects or where there are complex site logistics that make traditional site operations difficult. There is the added benefit from high levels of prefabrication where new homes can be erected much more quickly than traditional construction, reducing the disturbance to residents.

A case for renovation of well-located and connected homes in a conservation area

Clarion Housing Group is radically remodelling and refurbishing four blocks at the 100-year-old Sutton Dwellings near London's Sloane Square, and transforming the estate to become a multi-generational community.

Very small flats are converted to create 100% affordable rented one- to four-bedrooms flats, including wheelchair adaptable flats, and making all homes suitable for older people.

The renovated homes will have very low energy demands and will be heated with ground source heat pumps. New double-glazed windows will improve natural ventilation and daylight, as well as improving energy-saving performance by 57%.

The external solid brick walls will be insulated to a level which balances energy saving with fabric performance, and with improved airtightness and mechanical ventilation with heat recovery, there is calculated to be a 38% reduction in carbon emissions.



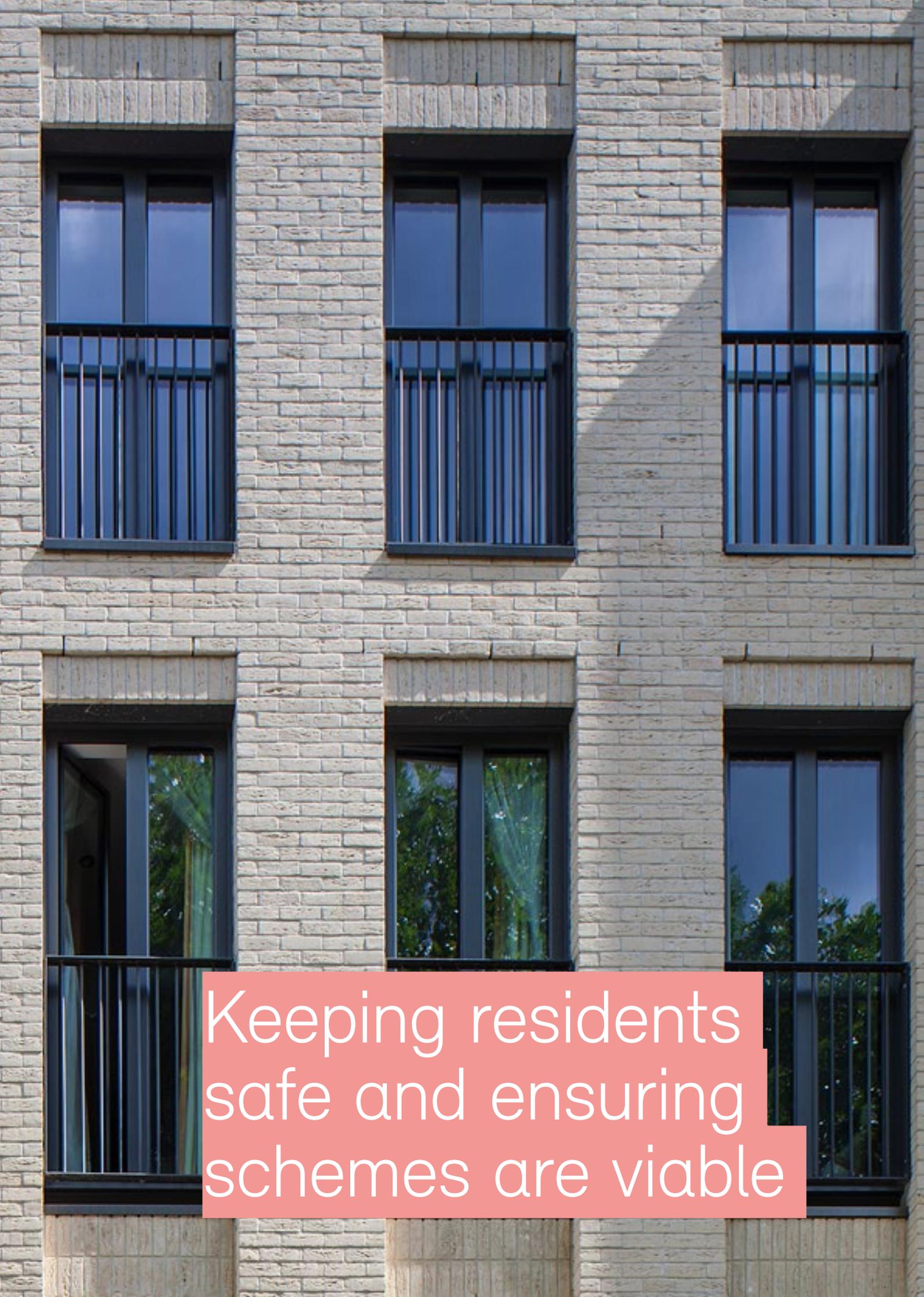
A case for redevelopment

The third phase of the regeneration of Gascoigne Estate, Barking and Dagenham, is an opportunity to demonstrate comprehensive transformations to mitigate climate change: a fabric first and whole life carbon approach has been taken to achieve net zero carbon, with maximised PV panels, LED lighting, minimised water usage and a façade design to balance daylight, energy, noise, ventilation and overheating issues. It is a car-free development, circular economy principles have been adopted. There will be net biodiversity gain with the creation of new habitats which will improve air quality and an urban greening factor of 0.4. A rain garden SUDs infrastructure has been incorporated with cycle paths. Structures have been designed to minimise the impact of concrete and local suppliers will be encouraged.

Recommendations

- 1. Social landlords need to conduct a holistic appraisal of the long-term future of every estate, including a comparison of the costs and benefits of alternative energy efficiency and climate change mitigation strategies.**
- 2. Government and social landlords need to prioritise alleviating fuel poverty and providing affordable warmth for low-income households by upgrading the energy performance of existing stock.**
- 3. Government should scrap the VAT levelled on renovation and remodelling to bring it in line with new build. The recent announcement of a 0% VAT for five years on PVs, insulation and heat pumps does not go far enough.**
- 4. Government needs to set out a comprehensive long-term funding programme for energy efficiency and climate change mitigation works to existing social housing and private stock.**





Keeping residents
safe and ensuring
schemes are viable

Delivering responsible regeneration

Keeping residents safe and ensuring schemes are viable.

The UK's socio-economic environment has transformed more within the last five years than in the previous two decades. The twin forces of Brexit and Covid have significantly affected all areas of commerce and in the way we work and live. For construction, escalating labour and material costs as a result of shortages or breaks in the supply chain or both, are now adding to procurement challenges facing housing developers.

But before these two upheavals occurred, the industry was reeling from the aftermath of the Grenfell tragedy, the tremors of which are still dissipating and will force change in design, procurement, construction and housing management.

This chapter examines this altering environment and the impact it has on estate regeneration. It looks at the procurement challenges facing the social-led developers of housing estates. It highlights the barriers to quality that remain within the housing sector despite the shock of evident lapses at Grenfell. It also describes the post-Grenfell regulatory environment from a procurement and delivery stance and how this will change the way we deliver projects.

The legacy of Grenfell

The Grenfell tragedy of June 2017 was an unprecedented disaster which should never have happened. Many lessons have been learned as a consequence and the impact on the sector has been significant. An on-going programme to confirm the safety of multi-occupancy residential buildings will now be continuous for the life of the buildings. New legislation has been introduced and more is on its way. Though much of the new regulation is aimed at new and existing relevant buildings of seven or more storeys (or 18m and over), some parts such as building control reform and the requirement for dutyholders will relate to residential buildings of all heights. We expect and recommend that some of the proposed requirements for tall buildings such as the Golden Thread and Digital Record will be adopted informally by many clients for medium and lower rise buildings.

The new build development programmes of many housing providers have been badly disrupted by the diversion of finance and human resources to the urgency in making buildings safe.

This disruption will continue for several years, complicated by the complaints of leaseholders and shared owners of apartments within tall buildings who are frustrated by the delay in the remediation of fire safety defects and who cannot move because their property has no value and no one will buy it. It remains to be seen if recent announcements by the government will address leaseholders' concerns.

Going forward, many in the industry will have to expand their building safety knowledge and prove they are competent to work on the design, construction and occupation phases of residential development. Clients' duties will be reinforced. The new building safety legislation will also introduce new procedures such as gateways during the design and construction process and periodic safety cases for existing relevant buildings.

However, most important are the residents and the need to prioritise their safety. There is now a specific need to ensure that residents are properly communicated with, informed, educated and consulted on all building safety matters from the outset of a regeneration project and onwards during the occupation of the development. Building owners will become Accountable Persons under the proposed Building Safety Act (The Building Safety Act is expected to receive Royal Assent later in 2022) and they will be responsible for the safety of those in the building in relation to fire and structural risks, and will also have duties with regard to communicating with residents safety.

Safety legislation

Residents' voice

Meeting residents' needs is why we design and build homes. Estate regeneration projects commence with the collection of intelligence on how residents live their lives. This is the start of a process which leads to a site-wide masterplan which addresses amenity provision, connectivity to the surroundings, community needs, building layout and building performance.

There is now a greater need to consider the safety of the residents, how they may respond to a safety incident and how emergency services can best provide support during that incident. Consultation strategies must now include building safety and actively engage residents in discussions about safety concerns in the existing buildings and infrastructure and must consider the needs of the more vulnerable people within the community.

At the outset of a project, responsibilities must be defined amongst the design team.

As new buildings are being designed, engagement with regulators such as the fire and rescue service must take place at the outset, to ensure that design proposals are compliant and appropriate. It is expected that the formal resident engagement strategy required for buildings that are within the scope of the Building Safety Act will also be applied by many building owners for lower rise residential buildings which may fall outside the scope of the new legislation.

The Building Safety Act, as it currently stands, includes reference to residents' feedback and evaluation of risks post-occupation, with specific duties set out. This aspect of residents' voices will become an important part of the improvement required in the delivery and servicing of residential development. We address the topic of post occupancy evaluation in the Building community support chapter (page 24).

Responsibilities and competency

The directions of the Building Safety Act need to be addressed now as we await the fine tuning which will hone the legislation. The underlying principles of the legislation are to improve safety outcomes and responsibility for safety so that those who undermine it by lack of competence or behaviour, can be held accountable. These principles should be adopted without waiting for legislation to be rolled out. In fact, the industry should have been practising them historically as standard without the Grenfell catalyst for improvement.

The client has a formal duty to appoint competent professional advisors, including a Principal Designer (PD) and Principal Contractor (PC). The PD and PC will be appointed for tall relevant building projects under the CDM Regulations, but their duties are much greater and therefore so is their required expertise. Considerations will focus on appropriate expertise and experience in regeneration projects but importantly, also on building safety knowledge and its implementation during the design and construction stages.

At the outset of a project, it is imperative that responsibilities are defined amongst the design team, particularly with regard to building safety matters and as the project progresses with new team members, including the contractor, that responsibilities are reviewed, redefined as required and allocated.

Retained buildings

Regeneration will have a greater focus on building retention and re-use for environmental reasons and as such, existing buildings may well pose greater safety risks than newly designed buildings which are built to current regulations, as the Grenfell experience demonstrated. There will therefore be a need for the design team to have expertise in existing building

adaptation to ensure that the inherent risks are removed or mitigated. Those risks may not only be related to fire safety or structural integrity but are likely to include, for example, protection from falling, thermal performance, hazardous materials and electrical safety.

The Golden Thread

It has become clear since Grenfell that there is very little recorded information about many of our existing residential buildings, even those completed relatively recently. This lack of information can be a hindrance in an emergency situation and can prevent assessment of the safety of a building. It is therefore proposed as part of new legislation that all new and regenerated buildings have a Golden Thread of Information.

The Golden Thread is a record of all key documentation from the design, construction and occupation phases of a building. This information is critical at all new gateway stages that buildings in scope of the legislation will need to go through to get approval to progress to the next stage.

These new approval gateways are being introduced so that enhanced information is provided by the developer at key stages of project procurement to the Building



Geoffrey Close Estate



Portobello Square



Regulator who for tall relevant buildings will act as the building control authority. The gateways are as follows:

- Planning Gateway one – at the planning application stage
- Gateway two – before building work starts (replaces the Building Regulations application)
- Gateway three – when building work is completed and prior to occupation

The gathered information will include specific details on products and systems installed in the building where they are deemed to be safety-related items.

Though it may not be mandated in the legislation, the Golden Thread format is likely to be best served through the adoption of Building Information Management (BIM) and its principles for information management. Materials and components can be location tagged in the model with relevant product information as well as test and performance certificates.

On estate regeneration projects involving higher-rise buildings, it will be highly appropriate to create such asset-rich models of both the new and the existing retained buildings. Existing buildings can be laser scanned and a BIM model created, this is particularly cost effective when the building has no record of drawings. The principles of the Golden Thread of Information may well go beyond that related to safety, as building owners see the advantages in its use for asset management, resident engagement and in demonstrating compliance on a continuous basis into the future.

Market difficulties

It has become increasingly difficult for design consultancies and contractors to operate in the post-Grenfell environment because of a dramatic increase in the cost of their Professional Indemnity Insurance (PII) premiums and a withdrawal of insurance agencies from the market altogether. For medium to large architectural practices specialising in housing, premiums have increased by a factor of three for some and for many it has been five-fold. The scope of cover has concurrently

reduced and some practices cannot secure any cover for fire-related claims.

These extreme market conditions are predicted to continue for some time, until insurers begin to regain appetite for providing cover to the sector. This is turning into a major headache for construction firms, consultants and materials suppliers, with some being forced out of working in this market. This will add to cost pressures for clients as it becomes a suppliers' market and clients will see cost rises in PII passed on.

Funding and procurement

Viability

Shortages of land, and the continued buoyancy of the housing market is pushing up land prices. The demands of clients to push residential density to the limits of policy are therefore greater than ever, reflecting the pressure on commercial viability faced by developers. This pressure has increased the number of buildings which exceed 18m in height and therefore come under scrutiny of compliance and fire safety. One of our case studies, Portobello Square in the Royal Borough of Kensington and Chelsea (Case studies page 86) for example, is a model of appropriate density measured against its physical context and the due process of a conservative planning authority. If this masterplan was being designed today, the density that was achieved back in 2017 would be considered inappropriately low, even though in terms of its urban design and architectural approach, it is beyond criticism.

Another of our case studies, Geoffrey Close Estate in Lambeth, South London (Case studies page 78) is pushing the density of an estate regeneration scheme on a confined urban footprint to the limits of what is possible within regulatory compliance and design guidance in an effort to achieve viability for a joint venture client organisation made up of a housing association and a private housing developer. In order to re-house the existing tenants on the estate and achieve financial viability, dwelling numbers will increase by a factor of 3.3.

The cross-subsidy model works at Geoffrey Close. Beyond the South East, where values are relatively less and density options more restricted, estate regeneration is far more challenging if not impossible without the aid of significant grant funding.

Controlling cost

The pressures on developers and viability issues are adding to the importance of robust cost planning. Clients are placing more emphasis on employing cost consultants who can work within a BIM environment and who can discern the relationship between cost and value.

Design and build has little provision for governing standards of workmanship or inspection during construction.

More enlightened clients are addressing capital cost control concurrently with operational cost planning, actively commissioning digitally mapped specifications which help control long-term maintenance and asset management costs.

Many client organisations however, have yet to make this elemental leap, partly owing to ignorance and partly to a lack of the requisite skills within respective organisations. There are significant efficiencies yet to be achieved in the sector.

Project cost plans remain largely out of reach of the design team as there remains a lingering distrust of the architect in UK procurement, even though the majority of UK housing delivery models impose strict parameters on designers. Open-book cost planning is a minority event even though it usually results in better working relationships and better buildings.



Housing Forum - Better Procurement for Better Homes

Increasingly, registered housing providers (both housing associations and local authorities) are turning to joint venture arrangements to deliver regeneration on their estates, even on relatively small capital programmes. This has the advantage of substantially defraying the risks prevalent in developing at scale whilst bringing private sector professional development expertise, including capital cost management, to the development team.

There is much more work to do here in controlling operational life-cycle costs because on many of these joint venture arrangements, the private sector entity falls away at handover, much like conventional development agreement models of procurement, leaving the registered provider to act as the sole building manager of the rental element of the project.

This lack of buy-in from the private sector presents risks to the inherent quality of the asset to be managed in perpetuity which registered providers need to counter through professionally monitored and embedded digital design and management techniques or by tying the private entity into longer periods of management liability.

Controlling quality

The holy grail of housing design in the UK, quality, remains out of reach in too many instances. Housing providers have tightened procedures out of necessity, principally in relation to fire safety, with enhanced site inspection regimes and more prescriptive specifications and Employer's Requirements. However, the nature of the pre-dominant vehicle for housing procurement under design and build leaves too much to chance, resulting in substandard architectural designs being constructed.

The design and build form of contract has little provision for governing standards of workmanship or inspection during the construction phase. This apparent weakness has been exacerbated by the division of responsibility, particularly amongst housing associations, between those in the development team whose role it is to secure planning consent, and those who see the project through to construction and handover. This leads to a loss of ownership or stewardship of the key aspirations of the project in relation to quality, as the gatekeeper of these aspirations often no longer has a role on the project.

This gap in oversight and stewardship is still being exploited by unscrupulous contractors who generally prefer that the pre-planning design team be discontinued. Whilst more clients are extending the role of the architect into RIBA Stage 4 and employing them as design guardians during the construction phase, this remains a crucial barrier to achieving quality in the built product.

Beyond our urban centres, standard housing products are being plastered, cookie-cutter style, upon the edges of our urban settlements with no regard for context, from Norwich to Falmouth.

Estate regeneration has largely escaped this mono-aesthetic as the delivery process usually requires a bespoke design approach which is heavily informed by community engagement. New challenges will come however from the commercial pressures to create standardisation and factory assembled components and modules. These challenges will not come from the products themselves but rather in their interface with conventionally constructed elements and with how they interconnect, particularly on their external facades to ensure long-term maintenance neutrality. A further challenge for designers will be in balancing standardisation of factory assembly with a desire to create local distinctiveness in the regeneration projects of the future.

These twin issues of cost and quality, including useful guidance on contractor selection, are explored in greater detail in the recently published document by The Housing Forum entitled *Better Procurement for Better Homes*.²⁰

Time to boost estate funding

In many areas of the country and for many estates the current reliance on a cross-subsidy model using private sector investment to finance regeneration is failing, as many of our clients attest. It is clear that many projects will be unable to apply best practice principles described in this report without some element of gap funding or pump priming to kick start programmes. This is compounded by the need to improve design quality through the use of design codes to ensure designs enhance rather than detract from local character, give a greater say for communities, meet new requirements to meet zero carbon targets and other emerging policy and legislative requirements.

The government focus on levelling up is welcomed and many estates, particularly those in low value areas and outside of London and the South East, will be identified as areas for redevelopment, part retention or full refurbishment. The relaxation of Homes England's 80:20 rule for distribution of housing investment that is focussed on 'high affordability pressure' set out in the Levelling Up White Paper should open the way for greater funding to plug gaps in business plans for marginal schemes and enabling more projects to come forward. A much-increased estate regeneration fund needs to be ring fenced to help deliver the levelling up agenda and the needs of communities on estates, more consistently across the country.

Recommendations

1. Promote continuity of client stewardship so that the client's design quality aspirations remain undiluted from planning through to building handover.
2. Define and continuously update the responsibilities of the client, Principal Designer, design team and Principal Contractor in relation to building safety.
3. Engage with existing residents with regard to safety where buildings are to be retained.
4. Develop competency programmes within client, construction and design teams to ensure that those working on projects within the scope of the Building Safety Act are appropriately trained.
5. Adopt BIM to enhance the Golden Thread of information and preserve the digital record of new and remediated buildings.
6. Look to optimise costs over the whole life by developing cost models that take into consideration maintenance needs, not just capital costs.
7. Promote open-book cost planning to include the whole design team.

The challenge of estate regeneration in the 2020s



Brendan Sarsfield, the Chair of Sustainability for Housing and former Chief Executive of Peabody, argues the lack of funding for regeneration is hugely short-sighted.

I have worked in housing for nearly 40 years and have always loved working on estate regeneration projects. They are difficult, time consuming and expensive but they can achieve so much in regenerating areas, communities, homes and the health of residents. The process can genuinely transform lives for the better, if done well.

It can take years to build trust, foster genuine resident involvement and create long-term pride and ownership of that process, but the result is worth the investment and the journey. They are long-term projects.

I think there are two fundamental drivers behind the myriad challenges of estate regeneration: finance and politics. They are inevitably political projects, and their financial viability is *always* marginal. I can't think of any that I've considered well-funded or without risk.

My favourite projects were Old Oak Estate in East Acton and Charlton Triangle Homes in Greenwich. Both were stock transfers of council estates to Family Housing Association in 1999. They both benefitted from a government dowry/grant plus a lot of money from Family Housing Association.

If we were risk-averse and financially driven, we would never have started these projects. At Charlton I remember we couldn't afford to replace lifts or roofs on most blocks. We took the view that with a fair wind, the financial plan might improve in year five onwards. Thankfully, interest rates reduced, and headroom was found. The benefits can be seen today and the positive impact for residents on the estates cannot be overstated.

The finances

Today estate regeneration is even more challenging than in 1999, and for the same reasons as ever. Dowries and grant are not available, and politics is becoming even more short-term and volatile. Many estates only have a chance of working financially with higher densities, possibly higher rents, and homes for sale to help cross-subsidise the investment. This is a function of a lack of funding and viability challenges. For example, in today's financing model, regeneration projects can only attract grant for the additional homes they add to an estate and not for those they are replacing or improving. The consequence of this squeeze on finances can be too many compromises and unsatisfactory outcomes for tenants. It can work, but it is very difficult. The delays end up exacerbating the financial challenges you faced in the first place while the people continue to live in unsuitable, inefficient homes that are not fit for purpose.

The politics

You don't get (or want) the credit for the risks you take, but they are necessarily long-term projects in a short-term political environment. You can involve politicians in the governance of a scheme, but it doesn't remove the politics. It doesn't necessarily improve the project either. Given the financial challenges, the necessary choices involved in estate regeneration can often be caught up in the political weather. The long-term vision and eventual benefits for communities are not always considered.

I should say I am a strong supporter of resident ballots where redevelopment is required. The support of people living there is rightly a prerequisite for estate regeneration. But unanimity is hard to find. Even where most people are in favour of redevelopment there can be hundreds of others and campaign groups who are opposed. This resistance would be less pronounced if projects were properly funded.

The situation now

If we stand back from this and think about the average life of an estate, you might expect an estate to have a big overhaul every 30 years and extensive regeneration every 60 years. Shorter time periods apply if there are design, layout or build problems. Now think of the council homes built since the Second World War and the housing association homes built since the 1980s. Based on these renewal cycles we should be seeing estate regeneration projects happening everywhere, but we aren't.

Too many people are living in homes that need investment or that have reached the end of their life cycle.

As I look around London now there is very little estate regeneration going on. I look outside of London and see even less happening because higher densities and the cross-subsidy model doesn't work when land values are low. The combination of financial and political pressure is preventing both redevelopment and regeneration at the exact time that it is most needed. Too many people are living in homes that need investment or that have reached the end of their life cycle.

I worry that the problem is set to get worse. Fire safety works and retrofitting historic homes to meet carbon and energy efficiency standards are new financial and resource obstacles for social landlords. This obviously reduces capacity and appetite to embark on costly development projects as well.

The effect of continuing with the current model, then, will be to effectively shorten the life cycle of homes and estates further. With less investment and capacity to maintain or redevelop, there will be more political turbulence and fewer satisfied residents. If estate

regeneration is going to work for everyone and with better outcomes and fewer compromises, there needs to be a fundamental change in approach and different funding models.

The government obviously supports the drive to net zero carbon and is reviewing the Decent Homes Standard so it is relevant to today's challenges. Ministers also know there needs to be additional commitments to help tackle the fire safety crisis, but all within the context of 'maintain' or 'minimum standards' rather than 'improve'.

I think the impact of these challenges on new housing supply (which housing associations and councils will put second) and the false economy of subsidising high private rents through the benefits system is now well understood in Whitehall too.

However, even if, or when, the government finally grasps this challenge we will then face a resource and cultural problem. There is a lack of skilled staff, in all disciplines, with the experience of delivering regeneration, and culturally, not many organisations are set up to co-produce development.

A better way forward

Perhaps then a different case can be made to government.

By funding the works as part of a wider post-lockdown housing and health strategy, which sees the links between all the housing strands and the health benefits that flow from that, we would once again prioritise public funding for estate regeneration. With a vision and the commitment to properly modernise housing in this country we could truly improve the lives of millions of people living in the UK, and also save the NHS and other government departments cash.

It is possible, but it will need vision and the political will to change the system.

Case studies

College Bank and Lower Falinge Rochdale



Aberfeldy Estate Tower Hamlets



Geoffrey Close Estate Lambeth



High Lane Ealing



Portobello Square RB Kensington and Chelsea



South Kilburn Regeneration Phases 4 and 6 Brent



Auckland Rise and other infill sites Croydon



Exeter Road Estate Enfield



High Path Estate Merton



King Square Islington



The Lakes Estate Bletchley, Milton Keynes



Wensley Road Reading





College Bank and Lower Falinge are adjacent estates in central Rochdale, Greater Manchester. Both suffer from poor housing quality as well as disconnection from their neighbouring communities and the town centre, with access to the centre hindered by an inner ring road with limited crossing points.

The estates, whilst built at the same time are different in character: College Bank consists of seven 17 and 20 storey tower blocks known locally as the seven sisters and Lower Falinge has a series of mid-rise blocks with poor internal access and pathways.

This is a regeneration project in an area where low land values rule out a cross-funding approach. For the project to work, funding is needed from a range of public sources. The current neighbourhoods comprise 1,203 homes although this total includes homes that are not habitable without major refurbishment. The regeneration includes phased demolition of around 600 homes. New provision will replace all of these and increase the overall number of homes as well as improve the quality and mix. The net gain of homes is around 400.

Community

One of the challenges of this project was to align the needs of these two distinct communities, one living in towers that they love but which are in poor repair and are expensive to maintain but are seen as a key feature of the Rochdale townscape. The other in lower rise blocks that are almost universally disliked. The result has been that residents of the two estates have been consulted at the same time but separately in order to capture and respond to the differing views.

Social Value

A major issue is that these two estates share one of the highest levels of unemployment in the UK. Underlying the regeneration therefore has been the need to address issues of social, economic, and environmental deprivation. Key to this is Rochdale Boroughwide Housing's (RBH) 'Resident's Deal' and a 'New Pioneers Programme'. The latter is a partnership between RBH and Rochdale Borough Council that provides tailored support and mentoring to residents combined with training and skills development to improve access to employment.



Place

The aim of this project is to create a distinctive place, building on the existing community while reimagining the character and identity of both estates and improving the quality of homes, streets, public realm and connections to the town centre and surroundings. The regeneration re-introduces streets that link with the historic street patterns surrounding the site and creates parks and open spaces that are well overlooked and located at the heart of the community. It is also part of a wider council-led regeneration of central Rochdale that aims to create links to the Rochdale Heritage Action Zone.

Given the extremely challenging viability of the project and the very real issues for many of fuel poverty, the new homes have been designed to minimise energy consumption, maximising dual aspect and with a focus on a low-tech, fabric first approach to design.

Delivery

Low property values in the area make cross-funding from private sales alone insufficient to deliver a viable regeneration project. To address this, various regeneration approaches were presented to the community, ranging from ‘Repair’ (the lowest level of intervention) to ‘Refresh’ (a combination of infill and repair) and ‘Rethink’ (the greatest level of intervention).

In addition to possible grant funding and cross funding, other sources of funding were also explored. As it is difficult to predict what funding will be available over the lifetime of the project, it was decided to work with the council to develop Supplementary planning documents (SPDs) that embed the design principles in planning policy and allow flexibility on delivery.

Local Authority

Rochdale Borough Council

Client

Rochdale Boroughwide Housing Limited

Architect

Levitt Bernstein

Landscape Architect

Levitt Bernstein

Planner

Avison Young

Dates 2017-current

Funding A combination of grant funding from a variety of sources plus some cross funding from private sale

Homes

Before: 1,203

After: 1,619

Demolished: 475

Constructed: 891

Net gain: 416

Density

Before: 120 homes per hectare

After: 162 homes per hectare

Tenure

This is evolving as the design and viability of the project evolves

Client's view

The difficult choices funding regeneration without cross-subsidy



Gareth Swarbrick, Chief Executive and Clare Tostevin, Director of Growth, Rochdale Boroughwide Housing, explain the complexities of regenerating these two differing but neighbouring housing estates.

Since 2016 Rochdale Boroughwide Housing (RBH), a tenant and employee-owned mutual housing society, has been working with the local community to address the challenges of College Bank and Lower Falinge estates. They had been transferred to RBH in 2012 with a host of social and economic problems, including water penetration, inadequate heating, noise nuisance and persistent crime. The sense of community had weakened steadily as locals departed and homes stood empty or were only temporarily made use of.

Conversations RBH had with the community led to a shared ambition to create a place that underpins a better quality of life. Not just through the quality and mix of homes but an improvement in the wider environment, with green space, street layout and street scene, as well as connectivity for walking and cycling – all of which would improve the physical and mental health of communities. It also meant feeling safe, good neighbourhood services and access to employment opportunities all of which underpin our people and place approach to regeneration.

Getting the right residential offer is critical for successful places. We know that local need, for larger family homes or homes for older people, does not fit with the current available supply of homes and the regeneration plans recognise that social housing is a critical part of meeting this need. We are committed to ensuring every resident who wishes to stay within the town centre area will be able to do so, in a home that meets their needs with the same tenancy conditions. We also aim to introduce home ownership options as an alternative to rent, so that those who live in the area and wish to own their own home, will in the future have that option available to them without having to leave the neighbourhood. And rather than be prescriptive about this mix from the outset we are taking

a phased approach, ensuring that all new development meets the principles of the masterplan in terms of design quality and place quality.

Resourcing regeneration is challenging and complex in any area. In some parts of the country, cross-subsidy from land sales can provide the finance. But the cross-subsidy model can lead to confusion of purpose: are you driving market sales to support regeneration or regenerating to generate value? In Rochdale this is not an issue. There is no cross-subsidy to be generated from land sales to support new build, redevelopment, or investment in existing homes.

Understanding the local market context is critical. Within central Rochdale a new build, affordable rent, two-bedroom house has a lower rent than a 1960s social rent high-rise flat. It can be cheaper (if you have access to a deposit and mortgage) to purchase a new build three-bedroom house with 100% ownership, garden and driveway than the social rent for a three-bedroom home on the next street.

Our plans are being delivered phase-by-phase with a combination of RBH and public sector resource. This is challenging to plan and may slow the pace of change, which is not helpful to anyone. There is no certainty and no driver for a private developer to build out homes at a premium to create a receipt for investment in the affordable homes or next phases of redevelopment.

RBH has committed significant resources, including £4m for land assembly, for example. We know that our focus on regeneration means there is less resource for developing new homes in other areas, but doing nothing is not an option. The neighbourhoods need investment and ignoring or delaying this creates long-term problems for both those living there and for RBH.

Work is underway on a phased approach to build replacement homes, with 55 new affordable rented homes due to complete in early 2022, and to refurbish homes in both Lower Falinge and College Bank with

budget provision for refurbishment of over £12m in the next three years.

The availability of additional public resource is also critical in supporting delivery. The original masterplan work was supported with £560,000 Estate Regeneration Fund grant. We have worked closely with the council on funding to support delivery including Towns Fund grant of £1.9m for land assembly and remediation and £2.3m for works on the adjacent highway which will improve connectivity to the town centre. The council has received £1.49m estate regeneration grant from the Brownfield Land Remediation Fund which is supporting rehousing, demolition of empty homes and garages, enhanced investment in the public realm and enhanced refurbishment of retained homes. A £280,000 Community Renewal Fund grant is helping us expand and enhance our New Pioneers Programme. A Homes England grant is supporting delivery of new affordable homes.

This critical public sector resource is helping us deliver on the significant local opportunity to shape a successful and sustainable place. However, some of this funding is very short term with a need to respond quickly to bidding opportunities and guarantee tight spending deadlines. The funding conditions from different government routes are not always consistent. A longer term, co-ordinated approach to funding and outcomes would enable stronger planning and reassure the local community with timescales and certainty. There is also potential to share expertise and learning across different partners. Homes England could have a key role here in supporting co-ordinated place shaping, bringing partner drive and challenge and, ensuring that available funding works harder and smarter.



College Bank and Lower Falinge



The Aberfeldy Estate in East London is bounded by the A12 and A13 roads which separate the estate from the rest of Poplar and Blackwall to the south and west. An original masterplan, which gained outline approval in 2012, set out a new urban village of 1,176 new homes, together with a community centre, nursery, shops, GP practice, and a significant linear park. The success of this masterplan saw it extended to include an adjoining estate and additional land parcels delivering a further 1,600 homes and a range of new facilities including workspaces.



Before regeneration

Community

The design process has been built on extensive engagement using a multitude of methods, including regular themed workshops, community meetings, narrative gathering, fact-finding events at local schools and sessions such as chutney making. Feedback on the design has directly influenced the masterplan, including the phasing, mix of housing, and design of the new park and play facilities. Consultation continued during the Covid-19 restrictions and included numerous online workshops with the steering group, walkabouts on site, street meetings, and a ground-

breaking 'Planning for Real' design exercise using posted physical packs and sharing of films made by each household on WhatsApp. As part of this, the design team based themselves in the 'Aberfeldy Shop' on the High Street. An overwhelmingly positive ballot was returned in 2020 with over 90% turnout and 90% support for the extended masterplan.

Social value

Young people from two local schools, residents and local businesses have been heavily involved in decision-making and design development. Business planning sessions with



local enterprises have formed the core of the process to rebuild the high street, ensuring a rich mix of new businesses with employment opportunities for residents.

Place

The extended masterplan creates connected green spaces and car-free routes to support cycling and walking, maximise biodiversity and provide various options for leisure and exercise. The new East India Park links the Culloden Primary School to the west to the new neighbourhoods, and River Lea to the east, enabling pupils and their families to walk along this green, safe, playable route, away from the A13 traffic.

Climate

Both masterplans have been conceived with sustainable design at their core. Buildings are designed with thermally efficient envelopes and take a fabric-first approach. PV arrays on upper roofs provide electricity for communal spaces, with green and brown roofs at lower levels. Sustainable water management and a rich biodiverse planting palette have been used

throughout. Future phases will utilise a centralised energy centre powered by air-source heat pumps, with homes being designed with Passivhaus principles, with a net zero carbon pilot project forming part of the next phase.

Delivery

The first three phases of the original masterplan delivered 901 homes. Their design draws heavily on the former industrial brick warehouses of the East India Dock to create new homes, community facilities and public space in the form of the new park – a new green ‘dock’ – which weaves in a swale to respond to the site’s location in an area of flood risk.

Feedback

POE and a thorough review of the delivered phases has been central to shaping the new, wider masterplan. The residents’ steering group and local young people have been particularly positive about the quality of homes and the design and safety of the new park.

Local Authority

London Borough of Tower Hamlets

Client

Aberfeldy New Village LLP (JV between Poplar HARCA and EcoWorld)

Architect

Levitt Bernstein (all) and Morris+Company (new masterplan) and ZCD (new masterplan)

Landscape Architect

Levitt Bernstein (original masterplan) and LDA (new masterplan)

Planner

Tibbalds (original masterplan) and DP9 (new masterplan)

Sustainability

Greengage

Dates

2012–ongoing

Funding

GLA and private sales

cross subsidy

Homes

Before: 546

After: 2,529

Demolished: 546

Constructed: 901

Net gain: 1,983

Density

Before: unknown

After: 227 homes per hectare

Tenure

Before: Social rent, shared ownership and private sale (leaseholders)

After: Social rent, shared ownership, build to rent and private sale (35% affordable by habitable room)

Auckland Rise and other infill sites Croydon, London



The programme delivered 175 new affordable, sustainable infill homes on four suburban estates across Croydon at a cost of £45m. A holistic masterplan across a variety of sites informed the project, leading to better use of redundant garage sites and left-over underused land and a much-improved public realm. Materials, details, and construction were carefully standardised across different sites, and each site was given an individual and distinctive character. Completed in July 2021, the project's funding derived from the sale of homes for shared ownership and private sale cross-subsidies.



Before regeneration

Community

Small infill sites are constrained and challenging, and drawing up the plan required close working with residents and council officers, who were consulted extensively throughout the design stages. Changes were made to the siting of the blocks of flats in response to comments and feedback during engagement sessions. This was to preserve mature trees and keep views open. Parking was an issue on all the sites and so redundant garages (which did not provide accessible parking) were removed, allowing existing residents

to benefit from improved parking, additional tree planting, play spaces, food growing places, new footpaths and lighting.

Social value

The project aspirations were to offer new affordable homes for local people, with 50% affordable and 50% private sale provided across each batch of sites. Children can enjoy a more active, healthy life as each estate now has safe, imaginative play spaces close to existing and new homes and integrated into the public realm.



Place

The original 1950s flats at Auckland Rise and Sylvan Hill were described by Nikolaus Pevsner as “good housing taking advantage of the trees on the site”. Our aim has been to carefully introduce new homes, similar in height to the existing flats, replacing redundant garages and left-over space. Existing mature trees and distant views are among the assets of this steeply wooded site, once the edge of the Great North Wood. At Ravensdale Gardens, a new landscape play space for all residents was created at the heart of the site, and new houses replaced the disused garages which had dominated the centre. All four sites have balanced the need for more homes with an appropriate scale, height and density for their context.

Climate

Sustainability is a key objective: the new homes have been designed to minimise energy consumption and maximise daylight and sunlight. Most flats are dual aspect, and the internal layout allows for views through, with windows in hallways and communal spaces. Semi-

recessed balconies provide generous private amenity and contribute to solar shading. New residents are encouraged to walk and cycle and use public transport, which is easily accessed adjoining the site.

Delivery

The sale of homes for shared ownership and private sale cross-subsidises the homes for affordable rent and the enhancements to the public realm. Panelised timber frame was selected for construction of Auckland Rise and Ravensdale Gardens, with good insulation and airtightness, and rationalised, vertically stacking plans. Tollgate and Longheath were built traditionally.

Feedback

The jury at the AJ Architecture Awards for Best Masterplan 2018 said: “This is a ground-breaking approach. The programme has created a strategy for maximising leftover spaces in the borough and making sure these were developed using an innovative model, which was at the same time ambitious for quality and equitable for the citizens of Croydon.”

Local authority

London Borough of Croydon

Client

Brick by Brick

Contractor

Quinn London and Henry Construction

Architect

HTA Design

Landscape Architect

HTA Design

Planner

Carter Jonas

Sustainability

Technology Centre Cast

Construction value circa £45m

Dates 2018-2021

Homes

After: 175 on 4 sites

Constructed: 175

Net gain: 175

Tenure

Before: n/a

After: 49% affordable, 51% market sale



The Exeter Road Estate is a series of 1960s mid-rise buildings and tower blocks linked by parking podiums, located on the edge of Durants Park in Enfield, North London. Following a period of extensive option appraisals in 2017, five potential development sites were identified all of which avoid the need for decant or demolition of existing homes. A total of 129 new homes will be built as infill blocks on underused land and as rooftop additions to the existing low-rise buildings, alongside new amenities and public realm improvements.



Before regeneration

Community

The proposals were developed over 18 months in close consultation with local planning and heritage teams and residents to ensure that the design created an appropriate transition between the existing tower blocks and the surrounding suburban two- and three-storey houses. The timing of the project coincided with the start of the Covid pandemic requiring a change in engagement techniques with more online.

Social value

All new homes will be affordable with more than two thirds offered at social rent. Over 45% will be for larger families providing three- and four-bedroom homes, reflecting the housing needs in the local area and re-balancing the existing provision of largely one and two-bedroom homes on the estate. From the outset the scheme sought to generate benefits for the wider estate. It provides secure cycle and car parking throughout, with the creation of new play spaces along the edge of Durant’s Park accessible to all in the local area.



Place

The proposals are based on strong placemaking principles using the new buildings and extensions to create a sense of place in an area which is currently fragmented and lacking in legibility. The design considers how the existing 'street', Exeter Road, can be enlivened by addressing its current lack of activity and animation. The proposal addresses the proximity and connectivity to Durrants Park by enhancing existing visual and pedestrian connections and creating a series of green amenity 'fingers' which bring the park landscape into the heart of the estate.

Climate

The council has sought to use the scheme to reduce energy bills for both existing and new residents, and to use landscape improvements to increase the ecological performance of the estate. Early ambitions to meet Passivhaus standards throughout proved unviable, so new buildings will use a combination of photovoltaics and communal air-source heat pumps to provide heating, with all homes designed

to meet new overheating targets through a combination of fixed external shading and secure opening vents next to windows. A highly sustainable drainage strategy has been developed for landscaped areas throughout the estate which will link into a new wetlands area in Durants Park developed by the council.

Delivery

The scheme is designed to avoid the need for demolition and decanting of residents and uses a series of 'stilts' to support the rooftop extensions over existing low-rise buildings, which are also served by new circulation cores, minimising the impact on existing residents during construction. The scheme received planning consent in August 2021, with the first phase of construction due to start on site in May 2022. The project has been tendered as a package with other nearby sites to encourage better competition from contractors and to maximise value for money for the council.

Client

London Borough of Enfield

Architect

Levitt Bernstein

Landscape Architect

Levitt Bernstein

Planner

HTA Design

Sustainability

London Plan +

Construction value £55m

Dates 2017-2025

Funding GLA / London Borough of Enfield

Homes

Before: 230

After: 359

Net gain: 129

Density

Before: 80 homes per hectare

After: 125 homes per hectare

Tenure

Before: 100% affordable

After: 100% affordable

Geoffrey Close Estate Lambeth, London



This small estate at Geoffrey Close was constructed in waves in the 1950s and 1960s. A masterplan for comprehensive redevelopment was granted planning consent by the London Borough of Lambeth in mid-2021, providing 441 new homes, along with an on-site residents' community centre and gym, concierge, post delivery room, secure cycle parking throughout and extensive new landscaping.



Before regeneration

Community

The existing Geoffrey Close Estate residents are a tight-knit, established community. Following a number of exhibitions and consultation sessions early in the design process with residents, council officers and the GLA, 67% of a residents' ballot voted for redevelopment of the estate. The phasing strategy minimised disruption to residents by keeping the community together and delivering all the social rent homes first. Over 50% of the new homes on the estate are affordable homes (split 70.5% social rent and 29.5% intermediate tenure).

Social value

The estate has very limited open green space, with poorly defined/under-optimised public realm alongside an old basketball court. Additionally, the estate suffers from high levels of anti-social behaviour with a number of areas not overlooked. The proposed new blocks overlook internal courtyards and bring to life the surrounding streets. They also serve as a frame for three new green spaces that are open and accessible to all residents, and a community square in the heart of the scheme that becomes a focus for them.



Place

The existing estate has a multitude of entry points and routes through the site, many of which are not overlooked. Rationalising these entry points down to one main entrance point and an additional pedestrian access point ensures that the site feels more secure. Reconfiguring the site layout has allowed the creation of 1,750 sqm of ground floor amenity in addition to 1,680 sqm of rooftop amenity for residents. The planting of new trees and green zones will transform the site into a great place to relax and play. Each new building's height and design responds to its immediate context. Using a limited palette of materials ensures that the buildings work together to form a family of buildings.

Climate

By using zero and low carbon technologies (air-source heat pumps and PVs) and a fabric first approach to sustainability, the proposal achieves the GLA's zero carbon target for regulated carbon dioxide emissions. The homes will be highly insulated and thus reduce residents'

energy bills. Extensive green roofs throughout the development and a rich tapestry of new planting at ground level contribute positively to on-site ecology and biodiversity, and promote active outdoor recreation.

Delivery

The phasing of the delivery ensures that residents will not need to leave the estate during construction and will have to move only once, from their existing home to their new home. Affordable homes have been prioritised in the early phases to ensure that the community is kept together. PRP is retained to produce RIBA Stage 4 documentation and will see the development through to completion.

Feedback

The existing estate fell short in many ways, including not meeting the needs of families, an ageing population or those with mobility issues. By engaging with the residents throughout, the designs were updated to reflect residents' wishes, creating a resident-led scheme that positively contributes to the local environment.

Local Authority

London Borough of Lambeth

Client

Lambeth Regeneration LLP (Joint Venture between The Riverside Group and Bellway London Partnerships)

Contractor

Bellway Homes

Architect

PRP

Landscape Architect

PRP

Construction value

£93m

Dates

2022-2029

Funding

Grant funding and partial cross-subsidy

Homes

Before: 134

After: 441 homes, with residents' community centre, residents' gym, concierge and post room

Net gain: 307

Density

Before: 126 homes per hectare

After: 416 homes per hectare

Tenure

Before: 100% social rent

After: 31% social rent, 8% London shared ownership, 6% London living rent, 55% market sale

Car parking

Before: 38

After: 22



Long known as the “Queen of the Suburbs” for its many parks and tree-lined streets, Ealing is now the fourth largest London borough by population, and one of the most ethnically diverse districts in the country. With strong support from the local community, the 1960s High Lane Estate is being replaced with 57 new family houses and 448 flats set around tree-lined streets and courtyards. Half the homes will be affordable, including 142 for existing council tenants and 75 at London affordable rents.



Before regeneration

Community

The established community here is diverse, friendly and knowledgeable. People are very engaged in shaping their future, and there is an active steering group. Everyone who wishes to remain will be offered a new home on site.

The design team led a series of design workshops with residents, neighbours, council officers and the GLA. A ballot was held in 2018, with a 90% vote in favour of the regeneration proposals.

Place

The current High Lane Estate perches on the slopes of the verdant Brent River valley and connects inter-war suburban streets to the large open spaces of Brent Valley Park. The existing apartments, which snake diagonally across the site, are characteristic of estates from the 1960s – a confusing layout that is dislocated from its surroundings, lacks permeability, discourages walking and cycling and feels unsafe. Existing homes are damp and noisy. Open spaces lack definition and purpose, and communal facilities are currently in temporary site cabins.



The approach to sustainable placemaking and building design responds to the character of the surrounding area, with its tree-lined streets of terraced houses and mansion blocks from the Edwardian and late Victorian periods. Six-storey apartments will be concentrated in the centre of the site with lower buildings at the edges relating sensitively to neighbours. The dramatic topography and curve of the proposed main avenue will provide sweeping vistas to a new park at the centre, where a community shop, cafe and hall will frame the southern entrance to the site.

Climate

The homes will blend tradition with modernity: highly insulated building envelopes with renewable energy, through photovoltaics and air-source heat pumps, will reduce carbon impact and residents' utility bills. The site layout promotes active recreation and travel through streets with front doors, safe and inviting parks and fitness trails, open to all. The design also enhances biodiversity and keeps existing valuable trees, alongside newly planted native trees.

Delivery

To cross-subsidise the affordable homes, the design achieves twice the existing density, while respecting the green context and neighbouring properties and avoiding tall buildings. The masterplan and phasing strategy prioritise safety for all during each stage of demolition and construction. The new neighbourhood will be jointly managed by Ealing Council, through its housing agency Broadway Living, and Real Group. Housing managers have been closely involved in the design process.

Feedback

Each phase will benefit from POE, enabling lessons learned to be fed back into the project. In the meantime, the Chair of Ealing's Quality Review Panel has said: "This project has the makings of an exemplar for Ealing and further afield."

Local authority

London Borough of Ealing

Client

Real Places

Architect

Pollard Thomas Edwards

Landscape Architect

AREA landscape architects

Planning Consultant

JLL

Construction value

£117m

Dates

2016-2028

Funding

GLA

Homes

Before: 264

After: 505

Demolished: 264

Net gain: 241

Density

Before: 77 homes per hectare

After: 146 homes per hectare

Tenure

Before: 81% social & London affordable rent, 19% private

After: 43% social & London affordable rent, 2% shared equity, 55% private

Car Parking

Before: 191

After: 205

High Path Estate Merton, London



High Path Estate is part of Clarion Housing Group's Merton Regeneration Project, which is developing three estate neighbourhoods simultaneously under one business plan and delivering 2,000 homes. The masterplan for High Path Estate envisages the phased comprehensive regeneration of an ageing 1950s estate which is surrounded by an urban environment dating in parts from the 1800s. It enjoys the full backing of the current residents through extensive community engagement. The first phase comprising principally of social rent homes was completed in late 2021.



Community

The regeneration is a catalyst for the continued transformation of the South Wimbledon area, delivering up to 2,000 homes, 10,000 sqm of commercial and community space and incorporating a new neighbourhood park. There has been detailed resident engagement that has focussed on the retention of the existing community. Over five years, more than 30 community engagement exercises were carried out with the community and local stakeholders, alongside detailed studies of the unique qualities

and challenges of the estate and its surroundings. Key was understanding potential shifts in age groups, access requirements and associated lifestyles, as well as designing for different requirements beyond specific housing needs to implement environmental sustainability and future adaptability.

Social value

One method adopted to break down social barriers was through a tripartite initiative with pupils of the local primary school which touches all aspects of the community. The



first strand involved the construction of birdfeeders which could be taken home and suspended in children's own external space. A second strand was developed around the streaming of different types of recycling and environmental sustainability, and to this end PRP devised a recycling game to create engagement, interaction and knowledge promotion.

A third strand involved the construction of model green roofs which showed the children how something grows and instils the life skills of nurturing, patience and communication as the children talked animatedly to each other about their product.

Place

The regenerated area now identifies with the design characteristics of the surroundings. It celebrates its rich history and reconnects the existing urban fabric and buildings with the architectural identity of South Wimbledon. By linking to the existing Victorian streets to the north through the provision of new north-south routes, openness and

access is enhanced, while future-proofing the potential for further regeneration beyond the southern edge of the estate. At the heart of it all is a new neighbourhood park, providing a green haven to the revitalised community.

Climate

A case for regeneration was made during the option appraisal stage and different options showing various extents of renewal of the existing buildings were presented to the residents. The report looked at accessibility, urban design principles, physical condition of buildings, tenure and the future environmental performance of the estate. There was a strong case for full redevelopment, which received the comprehensive support of the community, assisted by a strong offer document from Clarion Housing Group. The masterplan included extensive tree-planting. A holding pen for trees, allowing specimens from nurseries to be planted and to grow locally before placement on the estate, has been included thus significantly improving survival rates of the young trees through to maturity.

Local Authority

London Borough of Merton

Client

Clarion Housing Group

Contractor

Hill (Phase 1)

Architect

PRP

Landscape Architect

PRP

Construction value

£450m

Dates

2019-2029

Funding Cross-subsidy from private sales helps regenerate three Merton estates (part of stock transfer from London Borough of Merton to Clarion Housing Group totalling circa 9,500 homes)

Homes

Before: 608

After: 1,667

Demolished: 608

Constructed: 1,667

Net gain: 1,059

Density

Before: 88 homes per hectare

After: 223 homes per hectare

Tenure

Before: 59% social rent, 41%

leaseholders and private

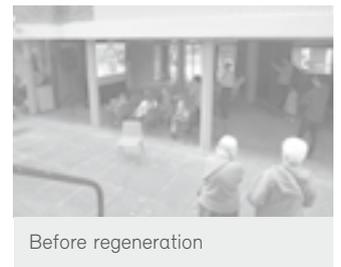
After: 22% social rent, 78%

leaseholders and private

King Square Islington, London



Building new affordable homes for local people in the UK's most densely populated borough is challenging: land and construction are expensive, and development tends to be controversial. Nevertheless, King Square Estate has been transformed with 140 new homes, a new community centre, a refurbished children's nursery, new landscaping, lighting, refuse stores and secure cycle parking.



Before regeneration

Community

King Square residents were proud of their 1960s estate, and were initially resistant to change. They began to engage once it was clear that the process would be genuinely resident-led, starting with selection of the project team – “the only ones who really listened to us”. Minimal demolition, a local lettings policy and architectural integration of the new with the old, were some of their key requirements. The design evolved through numerous workshops and exhibitions, plus group visits to other schemes, and film making with younger people on the estate. The phasing strategy minimised disruption and enabled residents to stay put during construction.

Social value

Previous problems of anti-social behaviour have been tackled by the public realm transformation and enhanced natural surveillance. Health impacts from air pollution have improved thanks to reduced car use. Demolishing underused garages made space for 10 three-bedroom houses. And rationalising the boundary helped unlock development of new premises for a neighbouring primary school, as well as improving connections between the school and estate. The new community centre has become popular with all ages.



Place

The previous public realm at King Square was defined by hard surfaces, lack of surveillance and poor connectivity to surrounding streets. The improved estate features active frontages, enhanced pedestrian routes and open spaces, with over 80 new trees. New homes have front doors on to proper streets. Overall, 1,695 sq m of green space has been gained through reconfiguring the urban layout.

New buildings respect the heights of existing low- and mid-rise blocks, and improve the setting of the two 1960s tower blocks. Each new building is bespoke to its setting, with a common language of calm brickwork and recessed balconies to complement the original architecture.

Climate

The new homes, which meet Code for Sustainable Homes Level 4, are connected to the Bunhill Heat and Power Network, the first scheme in the world to take waste heat from an underground train network and use it to provide affordable domestic heating. They also have green roofs and solar panels. The community

centre achieves BREEAM Excellent. Two hundred secure cycle parking spaces encourage residents to use greener transport options, and new residents don't receive parking permits, unless they are Blue Badge holders.

Delivery

Seventy per cent of the new homes are for social rent, including 25 for elderly or vulnerable residents. The council has funded these from housing grant and its own resources. Funds from the sale of homes have cross-subsidised a new local school and improvements to the existing public realm on the estate.

Feedback

One block was designed for and with older residents, encouraging them to downsize and free up larger homes, directly benefiting King Square families. One elderly couple who downsized say their lives "feel brighter", they like the friendly local community, and they leave their home much more, having previously been housebound and isolated. "Every time I come home it feels like I am going on holiday," one resident remarked.

Client

London Borough of Islington

Contractor

Higgins Homes

Architect

Pollard Thomas Edwards

Landscape Architect

HTA Design

Planning Consultant

HTA Design

Construction value £32m

Dates 2013-2021

Funding London Borough of Islington

Homes

Before: 350

After: 481 homes including 29 fully wheelchair accessible flats (independent living), plus community space and upgrade to existing nursery

Demolished: 9

Constructed: 140

Net gain/loss: 131

Density

Before: 176 homes per hectare

After: 242 homes per hectare

Tenure

After: 70% social rent, 30% market sale

Car Parking

Before: 55

After: 81 spaces, 21 of which are wheelchair accessible



By reconnecting the north end of Portobello Road to Ladbroke Grove and re-establishing other Victorian streets, this regeneration scheme for Catalyst Housing illustrates how it is possible to repair the historic fabric of an area and reintegrate new development with its immediate neighbourhood. Here, it has done all of that and augmented the vibrant multi-cultural community in North Kensington.



Before regeneration

Community

This is a truly transformative estate regeneration project situated at the far end of one of London's most famous thoroughfares, Portobello Road. The original Wornington Green mono-tenure estate near Portobello Road, West London, comprised 538 flats and houses constructed between 1964 and 1985, predominantly in the form of deck-accessed, interconnected H-block buildings. A longstanding commission from Catalyst Housing Group began with a 'vision for change' exercise which evolved into a hybrid planning application for the 1,000 homes masterplan with a detailed planning application for the initial phase of development.

A shared vision for a lively environment with a strong sense of place was developed with residents and stakeholders that would be socially, economically and environmentally sustainable. This comprehensive interaction with key stakeholders enabled a clear understanding of the community's views and concerns, and the opportunity to address them quickly. It also allowed the local community to influence the developing proposals. This impacted on a raft of issues such as the size of the new homes, the extent of private amenity space, numbers of homes which are accessed off a staircase and lift lobby, the creation of overlooked and defensible space, household need, parking provision, phasing



and opportunities for training, apprenticeships and employment. A key concern for residents was that the new homes should be spacious and at least the same size as current homes.

Social value

The masterstroke of the project was securing the council's agreement to move a poorly located municipal park from a neglected corner of the estate to a new position at the heart of the regeneration. The original park, Athlone Gardens, was not easily accessible to the public, nor clearly visible from its boundaries and not well overlooked for security. The relocated park allows better accessibility to the public and uninterrupted visibility from its boundaries. Most of the mature trees from the existing park were retained within the masterplan to give instant landscape maturity to new streets.

Place

By reconnecting the north end of Portobello Road to Ladbroke Grove and re-establishing other Victorian streets, this regeneration scheme illustrates how it is possible to repair the historic fabric of an area and

reintegrate new development with its immediate neighbourhood. Traditional mews houses, mansion blocks and terraced housing serve as the model for this exemplar regeneration scheme, setting the benchmark for mixed-tenure housing and architectural quality in the capital. The re-located park provides a new London square to the benefit of the whole community.

Climate

Energy efficiency and sustainability measures are incorporated into the development to achieve a Code for Sustainable Homes Level 4 rating. They include combined heat and power, brown roofs, photovoltaic panels on all buildings (apart from the houses) and run-off water storage and attenuation below ground.

Delivery

Following consent, PRP was retained by the chosen contractor to deliver the first phase construction documentation as well as acting as design guardian for the initial client. This phase of the masterplan would become Catalyst's most commercially successful development and set the quality benchmark for the delivery of future phases.

Local Authority

Royal Borough of Kensington & Chelsea

Client

Catalyst Housing Group

Contractor

Ardmore Construction (Phase 1)

Architect

PRP

Landscape Architect

Ireland Albrecht

Construction value £250m

Dates 2011-2015

Funding Cross-subsidy through sales of private residential

Homes

Before: 538

After: 932

Demolished: 538

Constructed: 932

Net gain: 394

Density

Before: 105 homes per hectare

After: 182 homes per hectare

Tenure

Before: 100% social rent

After: 58% social rent, 3% shared ownership, 39% leaseholders and private

South Kilburn Regeneration Phases 4 and 6 Brent, London



Phases 4 and 6 form part of the 15-year South Kilburn Regeneration Programme, which is delivering around 2,400 homes within a transformed neighbourhood. Over half the area of the 471 homes in these phases will be for social rent to existing secure tenants. The rehousing strategy holds together an existing community, with residents moving together into their new homes, and benefitting from new commercial, co-working and community spaces.



Before regeneration

Community

Themed workshops were undertaken with residents throughout the design process: they emphasised the importance of existing social connections and shared communal spaces such as courtyard gardens and the new car-free street. In the 2020 ballot 85% of residents voted in favour of the proposals.

Social value

The engagement programme, embracing existing and future residents, neighbours and other stakeholders, focuses on Brent's wider social value objectives, which go beyond the provision of quality homes to embrace building a community for the long term. The project team runs an

extensive social value programme of events including: music video and documentary making with young people; work experience placements; events to encourage STEM subjects in local schools; and working with a local church to integrate an upgraded worship space within the development.

Place

Elegant and tenure-blind city homes will be set around verdant courtyards and take design cues from West London's iconic mansion flats. Duplex homes at ground level improve the character of the streets and provide natural surveillance. A robust palette of material features glazed brick and cast stone with integrated signage features. This



distinctive architectural style helped achieve widespread local support for the development. The project embraces the active transport revolution by making cycling first choice: for example, instead of large, joyless bike stores, cycle stores are designed into secure circulation spaces close to front doors and accessed via goods lifts, with robust materials specified accordingly. This also frees ground floor frontage for active uses, including shops and co-working space.

Climate

The scheme is designed to minimise embedded carbon, and a whole-life carbon assessment has been submitted with Phase 6. Off-site construction minimises waste; its repetitive elements and stacked home layouts will improve construction quality, energy efficiency and use of resources. All phases will be connected to a district energy network, contributing to a significant reduction in carbon. Passive design measures, such as gallery access and central atria, help to minimise overheating. The new homes are larger than existing stock, and almost all are dual-aspect, with

good daylighting, ventilation and thermal efficiency.

Delivery

Homes for social rent will be cross-subsidised by private sales. An independent market advisor is actively involved in the design of private sale homes throughout the process. The architect is providing a full service for all phases as lead consultant managing a multi-disciplinary team from concept to RIBA Stage 3+. Following planning approval for Phase 4 in February 2020 and completion of tender information, the client is currently seeking a developer partner. The design team will be retained either by novation to the contractor or in a design guardian capacity.

Feedback

Although the estate is popular, residents understood the need for change. Consultation feedback forms show that some expressed discomfort about the “otherness” of their post-war homes compared with the surrounding neighbourhood, and many welcomed the proposed architectural style, which knits the estate back into the urban fabric.

Client

London Borough of Brent

Architect

Pollard Thomas Edwards

Landscape Architect

The Environment Partnership

Planning Consultant

Lichfields

Construction value

£171m

Dates 2018-current

Homes

Before: 261

After: 471

Demolished: 261

Net gain/loss: 210

Density

Before: 149 homes per hectare

After: 269 homes per hectare

Tenure

Before: 93% social rent, 7%

leaseholders

After: 46% social rent, 54% private

Car Parking

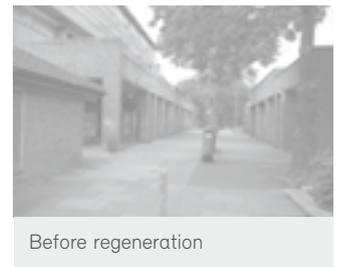
Before: 161

After: 76

The Lakes Estate Bletchley, Milton Keynes



The regeneration of run-down local shops and blocks of flats at the centre of this Milton Keynes estate forms a mixed-use neighbourhood with 2,000 homes, of which nearly 600 are new. Backed overwhelmingly by the fully-consulted residents, the programme delivers infill housing on sites within the wider estate, extensive improvements to the neighbourhood landscape and parking, and an enhanced public park at its heart. Construction work, budgeted for £150m, starts later in 2022.



Community

An options appraisal and extensive consultation process with residents was followed by a ballot in which 93% were in favour of regeneration. Through a subsequent series of 20 engagement events, a deliverable masterplan was developed which reflected residents' objectives. An active steering group has been formed, and these tenants have presented the residents' aspirations for regeneration at planning committee and other public meetings.

Social value

The vision for the Lakes Estate is to create an environment that supports a happy, healthy and prosperous

community that feels safe and proud of their homes. Social and physical issues, and the reputation of the estate, are being transformed. Residents will all benefit from a regenerated centre with a new community centre, nursery and shops.

Place

Phase 1 of the regeneration re-provides a community hub, nursery and shops on a new landscaped street connecting Warren Park, an existing public park, to the secondary school, with flats overlooking the new green spaces. An energy centre will be provided in Phase 2. The landscape masterplan is a holistic approach to place



regeneration that ranges from small-scale resident-led interventions to the complete redesign of the park and local centre.

Climate

Mitigating climate change and sustainability are important objectives for Milton Keynes. A new energy centre is proposed for all the homes in the central area, while new infill houses and flats will have individual air-source heat pumps. New homes will be of traditional masonry construction to Passivhaus standards on infill sites, and traditional reinforced concrete frame for the central area flats, shops and community uses. As well as responding to climate change, robust, low maintenance and durable materials and detailing will deliver sustainable homes which meet residents' needs. New homes will be larger than existing and meet Milton Keynes' standards for adaptable homes, all built to Part M4(2) of the Building Regulations. An extension to the wider Redway cycle network in Milton Keynes will also connect the centre of the Lakes Estate and encourage sustainable transport and physical activity.

Delivery

A mix of tenures will give all existing tenants in Phase 1 the opportunity to move to a new home on one of the infill sites. Milton Keynes Council has funded social housing and estate improvements in Phase 1. Private sale homes will provide cross-subsidy for the later phases.

Feedback

Local councillors have been positive about the plans. Councillor Carole Baume told MKFM news: "These proposals will go much further than just building new homes for our most vulnerable communities – they will improve life chances and give local people the opportunities to fulfil their true potential."

While Councillor Emily Darlington remarked to the same news channel: "These (estate) improvements are delivering on the regeneration proposals that residents voted for. We know just how important access to green spaces and play areas can be in improving people's quality of life."

Client

Milton Keynes Council

Architect

HTA Design

Landscape Architect

HTA Design (to planning); MK Landscape Architects Stage 3b

Planner, Sustainability, Engagement and Communication

HTA Design

Construction value

circa £150m

Dates Pre-ballot design commenced Sept 2017 – construction Phase 1 planned to start late 2022

Funding MKC, Cross subsidy

Homes

Before: Estate overall 1,800
After: 2,198 (589 new homes)
Demolished: 191 (and 13 shops)
Constructed: 398
Net gain: 398

Density

Before: 47 homes per hectare at Serpentine Court
After: 47 homes per hectare average across all development sites
Lakes Estate density - 22 homes per hectare average across all sites

Tenure

Before: 181 rent and 10 leasehold homes to be demolished
After: 50% affordable rent, 50% private

Car Parking

Before: 180
After: 694



Reading Borough Council is building 46 new homes for social rent, and achieving net zero carbon through Passivhaus principles, while at the same time retaining and refurbishing 276 existing homes within three 15-storey buildings to the highest energy efficiency standards, without decanting residents. New communal gardens, multi-generational play facilities, and enhanced public realm, are benefitting the wider neighbourhood.



Before regeneration

Community

The Wensley Road community were consulted extensively on the council's proposals for new homes and refurbishments on their estate, and changes were made to layout and proposed new building heights in response to their comments. Despite a small minority opposing the new homes, the proposals were positively endorsed at planning committee. The community will benefit from enhanced amenity, parking and overall image of the estate. Residents of the apartment blocks not only have improved energy performance, but also new distinctive entrances and greatly improved waste management. New play and community gardens provide an important space for residents to socialise.

Social value

As well as new homes and improved existing housing, social benefits include improved cycle connections and storage, and a better and more accessible bus route which make the town more accessible by public transport, thus reducing the use of cars and improving air quality.

Place

The new houses and flats are built on former garage and parking areas, as well as an area of underused green space behind one of the high-rise blocks. By creating a new road through the estate, additional parking has been re-provided, while better use can be made of the council's land. Existing trees are retained as far as possible, and extensive new tree planting is proposed for the whole site.



Climate

The new one- and two-bedroom flats and three- and four-bedroom houses are traditionally constructed to achieve net zero carbon through the use of Passivhaus principles, taking a fabric first approach to sustainability, with target airtightness well above current Building Regulations. They will be heated by air-source heat pumps and other measures to reduce energy and water use, and mitigate climate change in line with RIBA 2030 targets. The target for the three existing blocks is to be a similar standard to the new build and be as close to EnerPHit principles as possible. EnerPHit is the Passivhaus certificate for retrofits. The blocks are overclad in non-combustible, insulated coloured render which complements the new brick colour, with the base constructed in brick. New high-performance windows and increased airtightness, plus new ventilation, provides good air quality while keeping air changes as low as possible.

Delivery

This is 100% affordable housing, funded by Reading Borough Council with Homes England grant for the new build homes.

Feedback

Extensive consultation produced positive feedback: “I think the design is much better and can see that feedback has been listened to” was a comment from the existing residents in the New Build Consultation, October 2019.

“It is considered that the proposed buildings represent high quality design that will consequently enhance the character and appearance of this part of the Borough, which in time will successfully stitch into the surrounding area,” was the view of the planning case officer, in the council’s Planning Committee report in August 2020.

And in the Refurbishment Consultation, in February 2021, a resident remarked: “All of the suggestions are good, I really like the one saying replacement of the windows. Because trying to keep what warmth there is in my flat is a nightmare.”

Client

Reading Borough Council

Contractor

Glenman Corporation (Phase 1)

Architect

HTA Design

Landscape Architect, Planner, Sustainability, Engagement and Communication

HTA Design

Construction value

circa £25m

Dates

Start on site April 2021,

Phase 1 to be completed Dec 2023

Funding

RBC funding and Homes England grant for new build homes

Homes

Before: 276

After: 322

Improved: 273

Constructed: 46

Net gain: 46

Density

Before: 113 homes per hectare

After: 136 homes per hectare

Tenure

Before: 2.2% private leasehold,

97.8% affordable

After: 1.7% private leasehold,

98.3% affordable

Car Parking

Before: 192

After: 230

Review

A 30-year regeneration story in the Gorbals, Glasgow



The Gorbals' cyclical reinvention – from terraced homes to 'streets in the sky' and back again – echoes the reshaping of Britain's inner cities in the post-war era, writes Rory Olcayto, in this commentary on the Crown Street masterplan.

This is the story of the Gorbals and how a 1990s masterplan, hatched in Glasgow in the wake of Berlin's IBA 1987 seminal architectural exhibition, and designed by highflying postmodernist architects from London, rescued the world-famous district from oblivion. It is the story of how a series of broad avenues and tenements – themselves a revival of the Victorian gridiron townscape that were demolished to make way for Glasgow City Council's vast post-war redevelopment programme – would provide a template for Richard Rogers' Urban Task force and CABA, the influential design quango set up in 1999. And it is the story, in microcosm, of Britain's inner cities in the post-war era.

The 700-home masterplan, designed by CZWG, reconfigures a 40-acre site previously occupied by 12 seven-storey deck access blocks built between 1969 and 1972. They were demolished in 1987 after water penetration made them uninhabitable.

The development divides the area on either side of a main spine, Crown Street, into 10 plots: seven residential four- to six-storey perimeter blocks of maisonettes with flats above and shared courtyard gardens; an eighth plot that contains a shopping centre and two retained 24-storey point blocks (demolished in 2013); a ninth with a library, new church, offices and shops; and the tenth containing student accommodation and a hotel. Mainly local architects have built out the masterplan, mostly in the lively postmodern 'new tenement' style that emerged in 1980s and 1990s Glasgow.

Its success in attracting professionals and families to live in an area previously considered Britain's most notorious slum has led to the building out of two further masterplans, for Elizabeth Square (2001–2010) by Hypostyle Architects and New Laurieston (2012–2022)

by Page\Park. These later masterplans are built out in a contemporary manner, with Elizabeth Square inspired by iconic architecture trends and New Laurieston offering a severe local riposte to the prevalent, increasingly invasive New London Vernacular. Collectively known as the New Gorbals, they provide 2,158 homes in the heart of Scotland's biggest city. In contrast to the wholly social nature of the 1960s-built housing, 70% of New Gorbals homes are privately owned.

The Gorbals' long history stretches back to the 1300s, but the district we know today took shape in the early 1800s, when the first planned networks of streets were laid out, initially as a middle-class new town on the south bank of the River Clyde.

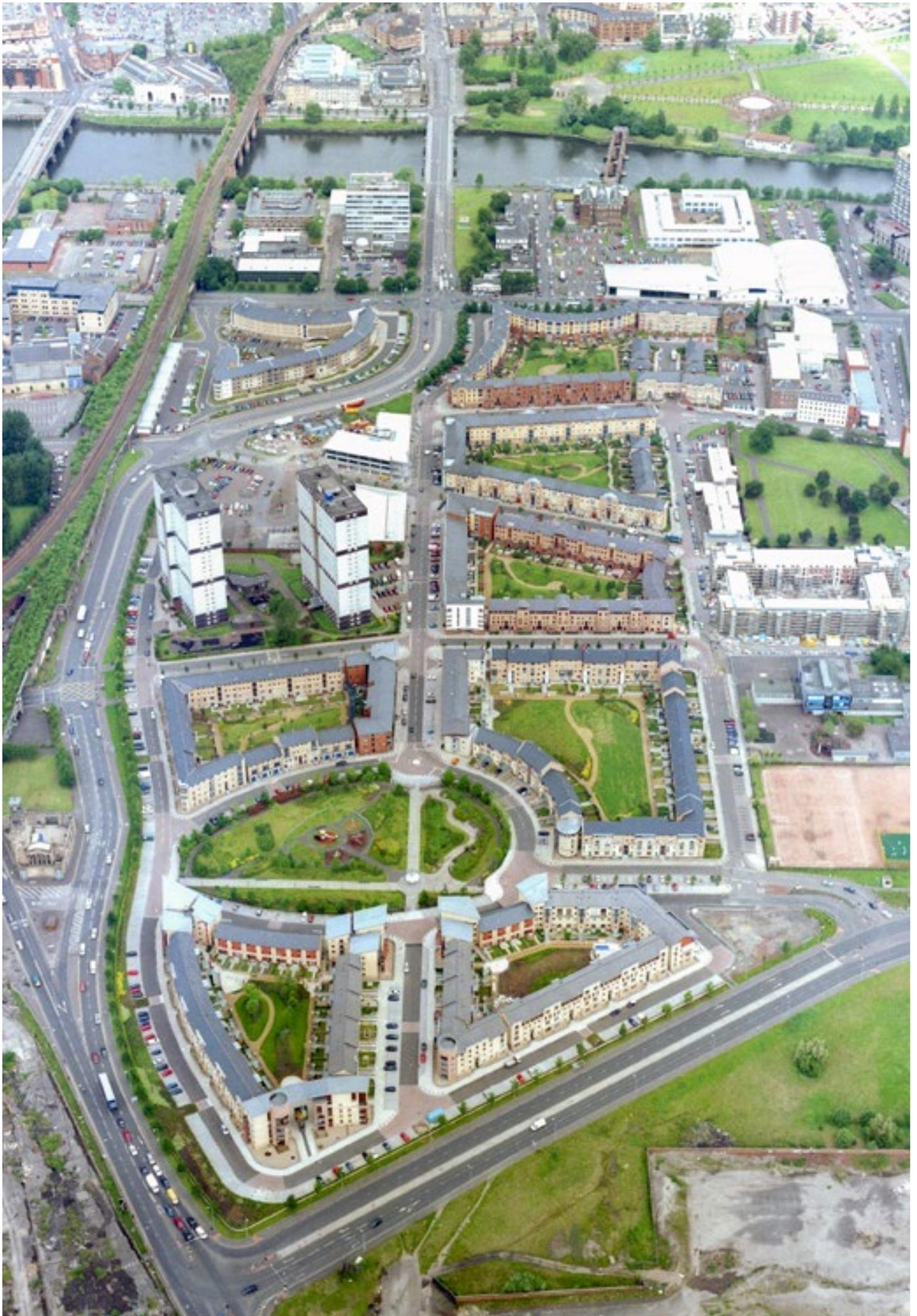
A short history of the Gorbals

From the 1840s when the Gorbals was incorporated by Glasgow City Council, industrial developments in railways, manufacturing and iron furnacing, coupled with Irish and Highland migration, transformed the area into an overcrowded, low-income neighbourhood.

Large tenements designed for the professional classes were subdivided, back lanes occupied by poorly-ventilated, substandard dwellings, and new tenements were built to lower standards. This led the City Improvement Trust to launch, from 1866, a programme of physical improvements and after a visit to view Haussmann's Paris, in 1871 City Architect John Carrick designed a feuing²¹ plan that replaced the medieval fabric with a gridiron street layout.

The sale of plots to private developers started in 1872 and construction was under way by 1874.

As Glasgow continued to grow living conditions in the Gorbals deteriorated. By 1920, in recognition of the squalor, 850 tenements were demolished, although up to 90,000 people were still crammed into an area of 252 acres in the 1930s.



New Gorbals Crown Street Regeneration project (1990-2000) masterplanned by CZWG

Post-war, Hutchesontown–Gorbals was the first of Glasgow’s 29 comprehensive development areas (CDAs) identified for wholesale redevelopment. A new masterplan for the area – inspired by a visit to Le Corbusier’s Unite D’Habitation in Marseilles – was approved in 1957. Fewer than 25% of the existing 27,000 residents would be resettled in a mix of mid-rise, deck access and high-rise blocks, with the rest moving elsewhere in the region.

The Hutchesontown–Gorbals CDA was delivered in five stages, A-E between 1957–1968. These included Robert Matthews’ four International Style riverside 18-storey Area A towers (still standing) and Basil Spence’s two Brutalist 20-storey towers for Area C (demolished in 1993). Area B’s four-storey maisonettes have been retained as have the low-rise elements of Area D (two of its four-point blocks were demolished in 2006 with a blowdown for the remaining two pending). Area E had been home to ‘The Dampies’ – the deck access blocks whose demolition in 1987 freed up the site that would later play host to the Crown Street Masterplan.



Hutchesontown–Gorbals CDA in 1965 alongside the condemned Victorian Gorbals



Demolition of Stirlingfauld Place, Phase 2B of the Laurieston–Gorbals CDA (1975), in 2008

Postmodernist Gorbals

In 1989, Glasgow City Council redeveloped the Gorbals again, adopting a neo-liberal financial model – and a retro, neo-traditional architectural aesthetic – that contrasted with the socialism and modernist design of the post-war redevelopment plan. The aim was to attract private sector investment, enhance the image of the area and stimulate positive trickle-down economic effects.

To this end, the Crown Street Regeneration Project (CSRП) was set up in 1990. Alongside the local community, the partnership included the Glasgow Development Agency, the City of Glasgow District Council, Scottish Homes, New Gorbals Housing Association.

The following year, London-based CZWG, noted at the time for its work reviving the Thames docklands with private housing, was appointed as masterplanner.

Over the next couple of years, further demolitions, site clearances and infrastructure work, including road realignments, were begun, with the first contractors starting on site, building over 200 homes.

By 1995, a supermarket had been built and environmental improvements at nearby flats and railway arches were underway. Three years later, 700 homes had been completed and a new park built, and in 2000 a hotel was opened and work began on the next masterplan for the Queen Elizabeth Square site (newly available after the demolition of the Spence blocks in 1993).

The strength of CZWG’s masterplan rested on three key moves: the reinstatement of historic street patterns; the provision of family homes (maisonettes) and flats in tenement blocks; and the creation of enclosed shared gardens.

As CZWG’s Piers Gough recalls: “Our big idea was so simple it is almost ridiculous. In our plan, the two lower floors of the four-storey buildings are maisonettes where families live.”

Neo-tenements

Gough turned to London’s Maida Vale for his next move (although a trip to Glasgow’s West End would have sufficed): the private shared gardens for each of the proposed residential perimeter blocks were borrowed from that neighbourhood. “This space made living in the centre of the city bearable,” he says.

The various tenement blocks completed for the IBA Berlin 1987 exhibition with their courtyard-focus and

colourful, eye-catching facades, and visited by many of the project's key members, were another key influence.

While CZWG's plan revives traditional streets, it differs from the north-south dynamic of the Victorian gridiron by emphasising east-west routes because, says Gough, existing streets running in that direction failed to connect with the wider city. In reality, this connectivity was stifled partly due to local residents' desire to protect the area from high-volume traffic and 'rat-run' activity, and partly to the existence of large undeveloped areas and other spatial barriers such as the river, the motorway and the railway.

Some facets of the original plan, a park centred upon the 'Greek' Thompson-designed Caledonia Road church, marooned by a busy road, and ground floor commercial uses on some of the residential blocks, were not properly realised. But by and large, CZWG's vision, if a little too car-friendly, provides an early example of the emerging new urbanism – walkable neighbourhoods, public green space, big balconies, high density housing – that would be codified a decade later by CABE.

Speaking in 2000, CSRP director Tom McCartney claimed the project was ahead of its time. "Even the Urban Task Force set up by John Prescott and chaired by Richard Rogers has acknowledged Crown Street as an exemplar for regenerating cities in the UK," he said.

When the New Gorbals project completes this year, the three masterplans will have created 2,158 new homes, almost half the total number of dwellings (around 4,500) in the historic Glasgow district. Today, the local population is 8,500, which is less than a tenth of the figure that lived there in its notorious slum heyday in the 1930s.

Concurrent with the building out of New Laurieston, new tenement blocks, a health centre and an office for the New Gorbals Housing Association have been built on the site of the once-retained point block in the Crown Street masterplan. And, in a sign that the neighbourhood is intrinsically linked to the grand and often grim narrative of British urban housing, similar towers at Oatlands, at the east side of the New Gorbals, were confirmed for demolition in November 2021 after it was found to have combustible cladding similar to the kind that made the Grenfell Tower fire so deadly. We can assume whatever replaces them will be inspired by the mid-rise, brick-built 'new tenements' now synonymous with the New Gorbals.

Rory Olcayto

Writer and Critic, Pollard Thomas Edwards



CZWG tenement in Elizabeth Square New Gorbals masterplan (2001-2010) by Hypostyle Architects



Elder & Cannon tenement for the original CZWG masterplan (1990-2000)

The New Gorbals ingredients for success

- In all three masterplans, development was phased into packages gradually released on the market
- Masterplans for both Crown Street (with fixed land prices) and Queen Elizabeth Square (with bidding on land price) had design codes covering building height and alignment, position of entrances, focal points, parking and suitable materials. There was no design code set for New Laurieston
- Gough and McCartney both cite the fact that the council and developers 'stuck to the masterplan' and used good local architects was central to New Gorbals' success
- An art fund created at the outset, locking contractors into providing site-specific artworks for each block to the value of one per cent of the project sum.

Altered Estates 2016

Summary of recommendations

Introduction: prerequisites for successful regeneration

Let's be clear about the objective of estate regeneration: is it to improve the lives of those who live on or around existing estates, or is it to help solve the housing crisis by making more effective use of public land? With care, patience and respect we should be able to do both.

Estate regeneration must maintain and enhance social diversity: it will not succeed without the broad support of existing residents, but it can and should also play a significant part in creating additional homes for buyers and renters.

The mixed-funding model (including public investment and cross-subsidy from market housing) has worked well in creating successful, diverse and financially viable estate regeneration, but that model does not work when public investment is reduced to a token contribution and too much reliance placed on the market. Estate regeneration is now under threat from unbalanced market-led solutions provoking resistance from existing communities.

We urge government to think again about the role of public investment in estates, and to review the application of current policies to estate regeneration. Right to Buy and the Starter Homes initiative should be applied flexibly to estate regeneration, with due attention to local priorities.

Chapter 1 Appraising the options

1. Undertake an initial desk exercise to establish the viability in principle of options to be tested.
2. The range of options should be wide and as distinct from one another as possible, enabling alternatives – including redevelopment versus refurbishment or the degree of densification necessary to generate cross-subsidy – to be evaluated. The range should include the costs and benefits of doing nothing as a baseline comparator. Minimal intervention and meanwhile uses are alternatives that should also be evaluated – the benefits can be unexpected.
3. Recognise the connection between options appraisal and the stakeholder engagement process described in Chapter 2. Establish appropriate appraisal criteria for each stakeholder group and appraise options against these separately.
4. Use one of the many tried and tested appraisal methodologies. Make sure that non-financial and non-quantifiable costs and benefits are appropriately considered as well as empirical measures. Embrace holistic measures of success, as well as purely empirical and financial ones.

Chapter 2 Engaging communities

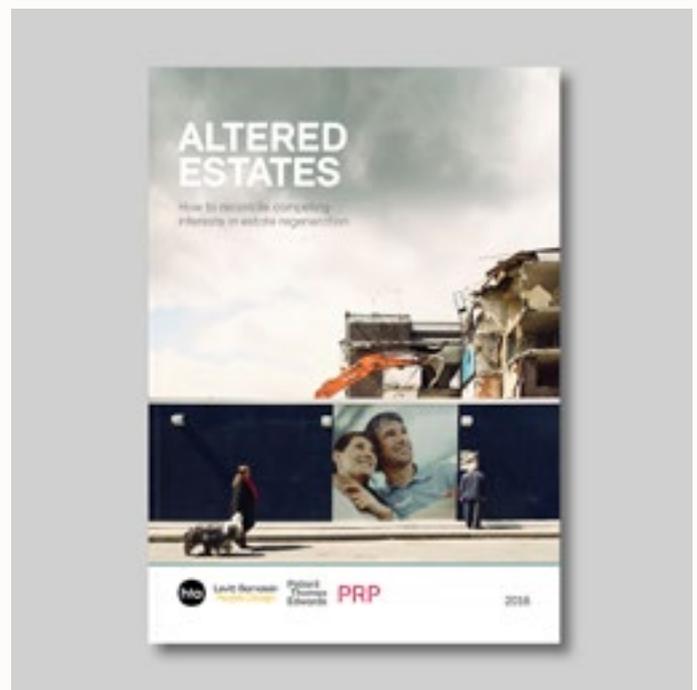
1. Ensure that residents are involved in the process as soon as a realistic prospect of regeneration is established. Always ensure anything shown to residents in consultation is deliverable.
2. Ensure that there is political and planning support, and that there is adequate time factored in for consultation.
3. What's in it for residents? Regeneration needs to have real benefits for existing residents. Make sure that there are embryonic but realistic ideas for the residents 'offer' from the beginning – residents will not engage effectively on other issues, such as design, until their future security is addressed.
4. Ensure that the process is transparent and auditable – a matter of record.
5. Ensure that residents have adequate skills and knowledge to be able to participate in the consultation. Provide training and other assistance if required.
6. The engagement process needs to be inclusive. Design the engagement strategy to reach a wide sample of the community – including neighbouring residents and businesses outside the estate – and ensure that small vocal groupings don't have a disproportionate voice in the process.

Chapter 3 Getting the design right

1. Understand the existing and historic patterns of development on and surrounding the estate, and seek to reintegrate the estate with its surroundings, making connections and reducing visible difference. Create places around a network of streets and other public spaces, with clear edges reinforced by the built-form and a clear distinction between public, shared and private space.
2. Use new development to provide a variety of homes in a range of typologies to suit different households - potentially combining family houses with mid-rise apartment blocks and taller buildings for singles and couples. Integrate different tenures within neighbourhoods and minimise visible difference - but be realistic about the need for separate entrances, different management regimes and the affordability of shared facilities.
3. To maximise their catchment and promote integration, locate community facilities, workspaces and shops on main routes and at the interface with the surrounding area.
4. Give early consideration to the car parking strategy, especially on suburban estates, and avoid domination of the street scene and other public realm by parked cars.
5. Remember that visual richness can be achieved in subtle ways and can evolve over time - avoid the temptation to create instant variety through diverse architectural languages and materials.
6. Follow the *Superdensity*²² guidance - if the financial model is pushing the solution towards hyperdensity then it may be better to do nothing for now, rather than risk unsustainable regeneration. Beware costly shared spaces, facilities and systems.

Chapter 4 Achieving sustainable outcomes

1. Address the local housing requirements of the wider area and rebalance tenures to reflect the needs of all sections of society including those of existing residents, vulnerable housing groups, the old, the young and families.
2. On large regeneration programmes, plan phased development to maximise the opportunity for existing residents to have the option to stay in the area (with a preference for a single stage decant), minimise the disruption to occupiers and create a series of complete places rather than fragments of a building site.
3. Consider new delivery models where local authorities retain a financial stake in the development and develop housing to suit their local circumstances, leading to solutions that deliver equitable outcomes for the benefit of existing and local residents and provide revenues for the council.
4. Review existing and emerging national housing, planning and fiscal policies where they conflict with sustainable estate regeneration outcomes - including Right to Buy, Starter Homes and the presumption in favour of demolition.



Altered Estates – How to reconcile competing interests in estate regeneration

About the authors

Four architectural practices

This report – like its predecessor – is the product of collaboration between four architectural practices, specialising in the design and delivery of residential and mixed-use neighbourhoods. We have been at the forefront of housing debate, design and delivery for nearly 50 years, and are currently involved with a significant proportion of the new and improved homes being delivered across England. We are therefore able to take a long view, and to bring experience from across the whole spectrum of housing by type, location and tenure. We are creating homes for all sorts of people: young and old, wealthy and poor, singles and families. Our regeneration work, engaging with local people, has given us particular insights into what has worked – and failed to work – in the past.

Why collaborate?

Although we are competitors, we also recognise the benefits of collaboration when it comes to understanding and influencing the wider context in which we operate. We therefore meet regularly to discuss current issues in relation to housing and place-making, and the way they are shaped by the pull of market and regulatory forces.

With a wide range of clients and huge collective experience, embodied in our 700 combined staff, we find that we can bring knowledge and insight to contemporary issues, and we are keen to share that with the wider community of developers, local authorities, practitioners and politicians. We certainly don't agree about everything, and we bring different voices to each debate, but we typically discover a high degree of consensus about what are the problems and what might be the solutions.

We also collaborate, individually and collectively, with other organisations such as the Housing Forum, Future of London, New London Architecture, NHBC, RIBA and Design for Homes.

Some of our collective work to date

Alongside other collaborators, the group has produced a number of reports including:

- *Distinctively Local – How to boost supply by creating beautiful and popular homes and places (2019)*
- *Altered Estates – How to reconcile competing interests in estate regeneration (2016)*
- *Transforming Suburbia – Suburbia and Semi-Permissive (2015)*
- *Superdensity: the Sequel (2015)*
- *Recommendations for Living at Superdensity (2007)*

...and discussion papers including:

- *Space Benchmarking: Helping Consumers to Make Informed Choices about Homes to Buy and Rent*
- *Yes! In our backyard. Reflections from 30 years of experience of community architecture on how Localism can be made to work*
- *Red Tape Challenge and Innovation in Housing*
- *Bonfire of the Regulations – Rights to Light*
- *Home Performance Labelling.*

Collectively and individually, members of our practices have participated in the Housing Standards Review, undertaken research for government and many other national organisations, written numerous design guides and published articles, papers and books about housing.



Levitt Bernstein
People.Design

Pollard
Thomas
Edwards

PRP

Credits

This report was written and compiled by the following:

HTA Design

Caroline Dove, Partner
Riette Oosthuizen, Partner, Planning
Rory Bergin, Partner, Sustainable Futures

Levitt Bernstein

Barry McCullough, Director
Glyn Tully, Associate Director, Head of Urban Design
Simon Lea, Associate Director

Pollard Thomas Edwards

Andrew Beharrell, Senior Advisor
Patrick Devlin, Partner
Tricia Patel, Partner

PRP

Andrew Mellor, Partner
Brendan Kilpatrick, Senior Partner

Themes:

Planning for social value

Levitt Bernstein and HTA Design

Building community support

Levitt Bernstein and Pollard Thomas Edwards

Supporting lifetime neighbourhoods

Levitt Bernstein and Pollard Thomas Edwards

Giving pride to place

Levitt Bernstein and Pollard Thomas Edwards

Addressing climate change

HTA Design

Delivering responsible regeneration

PRP

Edited by Denise Chevin

Graphic and web design by Tim Metcalfe, Pollard Thomas Edwards

Special thanks to: Andy von Bradsky, Janice Mophet, Rory Olcayto, Brendan Sarsfield, Gareth Swarbrick and Clare Tostevin

Contacts



Caroline Dove

Partner

HTA Design LLP

020 7485 8555

www.hta.co.uk

@HTADesignLLP

caroline.dove@hta.co.uk



Barry McCullough

Director

Levitt Bernstein

020 7275 7676

www.levittbernstein.co.uk

@LevittBernstein

barry.mccullough@levittbernstein.co.uk



Tricia Patel

Partner

Pollard Thomas Edwards

020 7336 7777

www.pollardthomasedwards.co.uk

@PTEarchitects

tricia.patel@ptea.co.uk



Brendan Kilpatrick

Senior Partner

PRP

020 7653 1200

www.prp-co.uk

@PRP_News

B.Kilpatrick@prp-co.uk

Further copies of the report can be obtained from any of the above or it is available to download from www.alteredestates.co.uk

Credits and references

Page

Cover	Aberfeldy Street, Jan Kattein Architects
4	Packington Estate © Graham Carlow
8	Andrew Beharrell © David Cummings
14	Aberfeldy Street, Jan Kattein Architects
18	Aberfeldy Estate © Thomas Graham
22	Aberfeldy Estate © Thomas Graham
27	Barnsbury Estate © Katie Martindale Toole
30	Packington Estate © Graham Carlow
33	South Kilburn NWCC Phase 4 © Rejuvenate UK
34	Aberfeldy Estate © Patricia Calvino
35	King Square © Tim Metcalfe
37	Redbrick Estate © Kimbo Sito
38	Redbrick Estate © Steve Bainbridge
41	Redbrick Estate © Steve Bainbridge
43	Jolles House © Galit Seligmann
44	Everton Mews © Tim Crocker
46	Aberfeldy Estate © Tim Crocker
47	Vaudeville Court © Rachel Serfling
48	Robin Hood Gardens © Galit Seligmann
53	Woodside, Collective Architecture
56	Portobello Square © Andy Spain
61	Portobello Square © David Bank
73	Aberfeldy Estate © Tim Crocker
74	Auckland Rise © Paul Raftery
75	Auckland Rise © Fred Howarth
81	High Lane © Martin Hobby
84	King Square © Tim Metcalfe
84	King Square © Simon Carr
86	Portobello Square © David Bank
95	The Gorbals, CZWG © Guthrie Aerial Photography
96	The Gorbals © Glasgow City Council
96	The Gorbals © Tatyana Jakovskaya / Sharmanka Kinetic Theatre
97	The Gorbals © Steve Tiesdell Legacy Collection
101	Barry McCullough © India Hobson
101	Tricia Patel © Morley von Sternberg
101	Brendan Kilpatrick © Joe D Miles

1. Estate Regeneration National Strategy, Ministry of Housing, Communities & Local Government, December 2016 <https://www.gov.uk/guidance/estate-regeneration-national-strategy>
2. Better homes for local people, The Mayor's Good Practice Guide to Estate Regeneration, Greater London Authority, February 2018 <https://www.london.gov.uk/sites/default/files/better-homes-for-local-people-the-mayors-good-practice-guide-to-estate-regeneration.pdf>
3. Living with beauty: report of the Building Better, Building Beautiful Commission, Ministry of Housing, Communities & Local Government, 30 January 2020 <https://www.gov.uk/government/publications/living-with-beauty-report-of-the-building-better-building-beautiful-commission>
4. National Design Guide, Ministry of Housing, Communities & Local Government, October 2019 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/962113/National_design_guide.pdf
5. National Model Design Code, Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities & Local Government, July 2021 <https://www.gov.uk/government/publications/national-model-design-code>
6. Estate Regeneration and Social Value, Anne Power and Bert Provan, London School of Economics, August 2019 <https://sticerd.lse.ac.uk/dps/case/cr/casereport124.pdf>
7. RIBA Social Value Toolkit for Architecture, June 2020 <https://www.architecture.com/knowledge-and-resources/knowledge-landing-page/download-riba-social-value-toolkit>
8. Framework for Defining Social Value, UK Green Building Council, February 2021 <https://www.ukgbc.org/ukgbc-work/framework-for-defining-social-value/>
9. The Construction Playbook, The Cabinet Office, December 2020 <https://www.gov.uk/government/publications/the-construction-playbook>
10. <https://busmethodology.org.uk/partner.html>
11. Social Value Roadmap, HACT, 2020 <https://hact.org.uk/nextinnovations/social-value-road-map/>
12. Global Age-friendly Cities: A Guide, WHO 2007 https://apps.who.int/iris/bitstream/handle/10665/43755/9789241547307_eng.pdf;sequenc
13. <https://www.housinglin.org.uk/Topics/browse/Design-building/HAPPI/>
14. <https://www.leti.london/>
15. House of Commons Library Briefing Note, March 22 <https://commonslibrary.parliament.uk/research-briefings/cbp-8730/>
16. Retrofit London Housing Action Plan, London Councils, October 2021 <https://www.londoncouncils.gov.uk/our-key-themes/climate-change/retrofit-london-housing-action-plan>
17. Energiesprong: <https://energiesprong.org/> A strategy for renovating existing homes to net zero carbon and recovering the cost through future energy bills.
18. EnerPHit is the standard issued by the Passivhaus Institute that focuses on retrofit projects.
19. 'Regulated' emissions are those from energy used for heating and hot water. 'Unregulated' emissions are those from home working, appliances and electric car charging.
20. The Housing Forum - Better Procurement for Better Homes <https://housingforum.org.uk/reports/report-housing-supply-and-delivery/better-procurement-for-better-homes/>
21. A feu is the most common form of land tenure in Scotland. A feuing plan, in Scots law, defines the right to the use of land in return for a fixed annual payment. The word "feu" is a derivation of "fee".
22. Superdensity: the Sequel <http://www.superdensity.co.uk/>



Aberfeldy Tailor & Fabrics
Coats, Jackets, Skirts, Trousers Alteration & Repair Made to Measure Suits, Tailor Kitchens, Curtains Etc.
Mob: 07950 116 244 Email: aberfeldytaylor@btinternet.com

Mens, Ladies & Childrens

Fashions Wear
Mens, Ladies & Childrens



Levitt Bernstein
People.Design

Pollard
Thomas
Edwards

PRP