Mixed use development, practice and potential

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Although this report was commissioned by the Office, the findings and recommendations are those of the authors and do not necessarily represent the views of the Office of the Deputy Prime Minister.

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Executive Summary

Public policy has been an important foundation for mixed-use development through the 1990s, promoting it as a mechanism for revitalising town centres. Numerous policy instruments have addressed the concept-some directly, others more obliquely-and have effectively created a strong portfolio of national guidance on mixed-use development. Yet a recurrent theme in the debate about mixed-use development is the suggestion that there exist ac series of barriers or obstacles which are believed to prevent or inhibit the delivery.

Against this background, the study analysed the potential and actual contribution of mixed-use development schemes with a significant housing component to the revitalisation of town centres, and interrogated the obstacles to implementation, with reference to twelve case studies. The main conclusions are as follows:

Policy context

- The case studies confirm the positive contribution that mixed-use schemes can make to the vitality and attractiveness of town-centre environments, to the extension of housing choice, and to the promotion of sustainable modes of transport.
- There is a wide variation in the definition and application of the term 'mixed-use development' by practitioners (local planning authorities, developers, consultants, funding agencies etc). This contributes to the eclectic mix of schemes which are categorised under the mixed-use development label.
- The vast majority of local planning authorities consider mixed-use development to be an important area of policy, but a far smaller percentage of development plans encourage or require its implementation.

The residents' perspective

- Residents of mixed-use schemes in town centres represent a wide range of incomes, household composition and age structure, which is perhaps contrary to the perceived image of dominance by professional and managerial groups.
- The positive reaction of residents to mixed-use schemes in town centres is based on the proximity of facilities and activities offered by the town centre, rather than the qualities of mixed use per se. Balanced against this are concerns expressed about the impact of night-time leisure and entertainment on residential environments.

Obstacles to mixed-use development

- Many commonly-cited obstacles or barriers to the realisation of mixed-use development appear to be over-stated; and where these obstacles do exist, they are usually not specific to mixed-use development, but in the nature of routine development control practice which affects all development.
- The difficulty of harmonising the differential lease terms for residential and commercial property is a major reason behind the reluctance of institutional investors to embrace mixed-use development. It may in part also explain the observed tendency for the separation of different uses into discrete development elements within a mixed-use scheme, in preference integrating them in the same development.
- While the property market has a strong preference for single-use schemes because
 they generally deliver greater profitability, it does bring forward mixed-use
 schemes in response to planning policy, site location and design considerations.
 These typically involve a compromise on optimum profitability in order to meet
 planning requirements; but, in this sense, a mixed-use scheme is no different to
 any other scheme that has to be modified in order to obtain planning consent.

Project funding

- While failure to secure funding support remains the single most common reason for mixed-use schemes not getting off the ground (this applies to any type of development), development finance per seis not the problem. The case studies none of which involved institutional investor funding - demonstrate that developers are able to respond to market conditions, to identify suitable development partners and to get access to short-term finance for mixed-use schemes.
- Short-term opportunistic investment by property developers in the property climate pertaining to the case studies appears to be more effective in delivering mixed-use environments than the long-term approach of institutional investors.

Future policy direction

- It is the mixed-use outcome(a richly textured area environment comprising a mix of uses and activities) rather than the mixed-use output(a discrete development incorporating a mix of uses) that underpins the general perception of the attractiveness of town centres, and the resulting commitment to the principle of mixed-use development.
- The successful realisation of vibrant and attractive mixed-use environments in town centres can be achieved by emphasis on managing and enabling the mix of uses and activities on an area basis over time, rather than on the pursuit of discrete mixed-use schemes on individual sites.
- The designation on plans of specific mixed-use development sites could usefully be complemented by the designation of a mixed-use development zone ('MXD zone') in and around town centres, subject to a policy that encourages mixed-use development.

1. Background to the Study

The proposition that mixed-use development can make a valuable contribution to town centres is based on people's observation of attractive places, which is at once both intuitive and rational. Central to the inherent value of mixed-use development is the belief that it contributes to the vitality and attractiveness of town centres.

The study aims were to explore the factors that underpin these qualities, and to suggest ways in which they may be strengthened and enhanced. The approach is deliberately inclusive, avoiding a rigid definition of what is or is not mixed-use development. So it considered both the problems of combining different uses within a discrete development; and qualities of area mixed-use environments.

Public policy has been an important foundation for mixed-use development through the 1990s, promoting it as a mechanism for revitalising town centres. Numerous policy instruments have addressed the concept, some directly, others more obliquely, and have effectively created a strong portfolio of national guidance on mixed-use development.

Against this background, the study offers a practical investigation into ways of promoting and enhancing the delivery of mixed-use development in town centres, especially where housing is a major component. The core of the study comprised three main streams of work:

- a literature review
- interviews with practitioners
- case studies.

2. Survey of Local Planning Authorities

All district and unitary authorities in England were sent a questionnaire in late 1998 which addressed attitudes and practice towards mixed-use development, and asked for examples of schemes to form the basis of the case studies. Some 250 responses were received, a response rate of 56 percent.

The survey revealed wide variation in the definition of mixed use. Those local planning authorities that considered it important tended towards a broader definition, whereas those that considered it less important tended towards a more rigid definition. The vast majority of authorities considered mixed-use development to be an important area of policy but, in practice, fewer had specific policies to promote or insist on mixed-use development even though they encourage it.

The most frequently stated benefit of mixed use was sustainability, followed by meeting housing needs. The most frequently stated constraints to mixed-use development were developer and investor reluctance, and the planning context that limited the ability of authorities to generate more schemes.

3. The Case Studies

The twelve schemes selected to exemplify typical practice carried out during the 1990s were drawn from a long list of 180 schemes submitted by local planning authorities. The process of selection focused on obtaining a good geographical spread of mixed-use schemes located in town centres, and with a strong residential component.

The twelve schemes are:

- Portland Place, Ashton-under-Lyne
- St Martin's Place, Dorking
- Brook Green, Hammersmith
- Cardinal House, Havant
- Pex Development, Leicester
- Smithfield Buildings, Manchester
- St John's Gate, Middlesbrough
- The Post Office Building, Newcastle-upon-Tyne
- Calvergate, Norwich
- Trivett Square, Nottingham
- Comish Place & Brooklyn Works, Sheffield
- Riverside Mill, Sowerby Bridge

Detailed examination of the case studies was based on site visits and interviews with the main participants: staff from the local planning authorities, developers, architects, estate agents, funding agencies etc.

Structured interviews were based on a list of questions to ensure that all participants were invited to cover the same ground. In practice, responses varied greatly, being subject to the individual's involvement and interest with the development, knowledge of the scheme history and interpretation of a particular set of events.

All case studies include housing, a basic requirement for selection. The most common mix is with offices; A3 uses such as pubs and restaurants, commonly perceived to be incompatible with residential use, are present in eight of the schemes.

The principal factors which determined the mixed-use character of each scheme are varied, but in all but one case (Nottingham) the property market played a significant role. Planning briefs were significant in more than half the schemes; and they appear to have been more important than development plans in determining the mix of uses, which is to be expected given their site-specific focus.

4. User Perception and Experience

Surveys were carried out with residents and business occupiers in four of the case study schemes (Hammersmith, Havant, Manchester and Norwich) in order to gain an understanding of how mixed-use development works in practice, and to gauge its contribution to vitality of town centres. These surveys included semi-structured face-to-face interviews, self-completion

questionnaires and focus groups.

These were supplemented by similar surveys in an area mixed-use environment (The Lace Market Nottingham) and also drew on primary research conducted in earlier surveys of schemes in Oxford, Glasgow and London (Covent Garden and Soho).

The residents of the mixed-use schemes represented a wider range in terms of income, household composition and age structure than is popularly perceived, balancing the image of the dominance of professional and managerial groups. The area-based surveys (The Lace Market, Soho and Covent Garden) showed a significant minority that had lived in town centres for over 20 years.

One and two-person households were the norm, with a comparatively small proportion of residents with children living at home, which is consistent with the type of accommodation offered. The proximity of facilities and activities offered by the town centre location was a more important attraction factor than the mixed-use development per se. The surveys confirmed the reciprocal benefit for residents and local businesses, although the trade from local residents was relatively small.

Residents placed a high value on the conversion of old buildings, which provided unconventional internal dwelling features and a high quality external environment, which outweighed the lack of gardens or external space.

Some residents expressed concerns about the need for harmonisation of conflicting uses, principally relating to the impact of night-time leisure and entertainment on residential environments. Longer-term residents sometimes felt that their interests were being subsumed to short-term commercial fads.

Wide variation was found in car ownership and usage, but, as expected, a high proportion of households had no car, with the average well below 0.5 cars per household. A small but significant proportion of households was found to have given up their car since moving into the development; and most car-owning residents said they used the car less than before. Lack of car parking provision is a common complaint even for non-car-owning households because of the inconvenience for visitors.

5. Design Quality and Context

Successful mixed use in an individual building, a series of buildings grouped together, or as a predominant characteristic across an urban area, is readily identifiable by a mix of functions which jointly activate the urban form. The resultant quality is more than just an aesthetic one, as it can have a powerful beneficial impact on the social and economic wellbeing of an area, often producing an environment which is both attractive and sustainable.

The impact upon the street environment is crucial, and especially the relationship between ground floor uses and street activities, which are influential as a generator of successful urbanism.

A design audit was carried out of five of the case study schemes (Hammersmith, Havant, Manchester, Norwich and Nottingham) to evaluate their contribution to urban quality through

assessment of the space-design-activity dynamic.

The five schemes reveal varying degrees of success in achieving a high quality interaction. They performed in different ways, which is a reflection of the different physical configuration and mix of uses. Some are deemed in some important respects to fall short of fully exploiting the potential of location or mix of uses. But all are considered to make a positive contribution in their own individual way, by augmenting the urban texture through the introduction of a mix of housing and other uses into a previously single-use environment.

6. Understanding the Contribution of Mixed-Use Development

The vitality of town centres is essential to their attractiveness, and is a characteristic which mixed-use development seeks simultaneously to harness and enhance. The introduction of a mix of uses, including housing, can stimulate the evening/weekend economy, and prevent 'dead' office zones; but this needs to be moderated against the negative impact of anti-social entertainment uses on residents. Variety and vitality may be achieved equally by a mix within use or as a mix of different uses: thus a street with a variety of small shops will tend to be more lively and attractive than the same street with a combination of multiple retail stores and offices.

The restoration and adaptation of old buildings provide a readymade context for new uses, and stimulate the incorporation of modern additions. The more complex planning and design process involved with integrating a mix of uses within a development appears to provide stimulus to the designers, which is reflected in the quality of the resulting scheme.

The buoyant state of the housing market, combined with the climate of plan-led development, has encouraged housing developers - generally considered to be more flexible than institutional investors - to turn their attention to town centre sites and to become major deliverers of mixed-use development.

The take-up on mixed-use schemes has tended to exceed developer expectations in recent years. This may be due to innovative products that offer a type of housing and associated lifestyle that was not previously available. The empirical evidence demonstrates that affordable housing can be effectively incorporated in high-quality mixed-use schemes.

Mixed-use development in town centres offers the potential to achieve lower rates of car ownership and usage (as demonstrated in the case studies), due more to the proximity to facilities rather than the character of mixed-use development. It is part of the policy mix to support sustainable transport usage, offering the possibility of promoting a multi-modal travel style, of reducing dependence on the private car, and of encouraging innovative transport responses (such as car clubs).

7. Barriers to Mixed-Use Development: Perception & Reality

A recurrent theme in the debate about mixed-use development is the existence of a series of barriers or obstacles, which are believed to prevent or inhibit the delivery. The report interrogates factors commonly cited to explain why mixed use is not or cannot be realised:

Are they factors that have a real inhibiting effect on the realisation of mixed-use

- development schemes?
- Are they simply the normal procedural hoops which have to be gone through with any development?
- Are they spurious barriers thrown up by those who have neither the interest nor inclination to get involved with mixed-use development?
- If they are real, how are they most effectively overcome?

The analysis suggests that many of these are overstated. Where they do exist, they do not appear to be specific to mixed-use development, but are more in the nature of routine development practice which affects both mixed and single-use development alike.

8. The Property Market Perspective

Mixed-use development will only happen if and when it matches the demands of the property market. Even allowing for publicsector contributions through land ownership or gap funding by English Partnerships or the Regional Development Agencies (reviewed following the December 1999 decision of the European Commission), the bulk of finance for mixed-use development comes from the private sector. The characteristics of a scheme must generate a reasonable developer and/or investor profit for the development to go ahead.

Securing funding support is the biggest single problem for mixed-use development schemes and the most common reason for schemes not getting off the ground. The property market tends to favour single-use schemes since these usually generate surer, greater profit; but it will accept mixed use. In some circumstances mixed use will be favoured due to a combination of location, site configuration, and local property market characteristics. The quantum of development appears to be critical: the larger the scheme, the greater the margin for incorporating additional, 'less profitable' uses.

At the time of the survey there was strong resistance from the property industry to the requirement to provide affordable housing, on the grounds that it is not possible to reconcile affordable housing with a prestige development aimed at delivering maximum economic return. However this should be set against the empirical evidence of the actual mixed-use schemes where affordable housing has been successfully integrated.

There was also a general nervousness in the industry about the climate of uncertainty posed by possible leasehold reform, including the introduction of commonhold. This was combined with a view that the current legislation achieves a good balance between freeholder and leaseholder interests. But differential commercial and residential leasehold regimes are seen as a major obstacle by institutional investors, as these necessitate complex management arrangements and constrain flexibility for reselling or redevelopment.

The professional culture divide between commercial and residential, reflected in the professional institutions and in property development companies and consultancies, can be seen as an additional inhibitor to the conception and realisation of mixed-use development schemes.

Local planning authorities were often thought sometimes to exercise too strong a role and attempt to interfere excessively with details of development, when their staff have a poor grasp

of the property market and development economics. On the other hand, the property industry would like authorities to be more proactive with land assembly through the use of compulsory purchase powers; but doubt whether the authorities have the appropriate skills in how to apply these powers.

9. Initiatives for Promoting Mixed-Use Development

There is wide variation in the definition of mixed-use development, which raises doubts about the value of using the term to describe a type or category of development. And it is unsatisfactory if the term becomes just a badge or label attached to a scheme, rather than being an essential part of its conceptual development.

The study draws an important distinction between the **mixed-use output** and the **mixed-use outcome**. And it is the outcome (a richly textured area environment comprising a mix of uses and activities) rather than the output (a discrete development incorporating a mix of uses) that underpins the general perception of the attractiveness of town centres, and the resulting commitment to the principle of mixed-use development.

Mixed-use development is more of a development culture than a technical planning issue. Its promotion and realisation will be most successfully achieved by adopting a positive approach to the planning process rather than addressing the development product.

Mixed-use development involves no special magic; but it does require imagination, especially by adopting a less prescriptive, more fluid planning framework, which focuses on the aggregate impact of emerging development proposals as much as the qualities of the individual schemes.

Mixed-use development zones ('MXD' zones) could be used to designate areas in, and immediately around, town centres which will be subject to a policy that encourages mixed-use development. These would complement specific individual sites designated for mixed-use development.

This approach could be implemented through non-statutory town centre plans or strategies, site-specific development briefs, and the development plan. It would also support the revitalisation of single-use areas, building on existing mixed-use developments, and the preservation of existing mixed-use areas.

The potential of mixed-use development would be enhanced by increasing awareness of its role as a tool for the enrichment and sustainable regeneration of town centres, emphasising the link between the type of development and quality of outcome. Suitable mechanisms might include training courses and continuing professional development (CPD), creation of mixeduse development websites, and a mixed-use category in awards promoted by Government, commercial and professional bodies.

The study concludes that there is no need for a specific PPG on mixed use since the field is covered by existing PPGs. But these notes may need to be sharpened to give greater emphasis to the mixed-use concept, to draw out the issue of quality, and relate potential benefits to the area in question.

A Good Practice Guide on town centre strategies would be a useful tool to emphasise the role that mixed use can play in creating an active, dynamic urban setting. A comprehensive review should be carried out of new development plans to examine their treatment of mixed use, and the practical experience of its implementation.

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1 Backound to the Study

1.1 The mixed-use development proposition

The proposition that mixed-use development can make a valuable contribution to town centres is based on our observation of attractive places, which is at once both intuitive and rational. Our entire city life experience tells us that the character of a place is defined as much by the environmental quality derived from the chance aggregation of different activities as it is by meticulous city planning and design. The intuitive reaction is formed by the feeling and sensation that we experience when we are in mixed-use town centre environments.

The rational reaction is formed by the logic that people do not operate particularly efficiently or happily when engaged in one single activity. A mix of uses - and a complementary mix of users and activities - therefore makes for more efficient and enjoyable places. The two reactions combined inform us that a mixed-use town centre environment is self evidently preferable to a single use environment.

Stating the generality is the easy part; it is more difficult however to identify the particular components and the method of their aggregation which creates character and quality, and to distinguish these from those which create disorder and alienation.

1.1.1 Vitality and attractiveness

Central to the inherent value of mixed-use development is the belief that it contributes to the vitality and attractiveness of town centres. The term vitality refers to life and, in the context of town centres, the life represented by the pressure of people. And this vitality covers a wide band of activity. It ranges from highly active 'liveliness' to the simple non-active 'presence', with every variation in between. The planned physical environment needs to cover all these, exploiting the positive elements and mitigating the negative ones.

There is a fundamental inter-relationship between activity and attractiveness. The qualities which attract are of particular interest to this study; but this is much more than creating places that look nice. Whilst the aesthetic element can be important in making a place attractive, it is not enough in itself. So the challenge is to create town centre environments which people want to visit and people enjoy being in.

1.1.2 So what is mixed-use development?

Whilst it is easy to define the unattractive, single-use, monocultural zone, it is less easy to define the attractive mixed-use zone. In part this is because there are different views, firmly held, about what constitutes mixed-use development.

Is Brindley Place in Birmingham, for example, a mixed-use development? It certainly has a

mixture of uses, albeit dominated by office use, but including, housing, leisure and cultural facilities, bars and restaurants. So this view suggests it is clearly an example of mixed-use.

But few of the buildings are mixed in the sense of accommodating layered uses with offices below and residential above, for example. The restaurants and bars, where these are integrated within an office building, are really little different to an office canteen. So the area does not conform to the more wholehearted objective inherent in the mixed-use concept.

So which view is correct? The answer is both. They are both equally valid responses, and holding one does not necessarily invalidate the other.

The study's approach is therefore inclusive. We address the specific issue of combining residential uses within a single block of development, in terms of the technical and operational factors, and of the attitudes of the property industry to this model. And we also expand the vision to address the broader consideration of area mixed-use regeneration, and how the aggregation of single uses can help deliver mixed-use environments, which people want to live in, visit and enjoy being in.

There is therefore a conceptual distinction to be drawn between the development output and the development outcome. The term 'output' refers to the individual developments or building blocks which make up the town centre. The term 'outcome' refers to the broader scale aggregation, the totality of the resulting environment.

This is more than a semantic distinction. The configuration of the individual components obviously plays an important role. But the location of successful town centres involves a more holistic approach than focusing on the individual outputs in terms of buildings and sites. This in turn has implications for the vision of what we want to achieve in our town centres, and the mechanisms and techniques required to realise this vision.

This is not a view which we brought to the study at the outset. It is one which has emerged from the research, interrogation of the case studies, and most importantly from interviews with practitioners.

Table 1 National Gu	idance on Mixed-Use Develo	opment
Date	Title	Content
March 1994	PPG13 Transport	Encourages development where it can be well served by public transport and
		promotes ingrendentity and moved use development as means of making
		efficient use of urban land and reducing the need to trevel
nn=1995	Or clinic receives,	While Paper (Co. 2901) on bursing repland the medianisms in satisfying his
	Opportunity, Croks,	housing need. Social housing is an important theme
	Responsibility	
nn=1996	P3G 6 Town Centres	Sels out the Governments in cruitment in residuising low centres through
	and Retail Developments	a plan-led approach. Encourages intead-use development and recognises into
		contribution to housing provision
Niverder 1995	Howelold Growth	Government discression reperconnection be because 144 million
	Where Shall we Live?	additional housahotts 1291-2016
February 927	P € : Leveral Folicy	Stresses significance of susta vaple development and mixed use
	and Principles	development, especially in town centres. Emphasizes plan-led system to give
		Energidance or coulty of developmen
February 1996	Parning for the	Emphasics the contribution of mixed-use/mixed-tenure
	Communities of	development in meeting housing next, assisting urban regeneration
	the Future	and supporting public transport
Ap:111998	Cro.lat 6/98: Planning	Falses the taux of interestorure housing developments in schemes
-	and Attordable Housing	with receivance to both moved use and moved tonure.
0=oper 1999	PPG 13. Transport; diaff	Encourages the integration of transport and planning policies and record
	exis on for public	the need to trave, through re-use of town/city centre land and
	consultation.	mored use development.
enusry 2000	PFG 12 Development	Integration of state vapility issues into plans, relatiouship between plan and
	Pars	other knowers such as our masport pairs and nex procedures for
		proporation, management, cores tation
March 2008	P ₹ 3: −015 nq	Strategic everylawistating commonent to mixed use development, including
		housing, to bring new life into towns and oties and promote sustainability.
		Also discovers criced communities, affor Miller costing re-invention hards or
		and buildings, real ocating employment and other land to housing, optimising
		Litter capacity, and U.Os.

1.2 The policy background

Mixed-use development emerged as an issue for land use planning policy during the 1990s, based on an inherent belief on the part of public policy makers that mixed-use development will contribute to a variety of objectives, including housing provision, revitalised town centres and more sustainable urban environments.

Table 1 summarises the documents which trace the development of national planning policy that refers to mixed-use development in England. The period since 1992 has been marked by a return to a plan-led system of development that is increasingly concerned with sustainability. The concern with sustainability was associated with a desire to reduce traffic movements in towns and cities (PPG13) and the revitalised town centre was seen as a means of achieving this (PPG6). Revitalised town centres were also regarded as suitable locations for providing more housing to meet an expanding housing demand.

These aspirations merged in PPG1 (February 1997), which emphasised sustainability, urban design and mixed-use, 'the three themes that underpin the Government's approach to the planning system' (DoE Press Release, 24 February 1997). Thus mixed-use has been identified as a vehicle for creating sustainable urban development, by helping to secure additional housing development within existing urban areas and revitalising urban centres affected by changes in the retail sector (PPG3). The concept of mixed use development received further impetus through the work of English Partnerships and the Urban Villages Forum, who combined to launch the mixed-use development initiative in 1998.

1.3 The perceived barriers

In spite of the commitment to the concept and the supporting policy and practice initiatives, there remain concerns that there are serious constraints on the delivery of mixed-use development. A central theme of this study is to identify and interrogate the factors which inhibit the realisation of mixed-use development, and to identify ways in which these can be and are being overcome in practice.

In pursuit of this, the study examines twelve case studies, selected from a long list of schemes submitted by local authorities throughout England. These provide information about how obstacles have been overcome in practice; but they say little about those factors which are so inhibiting that they prevent a scheme being realised or, less dramatically, lead to a participant dropping out.

For these the study relies on the interviews with practitioners: local authority planners, developers, institutional investors, architects etc. These interviews provide corroboration of the way obstacles are overcome, and also an insight into the 'what might have happened if?' scenario.

We have therefore used a format to review and test the obstacles or barriers most frequently cited in relation to mixeduse development. It sets out to determine whether these are real inhibitors, or whether they are no more than the regular procedural hoops that any development is required to go through, in other words that they are not specific to mixed-use development.

1.4 The study objectives

Against this background the study seeks to provide a practical investigation into ways of effectively delivering mixed-use development in town centres, especially where housing is a major component.

The key issues addressed by the study are:

i the contribution of mixed-use development to the vitality and attractiveness of town centres;

ii the role of housing in delivering mixed-use development in town centres;iii the contribution it can make to reducing travel by private cars and promoting sustainable modes of transport;

iv how to overcome the constraints of delivery identified by different actors;
v how to harness the role of the planning system and other mechanisms to realise mixed-use development in town centres;

vi how to ensure the provision and retention of non-residential uses, especially for small traders in mixed-use development;

vii how to protect existing mixed-use areas from the spread of single uses; and viii the role of partnerships to promote mixed-use development in town centres.

1.5 The study approach

The study incorporates quantitative and qualitative research methods. In practice, there is

more of the latter than the former for the simple reason that the straight facts gathered from interviews and the case studies do not always provide a sufficiently robust basis for addressing all the key issues listed above. For these the study relies on the views and opinions, attitudes and ideas gleaned from the interviews.

The core of the study comprised three main streams of work:

Literature review: published documents on mixed-use development and review of legislation, regulation, PPGs etc. Documents used in the course of the study are listed in the Bibliography at Annex A.

Interviews with practitioners: carried out in three phases: first, at the beginning of the study to assist with scoping the work programme; second, for the case studies; and third, for the validation of conclusions.

Case studies: site visits for physical evaluation, combined with practitioner and user interviews.

This report is presented in three main parts:

Part I (Chapters 2 - 5) examines current practice in mixed-use development through a series of case studies and interviews with practitioners and users;

Part II (Chapters 6 - 8) explores the potential of mixed-use development based on the foregoing examination of current practice; and

Part III (Chapters 9, 10) considers the measures required to promote the delivery of mixed-use development and presents the conclusions.

Although this report was commissioned by the Office, the findings and recommendations are those of the authors and do not necessarily represent the views of the Office of the Deputy Prime Minister.

2 Survey of Local Planning Authorities

The survey of English local planning authorities was carried out to provide a broad overview of the policy approach and the practical experience of mixed-use development. The survey was carried out in the third quarter of 1998 and included all district and unitary authorities in England. Some 200 responses were received, a response rate of 56%.

The questionnaire was in two parts:

- i. Form A addressed the degree to which the authorities' statutory plans dealt with mixeduse development, both in factual and attitudinal terms.
- ii. Form B asked for examples of mixed-use development schemes to form the basis of selection of the case studies. Schemes were submitted by 180 authorities. The selection of case studies and their analysis is described in Chapter 3.

A copy of the questionnaire is given in Annex B.

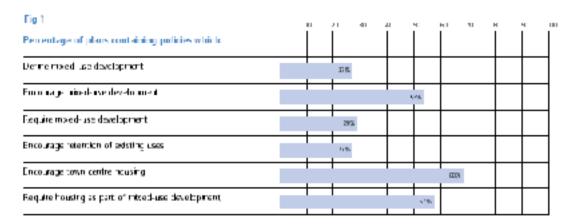
2.1 Definition of mixed-use development

<u>Figure 1</u> shows the percentage of statutory plans which contain specific policy items relating to mixed-use development. It shows that there is significant, if predictable, variation as to what was meant by the term 'mixed-use development', which corresponds to the impression formed by review of the literature:

- only 27% of plans contained a definition of mixed use development;
- some respondents took the rigid view that it referred only to buildings with a mix of uses;
- others suggested that it also included sites with a mix of uses, whether these were in adjacent parts of a block of buildings, or in separate parts of the site;
- in a very few cases the examples offered were of much larger scale, where new settlements are being created, often on reclaimed land formerly in industrial use; and
- while these offered a mix of uses, many of the plans suggested uses segregated by roads or landscaping.

The question of definition is important, because it determines in part whether authorities view mixed-use as a policy priority. Authorities that said mixed-use development was important as a policy objective tended to adopt a looser definition. Those that said it was unimportant tended towards the more rigid definition, seeing it as a mix of uses either in one building or implemented by a single developer.

For these authorities, mostly located in the north of the country, obtaining development of any kind in difficult economic conditions appeared to be more important than insisting on a mix of uses within a scheme. However, were they to adopt a looser definition it is possible that they might also have seen mixed-use as a policy priority.



2.2 Scope of policy

The vast majority (87%) of authorities consider mixed-use development to be an important area of policy. In practice however, some 53% of authorities encourage mixed-use development in their current plans, and only 29% actually contain provisions requiring mixed-use development. Given the overlap where authorities have both these approaches, 62% of plans either require or encourage a mix of uses. This corresponds to other survey data and suggests that despite the acknowledged importance of mixed-use, its translation into policy is a slower process.

The survey shows that 68% of plans incorporate policies specifically to encourage housing in town centres. A lower percentage (27%) have policies to retain existing uses, which might limit the creation of new mixed-use as much as retain an existing mix of uses.

Figure 2 illustrates the relationship between specific policy areas contained in statutory plans and their application to mixed-use development. It shows that there is significant variation in both the degree to which various policies are applied, and the degree to which they are applied equally to mixed-use development. This does not necessarily indicate that less policy direction is applied to mixed-use schemes. It may mean nothing more than the fact that different conditions are applied, which may in their own way be just as prescriptive.

Fig 2		131	A1		41	50	H	·11 81	48	111
Percentage of plans containing policies for:			Γ							7
Affordable housing — and for niced-use level quient				31%	OS.					1
Consity Standards — and for mixed-use development		EN		30%						1
Owalling size standards and for mixed use development	115	9454 6]
Car parking and for mixed lise development						D.E.		315.		1
Accessing standards — and for mixed-use development						192	179	 		

2.3 Benefits

Figure 3 shows the percentage of respondents mentioning specific benefits to be derived from mixed-use development. It shows that sustainability was the most frequently noted benefit (49%), followed by meeting housing needs (37%). Against this only 19% mentioned vitality and viability; but since this was not offered as a possible response, it represented unprompted responses. Sustainability and housing needs were two suggested benefits given on the questionnaire form, which may have prompted the high response. Transport issues (expressed either as the promotion of public transport, or the suppression of private cars usage) were mentioned by 16% of respondents.

Fig 3	.0	æ	20	(3	50	ĐO	70	20	90	100
Percentage of local planning authorities mentioning benefits of mixed use:										_
Sustai al illy				80.						_
Improved vitality/vita ity	1966									_
Moeting reasine needs			27%							_
Considertes a crimens or ion		34h								
incres state transfer transfer estorior	- 135									_
Efficient, we of howelfed land	e%									

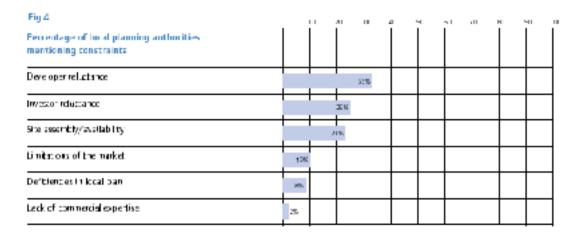
2.4 Constraints

Figure 4 shows the percentage of respondents mentioning specific constraints that have hindered the development of mixed-use schemes. The most frequently quoted constraints relate to developer and investor reluctance. This view from the public sector tends to support the view of the property industry, whose members often speak of the inability to put funding in place as being a major reason for mixed-use schemes not going ahead. Equally interesting is the low frequency of reference to the lack of commercial skills; yet the perception of the property industry is that there is generally very poor understanding on the local authority side

of the property industry as a whole and property economics in particular.

The survey indicated that the planning context limited the ability of some planning authorities to generate new mixed-use schemes. Sometimes this was due to the existence of an older, out-of-date statutory local plan, which favoured single-use development. In other cases it was due to the lack of experience in promoting mixed-use, the difficulty in identifying what mix should be expected in a particular location, and how to obtain the required co-operation from the development industry.

Several respondents acknowledged hostile attitudes from council members and, in some cases, the public towards mixed-use schemes, either in general or in the context of specific schemes. One authority noted that members were wary of schemes where a particular use could be changed without a further planning consent, but which could then be a nuisance to local residents. This is particularly true where uses are mixed within the same building.



Summary

- A survey of local planning authorities (LPAs) was carried out in late 1998. The questionnaire addressed LPA policies relating to mixed use, and invited examples of typical practice for selection as case studies.
- The survey revealed wide variation in the definition of mixeduse.
 Those LPAs that considered it important tended towards a broader definition, whereas those that considered it less important tended towards a more rigid definition.
- The vast majority of LPAs considered mixed-use development to be an important area of policy but, in practice, fewer have specific policies that promote or insist on mixed-use development even though they encourage it.
- The most frequently stated benefit of mixed use was sustainability, followed by meeting housing needs.
- The most frequently stated constraints to mixed-use development were developer and investor reluctance, and the planning context that limits the ability of LPAs to generate more schemes.

Although this report was commissioned by the Office, the findings and recommendations are those of the authors and do not necessarily represent the views of the Office of the Deputy Prime Minister.

3 The Case Studies

Twelve schemes were selected to exemplify the practice of mixed use development carried out during the 1990s. These provided a window on the state of the art, the roles of the practitioners and how the schemes actually got off the ground. A sub-set was then selected for more detailed analysis on user perception and urban design quality. The schemes were selected from those submitted by local authorities throughout England in response to the questionnaire. A long list of 180 schemes was whittled down by a process of elimination, focusing on schemes located in town centres with a residential component. In addition, a good geographical spread was sought, covering different sized urban centres ranging from metropolitan centres to small towns.

The final selection was as follows:

- Portland Place, Ashton-under-Lyne
- St Martin's Place, Dorking
- Brook Green, Hammersmith
- Cardinal House, Havant
- Pex Development, Leicester
- Smithfield Buildings, Manchester
- St John's Gate, Middlesbrough
- The Post Office Building, Newcastle
- Calvergate, Norwich
- Trivett Square, Nottingham
- Cornish Place & Brooklyn Works, Sheffield
- Riverside Mill, Sowerby Bridge

Details of each case study are summarised on the following pages. Interrogation of the case studies was based on site visits and interviews with the main participants in each development: staff from the local planning authority, representatives of the developers, the architects, estate agents, funding agencies etc.

Structured interviews were based on a list of questions to ensure that all participants were invited to cover the same ground. In practice, responses varied greatly, being subject to the individual's involvement and interest with the development, knowledge of the scheme history and interpretation of a particular set of events.

Ashton New Wharf, Portland Basin Ashton under Lyne Planning Authority
Tameside Metropolitan Borough Council
Developer

Sanctuary Housing

Funding

ERDF, SRB, National Lottery, English Partnerships, British Waterways, Housing Association Grant, local authority and private funding.

Architect

Philip Millson Architecture

Location and site details

0.9 ha site to the south of the town centre, set at the junction of the Ashton Canal, Peak Forest Canal and River Tame.

Scheme details

Reconstruction of fire damaged Grade II listed warehouse. Development consists of 67 housing association units located above a museum and conference room suite, with permission for A3 uses in a separate wing. Local authority provided the catalyst for development. The site was zoned for mixed use as part of wider regeneration programme in the Development Plan.

St Martin's Walk Dorking

Planning Authority

Mole Valley District Council

Developer

Bredero Properties plc

Funding

Private funding

Architect

Renton Howard Wood Levin Partnership

Location

1.2 ha site adjacent to the High Street

Scheme details

Former cattle market and Tesco store redeveloped to contain a food-store, 14 shops, 6 retail kiosks, offices, parking facilities, 8 studios and 2 one-bedroom flats. Council part owned the site identified for redevelopment in the Development Plan. Planning authority encouraged a scheme in keeping with the town's historic layout.

Brook Green Hammersmith

Planning Authority

London Borough of Hammersmith & Fulham

Developers

Tesco Stores Ltd

The Peabody Trust

Funding

Housing Association Grant, a Business Expansion Scheme, (set up by The Peabody Trust and LB Hammersmith & Fulham) and private funding.

Architect

Corstorphine & Wright

Location and site details

1.2 ha site on the former Osram light bulb factory, located on Shepherd's Bush Road to the north of Hammersmith underground station.

Scheme details

A new-build scheme which retains the Osram tower, deemed to be of particular architectural

merit. Scheme consists of 104 social housing units, mostly flats but also including 8 three-storey family dwellings built over 4,152 sqm Tesco superstore. The development was contrary to Development Plan which designated the site for industrial uses. The local authority was keen to involve a housing association, and the initial tenants were taken from local authority lists.

Cardinal House Havant Planning Authority

Havant Borough Council

Developer

JD Wetherspoon plc Landford Estates Ltd

Hermitage Housing

Funding

Private funding

Architect

Nicholson GDA Ltd

Location and site details

0.15 ha site to the south of the town centre.

Scheme details

Conversion of 1960s former Inland Revenue office building, with pub/restaurant on ground floor and 18 social housing units above. Local planning authority approached by developers and adopted a positive attitude to mix of uses.

Pex Development Leicester

Planning Authority

Leicester City Council

Developer

William Davis Ltd

Funding

City Challenge, City Grant and private funding.

Architect

HLM Architects

Location and site details

1.0 ha site along the River Soar west of the city centre, outside the inner ring road.

Scheme details

Refurbishment of a Grade II listed building (former sock factory and city landmark) and development of riverside frontage. Scheme consists of 3,800 sqm office space, 230 sqm restaurants/bars, 24 market housing units and 4 versatile business units. Zoned as a Potential Development Area in Development Plan as part of a wider regeneration policy. The Land Registry is sole occupier of the office space, and was became involved in later stages of the development process.

Smithfield Buildings Manchester Planning Authority

Manchester City Council

Developer

Urban Splash

Funding

English Partnerships and private funding.

Architect

Stephenson Bell Architects

Location and site details

0.25 ha site a few minutes walk from Piccadilly Gardens, close to the Northern Quarter. Scheme details Conversion of former department store and associated buildings for 81 market apartments, 3,400 sqm retail premises, and a public gym of 929 sqm. Local authority adopted enabling role and encouraged development of a mix of uses. Existing public multi-storey car park on adjacent site provides parking space for residents.

St John's Gate Middlesbrough

Planning Authority

Middlesbrough Borough Council

Developer

Persimmon Homes, Home Housing Association, Chestview Ltd

Funding

English Partnerships, Housing Association Grant,

Urban Programme, City Grant, City Challenge,

Northumbrian Water, local authority and private funding.

Architect

P + HS Architects

Location and site details

4 ha site on the eastern fringe of the town centre.

Scheme details

Scheme consists of 4,200 sqm office development, 140 social and market housing units, and a 0.4 ha local park. Site formerly occupied by terraced housing prone to severe drainage problems. Local authority acquired land through voluntary acquisition and CPO, and prepared site for development. Local authority prepared development brief which invited proposals for a mixed-use development.

Post Office Building Newcastle upon Tyne

Planning Authority

Newcastle City Council

Developer

Red Box Company

Funding

City Grant, English Partnerships and private funding.

Architect

Alan J Smith Partnership

Location and site details

0.24 has site fronting onto St Nicholas Street in city centre.

Scheme details

Conversion of a landmark Grade II listed building situated in a Conservation Area. Scheme consists of offices, 13 market apartments for private sale, restaurant/café, roof garden, design studio, art gallery, gymnasium and car parking. Scheme incorporated into the Grainger Town Project, which manages regeneration for a wider area of the city. The Red Box Company formed by Alan Smith (of Alan J Smith Partnership) and Sky Properties to part-fund and manage the development. The Development Plan zoned the building for refurbishment,

allowing flexibility in acceptable uses.

Calvergate Norwich

Planning Authority

Norwich City Council

Developer

WF Pointer and Sons

Funding

Housing Association Grant and private funding.

Architect

Feilden & Mawson Architects

Location and site details

0.8 ha site north of the city centre within the inner ring road.

Scheme details

Redevelopment of Grade II listed and derelict buildings (including former brush factory) within a Conservation Area, and additional new-build. Scheme consists of 59 social and sheltered housing units for sale and rent, a women's hostel, and 1,766 sqm of office space. The local authority prepared development brief specifying mixed use development. The Council owned part of the site and produced the scheme design in consultation with the developer.

Trivett Square Nottingham

Planning Authority

Nottingham City Council

Developer

Nottingham Community Housing Association

Funding

City Grant and English Partnerships and private funding.

Architect

Grogan-Culling-Macaulay-Sinclair, Architects and Interior Designers.

Location and site details

0.6 ha site south east of the city centre within the inner ring road, on the periphery of the Lace Market.

Scheme details

Largely new-build scheme incorporated into the regeneration of historic Lace Market. Scheme consists of 139 one and two-bed market flats, 10 six-bed student flats, plus 14 commercial units on the ground floor. Site identified in the Local Plan as a Development Opportunity Site. Scheme initiated by the developer.

Cornish Place and Brooklyn Works Sheffield

Planning Authority

Sheffield City Council

Developer

Gleeson Properties Ltd

Funding

English Partnerships, English Heritage and private funding.

Architect

Axis Architecture and Design Management Ltd

Location and site details

0.89 has site in Kelham Island northwest of the city centre, alongside the River Don.

Scheme details

Refurbishment of Grade II and Grade II* listed buildings in Conservation Area. Scheme consists of 99 market flats (including 14 live/work units), 540 sqm office space, 1 retail unit and 1 leisure unit.

Riverside Mill Sowerby Bridge

Planning Authority

Calderdale Metropolitan Borough Council

Developer

Fe Westgrove Homes Ltd

Funding

ERDF, English Heritage, SRB, English Partnerships and private funding.

Designer

Philip S. Ryley & Co

Location and site details

0.28 ha site on the River Calder immediately adjacent to the town centre.

Scheme details

Conversion of Grade II listed mill buildings in a Conservation Area, as part of the regeneration of the riverside on the southern side of the town. Scheme consists of 58 market flats and houses, 560 sqm of office space, and storage and leisure facilities for a canoe club. The local authority uses part of the commercial space as a One-Stop-Shop. The local authority was proactive in securing redevelopment. It acquired the buildings during the 1980s, and maintained them with ERDF and English Heritage grants. The site was included in a development brief prepared for the wider riverside area.

<u>Figure 5</u> shows the breakdown of uses by case study. All include housing, a basic requirement for selection as a case study. The most common mix is with offices; A3 uses such as pubs and restaurants, commonly perceived to be incompatible with residential use, are present in eight of the schemes.

<u>Figure 6</u> summarises the principal factors which determined the mixed use character of each scheme. The double bullet indicates dominance of a particular factor. In all but one case (Nottingham) the property market played a significant role. Planning briefs were significant in more than half the schemes; and they appear to have been more important than development plans in determining the mix of uses, which is to be expected given their site-specific focus.

Fig 5 Breakdown o	fluse by o	ase study						
	Housing		Offices	Caffy/	Pmb	Retail	Leisme/	Workshop
	Market	Social		Restaurant			Culture	
Pahton ander Lyne			•					
Dorting	•		•			•		
Ha mirersimith						•		
Havot					•			
Leicester	4		•					•
Marchester						•		
Middlesbrough	•		•					
Newcestle	-		•					
Nowici								
No:buchan	•		•	•				
9-effie d	•				•	•		•
Swery Budge								•

Fig 6 Principal Carte	orsidetermining r	D.P.			
	Planning	Property	Development	Funding	Public
	Brief	Market	Plan	Requirments	Demand
Ashton under Lyne	•				
Daxing	•				
Ham neremith	•				
Hewart					
Lekostar			•		
Manchester	•				
Middlesproug k	•				
Navcistla			•		
Norwich	•		•		
Notairgham			•		
Sie Tield			0.0		•
Sowerby Bildge	•				

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4 User Perception and Experience

4.1 Introduction

An essential element in understanding how mixed-use development works in practice, and to gauge objectively its contribution to the vitality of town centres, is to review the experience and views of those who live or work in such developments. This is important because of the continuing professional debate about what constitutes attractive living environments, and which segments of the housing market are attracted to town centre living.

Surveys were conducted with residents and business occupiers in four of the case study schemes:

- Brook Green, Hammersmith (completed 1996)
- Cardinal House, Havant (completed 1998)
- Smithfield Buildings, Manchester (completed 1997)
- Calvergate, Norwich (completed 1992)

These four schemes were supplemented by a survey of residents and businesses in The Lace Market area in Nottingham to assess the impact of mixed-use on a wider area, rather than within a single development. There are numerous mixed-use buildings in the Lace Market, and the change it is experiencing through the expansion of the evening economy into former industrial and commercial properties is worth investigating.

In addition, the findings drew on primary research conducted through earlier interviews with residents of mixed-use developments at Gloucester Green in Oxford, Covent Garden and Soho in Central London, and Merchant City in Glasgow (see endnote 1).

4.2 How the views were collected

Face-to-face semi-structured interviews were conducted with those living or working in Cardinal House, Smithfield Buildings and Calvergate, and self-completion questionnaires were distributed to residents of Brook Green and to residents and businesses in the Lace Market.

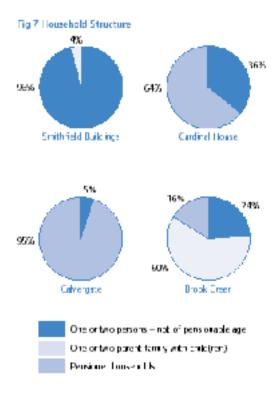
The questions for residents covered:

- the reasons for choosing to live in the development and locality and, if not a positive choice, how the respondent came to be living there;
- the area as a place to live;
- awareness of other activities or uses within the development and what influence (positive

- or negative) this has on the respondents' quality of life;
- perceptions of the local community and their degree of local involvement;
- use of activities and facilities in the development and the area (including, shops, entertainment, the evening economy);
- car ownership and car usage for different types of trips; whether ownership and use changed when the respondent moved to the development;
- any concerns for personal security and perceptions of nuisance and anti-social problems;
- if children and young people in the household, satisfaction with access to childcare and school provision; and
- profile information on the household, including composition and age structure, occupation, length of residence, and any plans to move and why.

The questions for businesses covered:

- views on suitability of the premises and location for business;
- awareness of residential use within the development and what influence (positive or negative) this has on the business, what use residents make of their business, whether any employees live in the development;
- the impact of housing on the security of the business, both during and outside business hours:
- complaints about the business made by residents and, if so, how these were resolved;
- perceptions of nuisance and anti-social problems; and
- profile information including type of business, hours of operation, car parking and delivery arrangements, length of time in development and any plans to move and why.



4.3 Who lives in mixed-use development?

Although attention from the media and others has focused on the attraction of affluent young professionals to city centre living, in reality the range and type of people living in mixed-use developments in a central location is much more varied; in terms of income, household composition and age structure (see **Figures 7-11**).

People living in town centres and mixed-use developments is not a new phenomenon, although the post-1950s encouragement of single-use commercial developments often resulted in substantial and irreversible population losses from city and town centres. Despite the often profound social impact of these large-scale developments, residential communities have maintained a presence and retained their roots and networks.

The surveys of the Lace Market, Soho and Covent Garden reveal that significant minorities have lived in the areas for twenty years or longer. Links to the community and the presence of family or friends locally can be important factors for making town centre locations a good place to live.

The responses of residents of Cardinal House, Calvergate and Brook Green reveal that, although those living in social housing may have had less choice in their location than owner occupiers, satisfaction levels are usually consistently high across tenures and between types of household. However, there are striking contrasts.

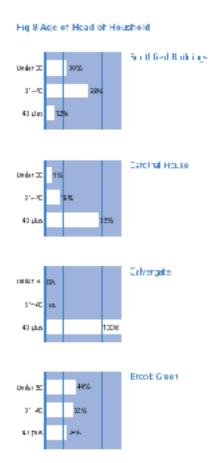
Those living in Smithfield Buildings and private developments in Merchant City tend to be in professional or managerial occupations, younger, and live alone or as a couple. In contrast, those in social housing, such as Cardinal House or Brook Green, are more likely to be retired, unemployed, at home looking after children or in lower-paid, clerical and service occupations.

One and two person households are still the norm.

A common feature in both privately-owned and social housing is the comparatively small numbers of residents with children living at home. In some cases, this was due to a decision taken by the social landlord (Cardinal House) or the managing agent (Calvergate) to restrict occupation to older households without children. It was considered that the layout and density of the development was not appropriate for households with young children and, by and large, the residents agree with this.

The only scheme with a significant number of residents with children is the social housing scheme at Brook Green, which includes both flats and family house units. Most families with children expressed satisfaction with the development and the location. However, some expressed dissatisfaction at the lack of education and child care facilities:

"Local government does not see the city centre as a place to live. The only people even vaguely catered for in Nottingham centre are young single professionals...If you have children like we do, they are unsafe, subject to high pollution, have to travel miles to school and have nowhere to play" resident of the Lace Market



4.4 "It's the locality that really attracts"

Whilst many views were expressed about the appeal of town centre habitats, very few residents referred specifically to the attraction of living in a mixed-use development. And for the

small minority that did refer to the presence of other uses as a consideration in their choice of the development as a place to live, it was rarely the deciding factor:

"The building is different. I suppose the design has a lot to do with it. That's what I like about it, and I suppose having the shops and offices in the same building makes it different as well' resident of Merchant City

For residents and businesses in a development where the different uses are physically separate, there is often only scant recognition of the mixed-use character of the scheme:

"I don't really think of this as having other uses; the housing is quite separate from the offices; it's only with the parking problems that you notice that they're here" resident of Calvergate

Although most residents attracted to city centre developments tend to be young, others have moved into the centre as a physical expression of changes in their life cycle:

"New job, new city, new marital status - moving to the city centre was an important part of saying that" resident of Smithfield Buildings

The surveys reveal that location in a lively and vibrant town centre is paramount in attracting residents to mixed-use developments:

"I love being in the centre of everything...'the buzz'... it's the atmosphere of this area that attracted me" resident of Covent Garden

"The merits are far more in the locality than in the building itself" resident of Gloucester Green

4.5 "All this makes for variety and a full life!"

Many of those interviewed identified the variety of local activities as being the dominant factor in attracting them to the town centre, rather then the mixed-use development per se:

"It's the mix of uses with residential, office, leisure, education, restaurants and bars that makes this such a lively place to be" business owner in The Lace Market

The mix of shops, restaurants and entertainment uses are most closely associated with vibrancy and life, especially for the newer arrivals to city centre living:

"Being part of the city centre means there are things going on all night. I just walk round the corner to eat, drink, shop, go to the theatre or a club" resident of Merchant City

It is not only the mix of activities or uses which are associated with vitality, but their influence

on and contribution to a dynamic street environment:

"You walk along the street and it's like the continent: the cafes and bars spill out on to the pavement; it gives the whole place a real buzz, there's so much going on" resident of Covent Garden

And it is not only the more affluent professionals who value the close proximity of entertainment uses. The residents of Gloucester Green include many students who rent their flats from owners, some of whom purchased the properties primarily as an investment. Not surprisingly, many of the students are regular users of the leisure and entertainment facilities:

"It's so convenient: there's a cinema nearby, we can go to a pub or club and walk home; places are open late and we don't have to go far for anything" student resident of Gloucester Green

For residents in rented housing, the attraction of town centre living tends to be more about the proximity of shops and facilities, and less about the centre's perceived vitality and vibrancy. In social housing in Covent Garden and Soho, nearly 60% of the respondents identified the proximity of the shops as a key reason for being satisfied with the area as a place to live. In The Lace Market, more than 90% of survey respondents identified its closeness to shops and other facilities as a key reason for enjoying living in the area. Less than 5% identified the area's liveliness and vibrancy as a reason for their satisfaction with living there.

In the three case studies which included rented social housing, the proximity of the shops within walking distance was often a major factor in people's decision to move to the development, and their subsequent satisfaction:

"It is in easy reach of the centre and close to the shops, it's close to all amenities, that's the reason I came here" resident of Calvergate

"It's all very convenient. I have three young children and, from food to toiletries, I can get it all there [the supermarket] without getting stressed" resident of Brook Green

It is often perceived by planners and developers that the residents of rented social housing are unlikely to be regular users of town centre facilities other than those meeting their local shopping needs. Because of lower income, family commitments and an older age structure, they will tend not to use these facilities as often as those living in private housing. But they are still users of and contributors to the evening economy of many town centres.

4.6 "There's a positive feel about the place that makes you feel good"

Although there are negative aspects of city centre living, especially from traffic noise and pollution and the disruption caused by late-night uses, the findings also identify the positive features. On an individual basis, residents identified the way in which living in a development or locality with variety and activity had reduced their sense of isolation and made them feel 'a part of life'. It was often - but not exclusively - older people and those living in social housing

who recognised and welcomed the social benefits of living in a mixed-use environment:

"Some of those inner city estates are very depressing places to live. Here it's lively and thereis workers, people enjoying themselves."
resident of Covent Garden

"I was so bored with suburbia, I think it was making me depressed just looking at the front and back garden! This was a once in a lifetime opportunity to move to the centre of Glasgow and at a reasonable price" resident of Merchant City

4.7 "I just walk round the corner to eat, drink, shop, go to the theatre or a club"

Having housing in the city centre can be good for business and the local economy.

The findings demonstrate that the higher-income professionals, many of whom have been recently attracted to city centre living, are often extensive and regular patrons of the attractions of the evening economy. Although the volume of residents contributing to the economy of the town centre is small compared to those who come in from outside on a daily or nightly basis, a number referred to the benefit of having shops and other facilities within the same development:

"We go there (the pub downstairs) to eat, especially if we have visitors; it's so convenient, the food is good and it's well priced" resident of Cardinal House

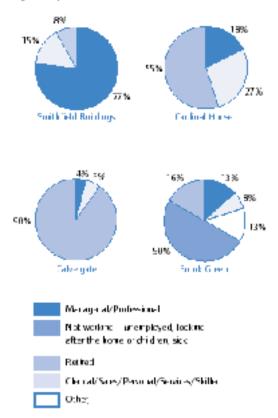
"I use all the shops downstairs all the time: the paper shop, the gym, the coffee shops" resident of Smithfield Buildings

"Not having to go far to get the shopping is a real bonus...just downstairs and back up with it all" resident of Brook Green

However, business occupiers are often unaware of the extent to which residents within the same development patronise their shops, cafés or pubs. Customers do not necessarily identify themselves as neighbours and the trade from local residents is relatively small for most businesses. One coffee shop in Smithfield Buildings did identify the importance of developing a relationship and sense of community with local residents in the development:

"I know some of the residents use us regularly. We have wine tasting and other events when we especially target the residents above, and we have late-night shopping...but it would be good for more to use us and we want to go out and encourage this." shop owner in Smithfield Buildings

Fig 9 Occupation of Head of Houshold



4.8 "The character of the building attracted me"

The survey highlights the attractiveness of conversions:

"I love Norwich. The rooms are in general a good size. It's a restored Grade II Listed building, and I like that. It gives it character and it means something, not just bricks and mortar" resident of Calvergate

"The character of the building attracted me, its design, the exposed beams and modern style, the space" resident of Smithfield Buildings

The residents of the converted office building in Cardinal House identified the size and quality of their accommodation as a principal reason for their satisfaction with their homes and the development:

"The flat is wonderful, it's spacious, with good size rooms, it's very light, the sun comes in the morning and it's cool in the evenings and there's nothing more that you could want' resident of Cardinal House

Many respondents commented favourably on the quality of their internal and external environment. It is discernible from the many comments received that light and space, and the added amenity provided by a pleasing view, are especially important to the residents of apartments or flats in a crowded city centre. The absence of a garden or external space means

that residents tend to prize generous window space and a good view as an extension of their own private space:

"I couldn't believe the flat when I saw it. It's so big and all that space and light. There's three big windows in the lounge alone" resident of Cardinal House

"It is also lovely and sunny; and the view! - I can see the castle, the cathedral and the City Hall clock. There is no need for a garden, the flat is so light and there's good space for the rooms" resident of Calvergate

4.9 "Much more thought and work needs to be done for businesses and residents to live in harmony"

Conflicts arise where the noise and bustle of evening or nighttime activities impact directly on the quality of life and peace of residents. These conflicts are not exclusive to mixed-use development schemes, but are obviously more likely to occur in mixed-use environments. Even those who are regular users of late-night leisure and entertainment venues want the area to be quiet when they come home and want to sleep:

"I use the clubs and the pubs a lot. But on Sunday mornings I like to get some sleep. When the club across the street is open to 4 or 5 am, with the music going, it's just what I don't need then"

resident of Smithfield Buildings

Not surprisingly, residents' attraction to late-night venues often matches changes in their life cycle or health:

"This was a fabulous place to live when I was interested in going to pubs and clubs, when I worked in the city centre as well...but all that's changed. I can't stand the noise anymore and my health has been affected...I'm desperate to leave now" resident of the Lace Market

Residents in The Lace Market, Soho and Covent Garden described how the growth in the number of late-night activities and the extension of opening hours into the early hours of the morning has increased the noise disruption and nuisance.

They spoke of the importance of striking a balance between the demand for late-night activities and the needs of residents:

"The city centre used to be very desirable up until a few years ago-the noise, the litter, the traffic, the violence and the drug problems have all got a lot worse. The balance of residential to leisure has to be right, otherwise the noise from the outlets causes problems that cannot be tolerated by people living here" resident of the Lace Market

Many residents in The Lace Market feel strongly that rapid changes to the area are destructive to the interests of established communities:

"At times the residents here feel as if they are not being listened to; and even if they are, it is not important what they have to say"

"We have reached saturation with clubs and pubs, and the balance could easily go the wrong way and we will end up with an area that nobody wants to live in" residents of the Lace Market

It is often well established residents, many with family ties with the area going back generations, who feel their needs are being ignored by the local authority and businesses in the drive for the 'twenty four hour' city:

"I've lived all my life in this area and my family's been here for generations. But we are not wanted now, that's how I feel. The centre's being developed for the rich; our needs don't seem to count anymore" resident of Soho

Yet despite well articulated concerns about recent changes to the area, nearly 85% of respondents from The Lace Market were satisfied with the area as a place to live. Many residents complained about anti-social behaviour associated with night-time activities:

"It's terrible, the noise and the drunks. They ring our bells at one and two o'clock in the morning. Those people could be from any pub in the area" resident of Cardinal House

"Yes, it was great living here; and then they turned a sedate and quiet Italian restaurant in our basement into an Irish night club. Then it all changed. Some thought should go into the fact that there are residents living above, and some activities are just not acceptable" resident of Merchant City

Some respondents suggested that more prior thought to how mixed-use development works in practice could help reduce or minimise the potential conflict:

"We agree with mixed-use, but planning and thought needs to go into it and the environmental issues need to be discussed. The people who make the decisions need to understand how an average resident's life is affected by noise, rubbish and other things" resident of Cardinal House

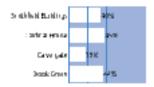
4.10 Sustainable living, car ownership and use

"It's good to have everything within walking distance. I've kept my car but I gain more time because of less driving and I'm fitter with more walking"

The survey findings reveal wide variation in car ownership and car usage. There is some evidence, however, that those attracted to mixed-use developments and city centre living are households who are not car owners:

"I don't drive so I was attracted by living so close to the shops, the buses and the trains. It makes a lot of difference, if you don't have your own transport" resident of Cardinal House

Fig 10 Percentage of respondents owning a car



Not surprisingly, the lowest car ownership was recorded for the sheltered housing at Calvergate. The majority did not own a car before moving to the scheme and, of those that did, personal reasons or cost were the main reasons for no longer being an owner. Only one respondent said it had been from personal choice because it was now possible to walk everywhere.

Almost half the residents interviewed at Cardinal House and the private housing at Calvergate were car owners. Again, only a small minority had given up their car when moving to the development and the reasons were mainly personal (the death of a partner who was the driver or failing health) or associated with cost of maintenance and parking.

At Brook Green, 44% of respondents were car owners, and half the households without a private car owned a car before moving to Brook Green. The main reasons for giving up a car were cost and car parking problems. A small number of respondents said it was a positive choice because they did not need a car living so close to amenities and good public transport.

Forty percent of respondents in Smithfield Buildings were car owners. It was evident from the interviews that residents welcomed the flexibility provided by proximity to good public transport and the availability of many amenities within walking distance. There is some evidence from the interviews that non-car owners were attracted to this development because of its location, but little evidence that residents had deliberately relinquished ownership on moving to Smithfield Buildings.

More than one third of residents of Gloucester Green said they had given up their car on moving to the development. The main reasons for this decision were the cost and difficulties of parking in the city centre, and the development's location meant the car was no longer a necessity.

Over half of respondents in the Lace Market were car owners. Just over 10% of respondents said they owned a car before moving to the Lace Market, and relinquished ownership because of car parking problems, the cost of maintenance and because a car was no longer needed in a city centre location.

The interviews reveal that those with cars are likely to use their vehicles less as a consequence of living in the city or town centre. For example, although the majority of those interviewed in Merchant City were car owners, regular use of the car was limited to a minority for journey to work and visiting friends or family.

At Cardinal House, the car is used mainly for the journey to work and for leisure and shopping trips. In the private housing at Calvergate, residents use their car most frequently for leisure trips and, to a lesser extent, for shopping. Car owners in both developments said they use their

car much less as a consequence of moving close to the city centre, and especially less frequently for shopping and leisure trips:

"I could even do without the car if necessary. I often don't use it. I used to walk to work, something I could never do before I moved here" resident of Calvergate

"Where we lived before, we had to use the car for almost everything - to go shopping, to visit friends and just to get out. Now, we can walk for most of these things and only use the car when we really have to" resident of Cardinal House

A key issue for many residents was the lack and/or cost of a car parking space. Even those without a car, such as the residents in the sheltered scheme at Calvergate, are inconvenienced by the lack of parking space for visitors. At that development, car owners also identified car parking problems as a main source of dissatisfaction:

"Perennial parking problems, that's the main bugbear. There's no garage or parking space for every flat, which makes it very difficult when we have visitors."

The competition for spaces between commercial occupiers and residents could lead to tension between the two:

"Staff from the pub and people using it park in the spaces which are meant for residents. It's a constant source of annoyance. When you come back, you don't know your space is going to be there, and we have nowhere else to park" resident of Cardinal House

"Car parking is a problem...the lorries for the offices often make our spaces inaccessible" resident of Calvergate

In the Lace Market, over 80% of car owners identified problems with parking as a feature they disliked about the area. At Brook Green even though parking is available, there were criticisms of the cost from residents:

"We are living in housing for people on low incomes and yet we are charged approximately three and a half times more for parking than the rest of the borough".

resident of Brook Green

Summary

- A combination of face-to-face interviews, questionnaires and focus groups was carried out with residents and business occupiers in four case study schemes (Hammersmith, Norwich, Manchester and Havant), supplemented by primary research in Nottingham, Oxford, London and Glasgow.
- The residents of mixed-use schemes represent a wider range in terms of income, household composition and age structure,

- balancing the image of the dominance of professional/ managerial groups.
- The area-based surveys (The Lace Market, Soho and Covent Garden) show a significant minority that has lived in town centres for over 20 years.
- One or two person households are the norm, with a comparatively small proportion of residents with children living at home, which is consistent with the type of accommodation offered.
- The proximity of facilities and activities offered by the town centre location is a more important attraction factor than the mixed-use development per se.
- The surveys confirm the reciprocal benefit for residents and local businesses, although the trade from local residents is relatively small. Residents place a high value on the conversion of old buildings, which provide unconventional internal dwelling features and a high-quality external environment, which outweigh the lack of gardens or external space.
- Widespread concerns are expressed about the need for harmonisation of conflicting uses, principally relating to the impact of night-time leisure and entertainment on residential environments. Longer-term residents feel that their interests are being subsumed to short-term commercial fads.
- There is wide variation in car ownership and usage, but, as expected, a high proportion of households has no car, with the average well below 0.5 car per household.
- A small but significant proportion of households has given up their car since moving into the development; and most car-owning residents say they use the car less than before.
- Lack of car parking provision is a common complaint even for noncar-owning households because of the inconvenience for visitors.

Endnotes

1. Background research carried out for Reclaiming the City, ed. Andy Coupland (1997), and for the Soho Housing Association (1998).

Although this report was commissioned by the Office, the findings and recommendations are those of the authors and do not necessarily represent the views of the Office of the Deputy Prime Minister.

5 Design Quality and Context

Successful mixed-use in an individual building, a series of buildings grouped together, or as a predominant characteristic across an urban area is readily identifiable by a mix of functions which jointly activate the built form. Successful mixed-use locations are notable when uses visibly activate the ground floor level of buildings and the street environment in a positive and integrated manner.

Successful mixed-use can also have a beneficial impact upon the economic and social well being of an area, enhancing viability and vitality, generating a strong sense of place and urbanism, and often producing an environment both attractive and sustainable.

Successful mixed-use provides choice, ease of access, and a sense of being in an active and dynamic urban setting. It comprises a coming together of different yet complementary activities, commercial, recreational and cultural. Moreover, mixeduse is a critical mass of functions which attain a degree of activation - economically, socially and environmentally -often greater than the simple sum of uses present.

The impact of mixed-use upon the street environment is critical. The relationship between ground floor uses and street activities is particularly influential in the space-design-activity dynamic as a generator of successful urbanism. The design audit therefore evaluates the success, or otherwise, of five of the case studies through an assessment of:

Space: the spatial organisation and use programming of building(s), what uses occur, where, the relationship of one to another, and the relationship with the external or street environment;

Design: the character and quality of the design of space, internally and externally; and

Activity: the active relationship(s) between building uses, particularly those operating at ground floor level, and their relationship with the external or street environment.

5.1 Smithfield Buildings, Manchester

The Smithfield Buildings development complex is a tightly contained and highly defined city block comprising several buildings of differing architectural style and materials.

The urban setting is a grid street pattern of approximately 2m footpath and 6m highway widths. The buildings which comprise the complex are predominantly four and five storeys, and are, like many in the vicinity, of high architectural quality originally constructed in the late nineteenth century.

The restoration of Smithfield Buildings and its adaptation to a mix of residential and retail functions has been carried out with skill and ingenuity. The project is undoubtedly one of

integrated mixed-use in so much as housing and retail have been successfully accommodated into the refurbished block. There is a café built into the project, which appears to work well with the residential element.

However, the degree to which the scheme is successful in generating spatial interaction between uses is debatable. In particular, the interaction between the building uses and spaces with the street environment at ground floor level is less than might be expected. Whilst the ornate and historic elevation to the residential accommodation above is attractive and lively in its appearance, the lower street-level facades of the retail accommodation are less so.

The tight urban setting and the heavily trafficked street allow little opportunity for the ground floor building uses to extend beyond or to articulate the building line. The choice of material and its uniform application renders the street level appearance of the building hard, resilient, and unattractive, leaving little opportunity for the introduction of variety and individual identity. The appearance echoes the use, in that while the retail function is mixed (café, music and clothes stores), the market orientation is on youth culture. Thus mixed in use but not necessarily mixed in users.

Looking at the project in its wider city context, however, highlights the positive contribution the scheme makes to this part of central Manchester. The integrity of the city block has been maintained, the opportunity to live in the city has been enhanced, and retail opportunities have been introduced to a marginal fringe zone of the central area.

5.2 Trivett Square, Nottingham

Trivett Square is set in The Lace Market district of Nottingham. The development is primarily residential (indeed it was described as that by the local planners rather than as mixed use) with a notional retail component located at the extreme south east corner of the scheme. Since it is predominantly residential, it does not function as a mixed-use scheme on its own. But it is worth analysing in terms of its relationship to the Lace Market, an area where regeneration and renewal projects have transformed a derelict area into a thriving mixed-use area.

The Lace Market is an area of outstanding historic quality, both in its buildings and street environment. The old lace manufacturing and trading quarter had become seriously run down following the loss of the traditional economic base. Yet it managed to retain its distinctive character, in large measure through the imposing robustness of the old commercial buildings combined with the quality of the fine grain medieval street layout. Together, these helped the area defy dereliction, and provide the base fabric for its rejuvenation.

The area has successfully absorbed a limited amount of new development which has helped bring life back to the moribund structure. And increasingly the new activities are re-establishing themselves in the old buildings. The result is a true mixed-use area comprising a wide range of uses, including housing, offices, a hotel, restaurants, pubs, clubs and a museum.

The area regeneration is not far enough advanced and occupied to assess fully the ultimate potential of the area in environmental design terms, as a centre for educational facilities, for recreation and night life, as a place to work in manufacturing and in offices, and as a place to live in mixed-tenure housing. The buildings which comprise Trivett Square are not so well dressed architecturally as their predecessors, but the massing and urban qualities of the

scheme are in keeping with the morphology and density of the area. Most importantly, the development makes an important housing contribution to the broader area setting.

The somewhat exaggerated massive quality provides a powerful visual anchor to the south east corner of the city centre, facing out onto the Inner Ring Road. The configuration of the development plays effectively with the steep topography. And it handles the design complexities of changes in levels and direction most adroitly as the development tumbles away down the slope, opening up distant views from within the development.

5.3 Calvergate, Norwich

The Calvergate development is set on the northern edge of the town centre adjacent to the ring road, highly visible to passing road traffic. The location enjoys excellent access to the city centre, which is within easy walking distance.

The development provides extensive office accommodation fronting the ring road, built to a high standard in a contemporary commercial style. The social and private housing component lies behind the office blocks, within the site and towards the city centre. The massing of the development mimics the traditional historical pattern of the medieval town, with the Stannard Place office blocks representing the city wall and ramparts, with the smaller domestic scale development contained within, in safety.

The development projects a strong urban density and urban continuity, and yet is somewhat lacking in vitality. The spatial articulation is compact and reflects the ancient street pattern. But there is a hard quality to the definition, and the monofunctional character of the office provision tends to dominate the environmental quality. The public street environment is sterile and lacks activity, and there is little evident relationship between functions, between ground floor commercial or housing functions and the street environment.

The project does nevertheless make a positive contribution in the wider sense, providing a mix of uses on the edge of the town centre, and providing these in a physical form which is faithful to the traditional urban form.

5.4 Brook Green, Hammersmith

This scheme comprises 104 social housing units located in five storeys of development above a Tesco supermarket. The site was previously occupied by a number of buildings comprising the Osram works, which were on the Council's local register of buildings of merit. None of the buildings were considered worthy of preservation, apart from the Osram Tower, topped by a globe, which has been successfully incorporated into the redevelopment.

This model is not new. The earlier part of the twentieth century saw a good deal of this type of development, which incorporated a mix of commercial, shopping and business uses at ground floor level with apartment housing above, often rising to nine and ten storeys. The Brook Green development does not rise so high, nor does it contain the variety and mix of commercial, business or shopping opportunities.

The building is undeniably urban in its scale and massing, a city block in its own right which is contextually appropriate in its form and use of materials. There is a clear functional separation

between the two uses. The retail use dominates the articulation of the lower level frontage, with its prominent Tesco signage, and access for customer car parking and service vehicles. The residential accommodation forms an important part of the visual mass of the building, with vehicular access hidden round the back. But residents have direct access from the podium to the supermarket by means of a lift.

The podium functions remarkably well, creating a convincing residential environment which provides a practical solution to the problem of achieving effective, uncontrived separation of commercial and residential activities.

This development makes a significant contribution to social housing needs, whilst exploiting the space-design-activity dynamic. The functional integration between the residential and retail uses enhances the interaction between the uses, and captures an essential objective of mixed-use development.

5.5 Cardinal House, Havant

The creative re-use of buildings need not necessarily involve historic areas or historic buildings. Cardinal House is not an architecturally distinguished building; nor does it enjoy exceptional townscape quality in its immediate environs. But it fits comfortably into its environmental context, a 1960s town centre re-development typically comprising three storey brick and panel cross wall construction buildings.

The building itself was formerly an Inland Revenue office, and the upper two storeys have been converted into housing association flats above an extensive pub on the ground floor. It fits well into its immediate context and contributes successfully to the mixed-use character of the area.

The building itself, although a successful residential conversion, is not functionally mixed-use, exhibiting no evident dynamic relationship between residential and commercial activities. Nor do the new uses impact upon the street environment in any meaningful or positive way.

The street facade to the pub along Park Road North is unrelenting in its length and repetitiveness. The interaction of the housing with the immediate environment is in a sense a remote one, as confirmed by residents, of an awareness and enjoyment of the activities in the street below but viewed from the flats, rather than experienced first hand. This is a valuable quality which enhances the quality of the residential units; but it falls short of stimulating the street level interface, and does not add to the urban design quality of the scheme.

The rear of the building dissolves into a predictable servicing area, mainly for the pub but with some car parking for residents. Beyond is the bus station, hardly a quality design feature but nevertheless mentioned by residents as a comforting and interesting feature.

Summary

 The interaction of uses at street level, especially between ground floor uses and street activities, is a critical indicator of urban quality and of determining the space-design-activity dynamic.

- Five case studies were subjected to a design audit to assess their contribution to successful urbanism.
- The schemes reveal varying degrees of success in achieving a high quality interaction, but all are considered to contribute in their own individual way by augmenting the urban texture through the introduction of a mix of housing and other uses.

Although this report was commissioned by the Office, the findings and recommendations are those of the authors and do not necessarily represent the views of the Office of the Deputy Prime Minister.

6 Understanding the Contribution of Mixed-Use Development

This chapter presents an analysis of the potential contribution of mixed-use development to improving the vitality and attractiveness of town and city centres, and to meeting housing needs in a sustainable manner. It also explores the particular factors that make it an attractive development phenomenon.

6.1 Vitality and Attractiveness

6.1.1 Life, people and activity

The term vitality refers to life, and in the particular context of town centres, the life represented by the presence of people. The term also embraces the natural environment in the form of plant life, and this provides an important element of the quality of the physical environment. But in the context of activity connected with land use, the role of people is paramount.

Vitality may be provided simultaneously by the activities in which people engage, and also by their simple presence. It is important to acknowledge that vitality does not necessarily equate with liveliness: a plant grows imperceptibly, but it is very much alive. Terms such as 'the 24-hour city' tend to conjure up a picture of frenzied round the clock entertainment and socialising. But this is a spurious development objective. Similarly, town centre vitality is sometimes equated with a highly compact life cycle, where all needs - living space, work space, shopping, entertainment and so on - are all in immediate proximity, characterised by some recent inner city loft-style live/work apartment developments.

While both these examples indicate a very intense form of vitality, they are clearly at the extremes of what is either practical or desirable. Many people would in any case probably find both examples unattractive. To strive to create the physical environment to accommodate this kind of activity places an unrealistically high threshold on the definition of mixed-use development, and risks frustrating the value of the exercise.

The actual norm is more mundane. In most cases the observed vitality element is a much more subtle and elusive quality, relating to lower level interaction between people doing different things at different times. There is nothing particularly complicated or dramatic about the concept. A variety of buildings, of uses and events, bring people together through a variety of activities.

6.1.2 Activity and attractiveness

There is a fundamental interrelationship between activity and attractiveness. The qualities in mixed-use development which attract are of particular interest for this study. At the risk of stating the obvious, unless these qualities are attractive to people, they are presumably not

worth searching out or trying to replicate.

The term attractiveness refers to much more than the visual impact, important though this may be in promoting an immediate sense of enjoyment and well-being in the observer. Successful mixed-use, whether in an individual building, in a series of adjacent buildings, or as the predominant character across a wider area, is characterised by a mix of function and activity. Its attractiveness will be measured by the degree to which the elements jointly activate the built form at ground floor level and the immediate street environment in a positive and integrated manner.

This phenomenon is exemplified in high-intensity historic town centres, such as Bath, York, Durham and Chester. And it is also manifest in the traditional commercial areas of town centres which attract large numbers of people on the basis of use and activity, whilst not necessarily being intrinsically attractive in the aesthetic sense; for example Oxford Street (London), Northumberland Street (Newcastle upon Tyne), The Briggate (Leeds) and Broadmead (Bristol).

Successful mixed-use can also have a beneficial impact upon the social and economic well-being of an area, enhancing viability, generating a strong sense of place and urbanism, and often producing an environment which is both attractive and sustainable. It provides choice, ease of access, and a sense of being in an active and dynamic urban setting. It creates a critical mass and level of activity which is greater than the sum of the individual uses, thereby making a critical contribution to location and character.

A classic example is the arcades of Bologna where the streetarcade-building relationship is most successfully realised.

Similarly, the Victorian cross street in Leeds arcade exhibits a highly successful space-design-activity relationship. The impact of mixed-use at street level is crucial to an assessment of attractiveness. The relationship between ground floor uses and street activity is the most important influence on the spacedesign- activity dynamic, and is the critical generator of successful urbanism. It follows that the internal workings of a development are less important in terms of attractiveness, although they may be crucial to user satisfaction and hence market viability.

We can observe this in Merchant City in Glasgow, The Quayside in Newcastle upon Tyne and, in an emerging form, in The Lace Market in Nottingham. But it is striking how limited is the diversity when compared with many European cities where economic activity is not restricted to bars and restaurants, but includes a wider range of shopping activity which enriches and stimulates the social element of the economic activity.

6.1.3 Diversifying the evening economy

The point about diversifying the evening economy is the contribution that it can make to an extended vitality for town centres (by preventing the six o'clock shut down when shops and offices close) rather than the promotion of economic activity per se. It is therefore a qualitative rather than a quantitative factor, but which depends critically upon economic viability, for without that it will die.

The principal requirement is for the existence of 'hosts' for the economic activity: shops open late, pubs, bars, clubs, restaurants, cinemas, theatres etc. Without these there can be no diversification. But whether these are contained in mixed or single-use developments is of no importance; they simply have to be there in the town centre.

In addition there needs to be people around to patronise these facilities and the clientele. But whether they live in the town centre (either in mixed-use development schemes or straight residential developments) or live outside and are attracted by the town centre facilities is of little importance to the diversification factor. The key issue is whether mixed-use development helps promote these types of activities.

Clearly mixed-use development can contribute, subject to the mix of uses and the critical mass. A combined housing and office scheme will not make a significant contribution. The addition of retail use may provide a bit of diversification, if the retail element stays open late, and so on. The more varied the facilities, the greater the potential contribution. But being part of a mixed-use development is probably a marginal factor, as they would make an equally successful contribution as part of a single use development.

The clientele depends on the type of housing and the type of resident; the mere existence of housing in the town centre does not alone ensure it. The evening economy requires a population that chooses to go out in the evening, and has money to spend. The younger professionals who choose to live in the town centre, have the resources and the lifestyle, may well fall into that category. On the other hand the residents of affordable housing schemes, who may be there more by necessity or chance than by choice, probably have less scope or inclination to engage in an active evening/night-time social life.

6.1.4 Insiders and outsiders

While mixed-use development can make a contribution by providing housing and the commercial or cultural facilities which stimulate diversification of the evening economy, this is not essential to the diversification concept. Firstly, the facilities and the clientele can be equally well provided through single-use developments. And secondly, the scale of clientele required to support a thriving evening economy is always going to be way in excess of the numbers of town centre residents. In other words, the economic viability will always be dependent on attracting 'outsiders'.

Furthermore, a certain caution should be adopted before embracing this as a development objective. There is frequently a level of conflict observed between the activities of those enjoying the evening economy and local residents. The evidence gleaned from the interviews indicates clearly that many town centre residents are unhappy about the increased nocturnal activity - and especially the noise and the perceived lack of personal safety - derived from the proliferation of restaurants and night clubs. It is interesting to note that these include young professionals who might be precisely the ones to place a high value on it: some complain about the persistent noise from allnight clubs which they sometimes patronise. This supports the intuitive view that people can behave in a noisy and even antisocial manner in one activity, and yet be displeased by the similar behaviour of others when they are trying to relax at home.

6.1.5 Vitality and variety

The variety of elements, users and activities inherent in mixeduse development is crucial to the notion of vitality. The subtle interrelationship between different uses and activities can be the element that provides the spark of vitality. It obviously does not work with every combination; and indeed some combinations are positively inimical to the notion of vitality.

The most common form of variety is achieved in developments which combine a number of different uses, for example housing, office and retail uses. Here the variety, and the resultant contribution to vitality, is obvious and relatively coarse grained. Each use is likely to operate as a discrete activity, and the larger each use, the less likely is there to be any meaningful contribution to local vitality. The contribution, such as it is, is manifest more at the scale of the entire town rather than the immediate locality.

A more interesting phenomenon is the evidence of variety within the same use, which often makes a more telling contribution to the vitality and attractiveness of town centres. The most obvious example is the street containing a variety of different shops or a cluster of offices (solicitor, estate agent, bank etc) which create a socio-economic microcosm which is efficient, meets customer needs, and provides important economic linkages. The level of variety achievable at the fine grain - both the mix of elements and their design - is in practice a more important factor than the simple mix of uses in creating attractive and liveable town centres.

By focusing on individual development schemes, rather than areas, the case studies by themselves provide a rather limited laboratory. The housing focus of the case studies means that they tell us about the advantages which may be derived from mixing housing with other uses. But this is more in the sense of gaining a better understanding of compatible and incompatible uses, rather than providing an insight into vitality. In practice they give us little understanding of the activities that stimulate the fine urban grain and texture of city centres.

We conclude that all the developments in their own way make a valuable contribution to their immediate locality. This is principally on the basis of introducing housing in a location where previously there was little or none, bringing with it the diversification of the social and economic activity.

6.1.6 New use for old buildings

It is striking that the reuse of old buildings features strongly in the case studies. Mixed-use development is clearly an effective mechanism for recycling old buildings, whether these are listed buildings of historical and cultural importance (Leicester, Newcastle, Nottingham, Sheffield), or simply buildings which have exceeded their practical life span (Havant, Manchester).

The restoration of old buildings and their adaptation to a mix of residential and other uses encourages spatial interaction both within the building and at street level. The existence of a readymade context allows the new uses to bed in more satisfactorily than is usually possible with new build schemes.

The old buildings also stimulate the incorporation of modern additions which offer a striking contrast between the old and the new. This counterpoint is an important element of the organic transformation of town through time, It is a reminder that the historic context itself probably represents accumulated development styles and user occupation over decades, even

centuries.

Particular mention should be made of Havant in this respect. The effective conversion of the former Inland Revenue Office (an uninspiring 1960s office building) into quality social housing over a pub demonstrates that the recycling of old buildings is not restricted to the cultural heritage model.

6.1.7 Environmental quality & appearance

There are strong indications that mixed-use development can have a significant impact on environmental quality and appearance. These can be important factors in determining attractiveness. Claiming no profound scientific method, we believe that the case studies represent a quality of development that is significantly superior to the average private sector residential development. It is interesting to speculate whether this results from the mixed-use development factor, or whether it is simply chance in a very small sample.

The challenge associated with the more complex planning and design required for a mixed-use scheme may well provide a drive and spark which is reflected in the quality of the resulting development. This derives first from the integration of different and sometimes potentially conflicting uses into the same building or in a complex of buildings, and secondly from the frequent need to incorporate or adapt some existing buildings.

This spark is even greater when the existing building exhibits some particular historic or architectural quality. The challenge is to retain the quality of the original building while incorporating contemporary uses. This applies in the case of both individual mixed-use schemes (e.g. Leicester, Newcastle, Sheffield) and mixed-use development areas such as the Lace Market in Nottingham or The Calls in Leeds.

An interesting point is the number of case studies which exploit strong settings, along rivers or canals (Ashton-under-Lyne, Leicester, Sheffield, Sowerby Bridge) or a steeply sloping site (Nottingham). It is reasonable to suppose that this stimulates the planning and design process to come up with something distinctive and unconventional.

6.2 The Role of Housing

6.2.1 Housing as a focus of the study

Housing is the dominant land use in this study. This derives first of all from the original research specification which drew on major themes underpinning current Government approaches to town centre development. The research specification emphasises among other things making the best use of urban land, diversifying uses in town centres, and making it easier for people to live near their place of work. It therefore gives a strong - but not exclusive focus on the housing component, making it a primary criterion in the selection of case studies, and placing it at the centre of the analysis of procedures and performance.

Figure 11 shows the breakdown of housing types in the twelve case study schemes.

Fig 11 Casa Study	Housing 1	ypes							
	merket	secial	14:ed	flats 2-bed	34:rel	houses	live/work unit	conversion	new-build
Adriton under Lyre				4				•	•
Corking									•
-au ceis nith				•		•			•
-avan:				•					
_excester							•	•	•
Vandrester	•							•	
Viddeshoor J				•		•			•
\ewcast e								•	
Nowich				4		•		•	•
\ottingham		•		4				•	•
Sheffleic									
sowerby Bridge						•		•	

A second factor which sharpens the role of housing in the context of this study is the current state of the property market: since the mid-1990s, housing has performed exceptionally well and is now viewed as a viable investment proposition. The result is a modest proliferation of mixed-use schemes with a strong housing component, from which the case studies have been drawn. The study has had the opportunity to explore a type of development at a time of buoyant housing activity.

A third factor is that housing brings people back into the town centre, and thus provides an important element of the vitality which is so central to the mixed-use development concept.

6.2.2 The role of the market

A buoyant housing market is undoubtedly good news for mixeduse development in town centres. Combined with a climate through the mid- to late-1990s which has favoured plan-led development and has restricted opportunities for out-of-town development, this has directed the attention of housing developers back to town centre sites which they previously ignored. The profitability and speed of return on investment allows housing developers to absorb the additional costs involved with mixed-use development.

There is now a richer texture to the town centre property development sector, bringing people with a different commercial outlook, skills and objectives into the property market alongside conventional institutional investors. The housing developers tend to be more flexible and imaginative, positive qualities in the context of mixed-use development. This is an interesting paradox given the general tendency to mistrust short-term opportunism when compared with long-term strategic investment.

6.2.3 Residents and lifestyle

Mixed-use development is often seen as a manifestation of a particular lifestyle, characterised - and caricatured - as yuppies supping cappuccinos in their live/work loft apartments located on the fringe of the throbbing commercial centre of the city. This model, if correct, clearly represents a very narrow segment of the housing market; and if it were the whole truth about housing in mixed-use development, it would represent an equally narrow and possibly unreliable springboard for policy formulation.

But the evidence suggests a broader picture. While the yuppie model does exist (and not only

in London), mixed-use schemes offer a variety of dwelling types aimed at different segments of the market which accommodate a range of lifestyles: from smart apartments aimed at young professionals, through flats occupied by middle-aged couples, to affordable housing for families, older people and single people.

With regard to the commercial sector, the type of housing quite naturally reflects the particular qualities and characteristics of the location, and the space needs of the kind of resident to which this is attractive. The social surveys identify two main groups: the young professionals, and the older people, both of which can be said to have made lifestyle choices. The young professionals, who include the cappuccino set caricature, have made a conscious decision to live in the town centre, favouring proximity to the work place and social activity. The social life is often very significant, an essential factor being the availability of a high quality, vibrant night life. It is seen by many as a transitional stage in life, prior to settling down and starting a family, when the dwelling space demands will change.

The older people have also made a conscious decision to live in the town centre, typically after their children have left home, some retired and some anticipating retirement. It is an interesting counterpoint to the traditional pattern of retiring to the country. The surrounding activity is an important attraction, but more in the sense of the proximity of a variety of shops and services.

This interest in the new arrivals should not mask the fact that in many towns there has always been a significant population living in affordable housing, either council housing or low-cost private rental accommodation, most noticeably in larger towns and cities.

6.2.4 Private housing demand

The indications are that the take-up of housing units in mixeduse schemes has tended to exceed developer expectations.

In the Sheffield and Manchester case studies, units have been bought from the plan in advance of completion of construction, based on visits to the show flats. It is possible that the take-up would have been identical had they been single-use schemes, and that this simply reflects the vibrant state of the market linked to imaginative development.

There is also the view that unconventional and innovative development prospers in a vigorous market climate. But it is significant - and encouraging - that developers who have a good feel for the nuances of the market have expressed enthusiasm for the strength of demand.

One probable reason for the vigorous demand is that mixed-use schemes offer a type of housing and associated lifestyle, which was not previously available. This may have released a combination of suppressed demand (supply matching previously unfulfilled demand for city centre or fringe locations) and created demand (for example, people who would never thought of moving to a flat in a converted mill because the choice never existed, are attracted to the idea when they see the development). The mixed-use development schemes thus offer significant additional choice in the housing market.

An additional factor in the strength of the market appears to be the attraction of the town centre location. This is an inversion - but not a contradiction - of the proposition that mixed-use development contributes to the vitality of town centres. It says that the attraction of the existing

town centre and the facilities available offers a level of vitality that makes it an attractive living environment, thus completing the virtuous circle of attraction.

6.2.5 Affordable housing

The provision of affordable housing is an inherent element of town centre schemes with a significant residential component. The case study evidence indicates that residential developers manage to resolve the potential problems, and are able to incorporate affordable housing in their schemes and deliver the required profit level. Housing associations were involved in six of the case studies.

On the other hand, the attitude of institutional investors is less favourable towards affordable housing as this is seen to drive down capital value and therefore the value of the investment. There is therefore very strong resistance to the provision of anything other than market housing. This is discussed further in Chapter 8.4.

6.2.6 Looking to the future

Town centre housing remains a fairly narrow segment of the overall housing market. It is interesting to speculate whether this might broaden in the foreseeable future, and adopt some of the characteristics observed in many mainland European towns and cities, of large inner city populations of all socio-economic groups living in apartments located in mixed-use environments.

The town centre living phenomenon has experienced a modest upsurge during the current decade. What started initially as a limited, style-driven property development programme has expanded significantly in recent years. The evolution of the town centre residential sector to include a broader socio-economic base may presage a much more fundamental long-term social and physical restructuring of towns especially the larger ones.

The recent Foresight Report 'Britain Towards 2010' examines social development scenarios in the light of technological and economic change, and gives some insight into the urban future which will accommodate mixed-use development. The report suggests that 'the growth of single-person households among the young and middle-aged is likely to be near the centre of major cities, and that this sector will play a major part in the rejuvenation of the town centres. Housing projects geared to this market sector will focus upon their leisure, health and personal security needs. Those with more traditional family or household patterns will live in the outer suburbs where the provision of quality schooling, education and childcare will be concentrated.'

The report reaffirms the image-based view of town centre living, referring to the concentration of fast-food outlets, delicatessens, wine bars, clubs, and 24-hour stores. Cosmopolitan and fashionable lifestyles will be concentrated in town centres; and it expects that the centres of large towns and cities will experience the most pronounced experimentation and innovation in lifestyles.

The report offers a cautionary note however. On the broader scale, it speculates that communities are likely to remain diverse reflecting socio-economic demographic and lifestyle factors. But large urban areas will continue to be segregated on the basis of income, occupation and lifestyle, and there will be increasing regional disparities. This offers a sobering

reflection on the expectation or hope that mixed-use development may be able to contribute significantly to the social integration of local communities.

Although by its very nature speculative, this study is valuable in providing a carefully considered socio-economic context, based on social science research, into which mixed-use development will be expected to connect over the forthcoming decade.

6.3 Sustainable Transport Usage

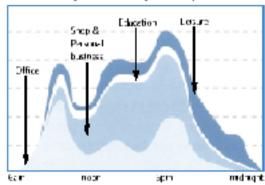
6.3.1 Reducing the need to travel

A key issue for the study is the contribution which mixed-use development can make to reducing the need to travel by private motorised transport, and to encouraging trips on foot, by bike and public transport.

The most important observation is that mixed-use development in town centres provides the potential to achieve lower rates of car ownership and usage. The proximity to social, commercial and community facilities enables residents in a town centre location to carry out most of their activities without mechanised transport of any sort, be it public or private. So even if they are car owners, mixed-use development residents will tend to use their car less for routine trips such as journey to work, shopping, entertainment and so on, than if they were living in a suburban location. Even for reaching suburban and more distant destinations, town centre residents will usually have a greater choice of mode by virtue of the fact that they can use the full range of radial public transport services.

This is of course more to do with location and concentration of the variety of services found in town centres than with the inherent characteristics of mixed-use development. The same benefits would apply to residents of a single-use residential development in the town centre. But insofar as a mixed-use scheme brings people closer to these facilities, then it performs a valuable contribution to the principle of sustainable development.

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Figures from PEG13, A Guide to Bette: Practice, Reducing the need to gravel through land-use and transport planning.

6.3.2 Potential and propensity

This is not a mechanistic relationship however. The town centre location offers the potential, but whether the people have the propensity to take advantage of this potential is another matter. This introduces the concept of 'travel style', a parallel concept to lifestyle. Just as private car usage has developed its own identifiable culture, fiercely amplified through commercial advertising, so low car-use can also acquire an identifiable cultural definition, which may be referred to as a multi-modal travel style.

That this is not so well developed in this country as in many parts of continental Europe for instance, is due in no small part to the steady decline in town centre populations, the reversal of which has only recently been seriously addressed by planning policy. We may well expect this multi-modal culture to become stronger as residential population returns to the town centres. And promotion of such a culture could also form part of a community development programme, for example as part of Local Agenda 21 initiatives.

The propensity to adopt a travel style with low levels of car use will be closely tied in with the type of housing provided and the socio-economic attributes of the owners or tenants. Pied à terre housing will generate trip patterns significantly different from student accommodation, affordable family housing or short-let luxury housing. As the experience of town centre regeneration expands, this will be a useful topic for further investigation.

6.3.3 The location factor

Location is the crucial factor. The most obvious aspect is the increased number of potential

destinations (shops, work place, entertainment etc) which are clustered together within walking distance of the town centre housing. But the potential advantages also relate to destinations outside the town centre.

The dominant radial structure of our cities and towns and the corresponding radial pattern of public transport systems, means that the town centre resident has a far greater choice of potential destinations available via public transport routes than the suburban resident.

Indeed the questions posed by residents of the two areas when contemplating a suitable destination for a particular activity will be quite different. The town centre resident will ask: "Where can I get to fast or easily by public transport?" The suburban resident on the other hand, presuming to use the private car, will ask: "Where will I find it easiest to park?" or "which route will be less congested?"

Low car usage does not necessarily mean low car ownership; it can simply mean a change in travel style. The evidence of the case studies suggests that car ownership is significantly lower in mixed-use development than in conventional suburban schemes. This allows mixed-use schemes to adopt a 1:1 or lower off-street car parking standard significantly lower than the level of provision which has typically been made for suburban housing.

And some schemes offer it as a charged optional extra. Residents who have moved into town centre housing confirm in interviews that they use their cars less than when they lived in conventional housing outside the town centre.

6.3.4 Non-standard responses

A town centre location will often offer or require a non-standard response to the provision of car access. For example, higher land prices will make structured parking (undercroft or multistorey) more commercially feasible. The need to limit vehicle crossings over busy town centre footways will demand communal rather than individual parking access. And on-street parking controls are now almost universally applied in town centres.

Town centre locations are also ideal for the neighbourhood car fleet (or city car club) concept now common in northern Europe and recently introduced to Britain. This offers enormous potential for reducing overall parking requirements, thereby enabling housing to be developed at a higher density, or on smaller sites than would normally be permitted.

6.3.5 Mixed-use development and trip-attraction

The regeneration impact of bringing housing into the town centre may be viewed as generally positive from the traffic point of view. However there is a point at which the use of land for housing may limit the potential for non-residential, tripattracting uses. This may be a particularly relevant question given the current vibrant state of the residential property market and the burgeoning market for office and industrial conversions.

Reducing the need to travel, especially car travel, requires significant trip-attracting development to be located in town centres and other places where alternative modes are available. A choice will therefore have to be made between residential uses (which allow access to town centre activities mainly on foot) and non-residential uses (which enables a

higher proportion of access by public transport).

Mixed-use development provides a major opportunity in this respect by allowing simultaneous development of housing with other activities. This win/win position is especially evident where a vertical mix is achieved, such as housing over shops.

Another key advantage of use mixing is to create lively streets throughout the day and into the evening. Travel times vary between different uses, so a mixture of arrival and departure times spreads the peak business or transport facilities and ensures that there are always people around. This makes for safe as well as lively public realms.

Summary

- The vitality of town centres is essential to their attractiveness, and is a characteristic which mixed-use development ideally seeks simultaneously to harness and enhance.
- The interrelationship between activity and attractiveness is fundamental to the observed quality of historic town centres, exemplified by the role of commercial activity in creating a successful urbanism.
- The introduction of a mix of uses including housing can stimulate the evening/weekend economy, and prevent 'dead' office zones; but this needs to be moderated against the negative impact of antisocial entertainment uses on residents.
- Variety and vitality may be achieved equally by a mix of uses within
 a development as by a mix of different uses in a street: thus a
 street with a variety of small shops will tend to be more lively and
 attractive than the same street with a combination of multiple retail
 stores and offices.
- The restoration and adaptation of old buildings provide a readymade context for new uses, and stimulate the incorporation of modern additions and provide a spur for good design.
- The more complex planning and design process involved with incorporating a mix of uses within a development appears to provide a certain stimulus to the designers, which is reflected in the quality of the resulting scheme.
- A buoyant housing market, combined with the climate of plan-led development, has encouraged housing developers - generally considered to be more flexible than institutional investors - to turn their attention to town centre sites and to become major deliverers of mixed-use development. This is an interesting paradox, given the general tendency to mistrust short-term opportunism when compared with long-term strategic investment.
- Mixed-use schemes offer a variety of dwelling types aimed at different segments of the market: young professionals, middle-aged couples, affordable housing for families and the elderly. The takeup on mixed-use schemes has tended to exceed developer expectations in recent years. This may be due to innovative

- products that offer a type of housing and associated lifestyle that was not previously available.
- The empirical evidence demonstrates that affordable housing can be effectively incorporated in the high-quality mixed-use schemes; but this needs to be set against the strong resistance expressed by some developers and institutional investors against mixed tenure within a single development.
- Mixed-use development in town centres offers the potential to achieve lower rates of car ownership and usage (as demonstrated in the case studies), due more to the proximity to facilities rather than the character of mixed-use development.
- The mixed-use lifestyle is part of the policy mix to support sustainable transport usage, offering the possibility of promoting a multi-modal travel style, of reducing dependence on the private car, and of encouraging innovative transport responses (such as car clubs).

Although this report was commissioned by the Office, the findings and recommendations are those of the authors and do not necessarily represent the views of the Office of the Deputy Prime Minister.

7 Barriers to Mixed-Use Development: Perception and Reality

A recurrent theme in the debate about mixed-use development is the existence of a series of barriers or obstacles which are believed to prevent or inhibit the delivery. This chapter sets out to interrogate barriers typically invoked to explain why mixed use is not or cannot be realised, based on the preceding analysis of current practice, the case studies and interviews with practicioners.

- Are they factors which have a real inhibiting effect on the realisation of mixed-use development schemes?
- Are they simply the normal procedural hoops which have to be gone through with any development?
- Are they spurious barriers thrown up by those who have neither the interest nor inclination to get involved with mixed-use development?
- If they are real, how are they most effectively overcome?

The following list represents frequently-cited barriers which are derived from the study interviews, the case studies, and general practice experience. This lays no claim to being a statistically verifiable list, but more an impressionistic one, a looser attempt to pull together the typical comments made by practitioners which will be readily recognised by those involved in the development process.

The format is as follows: each proposition is articulated to explain its full meaning, and then tested against the evidence of the case studies and the study team's practical experience.

7.1 The market is not deep enough for mixed-use development

The market does not have the volume to stimulate sufficient demand for what is essentially a limited, elite market for a very particular lifestyle, characterised by inner city loft living in major cities.

This is a caricatured representation of mixed-use development. In practice it is a much broader phenomenon, which covers a wide geographical spread including small and medium-sized towns, and accommodates a wider range of housing needs. The current range of housing supply in mixed-use schemes is admittedly still rather limited; but there is every prospect that this will expand as mixed-use development practice becomes more routine, and the advantages offered become more apparent.

7.2 Complex planning procedures

The planning application and decision-making process is complicated when applied to mixed-

use development, takes a long time and discourages developers from considering such schemes.

In all cases, the local planning authority (LPA) role and that of the officers involved was described by developer-side players to be supportive and constructive. The role varied from being proactive (e.g. Middlesbrough) to reactive (e.g. Manchester) to neutral (e.g. Newcastle); but no evidence was recorded of the process being obstructive or time-wasting.

7.3 Single-use zoning

Single-use zoning contained in unitary development plans and local plans does not encourage mixed-use development solutions, and adds to the complexity of planning approval.

The provision of statutory plans was never given as a reason for delay or obstruction. LPAs tend to be flexible where plan land allocation is concerned, adapting the plan provisions to fit in with the nature of mixed-use development. It appears that LPAs are usually more keen to see the benefits arising from redevelopment of problematic sites, rather than insisting on plan allocations. The conclusion is that land allocation in development plans is a neutral factor.

It is pertinent to ask whether mixed-use zoning would actually encourage more mixed-use development.

The case studies are inconclusive on this matter. Mixed-use zoning certainly gives a clear indication of the LPA's intentions for the site. But it is equally certain that the zoning cannot by itself make the mixed-use development happen, unless it is supported by the market.

7.4 Compatibility of uses

The conflicting activity patterns of different users within a building or complex make the integration of different uses a barrier to quality development.

One would expect this to be a greater problem in schemes which are contained within one building or block (e.g. Manchester, Newcastle, Hammersmith, Havant) than those which comprise separate buildings alongside each other (Leicester). Some of the schemes are insufficiently advanced to offer useful information (Newcastle, Sheffield).

Only the Havant case indicated a measure of incompatibility: noise from the pub garden which is overlooked by the social housing has been the subject of complaints by residents. Discussions have taken place between the housing association and the pub operator to restrict the times when the garden is used.

7.5 Building regulations

The requirements of building regulations impose onerous conditions on mixed-use development schemes.

In two cases (Hammersmith, Havant), reference was made to the need to provide a thicker floor slab to separate the commercial uses from the residential, but there was no suggestion that the conditions imposed were onerous or excessive. It is suggested that the problems posed by mixed-use development are not significantly different from those of different contiguous uses on adjacent sites, although there may be some impact on construction costs. This suggests that the mixed-use development factor is largely irrelevant, although clearly this will depend on the configuration and complexity of individual schemes.

This view corroborates the 1995 study on the impact of Building Regulations for mixed-use development carried out by BDP for the Department of the Environment, which concluded that there were no unwarranted difficulties caused by the Building Regulations and/or the approved documents when applied to mixed-use development involving residential use.

7.6 Member resistance

Even if the technical officers of the LPA might promote mixed-use development, members tend to adopt a more sceptical attitude towards the benefits.

The implication is that officer enthusiasm may mislead the potential developer down a path which finds less favour with the members who make the final decision. The case studies give no evidence of this; but then this could be because all the schemes reviewed were approved. It would be necessary to review cases where mixed-use development failed to get planning approval to determine the validity of the barrier.

7.7 Land assembly

Assembling land to create a credible and viable mixed-use development site is a very complicated process.

None of the case studies reported land assembly to be a problem. The local authority played a significant role in land assembly in three schemes (Norwich, Middlesbrough, Sowerby Bridge). A number of interviewees suggested that stronger local authority action in assembling sites, possibly using compulsory purchase powers, would facilitate mixed-use development schemes.

7.8 Institutional investor criteria

Institutional investors are reluctant to invest in mixed-use schemes because they tend to offer poor long-term investment prospects, and are typically not large enough to generate the scale of profit sought.

None of the case study schemes has been funded by an institutional investor. The major institutional investors tend to look for large-scale, long-term financial returns which are most efficiently achieved through large commercial development schemes. Housing does not generate sufficient year-on-year returns. So it is not surprising that they are not involved in housing-dominated mixed-use development. Developers, banks, and English Partnerships on the other hand are interested in shorter-term capital value.

This general proposition remains true. However, interviews with institutional investors do suggest some movement on this issue, and a greater willingness to consider mixed-use schemes under particular site or market conditions.

7.9 Developers do not like mixed-use development

This is a generic comment which incorporates many of the other more specific barriers included in the list: planning process too complex, profit margins too low, management too complex etc.

Clearly, the developers involved in the case studies liked mixeduse development enough to see these schemes through to implementation. Anecdotal evidence suggests that some developers who were originally wary became more enthusiastic the more they became involved.

The developers included both mixed-use development first timers (Newcastle, Sowerby Bridge) and ones with previous experience (Manchester, Sheffield), and it appears that many have been positively conditioned by the emerging policy framework. The more that mixed-use development is spoken about as 'a good thing' - whether in official published guidance or through the mouths of planning officers - so the more the development industry gets swept along by the tide. So in the end, some developers at least do like mixed-use development. If this line of thinking is correct, then it suggests that the creation of a positive climate to promote a particular idea can have a very pronounced effect.

7.10 Environmental health factors

It is very difficult to reconcile conflicting environmental health requirements - noise, smell, hygiene etc - within a mixed-use development scheme.

This is the statutory version of the issue of compatibility between different uses, and also has parallels with the building regulations barrier. The three occupied schemes where uses are combined within one building complex have resolved these potential conflicts. The evidence suggests that, as with the building regulations, the mixed-use development factor is largely irrelevant, and the problems are similar to those arising with different contiguous uses on adjacent sites.

One interviewee made the comment that residents in town centres expect to experience different levels of nuisance than in suburban locations. So, for example, noise from adjacent properties or commercial refuse left on pavements for collection is to be expected as part of the city package. The application of environmental health standards to town centre housing needs to be adjusted to reflect the context. However, the user surveys revealed strong views of disapproval at evening and night-time noise emanating from bars, restaurants and clubs.

7.11 Value boundaries and transitional areas

Mixed-use development is only a viable business proposition in areas where one particular use is not dominant in the market. It is therefore destined to be pushed to marginal locations, on the 'value boundaries', and will never form a major development component of city centres.

This proposition sees land values as relatively fixed in space (if not in actual value) and that they can therefore be mapped. In this way, says the proposition, the boundaries between areas of different values can be identified. A contrary view is that this is too rigid a model: the value of any site is crucially dependent upon what is happening all around, and the constant

flux and volatility in land values effectively defies sensible mapping.

The case studies indicate that mixed-use development frequently occupies fringe town centre sites (Leicester, Middlebrough, Sheffield). Whether this is due to land value boundaries or chance local factors such as site availability, land ownership or development pressures is not known. These fringe city centre cases can in any case be said to represent a certain locational logic, exploiting the convenience for both residential and commercial uses to mutual advantage.

This in turn raises the question whether the value boundary interpretation, if correct, is necessarily a bad thing. The implied negative reading can be turned round to say that mixed-use development can be a valuable instrument to help transform areas which under conventional single-use development criteria would fall into a gap of developer disinterest.

7.12 Listed buildings

The presence of listed buildings or buildings with special character constrain site development opportunities.

There is strong evidence from the case studies that the presence of listed buildings, far from being a negative factor, is in fact a very positive one for mixed-use development. Seven cases (Ashton-under-Lyne, Hammersmith, Leicester, Newcastle, Nottingham, Sheffield, Sowerby Bridge) incorporate listed buildings or buildings of special historic and cultural interest.

These provide a quality core to the development, which helps integrate the development into its local context. It is likely that the planning and design process is more complex than for a straight new-build development; and it is reasonable to suppose that the additional attention and effort involved is reflected in the general high quality of the resulting schemes.

Summary

Many commonly-cited obstacles or barriers to the realisation of mixeduse development are overstated. Where such obstacles do exist, they do not appear to be specific to mixed-use development, but are more in the nature of routine development practice which affects both mixed and single-use development alike. Although this report was commissioned by the Office, the findings and recommendations are those of the authors and do not necessarily represent the views of the Office of the Deputy Prime Minister.

8 The Property Market Perspective

A fundamental conclusion of the research study is that mixed-use development will only happen if and when it matches the demands of the property market. Even allowing for public sector contributions through land ownership or gap funding by English Partnerships or the RDAs (reviewed following the December 1999 decision of the European Commission that the Partnership Investment Programme (PIP) breached the State Aid rules), the fact remains that the bulk of finance for mixed-use development comes from the private sector. And the simple truth is that the characteristics of a scheme must generate conditions able to deliver a reasonable profit for the developer and/or investor. If the reasonable profit is not there, no great disaster will eventuate; but the scheme simply will not get built.

The case studies have by definition described schemes where the required profit level was present and the schemes went ahead. In that sense they are not particularly instructive in illuminating the constraints which inhibit development. More valuable lessons may be learned by examining projects which have not been implemented through failure to complete the funding equation. But this poses a dilemma for a research study: how to analyse something which has not happened.

So we rely on the extensive interviews with representatives of the property industry in both developers and institutional investors, who are able to give an insight into the factors which inhibit the mobilisation of private finance for mixed-use development schemes.

8.1 Securing of funds

There is widespread agreement that securing funding support is the biggest problem for mixeduse development schemes, and is the single most common reason for schemes not getting off the ground. It all comes down to the bottom line. The risk-averse approach adopted by the institutional investors means that they seek an assured income stream. Anything which makes this less likely, or suggests complications to a guaranteed yield inhibits their potential involvement. The decision process is firmly driven by strong economic rationale, and the corporate or market view tends to take precedence over the local planning authority's aspirations and intentions.

Short term bank finance raises a different set of issues to do mainly with the ability of the borrowng developer to complete a scheme and repay the loan within the loan period. The case studies provide many examples of mixed-use schemes being funded in this manner. Whilst this suggests that access to bank finance is not a constraint on mixed-use development per se, it could also reflect the particular nature of the case study schemes and the financial standing of their developers.

8.2 Single use versus mixed use

For the property market, single use generally delivers surer, greater profit than mixed use and, given a free choice, is therefore favoured by the property industry. Mixed-use development is characterised as a signal for weak demand, in other words that it is a compromise or hedging of bets in the absence of strong demand for one use or another, often camouflaged under a spurious sustainable development objective.

When private developers do include mixed-use, it is often viewed as planning gain, reflecting a degree of room to manoeuvre within the bottom line of acceptable profit. This is frequently a limited range of add-on retail and food units within an office development, falling short of a more wholehearted mix of uses to which local planning authorities may aspire.

In certain circumstances, mixed use may be seen as a desirable option due to a combination of location, site configuration, and local property market characteristics. The quantum of development appears to be critical. The larger the scheme, the greater the acceptable margin for tweaking additional uses, and the greater the resulting floorspace of the mixed uses.

8.3 Residential use

The potential diseconomies of mixed-use are compounded when residential use is added into the equation. This is because, on a given town centre site, residential use will normally deliver lower capital value than commercial use. So introducing housing into a predominantly commercial scheme will tend to reduce the value, and thereby make it less attractive to the potential investor.

In such situations, a key issue is whether the introduction of residential accommodation makes a financially viable scheme unviable, or whether it simply reduces the development surplus within an acceptable margin.

It is acknowledged that there are circumstances, such as in parts of Central London, where the values generated by residential use are sufficiently high to enable housing to be included within commercial schemes with relatively little adverse impact on the development market.

Financial Appraisal

A financial appraisal was undertaken as part of the study to highlight some of the issues which affect the relative viability of mixed-use development. This exercise covered three sites in different locations. The exercise involved

- Preparing three notional new-build development schemes for each site, one residential, one commercial and one mixed-use;
- Assessing the total costs of providing these schemes and their value on completion; and
- Deducting the cost from the value to calculate the value a developer would pay for the land.

From this exercise it is clear that at any one time and in any particular

location there are three possible outcomes:

- Commercial use is most valuable i.e. produces the highest land value;
- Residential use is most valuable i.e. produces the highest land value; and
- It is not clear which is most valuable.

Other than in particular circumstances (such as existing buildings in locations or times of low demand, or particularly large sites), mixed-use development is not the most valuable. Factors such as differing leasehold regimes for residential and commercial and the need for separate vertical access (stairs and lifts) increases the design, construction and management costs and so reduces the value of a mixed-use development compared with a singleuse development.

From this we can conclude:

- Except in value boundary areas (see 7.11), the market will tend to deliver single use developments:
- In some circumstances mixed use can show a greater return than single use: this is where local market conditions are such that a single office development, for instance, might flood the local office market with a resultant drop in the capital value of the development. In such circumstances, a mix of uses may represent a prudent spread of investment risk;
- These circumstances are most likely to occur on the fringe of major city centres and in smaller town centres, where the commercial imperative that drives single use schemes is weaker. This is consistent with anecdotal information obtained through interviews with representatives of the property industry; and
- Over time in such locations, neighbouring developments may be primarily residential or commercial, but the overall outcome will be mixed-use.

Contrary to evidence presented elsewhere in this study, some interviewees expressed reservations about the strength of demand for housing - especially on short leasehold - in town centres. Where demand is weak and values lower as a result, mixed-use development could become an even weaker commercial proposition.

8.4 Affordable housing

The requirement imposed on developers by local authorities to provide affordable housing provoked the most powerful response of all items on the agenda. It was most moderately described as "a tax on housing development"; less constrained comments referred to it as a

"nonsense" a "nightmare", "legalised bribery and utterly distasteful", a "gratuitous requirement", "adding insult to injury", the "high jump", and a "turf war".

The strong language reflects the property industry's firm view that it is simply not possible to reconcile affordable housing with a prestige development - be it housing or commercial - aimed at delivering maximum economic return.

The need for affordable housing was fully acknowledged, as was the view that low-cost housing ghettos were no solution to a real social problem. But there was the implacable view that it was entirely unrealistic to imagine that this problem could be solved by local authorities or central government "arm twisting" developers and investors. It would not happen; they would simply walk away from the development opportunities.

The gap may in fact not be quite as wide as the strong language might suggest. Many interviewees asked rhetorically whether anyone would sensibly spend their own funds to buy a property only to end up "living cheek by jowl" with a family living in subsidised housing. The simple fact is that this happens all the time in larger cities, albeit not in new housing developments but in areas of older housing stock. The process of gentrification has for many years seen professional classes moving into working class neighbourhoods and indeed "living cheek by jowl" with families in controlled rental or council-owned properties.

8.5 Lease conditions

A major disincentive of mixed-use schemes is the differential lease regimes which are often involved. Commercial leases are typically 25-years which enable re-sale or redevelopment to overcome obsolescence, and to ensure that income can be maximised. Residential leases on the other hand are typically 99-years. Where the two leasehold regimes are combined within a single building or complex, redevelopment within the shorter period is impossible without an expensive process of buying out tenants. The reduced flexibility reduces the capital value.

In the case of shorthold tenancies on the residential parts, there are significant additional costs involved in managing the numerous leases.

So either way, these leasehold regimes conspire to inhibit the potential investor. In contrast, single use provides maximum flexibility for redevelopment with a simplified management regime, a situation compromised by the combination of residential and commercial within the same building.

8.6 Legislative change

Many interviewees spoke of a general nervousness in the industry of legislative change, and in particular political uncertainty about possible leasehold reform with regard to residential leases, including the introduction of commonhold. Whilst there appears to be a general belief in the assurances given by the current government to make no substantial changes, there remains a degree of uncertainty. Even the mildest speculation by a politician can "send tremors through the industry".

The view was expressed that the current legislative format is adequate, especially with the provisions of the shorthold tenancies, and is a fair balance between the interests of landlord

and tenant. There was widespread recognition of the need for fair protection of tenants and a concern to avoid the industry being stigmatised as "the wicked landlord". But the view was expressed that the landlord should be able to evict quickly and easily when he needs to do so.

Notwithstanding these cautions, a number of interviewees confidently forecast that the major investors would start to rebuild their residential portfolios, which they had sold off in the 1970s, over the next 20 years or so.

8.7 The professional culture divide

A surprising factor to emerge is the cultural divide within the property industry between commercial and residential, which many feel contribute to the practical difficulty in conceiving schemes which mix commercial and housing uses. Professionals in the industry, and especially those in the role of advisers or consultants, tend to be firm specialists in one side or the other.

Commercial is seen as the dominant side, based on its historic record of delivering the greater profits, and so attracts the sharper minds, and offers the more stimulating and rewarding career stream. Residential is the poor relation, and tends to be looked down on in professional terms. One result is that many development companies are rigidly structured as two separate divisions, using different personnel for each sector with little practical cross-fertilisation. And this tends to be reflected in the organisation and structure of the professional institutions.

Insofar as this is a significant inhibitor of mixed use, many professionals operate and acquire experience in a single-use culture where mixed use, if it means anything, tends to suggest the addition of shops and restaurants into an office block for example, rather than a more imaginative, fully-integrated model. And this culture of course tends to be reinforced rather than weakened with time, as people progress in their careers.

But there is recognition within the profession that this divide may well be suppressing the creative evaluation of development opportunities. One interviewee spoke firmly of the need "to break the sector-specific thinking within the development profession".

8.8 Compulsory purchase

A number of interviewees favoured the stronger application of compulsory purchase for effective land assembly. There is nothing fundamentally wrong with the current legislation it was suggested, but local authorities have lost the skills in how to apply it, effectively through lack of practice. It was suggested that innovative formulae should be encouraged, such as the 'fair price plus bonus' or reward for early settlement, in order to dissuade individuals holding out and frustrating developments which are deemed to be in the public interest.

8.9 The local planning authority

The interviews carried out for the case studies presented a generally favourable view of the role and performance of the local planning authorities. This may be presumed to reflect satisfaction at reaching a development agreement which, however much of a compromise, nevertheless met the individual developer and funder's bottom-line requirements. However the interviews carried out without reference to a specific development produced less generous

responses.

There was a general resistance to a strong local planning authority role in two areas: firstly, in the imposition of prescriptive zonings or policies which are seen to interfere with the property industry's freedom of manoeuvre; and secondly what are viewed as excessive attempts to interfere in the details of a scheme. In practice these concerns are nothing more than complaint about an authority executing its statutory function. Yet they are deeply felt and probably affect the way the property industry approaches the planning authorities, and conditions the style and manner of its negotiation techniques.

Perhaps the most important single view, which was widely expressed, was that planners do not have a good understanding of the property market and development economics. It was suggested that many planners were attempting to interfere in a process of which they have but a rudimentary grasp. One interviewee spoke of "the total lack of skills and understanding of the property market"; another suggested that "investment managers know more about the creation of quality environments than many town planners".

Putting aside the temptation of the interviewees to deliver a response designed to shock, there does remain some concern about the validity of these comments. This is not to doubt the sincerity of planners as individuals, nor to accept unchallenged that what the property industry wants is necessarily consistent with the greater public interest, regardless of how frequently the phrase 'what the punters want' is used. But it is to recognise that they may often not have sufficient grounding in development economics, nor a solid understanding of the operation of the property industry to be able to enter into negotiations on an equal footing. This must inevitably put them at a disadvantage which may manifest itself either in being taken for a ride, or in being too stubborn and ending up with nothing.

8.10 Willingness to embrace mixed use

Against a background which tended to stress the negative aspects of mixed-use schemes, and the reasons why developers and investors are less than attracted towards the development model, ideas were forthcoming to indicate the debate is not as polarised at might at first appear.

A number of institutional investors suggested that they would consider incorporating a residential component in a commercial scheme if they were able to hand over the responsibility to a suitably experienced management organisation "to relieve the residential burden". Housing associations would be one possibility, but the impression is that the investors are thinking of a more commercially oriented type of organisation. The view was that such organisations are not well established, reflecting perhaps the low status of the residential sector in the profession.

The quantum of development is viewed as a critical factor in determining viability, and hence potential investor interest. All the inhibiting factors described above become progressively less critical, the larger the scheme. There is likely to be an inherent futility in local planning authorities insisting on mixed-use schemes on small developments. But their bargaining power increases with the size of the development, as the marginal tolerances which the property industry will bear become ever greater. This encourages the view that area-based mixed-use environments may be a way forward to achieve the desired outcome.

Summary

- Securing funding support is the biggest single problem for mixeduse development schemes, and the most common reason for schemes not getting off the ground.
- The property market tends to favour single-use schemes since these usually generate surer, greater profit; but it will accept mixeduse as a form of planning gain compromise. In some circumstances mixed use will be favoured due to a combination of location, site configuration, and local property market characteristics.
- The quantum of development appears to be critical: the larger the scheme, the greater the margin for incorporating additional, 'less profitable' uses.
- On a given town centre site, residential use will usually deliver lower capital value than commercial use, subject to the particular characteristics of the local property market. Introducing housing into a predominantly commercial scheme will tend to reduce the value. Conversely, commercial use will increase the value of a predominantly residential scheme.
- There was strong resistance to the required provision of affordable housing, on the grounds that it is not possible to reconcile affordable housing with a prestige development aimed at delivering maximum economic return. However this should be set against the evidence of the actual mixed-use schemes where affordable housing has been successfully integrated.
- Differential commercial and residential leasehold regimes were seen as a major obstacle by institutional investors, as this necessitates complex management arrangements and constrains flexibility for reselling or redevelopment.
- There was a general nervousness in the industry about possible leasehold reform, combined with a view that the current legislation achieves a good balance between freeholder and leaseholder interests.
- The professional culture divide between commercial and residential, reflected in the professional institutions, was seen as a major inhibitor in the conception and realisation of mixed-use development schemes.
- There was a demand for local planning authorities to be more proactive with land assembly through the use of compulsory purchase powers; but many LPAs are felt to have lost the skills in how to apply them.
- LPAs were often thought to exercise too strong a role and attempt to interfere excessively with details of development, when they have a poor grasp of the property market and development economics.

9 Initiatives for Promoting Mixed-Use Development

This report describes a range of typical mixed-use development schemes, analyses the qualities which they offer and the process by which they were achieved, and explores the attitudes of public and private sector participants. It draws attention to the important contribution of housing in the quality of mixed-use environments, and to the crucial role it can play in driving the delivery of mixed-use schemes.

Building on this analysis, this chapter explores the initiatives required to promote the realisation of mixed-use environments, but first addresses the issue of awareness and definition.

9.1 Awareness and definition

The evidence of this study demonstrates forcefully that there is widespread awareness of mixed use as a development concept. Nobody contacted in the course of the study needed to have it explained. Insofar as people did ask "what do you mean by mixed use?", this was in the rhetorical sense to prompt discussion of the definition.

But the evidence equally forcefully demonstrates that there is a wide variation in what people understand by the term. The wide variety of schemes submitted in response to the local authority questionnaire testifies to the loose interpretation of what constitutes mixed-use development. The case studies alone, 12 schemes whittled down from a long list of 180, demonstrate a wide range of types of use, physical configuration, location and impact.

For example we may compare the St John's Gate scheme in Middlesbrough (covering 10 ha of vacant brownfield land adjacent to the town centre; and providing 117 residential units and 4,500 m2 of offices) with the Post Office Building in Newcastle upon Tyne (the refurbishment of a Grade II listed building for offices, 12 residential units and cultural uses on a compact city centre site). On the face of it these two schemes have very little in common, apart from the fact that they were conceived and are perceived as mixed-use development by those involved.

This variation in definition is no problem in itself, even though it raises doubts about the practical value of using the term mixeduse development to define a category or type of development when it evidently encompasses such a wide range of development. But it becomes a problem when the term becomes just a badge which is attached to a scheme as an afterthought or selling point, rather than being an essential part of its conceptual development. In such cases an important policy theme is debased by being used as a glib headline, with no real contribution to the character or vitality of urban centres.

And even if used correctly, this should not mask the overriding quality issue. There are numerous examples in the long list of schemes submitted by local authorities of an assembly of a range of different land uses (or just users) being offered as a response to Government guidance that there should be more mixed-use development. Such spare, inadequate

interpretations suggest a crucial misunderstanding of the particular qualities of vitality and attractiveness which mixed use is intended to - and can - deliver, and which are surely the driving force behind the belief in its value.

So we conclude that, while the broad interpretation of mixed-use development is perfectly understandable and acceptable, the way it is interpreted by individual local authorities conditions their approach to its promotion, their response to mixed-use applications, and their formulation of the planning context within which the development industry is to operate.

9.2 Development outcome and output

We believe that there is an important distinction to be drawn between the mixed-use development **output** (a discrete development which incorporates a mix of uses) and mixed-use development **outcome** (a richly-textured area environment which comprises a mix of uses and activities). And this distinction has direct implications on identifying the types of initiative which would be effective for the promotion of mixed-use development.

The mixed-use environments which are universally admired are as much to do with the lateral aggregation of different uses over a Initiatives for Promoting Mixed-Use Development 82 large area - sometimes planned as a coherent whole, but more often than not reflecting harmonious serendipity - as with the configuration of an individual development or building. We believe that it is this development outcome, and the resulting richly-textured town-centre environment, which underpins the general perception of attractiveness and our commitment to mixed-use development.

Focusing attention and effort on the output - the single development combining different uses - may be to miss the bigger picture and so unwittingly compromise achievement of quality mixed-use town-centre environments. It is likely to highlight the difficulties - some real, some probably overexaggerated, as discussed elsewhere in this report - instead of exploiting the potential. Whilst the mixed-use output can obviously contribute to the achievement of the wider mixed-use environment, it is not in itself sufficient, nor necessarily a prerequisite. So we believe that it is towards the outcome rather than the output that policy formulation, whether central or local, should be addressed.

What emerges from this study is a sense that mixed-use development is essentially a development culture, rather than a technical planning issue. And when the culture is right, mixed-use development tends to occur naturally and unselfconsciously. The evidence is all around us in town, district and local centres, and along many main arterial routes.

This in turn suggests that the promotion of mixed-use will be most effectively achieved by addressing the planning process, rather than the development product. The appropriate initiatives will be less to do with setting down land-use designations for mixed-use development, with specific standards or performance specifications, and more to do with articulating the mixed-use vision and sharpening the planning process to achieve that vision.

These considerations lead us to four broad conclusions that frame our recommendations on initiatives for the promotion of successful mixed-use development:

- an area-based approach will be more productive than a sitebased approach;
- initiatives need to address the process as well as the product;
- there is good awareness of mixed-use development as a concept; but there is scope for raising awareness and training in order to improve the delivery of successful mixed-use environments; and
- the policy and regulatory frameworks appear to be in place; but the wider application of good practice needs to be addressed.

9.3 Promoting an area-based approach

The mixed-use outcome implies an area-based approach rather than a site-based one. So areas - rather than individual sites - in and around town centres would be defined on development plan proposals maps in which mixed-use development is to be encouraged. The study indicates that the transitional zones on the edge of central commercial zones offer a property market profile where a mix of uses will often be attractive to developers, and where the seeds for attractive housing and mixed-use development may already exist.

We envisage definition of 'MXD zones' (mixed-use development zones indicated in the plan by a coloured tone or hatched overlay), which would indicate a presumption in favour of mixed use. These zones would cover town, district and local centres, and also the immediate surrounding areas characterised by an existing mix of uses, or opportunities for such development on vacant, derelict or under-utilised land and buildings.

This means that the town centre designation for MXD zoning may be different from that used for other planning policies, such as retail or employment. The fringe transition areas should be the subject of careful attention given their inherent physical character, availability of under-utilised land and buildings, proximity to public transport and the need for environmental upgrading.

It will, in some cases, be appropriate to designate individual sites for which mixed-use development is favoured, such as:

- large sites which offer sufficient scale to allow a mix of uses in a well-structured, sensible and uncontrived manner; or
- sites outside the MXD zone, which provide an opportunity to stimulate mixed use where at present there is none.

But in such cases, care will be needed to avoid overprescription of the mix of uses, and to get a reasonable assurance of commercial viability, so that the designation does not end up frustrating the very objective that it seeks.

The following planning mechanisms may be used to carry this approach:

• Non-statutory town centre plans or strategies: A useful tool for the promotion of

mixed-use development, derived from a town centre visioning exercise. These would set out land-use proposals and cover density, transport (public and private), car parking, vacant land/buildings, opportunities for flats over shops, treatment of the public realm, urban design etc. Mixed-use will be simply one of the approaches used to achieve a high quality town centre environment.

- **Development briefs**: Significant in many of the case studies, and a useful tool to set out in greater detail the analysis of potential and proposals for particular sites or areas of the town centre.
- **Development plan**: The document which pulls together mixed-use development policies and presents them in a coherent local planning authority-wide setting.

The area-based approach will also support three related policy themes:

Revitalisation of single-use areas

There will be many areas within or around the town centre which have through circumstance acquired a single-use character, through the dominance of a particular economic use, typically office or retail. Local planning authorities should explore ways in which different uses, especially housing, might be introduced through redevelopment or infill in order to enrich the character and quality of the area. This will need to be done with creativity and imagination, focusing on a mix of uses which can deliver the twin attributes of vitality and attractiveness, rather than on a strict mechanical basis which introduces different uses but achieves no substantial qualitative enhancement.

• Building on existing mixed-use development

Local planning authorities should explore the potential for extending and expanding existing, successful mixed-use development to enrich adjacent areas. This would involve analysing the particular factors and conditions which are responsible for the success, and assessing how these may be extended. This would need to take account of the commercial rationale which underpins the existing development, and to establish the extent to which there is the economic capacity to expand the supply, since it will be important to avoid sabotaging a successful but marginal operation.

• Preservation of existing mixed-use development

We observe a paradox that the thrust of the study tends to view mixed-use development as a problematic new development product, yet we can see the effortless legacy of mixed-use development areas throughout our cities and towns. Given the apparent difficulty in creating a similar fine grain mix of uses, as demonstrated in the case studies, we should do the utmost to safeguard and enhance existing quality mixed-use environments.

This may start with developing a better appreciation of the places which we tend to take for granted, and involve formulating investment programmes to upgrade and enhance town centres, giving particular attention to the quality of the public realm which acts as the connective tissue. And it is important that new development, even located well away from the town centre, does not undermine the viability of that centre's mix of uses.

9.4 Focusing on process rather than product

We contend that there is no particular magic to mixed-use development, either in terms of conception or implementation; but it does require imagination. The study evidence suggests that a creative and imaginative approach to development control can be an important factor in stimulating quality schemes.

Where individual mixed-use development schemes are concerned, the local planning authority has an important role to play in defining the technical parameters of the scheme, and in negotiating with the developer to ensure a development output which meets quality performance criteria. Creativity and imagination are clearly part of the 'good practice kit' associated with this process. Of particular importance is the ability to spot the contrived mixed-use development scheme, which conforms to the letter of the mixed-use development concept but not the spirit. Typically this might be a scheme which offers a mix of uses but lacks a coherent design to integrate the different uses in any functional way.

The need for creativity and imagination becomes even more important when pursuing an area-based mixed-use development outcome approach, since the process will inevitably have a less prescriptive, more fluid planning framework. The conventional reactive role (i.e. responding to schemes submitted by developers) would need to be complemented by an awareness of the aggregate impact of development proposals, and not simply the qualities inherent in the scheme itself. This would require accurate tracking or monitoring of the aggregate mix of uses within specified MXD zones, so that judgement can be made whether a particular scheme contributes or compromises the wider mixed-use area objective.

The less prescriptive plan framework would, by definition, imply less certainty for both the local planning authority and the private developer. This would put a premium on management of the evolving mix of uses. Successive developments will have a direct cumulative impact on what might be permitted downstream so that the ultimate required mix of uses is to be assured. And it would also increase the importance of technical negotiation process between the two parties, and would require local planning authorities to be able to engage in robust negotiation with commercial property representatives on an equal footing.

9.5 Raising awareness

It is important that the profile of mixed-use development is enhanced, so that the potential benefits are firmly implanted in the regular language of planners and developers, in the same way that phrases such as 'reducing the need to travel' and 're-using brownfield land' have entered the planning lexicon.

The study evidence indicates that this is pretty well in place. But there is scope for increasing awareness among public sector agencies of the potential of mixed-use as a tool for the enrichment and sustainable regeneration of town centres. The objective would be to instil a more profound understanding of the relationship between the type of development and quality of outcome - the study evidence demonstrates clearly that a mix of uses does not necessarily equate with quality development.

Agencies to be targeted would include local authorities (covering all relevant departments: Planning, Estates, Housing, Economic Development etc), Town Centre Managers and Regional Development Agencies.

Suitable mechanisms might include training courses and continuing professional development (CPD); creation of mixeduse web-sites by appropriate organisations (e.g. DETR, British Urban Regeneration Agency); and separate mixed-use categories for awards sponsored by DETR, professional bodies (e.g. Royal Town Planning Institute, Royal Institute of Chartered Surveyors, the Civic Trust) and the media.

Specialist mixed-use development training programmes should be developed for public sector staff, geared for technical staff engaged in formulation, implementation and negotiation of mixed-use development proposals. This training should be based on the potential contribution of mixed-use development to town centre regeneration, and provide staff with a strong understanding of property and investment finance, and with improved negotiating skills, so that they are better able to engage in creative yet robust discussion with private sector developers.

The issue of training is highlighted in the report of the Urban Task Force. We see training in mixed-use development to be central to such programmes, as well as the work of bodies such as the Prince's Foundation.

Perhaps the most powerful mechanism would be if Government departments and agencies were to promote mixed-use schemes for their own development and property portfolios.

9.6 Policy, guidance & regulation

National planning guidance is in place in the form of PPG1, PPG3, PPG6 and so on. The study evidence suggests that there is no need for a specific PPG on mixed-use, since the subject matter is covered by other PPGs. But these may need to be sharpened to give greater emphasis to the mixed-use concept and to draw out the issue of quality.

A good practice guide on town centre strategies with a focus on design quality would be a valuable addition. This would emphasise the role mixed use can play in creating an active, dynamic urban setting. This would help define the practical linkages between the aesthetic and the functional elements of urban design in town centres.

The essential regulatory tools are there, and there is no discernible need for changes to planning law or practice; but the study evidence does suggest that a more creative approach to the way practice is carried out is required. The principal objective should be to encourage a looser, more flexible approach to town centre planning. This would involve moving away from a rigid designation regime for specific sites, and focusing on rigorous monitoring of land use change and the creative cumulative buildup of the mix of uses, and not just the promotion of individual mixed-use schemes per se.

The basic approach should be to encourage mixed-use development throughout the town centre, whether as individual mixed-use development schemes or as a mix of uses on adjacent sites. This approach would require planners to adopt a more flexible interpretation of development plan provisions, and acquire keener understanding of the practical economics and finance of property development. This implies a conceptual shift from planning as plan preparation and development control, to planning as the management of urban change.

Local authority planners contacted in the course of the study mostly agreed that it is neither necessary nor appropriate to modify the Use Classes Order to accommodate mixed-use.

There is a concern that a mixed-use class might be too slack, and provide insufficient control over subsequent changes of use.

9.7 Comprehensive review

In the period during which this study has been undertaken, there has been a significant shift in policy and practice over a wide range of topics, including mixed use. This can be traced back to the mid-1990s, a period which has seen the professional culture increasingly engaged with the interrelationship between planning policy and the delivery of quality environments. The strengthened awareness and concern for implementation of mixed-use development is an important reflection of this shift.

A new wave of development plans have been produced during the study period, which reflect this new policy context and culture. Given that the survey of local planning authorities for the study was carried out more than two years ago, there would be merit in carrying out a comprehensive review of new development plans to examine the treatment of mixeduse, the experience or local authorities with regards to its effectiveness, and how new policy approaches are applied in practice.

Summary

- There is a wide variation in the definition of mixed-use development, which raises doubts about the value of using the term to describe a type or category of development. And it is not satisfactory if it becomes just a badge attached to a scheme rather than being an essential part of its conceptual development.
- There is an important distinction to be drawn between the mixed-use output and the mixed-use outcome, and it is the development outcome which underpins the general perception of attractiveness and the commitment to mixeduse development. Mixed-use development is more a professional culture than a technical planning issue, which suggests that its promotion will be most successfully achieved by addressing the planning process rather than the development product, and by adopting an area-based approach rather than a site-based one.
- Mixed-use development involves no magic; but it does require imagination, especially in terms of adopting a less prescriptive, more fluid planning framework, which focuses on the aggregate impact of emerging development proposals as much as the qualities of the schemes themselves.
- 'MXD zones' could be used to designate areas in and around town centres which will be subject to a policy that encourages mixed-use development, supplemented by the designation of specific individual sites, as appropriate, for which mixed-use development is favoured.
- This approach could be implemented through non-statutory town centre plans or strategies, site-specific development briefs, and the development plan, and will also support the revitalisation of single-

- use areas, the building on existing mixed-use developments, and the preservation of existing mixed-use areas.
- The profile of mixed-use development has been enhanced by its absorption into the everyday planning lexicon. This process will be extended by raising awareness of its real potential as a tool for the enrichment and sustainable regeneration of town centres, and of the link between the type of development and quality of outcome.
- Suitable mechanisms might include training courses and CPD (especially aimed at public sector staff), and creation of mixed-use websites and separate mixed-use award categories by appropriate organisations and professional bodies.
- There is no need for a specific PPG on mixed-use since the field is covered by existing PPGs. But these may need to be sharpened to give greater emphasis to the mixed-use concept, to draw out the issue of quality, and relate potential benefits to the area in question.
- A good practice guide on town-centre strategies would be a useful tool to emphasise the role that mixed-use can play in creating an active, dynamic urban setting.
- A comprehensive review should be carried out of new development plans to examine their treatment of mixed-use, and the practical experience of its implementation.

10 Conclusion

The evidence of this study leads to the powerful conclusion that mixed-use development is a desirable development objective in town centres. The case studies and the wider empirical and anecdotal evidence highlight the important role that it can play in creating the type and character of town centres which appeal to our intuitive aesthetic, social, cultural and physical precepts. This is a rather complicated way of saying that we know we like mixed-use environments.

Moreover the study points to the significance of housing as an essential component, in terms of both mixed-use output and outcome.

The key findings of the study may be summarised as follows:

- Housing contributes an important qualitative benefit to a mix of uses, the residents
 providing vitality through continuity and variety of presence, which is not provided by
 employment or commercial uses, whose active period is limited to the working day.
- Housing development in town centres tends to deliver a mixed-use configuration, because the treatment of the street-level interface favours the introduction of commercial uses on lower floors.
- The property market demonstrates that there is a strong, continuing demand for town centre housing, albeit that it will always represent a relatively small share of overall housing demand.
- Residential developers are responding to the current market climate and are active promoters of new mixed-use development.
- The commonly-cited obstacles or barriers to the realisation of mixed-use development may be overstated; and where these obstacles do exist, they are usually not specific to mixed-use development, but more in the nature of routine development practice which affects both mixed and singleuse developments alike.
- There are two interrelated factors which are crucial in defining the context or climate in which mixed-use development happens: the perception and application of the concept by the local planning authorities, and the operation of the property market.
- The premise which underpins the research specification is that mixed use is a type or category of development product, and possibly involves a distinctive development process. In our view it incorporates both of these and yet is neither since it is in reality a development outcome, a higher-level concept.
- It is the mixed-use outcome (a richly-textured area environment comprising a mix of uses and activities) rather than the mixed-use output (a discrete development incorporating a mix of uses) that underpins the general perception of attractiveness of town centres, and the resulting commitment to the principle of mixed-use development.
- An area-based approach for the planning and promotion of mixed-use development will be the most effective way of realising vibrant and attractive town centre environments.
- Short-term opportunistic investment by property developers appears in the current

property climate to be more effective in delivering mixed-use environments than the longterm approach of the institutional investor.

Based on the research findings and the broader experience derived from exposure to mixeduse environments during the study, we can confirm the following:

- The positive contribution which mixed use makes to towncentre environments;
- The wide variety of development outputs which it produces, which contribute to richer, more attractive urban form and dynamics;
- The above average quality of the resulting development, which we suggest flows from the more demanding planning and design process involved;
- The more efficient use of land than offered by single-use development;
- The introduction of new or different life back into town centres, especially through the large private sector and affordable housing component; and

The evident commitment of public sector staff, especially in local authority planning departments, to adopt the principle of mixed-use and to work hard to ensure its implementation; this is echoed by parties on the developer side, whether private developers, housing associations, or funding agencies. The commitment which underpins the encouragement of mixeduse is based on the straightforward fact that we enjoy and value mixed-use environments. It is the condition or end state of mixed-use that attracts, not necessarily the individual components or the process by which it is achieved.

We conclude that policy and practice should be directed more roundly towards the realisation of attractive and vibrant town centre environments, and should avoid becoming over-reliant on a particular type of development product. We echo the Urban Task Force's view that there is a broad consensus on what constitutes good town centre environments, although we may argue long and hard about the merits of the individual components. We need not confuse this consensus by overlaying policies or methodologies for its realisation, when what is sought is nothing more or less than the creation of high-quality environments.

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Annex B

Local Planning Authority Questionnaire (Adobe Acrobat 390kb)