

# Monitoring and Re-use of Brownfield Land in England and Wales

Dr Andrew R Harrison<sup>1</sup>, LandInform Ltd

## Introduction

Brownfield land has been a policy concern in the UK since the 1970s. Brownfield policy in England is the responsibility of the Office of the Deputy Prime Minister<sup>2</sup> (ODPM). Current policy in England provides a coordinated national programme of planning and fiscal instruments backed up by the routine collection of land use data. This policy has developed over the past five years through a series key policy statements and an independent task force. A broadly similar policy approach is emerging from the Welsh Assembly Government.

Current policy emphasises the objective of sustainable development. In land use planning terms the aim is 'to promote a sustainable pattern of physical development and land and property use in cities, towns and the countryside'<sup>3</sup>.

The major pressure for development arises from the demand for new homes, associated developments and improved infrastructure. In response ODPM has published a series of Public Service Agreement (PSA) aims and objectives. PSA 5 specifically addresses the supply of and demand for housing and sets out a series of targets and indicators to measure performance. From a Brownfield perspective it sets a target of 60% of all new housing developments being on previously-developed land (PDL), or provided through the conversion of existing buildings by 2008<sup>4</sup>.

Previously developed land is defined as 'that which is or was occupied by a permanent structure (excluding agriculture or forestry buildings) and associated fixed surface infrastructure'. The definition includes vacant and derelict land and other previously-developed land potentially available for redevelopment. Data are reported on an annual basis using Land Use Change Statistics (LUCS) which provide the percentage of new housing on previously developed land, Housing Statistics which provide estimates of conversions and the National Land Use Database (NLUD) which provides detailed site-specific information collected by Local Authorities.

## Policy Development

The basis of the current brownfield policy in England was established by 'Planning for the Communities of the Future'<sup>5</sup> policy document published in February 1998. This proposed the following goals for promoting brownfield redevelopment:

- the development of regional targets for the building of new homes on previously-developed sites;
- nationally, to raise the proportion of new homes to be built on previously developed land from 50% to 60%, to be achieved over the next ten years
- a new national database of previously developed sites
- a Task Force to help local authorities and developers make better and more innovative use of previously developed land
- a sequential and phased approach to the development of all sites, which means there will be a general preference for building on previously-developed sites first, especially in urban areas.

These proposals were translated into planning policy through a new Planning Policy Guidance note on housing (PPG3)<sup>6</sup> published in March 2000. This announced a move away from the 'Predict and Provide' approach to the provision of housing through the planning system towards a 'Plan, Monitor and Manage' methodology. PPG3 sets out a series of approaches for promoting more sustainable patterns of development, by:

- concentrating most additional housing development within urban areas
- making more efficient use of land by maximising the re-use of previously-developed land and the conversion and re-use of existing buildings
- assessing the capacity of urban areas to accommodate more housing
- adopting a sequential approach to the allocation of land for housing development
- managing the release of housing land
- reviewing existing allocations of housing land in plans, and planning permissions when they come up for renewal.

In 1999, the proposed Urban Task Force was set up by the Government to examine the current and potential role of national government and other public sector bodies in urban policy, including the promotion of Brownfield redevelopment. Its report, 'Towards an Urban Renaissance'<sup>7</sup>, established a new vision for urban regeneration founded on the principles of design excellence, social well-being and environmental responsibility and made a series of detailed recommendations for future action. The report reiterates the need to make best use of derelict, vacant and under-used land and buildings before developing greenfield sites. To promote recycling of land and buildings the report recommends:

- the need to limit greenfield land releases and channel development into redeveloping urban brownfield sites
- a requirement for public bodies and utilities to release redundant urban land and buildings for regeneration
- a national campaign to bring all contaminated land back into beneficial use by 2030
- introduction of an empty property strategy in every Local Authority
- harmonisation of VAT on new build and residential conversions.

The Government set out its own framework of policies and programs, and responded to the Task Force's recommendations, in an urban white paper 'Our Towns and Cities: The Future – Delivering an Urban Renaissance'<sup>8</sup> published in November 2000. The white paper includes specific proposals to 'use the tax and planning systems to bring previously developed brownfield sites and empty property back into constructive use, turning eyesores into assets'. It sets out a comprehensive £1bn package of national taxation measures to increase investment in urban areas including plans to introduce:

- an exemption from stamp duty for all property transactions in disadvantaged communities
- accelerated payable tax credits for cleaning up contaminated land
- 100 per cent capital allowances for creating 'flats over shops' for letting
- package of VAT reforms to encourage additional conversions of properties for residential use.

Building on urban white paper the Government has recently set out a programme of action in the 'Sustainable Communities: Building for the Future'<sup>9</sup> document, known informally as the 'Communities Plan', launched by the Deputy Prime Minister on 5 February 2003. The aim is to tackle the problem of an overheated property market in the south-east through new ways of building affordable homes while attempting to reverse the abandonment of northern cities where there is a surplus of homes. In relation to land use planning and regeneration the main elements are:

- £22bn to improve housing and communities including over £5bn to regenerate deprived areas
- a new regional approach to housing policy and £350m to speed up the planning process
- development of four growth areas - Ashford in Kent; Milton Keynes; the M11 corridor from London to Stansted; and the Thames Gateway - a 40 mile strip to the east of London
- guarantee to protect green belt
- £201m to improve local environment - parks and public spaces.

## **The Planning Process**

In general, a comprehensive system of land use planning regulations is used to control how redevelopment takes place on brownfield sites. The 'Town and Country Planning' process promotes brownfield redevelopment largely by inhibiting or preventing development projects on greenfield sites, and by making brownfield land available for development.

Since December 2001 and the publication of the green paper 'Planning: Delivering a Fundamental Change'<sup>10</sup> the Government has been consulting on changes to the planning system and planning practice in England which will introduce the most fundamental reforms for over a decade. The aim is to transform the planning system to deliver in a sustainable way key Government objectives such as housing, economic development, transport infrastructure and rural regeneration whilst protecting the environment. The Welsh Assembly Government carried out its own consultation on a separate green paper – 'Planning: delivering for Wales'.

The Planning and Compulsory Purchase Bill was published in December 2002. The Bill applies to Wales as well as to England, with specific sections for the different development planning arrangements in the two countries. The operational date for the new Act is expected to be late 2004.

The Government wants to make the planning system faster by simplifying the way decisions are made. There are also likely to be plans that will make it easier for councils to buy up and regenerate land through compulsory purchase orders.

The Bill will restructure the way that planning works across the country. In the past, all eight English regions outside London have worked under planning guidance prepared by Ministers. In future it is proposed that regional consortiums of councillors, business people and voluntary sector representatives will prepare draft Regional Spatial Strategies (RSSs), bringing together planning, economic development and transport needs to be finally approved by the Secretary of State. The RSSs will provide the strategic spatial framework within which a single tier of Local Development Frameworks (LDFs) will be prepared.

The new system will develop a spatial 'plan-led' approach. Spatial planning goes beyond traditional land use planning to integrate policies for the development and use of land with other policies and programmes which influence the nature of places and how they function. This is brought about through a hierarchical structure of guidance and plans covering national, regional and local planning which includes:

- National Planning Policy Statements (PPSs)
- Regional Spatial Strategies (RSSs)
- Local Development Frameworks (LDFs).

At the local level Local Authorities must prepare a Local Development Scheme (LDS). The LDS is a 'project plan' which sets out timetables for the preparation of Local Development Documents (LDDs). These documents make up the Local Development Framework. This is the 'folder' of LDDs which provide the framework for delivering the spatial planning strategy for the area. LDDs should reflect, and build on the policies set out nationally and regionally, taking into account local needs and variations. The Planning and Compulsory Purchase Bill contains a statutory requirement (Clause 38) for those responsible for preparing the RSS and LDDs in England, to undertake these functions with a view to contributing to the achievement of sustainable development.

Individual decisions on development require specific planning permission which should normally conform to the relevant Development Plan Documents within the LDF and may control not only the location of development, but also the nature of that development and the way it is carried out. In the context of brownfield redevelopment, the planning permission may contain specific conditions relating to site investigation and assessment and, where appropriate, remediation of contamination.

The national Public Service Agreement target for 60% of housing to be on previously developed land or in converted buildings cascades through this hierarchical framework and is transformed into more detailed regional and local targets. At the local level the application of 'sequential testing' promotes the development of brownfield sites. This test means that a local planning authority must first satisfy itself that there are no suitable and available sites that have been previously developed before it can allocate any greenfield sites for new development. To apply this approach rigorously each Local Authority requires an up-to-date and comprehensive database of previously-developed sites.

## **Brownfield Redevelopment**

Redevelopment of brownfield sites is undertaken largely by the private sector. A significant proportion of projects take place with very little direct involvement from public bodies and government agencies, except in their roles as regulators, issuing and enforcing necessary approvals and legal permissions. However, there are also significant government programs to promote and support brownfield redevelopment.

Brownfield redevelopment is eligible for direct public sector financial support where this is necessary to achieve social and economic policy objectives. In England, direct funding is generally provided by ODPM through its national regeneration agency, English Partnerships (EP), and the network of nine regional development agencies in England. In Wales, the Welsh Development Agency is the lead public sector regeneration body.

English Partnerships are developing a comprehensive national strategy for brownfield land<sup>11</sup>. This will start from a detailed understanding of what brownfield land is available, making full use of NLUD,

which identifies 66,000 hectares of previously-developed land capable of redevelopment. A recent study has shown that a quarter of this land has lain dormant or derelict for 10 or more years. The strategy will cover how best to bring sites back into use, especially in the growth areas.

The RDAs will develop EP's national strategy in more detail to produce Brownfield Land Action Plans, in co-operation with local authorities, and other relevant agencies and statutory bodies. These plans will fit closely with the Regional Economic Strategies and Regional Housing Strategies.

EP will also adopt a strategic role for surplus public sector land. Their portfolio already includes 42 strategic sites, many in growth areas. EP is charged with drawing up a register of surplus public sector land across Government. Working in collaboration with the RDAs, EP's involvement helps ensure that wider government objectives, including housing need and regional economic strategies, are factored into disposal decisions.

English Partnerships, Groundwork, the Forestry Commission and the Environment Agency will create the Land Restoration Trust to restore and manage brownfield land that is suitable only for use as public green space. The Trust will work in partnership with local communities

### **Monitoring Brownfield Land**

Two sources of land use data are routinely collected and provide information on the extent, distribution of brownfield land and brownfield redevelopment. These are the Land Use Change Statistics (LUCS) data series and the NLUD Previously-Developed Land (NLUD-PDL) project. These data sources provide the basis for evaluating and monitoring brownfield policy and targets.

Monitoring of land use change is carried out by Ordnance Survey (OS, the National Mapping Agency of Great Britain) on behalf of Government. The data are assembled and published by ODPM as an annual statistical bulletin<sup>12</sup>. Data are collected as part of routine revision of the national large scale topographic mapping using ground survey techniques in built-up areas and air-photo interpretation in rural areas. LUCS have been collected by the OS in England since 1985 but collection in Wales has ceased.

LUCS are used to produce statistics such as the percentage of dwellings built on PDL and the amount of development within Green Belt areas, so that the effectiveness of government policies can be monitored. They are also used in formulating and monitoring a national target for the percentage of housing that should be built on reused sites and in projecting urban growth. LUCS are published at the national, regional and county levels and classify land use into 10 groups and 24 categories.

A land use change is recorded as part of the OS map revision process when the current land use category of a parcel (identified by a centroid) changes or when new features appear, such as the demolition of a single dwelling and replacement by one or more new dwellings. If a land use change is not physically apparent on OS large-scale mapping (such as a conversion from office to retail) then LUCS would not record this, although the local planning authority would. Consequently LUCS tend to record land cover change more effectively than land use change. The majority of changes are picked up after five years of OS surveying. Residential land use change is recorded more quickly and rural changes are subject to significant lags. Currently LUCS data record the approximate area of a site in hectares.

The NLUD-PDL project commenced in 1998 in response to the policy requirement for a national assessment of previously-developed land. It is based on the collection and recording of site specific data by Local Authorities returned to ODPM on an annual basis. The NLUD-PDL data specification<sup>13</sup> uses the PPG3 definition of previously-developed land and identifies five categories of vacant and derelict sites and other previously-developed land and buildings that may be available for development:

- (a) Previously developed land which is now vacant
- (b) Vacant buildings
- (c) Derelict land and buildings
- (d) Land or buildings currently in use and allocated in the local plan and/or having planning permission
- (e) Land or buildings currently in use where it is known there is potential for redevelopment (but the sites do not have any plan allocation or planning permission)

The data specification defines how the geographical location, address, land use and planning attributes are to be recorded for each site.

There have now been four national data collection exercises in 1998, 2001, 2002 and 2003 based on this data specification. However, none of these data sets is complete. In 1998 95% of local authorities completed a return falling to 63% in 2001 and rising again to 80% in 2002 and 84% in 2003. The collection of data by Local Authorities is not a mandatory exercise and maintaining a viable response rate is only achieved by intensive telephone chasing by ODPM staff, visits to local authorities by ODPM staff, acceptance of paper-based "assisted returns" and inclusion of paper returns that were completed by consultants in place of non-responding local authorities. In addition, there are some concerns over the consistency and completeness of returns between local authorities although a formal assessment of data quality has not been carried out.

In Wales an alternative approach is being piloted based on the use of existing data sources and monitoring streams<sup>14</sup>. This avoids the reliance on variable Local Authority returns and provides a potentially more consistent national data set.

## **Key Results**

The 2002 LUCS Statistical Release provides information on residential development in England, including the 2002 estimate of the proportion of new dwellings provided on previously-developed land. LUCS data indicate that the Government's national target, that by 2008 60% of new dwellings should be provided on previously-developed land and through conversions of existing buildings, has already been exceeded. The LUCS Statistical Release reports the following key results for England:

- In 2002, on a provisional estimate, 64 per cent of new dwellings were built on previously-developed land including conversions. This compares with 63 per cent in 2001 and 61 per cent in 2000.
- In 2002, new dwellings were built at an average density of 27 dwellings per hectare. This density had previously remained unchanged since 1996 at 25 dwellings per hectare.
- In 2001, some 4 per cent of new dwellings were built within 1997 designated Green Belt areas. Of these dwellings, 65 per cent were on previously-developed land.
- In 2001, some 11 per cent of new dwellings were built within the Environment Agency Flood Risk Areas<sup>15</sup>. Of these, 61 per cent were on previously-developed land.

The 2002 NLUD-PDL Statistical Release shows that the total amount of previously-developed land available for development for 2002 showed little change since 2001. A continuing flow of new previously-developed (brownfield) land compensated for brownfield land that had been developed. The NLUD-PDL Statistical Release reported the following key results for England:

- An estimated 66,000 hectares of previously-developed (brownfield) land were available for development.
- An estimated 29,000 hectares (43%) were potentially available for housing and, on the figures supplied by planning authorities, could provide for 880,000 new dwellings.
- Not all of this land is vacant or derelict. Of the total, 60% (41,000 hectares) was vacant or derelict land or buildings, the rest being in productive use but known to be potentially available for redevelopment.
- About 9% of the previously-developed land in 2001 had been redeveloped by 2002.

## **Future Challenges**

The impact of current brownfield policy is demonstrated by recycling targets being met ahead of schedule and the insertion of sustainability objectives into key planning and regeneration policies. Implementation of these policies is underway through the activities of national and regional regeneration agencies. To assist this work the Government is reforming the planning system.

However, there are concerns that the supply of land is insufficient to meet the need for housing. In part the proposals for new growth areas announced in the Communities Plan recognise the need for accelerated housing development. In 2001 the construction of new homes fell to its lowest level since 1945. Over the ten years to 2002, output of new homes was 12½% lower than for the previous ten years. It is estimated that over the next ten years the number of social and affordable houses will need to be increased by about 17,000 per annum requiring an annual investment of £1.2bn.

An independent review, referred to as the Barker Report<sup>16</sup>, commissioned by the Government has recently reported on the issues underlying the lack of supply and responsiveness of the UK housing market. The report argues that continuing at the current rate of house building is not a realistic option.

The review sets out a series of policy recommendations which raise fundamental questions about the current operation of the planning system and the determination of demand for housing based on demographic projections. In broad terms the review recommends the need to:

- integrate economic considerations into the planning process
- better assess the costs and benefits of development and land use
- acknowledge market signals and use the information provided.

Barker argues that the use of fiscal measures as a means to increase the supply of land is limited by the planning system which modifies land value (e.g. by constraining the supply of greenfield land) and so reduces the effectiveness of price signals. The review sets out three scenarios, two of which would require policy changes beyond those currently being implemented by the Government. The review notes that the need to allocate more land for development is central to achieve the required level of housing supply and that this will inevitably bring adverse consequences for the environment and public amenity.

The challenge now for Government is how to reconcile this economic assessment of housing supply and its implications with current policies for brownfield regeneration and sustainable development.

---

<sup>1</sup> Dr A R Harrison, Director, LandInform Limited, Email: [a.r.harrison@landinform.com](mailto:a.r.harrison@landinform.com)

<sup>2</sup> Formerly the Department of Environment, Transport and the Regions (DETR) and the Department for Transport, Local Government and the Regions (DTLR)

<sup>3</sup> DETR (2000) *Spending Review 2000: Public Service Agreements 2001 - 2004* (Cm 4808)

<sup>4</sup> ODPM (2003) *Annual Report 2003* (Cm 5906)

<sup>5</sup> DETR (1998) *Planning for the Communities of the Future* (Cm 3885)

<sup>6</sup> DETR (2000) *Planning Policy Guidance Note 3: Housing* (London: The Stationary Office)

<sup>7</sup> Urban Task Force (1999) *Towards an Urban Renaissance*, The Report of the Urban Task Force Chaired by Lord Rogers of Riverside (London: Spon)

<sup>8</sup> DETR (2000) *Our Towns and Cities: The Future – Delivering an Urban Renaissance* (London: The Stationary Office)

<sup>9</sup> ODPM (2003) *Sustainable Communities: Building for the Future* (London: The Stationary Office)

<sup>10</sup> DTLR (2001) *Planning: Delivering a Fundamental Change* (London: The Stationary Office)

<sup>11</sup> English Partnerships (2003) *Towards a national brownfield strategy*. Available from: <http://www.englishpartnerships.co.uk/>

<sup>12</sup> ODPM (2003) *Land Use Change in England: LUCS18* (National Statistics: Statistical Release)

<sup>13</sup> National Land Use Database (2000) *NLUD Previously Developed Land (PDL): Data Specification v2.2*. Available from: <http://www.nlud.org.uk/>

<sup>14</sup> Welsh Assembly Government (2004) *Undertaking a pilot study to evaluate the feasibility of monitoring previously developed land in Wales* (Cardiff: Welsh Assembly Government)

<sup>15</sup> Flood risk analysis is based on indicative floodplain mapping. These are approximate boundaries and do not take into account any flood defences.

<sup>16</sup> Barker K (2004) Review of Housing Supply 'Delivering Stability: Securing our Future Housing Needs' (London: HM Treasury) Available from: <http://www.barkerreview.org.uk/>