gauging the brownfield land supply in england

Katie Williams, Danni Sinnett, Paul Miner and Laurence Carmichael report on the findings of a study that aimed to help fill the information gap left by the loss of the National Land Use Database – and asked 'Is there enough brownfield land in England to meet housing needs?'

Peter Astles

Previously developed brownfield land at Newton le Willows

There is no shortage of political support for building more homes in England, but there are considerable problems with housing delivery. The All-Party Parliamentary Group for Housing and Planning has recently set itself the task of tackling what it calls 'the national housing emergency'.[1] New households are forming at a rate of around 221,000 per year, and yet only 112,000 new dwellings are being built annually: about half the required number. A legacy of under-provision has led, in part, to an affordability crisis affecting a large proportion of the population. The current Government sees kick-starting private sector housebuilding as the main solution. In tandem with the drive to boost housing development is the

inevitable debate about where new dwellings should be located. There is a long-standing rationale in favour of focusing new development within existing cities, mainly on brownfield land, but there are also arguments in favour of delivering large numbers of homes in new settlements or urban extensions, predominantly on greenfield sites.

The reality is that to meet the country's housing needs over the coming decades we are likely to require a mix of development types, plus a concerted effort to refurbish the existing housing stock. The task for those responsible for planning and infrastructure is to ensure that new homes are built in the most sustainable places, given the prevailing opportunities and limitations.

In this context there remains a strong sustainability rationale (economic, social and environmental), in the majority of cases, for making the best use of brownfield land in existing built-up areas before considering greenfield sites. Brownfield development can help to revitalise towns and cities, provide good access to existing jobs and services, allow energy-efficient forms of transport, maximise use of existing developed land and infrastructure, and avoid development in the countryside.

Until the Coalition Government came to power in 2010, planning had operated within a broadly 'brownfield-first' policy context for the previous two decades. This policy, coupled with a number of pro-urban socio-economic trends, saw the proportion of homes built on brownfield land rise from 53% in 1990 to a peak of 81% in 2008. Partly as a result, many English towns and cities enjoyed elements of an 'urban renaissance'.

However, the total number of homes delivered during this period was too low to meet rising demand, and the Coalition Government's response was to move away from an explicit 'brownfield-first' position to one that encouraged developers to come forward with a range of sites, including greenfield. This contributed to an increase in the proportion of dwellings built on greenfield sites (32% in 2011) but ultimately still did not deliver the required housing numbers.

The new Conservative Government has turned its attention to brownfields again with proposals to enable the development of 200,000 new homes on such sites by 2020. It plans to introduce a statutory register of brownfield sites suitable for development, and to compel local authorities to fast-track granting planning permission on 90% of these sites. Funding is also being directed into preparing sites. This proposal does not necessarily signal a return to a 'brownfield-first' policy environment as developers are still being encouraged to bring forward any potential housing sites, including greenfield. Rather, it is a drive to stimulate building on sites that are perceived by the Government to be complex and unattractive to developers.

But how realistic is it to keep looking to brownfields as suitable locations for housing development in England? After several decades of 'brownfield first', are there enough sites left for new housing or have they all been used? Exactly how many homes could be accommodated? And, importantly, is there capacity where demand for housing is high?

Answering these questions in England is not straightforward. Until 2010, there were fairly accurate data on brownfield land. Local authorities reported annually to the National Land Use Database (NLUD). However, in 2010 the Coalition Government removed this reporting requirement, resulting in the loss of a national dataset and uncertainty over development trends. As a consequence, estimates of how much housing could be provided on brownfield sites have varied, with figures of 200,000 and 1.5 million being quoted by government.

In an attempt to update the NLUD and regain a national land use overview, in 2014 the Campaign to Protect Rural England (CPRE) commissioned the University of the West of England to survey all local authorities in England and collect data on brownfield land. Every local authority in England was asked to provide the equivalent of their NLUD data from 2011, 2012 and 2013.[2]

Overall, 82% of local authorities responded, but many indicated that they had not collected this data, or had not provided data to the Homes and Communities Agency since 2010. While 34% of local authorities provided data for 2011 and/or 2012, very few provided data for 2013 (9%), so this year was excluded from the analysis. Hence, to determine the national picture the most up-to-date data for each local authority was used. This means that for more than half of local authorities the 2010 data had to be included as no 2011 and/or 2012 data were available.

The survey took a very conservative approach to estimating the suitability of brownfield sites for housing, only including those with genuine potential for development. The NLUD classified 'brownfield' land into five categories and these were used to collect and categorise the data in the survey too:

- *Type A:* Previously developed land (PDL) now vacant.
- *Type B:* Vacant buildings.
- *Type C:* Derelict land and buildings.
- *Type D:* PDL or buildings currently in use and allocated in the Local Plan or with planning permission.
- *Type E:* Land currently in use with known redevelopment potential but no planning allocation or permission.

Some previous government summaries of housing land availability have included all five types of land in their headline figures. However, in the CPRE analysis type E data was removed because it has

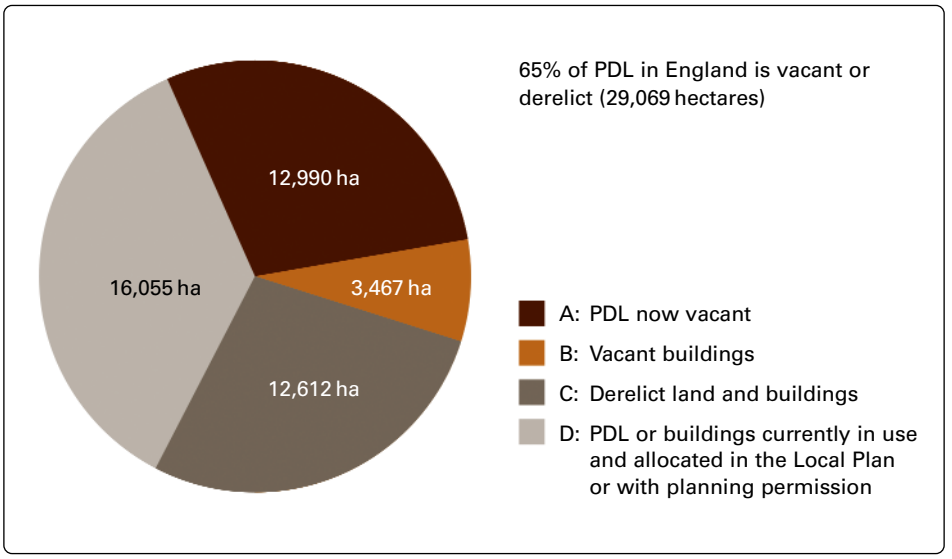

Fig. 1 Proportion of brownfield land types A to D in England in 2012

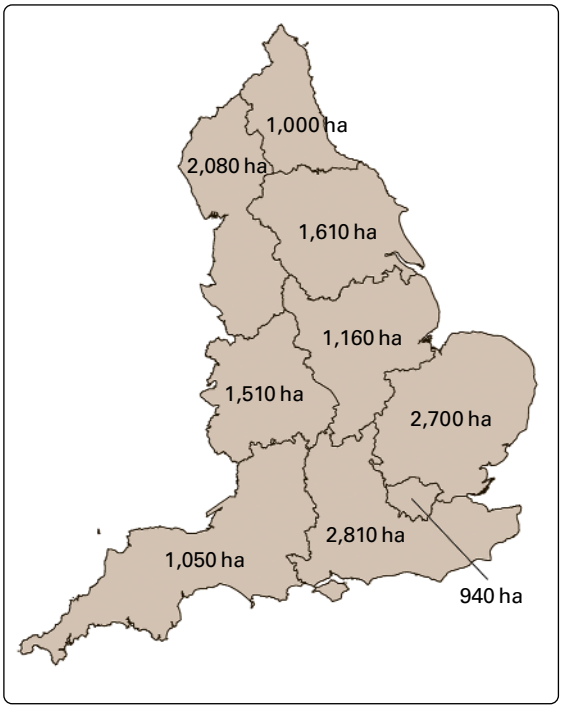

Fig. 2 Total area of brownfield land with outline or detailed planning permission in 2012, by English region

little or no short- to medium-term likelihood of being developed, and because the dataset is not made publicly available in full for this category owing to its sensitivity.

The NLUD data also included the local authority's judgement on each site's suitability for housing, planning status and estimated housing density and capacity. The figures presented in the CPRE survey are based on these data to ensure some certainty over each site's appropriateness and capacity for housing.

The survey revealed that there were approximately *45,120 hectares* of brownfield land in England in 2012 (see Fig. 1). *29,069 hectares*, or 65% of this land, were *vacant or derelict sites*, equating to an area the size of Bristol. The majority of sites were less than 1 hectare in size (71%), with 22% in the range 1-5 hectares, 6% in the range 5-20 hectares, and only 1% over 20 hectares.

Not all of this land is developable in the short to medium term, so the planning status of these sites was analysed to assess the amount of land immediately available for development. It was estimated that 18,100 hectares (40%) were allocated or had a draft allocation in the Local Plan and a further 14,850 hectares (33%) had either detailed or outline planning permission. Hence 73% of land was developable. In terms of land area, this translated into regional variations ranging from 940 hectares with planning permission in London to 2,810 hectares in the rest of South East (see Fig. 2).

Some of this land may not be suitable for housing, due, for example, to its physical characteristics or location. In the CPRE survey (as in NLUD) local authorities indicated which sites were suitable for housing, either for purely residential schemes or within mixed-use developments. The local authorities judged that 22,680 hectares of brownfield land were suitable for housing – equivalent to a site larger than the Liverpool Urban Area. Again, there were significant regional variations, with 81% of land suitable for housing in London and only 36% in Yorkshire and the Humber (see Fig. 3).

The survey also recorded whether or not this land (i.e. land suitable for housing) had planning permission. Overall, 85% of land judged suitable for

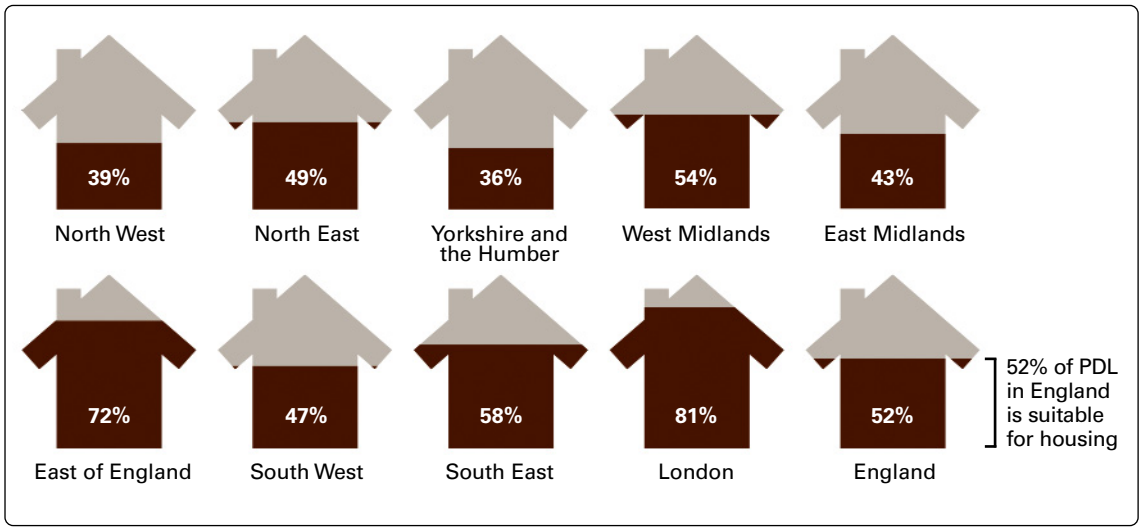

Fig. 3 Proportion of brownfield land suitable for housing in England in 2012

housing had some form of planning status (either detailed or outline permission, or allocated or with draft allocation in the Local Plan, or planning permission subject to further legal agreement). There were regional variations in the availability of this land, but there is considerable provision in London and the South East, where demand for homes is high (see Fig. 4).

So, there are considerable land stocks suitable for housing and with planning permission of some type. However, it was essential to relate the amount of land to housing capacity to get an idea of the numbers of dwellings that could be provided. The housing capacity for each site is based on assumptions about dwelling density that the local authorities made when they returned their data.

Overall, there is capacity for *975,991 homes in England on brownfield land* (see Fig. 5), equating to just over four years' supply, assuming a household formation rate of 221,000 households per year. This is a very conservative estimate of the true picture of brownfield land availability, as it does not include land with redevelopment potential that may shortly become brownfield (land type E, above), and it does not include currently unidentified sites (or windfalls) that may render the local authority data incomplete.

It is worth noting that the housing capacity figures are based on differing estimates of density between the regions. The London authorities averaged estimates of 140 dwellings per hectare, whereas the average across the remaining regions was a relatively low 35 dwellings per hectare. These differences lead to contrasting capacity calculations per hectare for the English regions, but also suggest that there may be scope to increase the capacity outside of London.

In terms of viability, of the potential 975,991 homes, *405,000 are on brownfield land which already has outline or detailed planning permission*, and the

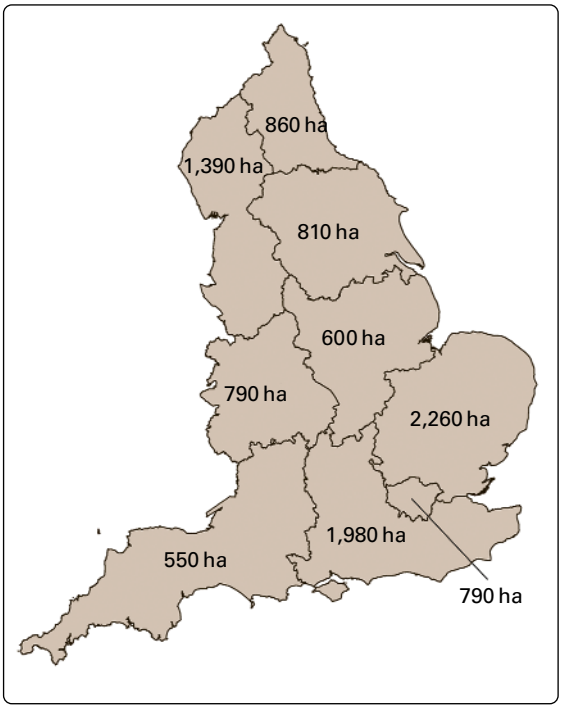

Fig. 4 Total area of brownfield land suitable for housing with outline or detailed planning permission in 2012, by English region

prospect of building in the short term is greatest in the areas of highest demand for new housing, such as London and the rest of the South East (see Fig. 6).

Looking at the type of land available for development, there is capacity for *550,000 homes on sites that are already vacant and derelict*, and almost half of these homes (44%) are in the South

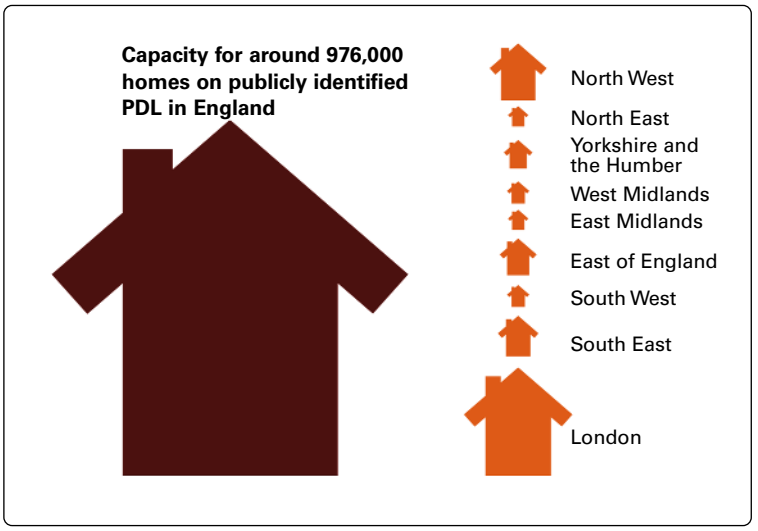

Fig. 5 Housing capacity on brownfield land in England in 2012

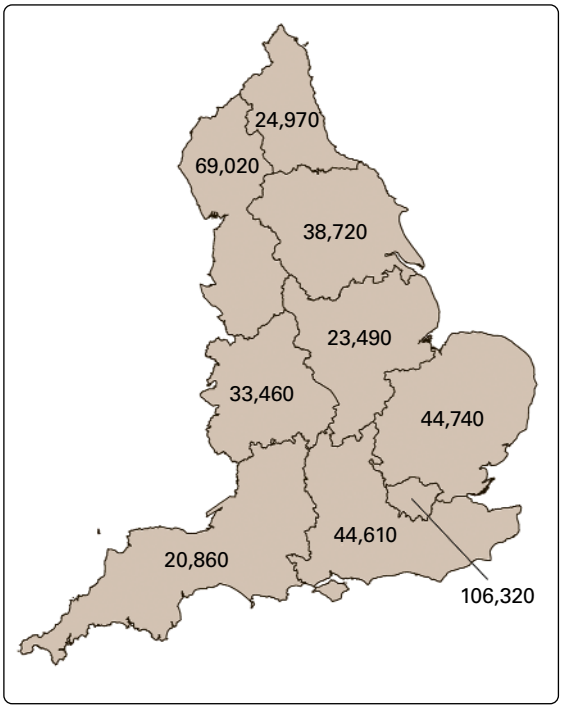

Fig. 6 Total housing capacity on brownfield land with outline or detailed planning permission in 2012, by English region

East, the East of England or London. London itself could provide at least *146,000 homes on derelict and vacant brownfield land*. The 2014 Alterations to the London Plan states that 'Opportunity Areas' which include land still in use and land yet to be designated as brownfield could accommodate 300,000 homes, again reiterating that the CPRE survey figures are conservative.

A final significant finding is that the amount of brownfield land is far from finite. The data from the 82 local authorities that responded with figures for 2011 and 2012 show that 1,658 hectares of land were redeveloped and removed from the database between 2010 and 2011, while 1,725 hectares were added. This shows a modest increase of 67 hectares of total brownfield land during that period, but also a turnover of more than 10% of the overall amount of brownfield land in both years (17% in 2010/11; and 11% in 2011/12).

So, what does this survey contribute to the debate about the potential for brownfield development in England? First, it shows that in real terms there is enough brownfield land to meet housing needs for at least four years, even if no new land comes forward: absolute availability of brownfield sites is not a problem. It also shows that land stocks are being replenished, so brownfield sites do not appear to be 'running out' because new ones are created through the constant 'churn' of sites as they come to the end of their useful life. However, most sites are relatively small, with a majority (71%) being less than 1 hectare, which may render them less attractive to the larger housebuilders that dominate the English market.

Second, it shows that there is enough land currently with planning permission for over 400,000 homes. Some of these sites may be about to be developed in the near future, but this figure is still double the Government's target for its programme of planning permissions on brownfield sites by 2020. This calls into question whether the Government's ambition is too modest, and whether planning really is a barrier to brownfield development at the moment, as there are vast stocks of land that already have permission but are not being developed. It also suggests, perhaps, that the Government's approach of further deregulation will do little to stimulate new housing.

Brownfield land in Northallerton – brownfield sites do not appear to be 'running out' because new ones are created as existing uses come to the end of their useful life

This research has clearly influenced Ministers to put a renewed emphasis on tracking the amount of brownfield land that is available and suitable for development. Following a commitment in the 2015 Conservative manifesto, the Government announced that provision for a new, statutory,

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register of brownfield sites would be included in the Housing Bill, which at the time of writing has yet to be published. The Government's 'Productivity Plan',[3] published in July 2015, states that sites included on the register will be given automatic planning permission, through a process where the principle of development is established only once. The Plan describes this as a move towards a more European-style zoning system for new development.

So, will future development on brownfield sites be subject to a new procedure to which section 106 planning agreements cannot be applied, or to an expedited form of either Local Development Orders or outline planning permission? This will not be known until the Housing Bill becomes law.

What is clear is that the regeneration of brownfield sites can achieve many societal and environmental benefits. Local Plans and planning agreements have been, and can be, invaluable for directing development to the most suitable sites, and for providing longer-term, sustainable regeneration for surrounding communities. A brownfield sites register should be seen as a necessary part of the evidence for local planning, but not as a substitute for it.

● ***Professor Katie Williams***, ***Dr Danni Sinnett*** and ***Dr Laurence Carmichael*** *are with the University of the West of England, Bristol.* ***Paul Miner*** *is with the Campaign to Protect Rural England. This article draws on the report From Wasted Space to Living Spaces: The Availability of Brownfield Land for Housing Development in England (see http://cpre.org.uk/housing-and-planning/housing/item/download/3847). The views expressed are personal.*

Notes

1 See www.rics.org/uk/news/news-insight/press-releases/all-party-parliamentary-group-announced-to-tackle-national-housing-emergency—/

2 This article draws on the report of the study: D. Sinnett, L. Carmichael, K. Williams and P. Miner: *From Wasted Space to Living Spaces: The Availability of Brownfield Land for Housing Development in England*. University of the West of England, for the Campaign to Protect Rural England, Nov. 2014. http://cpre.org.uk/housing-and-planning/housing/item/download/3847

3 *Fixing the Foundations: Creating a More Prosperous Nation*. Cm 9098. HM Treasury, Jul. 2015. www.gov.uk/government/publications/fixing-the-foundations-creating-a-more-prosperous-nation