



# Daniel Watney

Development Update

## The challenges of brownfield land





## Introduction

John Harding, Senior Partner, Daniel Watney

# Britain's housing market is never out of the headlines.

Since Kate Barker's 2004 report said we needed

**240,000 homes a year**

to keep prices stable, countless promises have been made around how much each political party would build. Currently, we met barely half that amount each year.



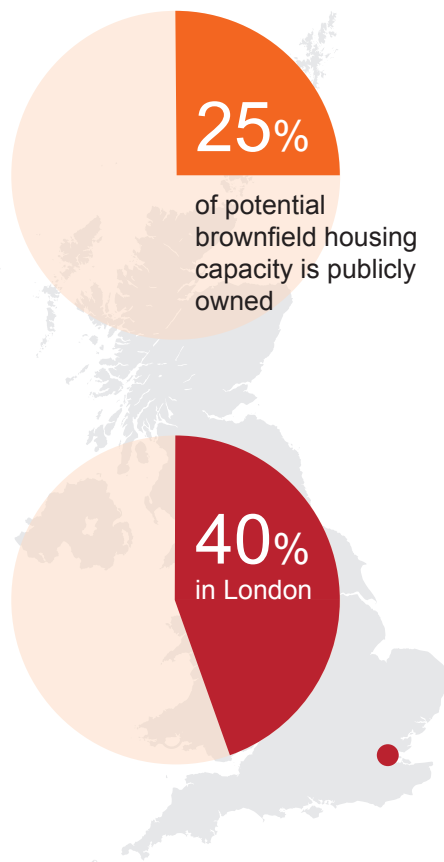
# The issues and potential solutions are highly complex.

Local communities, empowered by recent planning changes, often see little value in voting for development which could lower their house prices and add extra pressure to services. Subsequent appeals lead to costly delays while developers are all too often vilified unfairly for garden-grabbing or land banking.

With efficiency drives underway across the public sector, the scope to reuse sites previously owned by the public sector is huge. Yet the scope and scale of these opportunities has never been truly known.



Brownfield land has long been prioritised for development and where sites can be supported by existing infrastructure it surely makes sense to bring them forward quickly.



Source:  
ONS data for 2012, published Oct 2014



Our analysis, based on official data, highlights councils across England containing viable land for nearly half a million homes. Our detailed sample makes up 45% of local authorities (LAs) in England. While LAs vary greatly in size and location, we can estimate with some confidence that the total volume of brownfield land across other sites is likely to increase this number by a significant margin.

Crucially, in terms of potential housing capacity, **25% of the land identified is publicly owned**. This figure rises to **40% in London** – which underlines the role the public sector has to play in supporting development.

Given the acute housing shortage in the capital, this is a highly significant figure. But it does not mean that other solutions - such as building on the green belt or looking at higher densities - will not be necessary too, as brownfield development is often far more costly than greenfield development.

Brownfield land is not necessarily old manufacturing or contaminated land, yet it is often not suitable for housing. However, our analysis focuses on more than

## 10,000 hectares of brownfield land

that are considered suitable for housebuilding.

This is still not necessarily easy – or financially viable – to develop under normal market conditions. We therefore need sensible debate and compromise around whether land which needs high levels of remediation is subsidised to encourage its recycling by the private sector.



Long term strategic thinking is also needed around how land is brought forward to development and for what tenure of housing. The genuine needs of local communities need to be considered – and this includes a greater provision of private rented housing, as the Mayor of London has identified.

The Greater London Authority has used planning powers to usher through new housing on public land, with major schemes underway in Battersea, Elephant and Castle and Silvertown

We need to consider all the options: higher density development will work in London which has comparatively lower density than other major international cities; a sensible review of the green belt is long overdue; while creating measures that ensure the redevelopment of brownfield land could be among the least controversial.

As a full-service consultancy, Daniel Watney's partner-led approach serves an array of public and private sector clients. Our specialist teams can advise on the full range of development, investment, planning and residential issues.



## Brownfield land in context

### Headline statistics at a glance

	Total brownfield area (Ha)	Area suitable for building	Number brownfield sites	Sites suitable for housing	Estimated housing capacity
All England	23,697	10,113	8,860	5,706	467,000
London	1,271	1,123	732	634	157,000
Rest England	22,425	8,991	8,128	5,072	309,000
All England	4,678	1,906	1,567	1,046	119,000
London	423	382	124	98	65,000
Rest England	4,255	1,524	1,443	948	54,000

 All brownfield land

 Publicly owned brownfield land

Source: ONS data for 2012, published Oct 2014

Note: Estimated housing capacity has been rounded to the nearest 1,000

	% sites publicly owned	% potential houses publicly owned
All England	18	25
London	15	41
Rest England	19	17

## What is brownfield land?

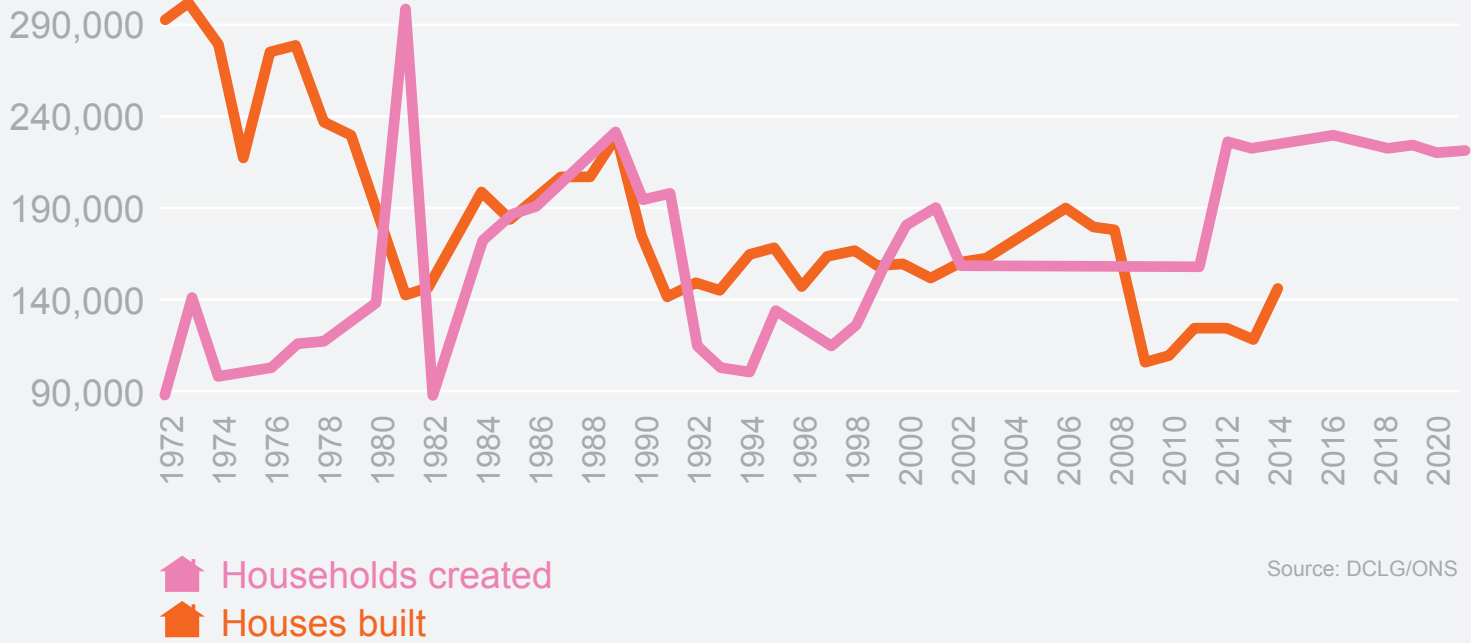
The government definition of brownfield land is “an area of land that has been previously used, but has subsequently become vacant, derelict or contaminated. The term derives from its opposite: undeveloped or greenfield land.”

Brownfield land is often a more informal term for what is defined in planning guidance as ‘previously developed land’. Essentially the two are the same.

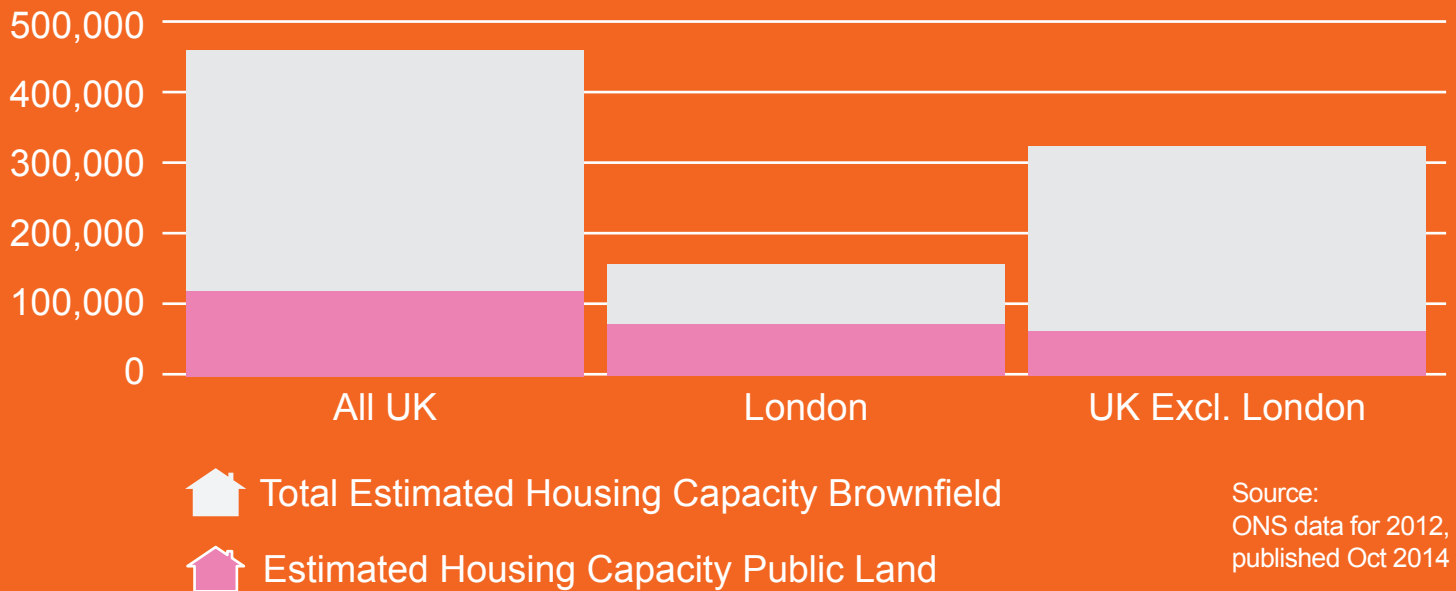
The significance of developing on brownfield land grew in 1998. Years of post-industrial decline led to a national target for 60% of all new development to be built on brownfield land, which planning guidance continues to encourage.

## Number of households created per annum vs. houses built

(including predictions from 2013)



### National housing potential of brownfield sites



### Headlines

There are almost 23,700 hectares of brownfield land in the 149 LAs measured in the sample

Of this, there are over 10,000 hectares of Brownfield land around England considered suitable for housing, which could support 467,000 homes

Publicly owned land accounts for almost 2,000 hectares of land, that would support 119,000 homes – or 25% of the total amount

In London there are 1,200 ha, which could support 157,000 homes

Of this, publicly owned land accounts for almost 400 hectares, which could support 65,000 homes – or 41% of the total.

If complete data for all LAs and government departments was available, there would be a significant increase in land and potential housing. Despite the variations in sizes of LAs, when taking this into account and factoring in higher densities, estimates suggest over one million homes could be built nationally on previously developed land.

## Analysis

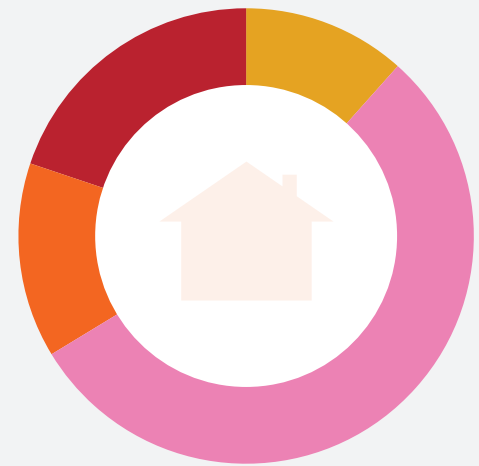
The data show that the ratio of potential homes to available land is considerably higher in London than in the rest of England – working out at roughly 140 homes per available hectare in the capital, compared with 34 per hectare in the UK excluding London, and 46 per hectare for the all UK average.





Much higher densities can be achieved in London compared with other parts of England. This is a key factor in brownfield development: by permitting building at scale, the financial viability of development can be significantly enhanced. Critical mass and economies of scale regarding the delivery and funding of social and physical infrastructure also amplify viability.

In terms of London boroughs, the amount of brownfield land identified varies considerably from just 20 hectares in Kensington to over 200 in Barnet. While large-scale industrial space used to typify brownfield sites, a sizeable proportion of the data sample is now identified as old office and commercial space. By borough, the density of development is intriguing: Redbridge and Harrow have the same amount of publicly owned land, but Redbridge has twice the potential housing capacity.



### Proportion of 467,000 houses on public and private land



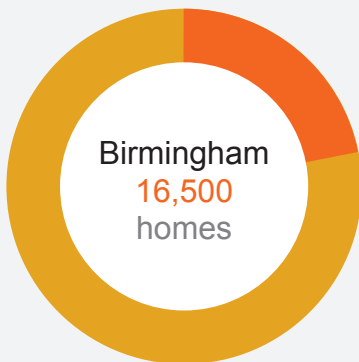
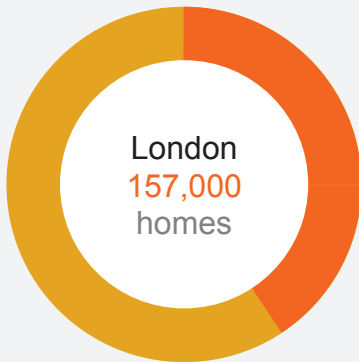
-  Public rest of England
-  Private rest of England
-  Public London
-  Private London

## Brownfield land in urban areas

Source: ONS data for 2012, published Oct 2014  
 Note: Estimated housing numbers have been rounded

	Sites suitable for housing	Estimated potential housing capacity	% sites publicly owned	% potential houses publicly owned
Liverpool	467	19,000	22	36
Wandsworth	64	18,500	11	7
Birmingham	261	16,500	34	21
Ham & Ful	26	16,500	19	47
Dartford	34	16,000	9	2
Lambeth	72	12,500	17	14
Barnet	120	12,500	13	57
Lewisham	51	11,500	6	6
Sheffield	145	11,000	30	30
Wakefield	69	10,500	17	9
Bristol	110	6,500	22	18
Brighton	45	6,000	9	14
Coventry	110	6,000	19	18
Ipswich	65	4,500	22	14
Ken & Chel	23	4,000	30	37
Oldham	59	3,000	32	32
Walsall	68	3,000	9	5
Poole	77	3,000	1	8
Watford	27	3,000	11	7
Bolton	39	2,500	13	10
Portsmouth	50	2,500	24	24
Bury	29	2,500	10	9
Ashford	20	2,000	55	23
Oxford	36	1,500	33	26
Basingstoke	13	1,500	15	37
South Tyneside	16	1,500	38	53
Milton Keynes	35	1,000	6	26
Woking	10	500	10	27

 Public land  
 Private land



Source:  
ONS data for 2012, published Oct 2014

Outside of London, there are 9,000 hectares of brownfield land considered useable for housing development.

These sites have the capacity for roughly

**309,000 homes, of which 54,000 are on public land – or 17% of the total number of houses.**

Density is considerably lower than in the London, which brings with it its own problems in terms of development, not least in adding the infrastructure necessary to ensure a vibrant development and community.

However, brownfield land increases in terms of development viability when located in or near an existing urban area. The table on this page singles out some of the larger urban areas from the data and looks at their ability to support housing.

Many, for instance Birmingham, Liverpool, Oxford, Sheffield and Bristol, are surrounded by significant swathes of green belt land, but have the potential to utilise their existing stores of brownfield to stimulate housing development.

Others have good transport connections to nearby larger centres, or are already on their periphery: for instance Ashford, Milton Keynes, South Tyneside and Bolton.

In all such cases, there are no easy answers to development, but plentiful opportunities.

Source: National Land Use Database of Previously Developed Land / ONS

The dataset used for this analysis covers roughly 45% of England – meaning the total national figure will be substantially higher. This data are provisional and not validated by the ONS, meaning that while they offer some of the best indications yet around the supply of public land, they cannot be taken as completely accurate. Potential housing yields are taken from actual figures supplied by the local authority to the HCA/ONS, rather than applying a 'standard dwellings per hectare' value.

## The issues and costs of developing brownfield land

Despite the ready availability of brownfield land, particularly in urban centres, the associated costs of development remain prohibitive.

Generally, developers require 15-20% profit margins, which the cost of developing can rapidly erode. As a result, the development of brownfield sites often only begins when house prices reach a high enough value to make building viable.



### The key constraints for housebuilders are:

#### Decontamination costs

A common cause for expense, as residential development requires a far more stringent risk assessment and site clean up than commercial. Contaminated land investigations are complex and time consuming, thus increasing costs.

#### Demolition of existing buildings

This can be particularly complex when they require the removal of hazardous materials, or of significant underground obstacles.

#### The scale and shape of sites

Many sites are too small or awkwardly shaped to allow for efficient development.





## Location

Brownfield sites are often located in previously industrial or unloved areas of a town or city, meaning that unless development comes as part of wider regeneration, it is unlikely to produce viable yields for development. Location can also become an issue due to flood and other risk factors.

## Existing infrastructure

The location of sites often means no accompanying infrastructure, be it roads and transport connections, and also local shops and services, schools and healthcare facilities.





## Is publicly owned brownfield land the answer?

James Davis, Partner and Head of Building Consultancy at Daniel Watney

Building on brownfield land is the least toxic option for politicians keen to protect greenfield sites and maintain the green belt. But put quite simply, it involves much more risk for developers.

Irrespective of who owns them, land previously built upon could potentially hide a wealth of complexities which could cause delays and increase costs, hampering the economic viability of schemes. Because successive governments have largely left housebuilding to the private sector – even housing associations now subsidise their work with private development – if companies cannot reasonably make a profit, they will not build.

This means that if it's not cost effective to clean up a brownfield site and still make a profit after developing, a developer cannot do it. The answer is then to find a compromise over the price or accept that some sites will remain dormant.

Contamination is a particular bugbear – particularly on former industrial sites. While many obstacles can be identified in advance, advanced mapping cannot easily estimate the price of decontamination.

The problem here is that detailed site investigations telling you the full story normally do not happen until the planning process has begun.



Desktop surveys – where developers can check who did what on a site previously - can give them some idea of what may be lurking in the soil. For instance, an old school is likely to have less problems than a former plastic factory. But developers remain cautious because there's no clear itinerary of what risks lurk below the surface.

Our analysis shows that while a quarter of brownfield land in England is owned by the public sector, in London that figure rises to over 40%, based on sites presently identified. Where this helps us, is by allowing us to focus energies on sites which may be worth investing in, perhaps because they're close to existing infrastructure.

While privately owned brownfield land will generally be sold to highest bidder, public land can be invested into via joint-venture agreements with developers at a discount in a bid to encourage housing development. This practice already happens, but with so much state-owned land lying dormant, there is scope to help speed along this process.

On some levels, asking cash-strapped local authorities to subsidise developers may sound unpalatable. But we need to be realistic in admitting that you cannot have policy without profit if you're relying on the private sector to deliver the nation's housing.

The state does have responsibility to get the best possible value from its assets. But in many cases, there's greater value to be had from new housing, commercial and leisure facilities than a higher capital receipt. If the public sector can encourage development that brings with it such benefits by investing itself – it should not be discouraged.



Some of the issues could be resolved by greater collaboration across public bodies so that any potential developer can know the risks up-front without needing to enter into planning. With improvements in data sharing, there should be plenty of scope for land to be catalogued and graded so that a concerted effort can be made to remediate it where necessary.

Land with pre-completed environmental assessments, which could also stipulate the tenure of development preferred by the council, may be easier to dispose of, since some of the risks are removed.

A wealth of new funders continue to enter the English property market, investing in everything from student housing to distribution centres. With that in mind, councils could engage with experts to determine what there is demand for from investors. They could evaluate whether sites may benefit from being reclassified and adjusted local plans could be made to encourage investment. If this can be achieved, then potentially toxic land could be turned into profitable opportunities for developers and local authorities.



## What does planning policy say?

Since 1998, there have been a number of policies encouraging the development of brownfield land

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February 1998: 'Planning for the communities of the future sets national target of 60% of all development to be on brownfield land

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November 2006: Planning Policy Statement 3 (PPS3) reaffirms 60% target and stresses LAs should prioritise brownfield development

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February 2009: National Brownfield Forum holds first meeting for implementation of National Brownfield Strategy, devised by regen agency English Partnerships

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March 2012: Revised NPPF has the 'effective use' of brownfield land as one of its core principles, providing sites not of high environmental value, though drops 60% target

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June 2014: Government offers £200m funding for 10 brownfield development zones outside of London, and £400m for 20 brownfield development zones inside London

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## Going forwards

### Examples of development

The difficulty remains in encouraging LAs and other public bodies to bring their land forward, and in this respect there are fewer public private partnerships.

### Notable examples in the last few years include

- 1** Silvertown Quays, London
  - a. A 3,000 home, mixed tenure development
  - b. Developed through the Silvertown Partnership: Chelsfield Properties, First Base, Macquarie Capital, Greater London Authority and the London Borough of Newham
  
- 2** Heritage Park, Silverdale (nr Newcastle-under-Lyme)
  - a. A 300 home, mixed tenure development
  - b. Done in partnership between Barratt Homes, David Wilson Homes and Newcastle-under-Lyme Borough Council
  
- 3** Stone House Hospital (Victoria Park), Dartford, Kent
  - a. A 260 home, mixed tenure
  - b. Partnership between Ward homes, PJ Livesey Group and Dartford Council



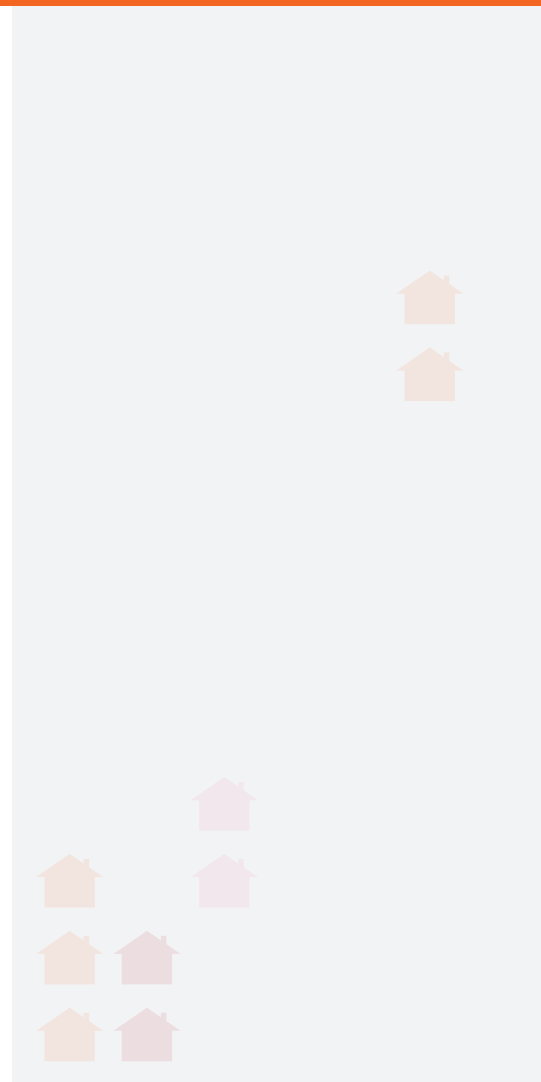
## Encouraging more brownfield development

Brownfield land has the potential to provide roughly one million homes in the UK, bypassing much of the delays that localism has led to in house building.

Its successful development will rely on collaboration between the public and private sectors, but this does not mean there are not other actions that can encourage development. A number of recommendations are outlined below – not for systematic inclusion in all schemes, but to help get those off the ground that need assistance.

### Allow higher density development

Higher densities, though unpopular, increase the viability of sites for developers. The fact that brownfield schemes are in relatively unloved areas should take away much of the hostility normally shown to larger developments, while the creation of a certain scale of homes will make the provision of infrastructure more cost effective.



### Reduce development costs

Reducing the costs to developers may seem counterintuitive, but in exchange for helping schemes get off the ground they can be used to stipulate development of types of housing that suit the need of the location. Whether this be mid-market, affordable, social or rental, providing more benefit than a housing scheme sold at the maximum possible price.

### Bring forward land with planning, or change of use

Bringing forward sites with planning, in sale packs that have already conducted environmental assessments, or with their use already converted to residential, will markedly reduce the the risk for developers, and make it easier for them to obtain funding for schemes from lenders.



## Compulsory Purchase Orders for private land

These are an expensive option for any local authority, are an expensive option for local authority, but when there is one block of privately owned land stalling the development of a wider site, powers should be used to kick start development. Such powers can be used to encourage schemes of scale.

## Show the necessary political will

We are already seeing a number of local authorities partnering with developers, but more need to be encouraged to take the lead: openly tendering their land to developers. Brownfield development is far from easy, but it is still one of the least controversial methods of supplying thousands of new homes, and local authorities should leap at that chance.



# Daniel Watney

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