#### **EXECUTIVE SUMMARY**

- Green Belts are unsustainable. Urban containment policies push up rents and house prices and generally increase the cost of living, force households into ever smaller homes and more cramped transport, and are harmful to the environment. This hugely depresses people's quality of life.
- In The Green Noose we recommended a policy of "Abolish and Protect", whereby substantial parts of the existing Green Belt would be re-designated under other land-use classifications, while the remainder would be available for development. This would allow markets to operate and so ensure that welfare-maximising solutions emerged.
- However, debates about Green Belt policy always descend into demands to know
  where development will take place, or claims that every hectare of declassified
  land would be concreted over. While the former misunderstands the role of planning policy, and the latter is disingenuous, such arguments are almost impossible
  to avoid.
- This paper seeks to provide examples of where development could take place. As it is location-specific, we have chosen to focus on one Green Belt the Metropolitan Green Belt around London. In doing so we (artificially) distinguish between the Metropolitan Green Belt and "London Green Belt" (i.e. those parts of the Metropolitan Green Belt within the boundaries of Greater London).
- Our aim is not to prescribe sites for development, but to demonstrate that there is ample land within the Metropolitan Green Belt that would be suitable for development and could be built upon without undermining the overall purpose of Green Belt policy (as defined by the NPPF).
- We look at six scenarios:
- 1. Declassify Metropolitan Green Belt land within walking distance of a rail way station
- 2. Declassify Green Belt land in London within cycling distance of a railway station
- 3. Allow development of Green Belt golf courses
- 4. Infill areas of Green Belt that do not support Green Belt Policy

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- 5. Remove agricultural land from the Green Belt
- 6. Declassify and re-use of already developed Green Belt land.
- Each of these would make a dramatic contribution to meeting housing need in London and the South East; in three cases, a single measure would more than meet all additional housing need until 2030.

#### INTROUCTION

Green Belt policy is unsustainable. The increasing demand for housing is putting pressure on our cities, the growth and prosperity of which is strangled by urban containment policies that were introduced nearly 70 years ago.¹ Green Belts also have significant negative effects in human welfare, pushing up accommodation costs, reducing private space, increasing house price volatility and increasing the cost of business (and thus pushing up retail prices and reducing employment prospects). They are also harmful to the environment, both because they shift development from low-quality Green Belt land onto higher quality land outside the Green Belt, and because developments pushed beyond the Green Belt need to be connected to urban centres by longer transport infrastructure, leading to more tarmac and rail being laid and longer (and more polluting) commute. We published a fuller examination of the fallacies and flaws of Green Belt Policy in The Green Noose - an analysis of Green Belts and proposals for reform (Papworth, 2015).

In The Green Noose we recommended a policy of "Abolish and Protect", whereby substantial parts of the existing Green Belt would be re-designated under one of England's numerous land-use classifications, providing continued protection for areas where there is genuine environmental, heritage or recreational value.<sup>2</sup> The remainder – areas that are unremarkable, unattractive and/or inaccessible – would be free for owners to develop. This remains our preferred policy, as it would "allow market processes to reveal where people would most want to see new homes." <sup>3</sup>This would ensure the most efficient allocation of resources because the interaction of private property, prices and profit ensures that owners, developers and buyers reveal information, innovate around forms of development and are incentivised to allocate resources efficiently. It is only through the operation of markets that preferences are revealed. Planners, academics, policy analysts, and the general public collectively do not know which sites are most suitable for development, but where markets operate this information is revealed through free exchange.

However, there are two practical problems with this approach. Firstly, though it is highly unlikely that more than a small percentage of the Green Belt would be developed, it would be very easy for opponents to claim that vast swathes of greenspace

<sup>1</sup> On the relationship between the size (population) of a city and its economic prosperity, see Cheshire et al (2014), chapter 2.

<sup>2</sup> Papworth (2015), p46.

<sup>3</sup> Papworth (2015), p48.

were under threat. Protection would be removed from potentially hundreds of thousands of hectares, even if only tens of thousands were ever built upon.

Secondly, even those willing to admit that only a small percentage of the Green Belt would need to be developed tend to want to know where specifically development will take place. This entirely misses the point of allowing markets to operate, which is that without markets revealing information, nobody knows which sites are most suitable. Nonetheless, debates about Green Belt reform inevitably revert to discussions of specific locations.

To address these objections, the remainder of this paper will consider specific answers to the question where in the Metropolitan Green Belt new housing could be sited. We focus on the Metropolitan Green Belt because housing pressures are most acute in Greater London, the South East and East of England, in particular in and around the metropolis. It also makes sense, once the debate becomes location-specific, to focus on one Green Belt.

## THE NEED FOR GREENFIELD DEVELOPMENT IN AND AROUND LONDON

The government needs to plan for 1 million homes to be built on greenfield sites within the outer circuit of the Metropolitan Green Belt, of which 400,000 are assumed to be within Greater London. Assuming 50 houses to the hectare, this would require 20,000 hectares of land. Cheshire (2014) refers to 50 houses per hectare as "the current norm." URBED (2014) suggested average densities of 30-40ha for "Uxcester Garden City", but this was deliberately low to avoid accusations that high-density housing was being imposed on low density areas. By comparison, in London new developments were completed at an average density of 120 per hectare in 2012/13, compared to a peak of 136 in 2009/10.<sup>4</sup> This has largely been in the inner city, whereas our proposal is to create new suburbs or satellite towns. For this reason we consider 50 units/ha to be a reasonable level of development.

This housing would need to be supported by transport infrastructure and non-domestic buildings. Assuming the ratios were similar to those in Greater London, a further 10,000ha would need to be developed. However, it is possible that half of the 20,000ha devoted to "housing" would in fact be private gardens. Therefore only 20,000ha would be "concreted over".

It does not automatically follow that this land needs to be Green Belt; other greenfield sites could be used. However, concentrating development on greenfield sites other than Green Belt land would be far more detrimental to both the environment and to people's welfare. Within Greater London, a third of the land is "greenspace"

<sup>4</sup> GLA (2014a).

<sup>5</sup> Analysis based on ONS (2005).

**<sup>6</sup>** 70% of domestic land in London is gardens. However, our proposed developments have a higher density than the London average and so we are assuming only 50% of newly-developed land would be gardens.

while the remainder is fairly evenly split between gardens and buildings/transport.<sup>7</sup> Of the greenfield land, 35,180ha is Green Belt, while the remaining 25,000ha consists of Metropolitan Open Land (which has the same protection as the Metropolitan Green Belt), parkland and other undeveloped urban areas.<sup>8</sup> Metropolitan Open Land and urban greenspace are much closer to, and much more commonly used by, urban populations. It would be perverse to sacrifice either to protect Green Belt that is less environmentally valuable and less frequently visited (though this is exactly what is currently happening).

Most of the Metropolitan Green Belt is not within Greater London but rather is in the home counties. In total the Metropolitan Green Belt stretches over 514,060ha, four times the size of the "concreted over" area of Greater London. Building a million homes on Green Belt land would require developing just 3.9% of the Metropolitan Green Belt (with half as much additionally being turned into private gardens).

### 1. DECLASSIFY METROPOLITAN GREEN BELT LAND WITHIN WALKING DISTANCE OF A RAILWAY STATION

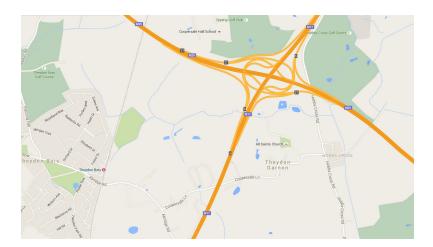
Our first option repeats the third scenario we explored in The Green Noose. Assuming that most of the demand for housing will be from people who wish to be able to reach London easily, new homes need to be near good transport links. While new rail and road infrastructure is feasible, it would make sense to use existing infrastructure as far as possible. This has the additional advantage of reducing the demand for Green Belt land, as three quarters of any non-domestic development would consist of transport infrastructure.

Barney Stringer of QUOD has mapped areas of London Green Belt within 800 metres (i.e. less than a ten minute walk) of an existing tube, tram or train station. Even excluding sites that have other protective designations (i.e. those that have real environmental value), there are nearly 20,000ha of accessible Green Belt within 10 minutes of an existing station. For example, immediately to the east of Theydon Bois station on the Central Line is farmland; the field adjacent to the station is home to three horses.

<sup>7</sup> Plus about 10% that consists of water and "other" types. DCLG (2005).

<sup>8</sup> DCLG (2015b).

<sup>9</sup> ONS (2005).





The coincidence notwithstanding, removing the Green Belt designation from all land within 10 minutes' walk of an existing station in the Green Belt, while maintaining other protections on sites of genuine environmental or amenity value, would free up enough land to meet all housing demand in and around London (including most of the housing demand in the East and South East) until 2030.

# 2. DECLASSIFY GREEN BELT LAND IN LONDON WITHIN CYCLING DISTANCE OF A RAILWAY STATION

Option 1 requires declassification of land in all three regions. Our second option only requires action within Greater London. Though Green Belt designations are currently within the purview of London's boroughs, government could transfer power over the Green Belt to the Mayor of London. This would enable the Mayor to overcome the free riding that many of the boroughs are currently engaged in, whereby they resist development in the hope that London's housing need will be met by other boroughs.

We noted in Table 1 that Greater London needs to find room on greenfield land for 422,837 homes by 2030. That would require around 8,500 ha. Our second option

<sup>10</sup> Google maps; Google Street View.

is for the Mayor to remove the Green Belt designation from all land in Greater London within 2km of an existing tube, tram or railway station. About a third of this land would continue to be protected under other classifications, but 42% of Green Belt land within Greater London would become available for development.<sup>11</sup> This equates to approximately 15,000ha of land.<sup>12</sup>

A significant proportion of this housing would be within 1km (and therefore within walking distance) of a station. For the remainder, we have no strong views on appropriate means of transport. However, we expect that the Mayor would want to encourage "sustainable" transport solutions. All the de-classified land would be within a ten minute cycle ride of a station. To encourage cycling, the Mayor could improve stations to make it easier and safer to park bicycles, impose parking restrictions to limit commuter parking, and provide decent cycle lanes in the new suburban neighbourhoods. London has had a less-than stellar record of retrofitting cycle lanes into its existing infrastructure, but these new suburbs could be designed from the outset to be cycle friendly.

EXAMPLE 2: CYCLE LANES IN THE NETHERLANDS<sup>13</sup> AND SEVILLE<sup>14</sup>





Option 2 would liberate nearly twice as much land as London needs to find over the next 15 years. This has three possible consequences. In the first instance, it could provide a small amount of competition for the provision of land, enabling a market to operate in the early stages. Alternatively, it could lead to more development than is currently proposed. Meeting predicted demand will only stabilise prices, but developing all 15,000ha would enable some additional supply to be delivered over the next 15 years, which would actually put downward pressure on accommodation costs. This assumes that neighbouring authorities did not respond to this increased development in London by reducing their own housing supply, steering new demand from the East and South East to Greater London. Finally, if the 15,000ha were not developed by 2030 they would leave space for the next generation to meet future housing demand.

<sup>11</sup> London First (2015).

<sup>12</sup> DCLG (2015b).

<sup>13</sup> https://departmentfortransport.wordpress.com/2012/08/19/franklin-and-forester-quotes-in-adutch-context/

<sup>14</sup> http://lcc.org.uk/pages/seville-goes-dutch.

## 3. ALLOWING DEVELOPMENT OF GREEN BELT GOLF COURSES

According to London First (2015), "A total of 7.1% of London's Green Belt is golf courses – nearly two and a half thousand hectares – double the size of the Royal Borough of Kensington and Chelsea." In theory, allowing development of golf courses in London could provide more than a quarter of the greenfield space needed to meet London's housing demand (see Table 1). Whether any or all of this land were to be developed would be at the discretion of the owners, however.

It is highly unlikely that most of these would be developed voluntarily. Members of mutually-owned clubs might very well resist, and many clubs will be constitutionally barred from divesting themselves of the property. Shareholder-owned clubs might be more inclined to reap the windfall gains, but would nonetheless face a backlash from members and local residents.

On the other hand, as the supply of brownfield land in London dwindles, pressure will fall on politicians to find new sources of land. It is not impossible to imagine the use of compulsory purchase powers to acquire developable sites.

While targeting all of, and only, London's golf courses may be unrealistic, there may be more (square) mileage in looking at the whole of the Metropolitan Green Belt. As the Campaign for the Protection of Rural England is happy to point out, 2.8% of Surrey is currently used for golf, around 4,600 ha.<sup>15</sup> Not all of this is necessarily Green Belt, however, and Surrey – as the poster-child of golfing excess – is presumably an outlier. Half of Hertfordshire is Green Belt, and it contains perhaps 70 golf courses.<sup>16</sup> Assuming an average of 45 hectares a course, that totals 3,150 ha.<sup>17</sup> Not all of these will be full-sized (18 hole) courses, but the courses will be clustered near urban populations, and thus in the Green Belt. A rough estimate of 1,500ha of Green Belt golf course in Hertfordshire would probably be conservative.

In total it is likely that the Metropolitan Green Belt contains upward of 10,000ha of golf course. Again, not all of this could (or indeed should – people have every right to play golf) be developed. But if even a fraction of it could be, that would provide space for tens if not hundreds of thousands of homes in areas that are likely to be reasonably well served by public transport.

### 4. INFILL AREAS OF GREEN BELT THAT DO NOT SUPPORT GREEN BELT POLICY

According to the National Planning Policy Framework (NPPF), the Green Belt serves five purposes:

<sup>15</sup> http://lcc.org.uk/pages/seville-goes-dutch.

<sup>16</sup> Golf Today website, http://www.englishgolf-courses.co.uk/hertfordshire/, accessed 8 October 2015.

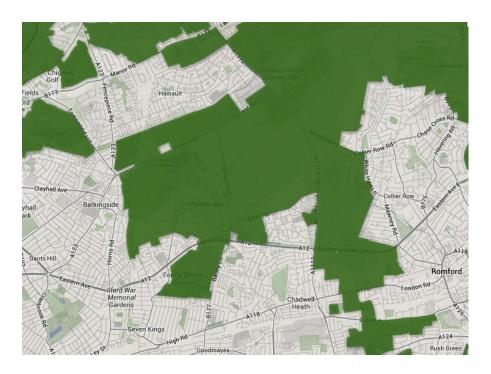
<sup>17</sup> BBC (2015).

- 1. to check the unrestricted sprawl of large built-up areas;
- 2. to prevent neighbouring towns merging into one another;
- 3. to assist in safeguarding the countryside from encroachment;
- 4. to preserve the setting and special character of historic towns; and
- 5. to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

It seems fairly obvious that any area of Green Belt that does not support one of these five purposes should be declassified.

There are in fact several examples, many of which have been catalogued by Paul Wellman at the Estates Gazette. Take, for example, the area between Hainault, Barkingside, Chadwell Heath and Colliers Row. This piece of land, which Wellman (2014) estimates at 1,222 ha, is almost entirely surrounded by the London Borough of Redbridge. Consequently, it fails to satisfy Purpose 1 and 3 of the NPPF, as Redbridge has "sprawled" out towards Essex on all sides of this patch of land, and while one could argue that it prevents the merger of the above-named towns, the role of Purpose 2 is to prevent London swallowing (in this case) Lambourne End and Stapleford Abbots, not to prevent districts of London from merging. Purposes 4 and 5 are utterly irrelevant to this site.

EXAMPLE 3: GREEN BELT LAND IN LONDON BOROUGH OF REDBRIDGE  $^{18}$ 



As Wellman has noted, this site is not made up of "hundreds of years old ancient woodland ... but in fact a quarry." Furthermore, the north-east of the site is protected by Hainault Forest Country Park, preventing any further expansion;

<sup>18</sup> Map copied from Wellman (2014).

<sup>19</sup> Wellman (2014).

developing it would not result in Redbridge forever pushing north and east. Rather, as Wellman (2014) puts it,

"this area of green belt, with tube accessibility, good road access, which wouldn't exacerbate urban sprawl, where open quarries have been in operation for the last 50 years (with diminishing stock) and with little aesthetic or recreational value, is over 10 times the size of Barking Riverside (hardly a dense development) which when complete will provide a home to between 25-30,000 people."

This area could, therefore, provide for between 50,000 and 100,000 new homes.<sup>20</sup> The Barking Riverside comparison is particularly germane as that development will not only contain 10,800 homes, but also "will feature healthcare, schools, open space, public squares, new rail station with links to central London, 65,000sq.m. commercial floor space including shopping, community and leisure facilities with an ambition to create a new nighttime economy in this part of the borough." It thus allows for additional infrastructure and non-domestic buildings; it also has ample local greenspace.

This is not an isolated example. Pinner Park Farm is an 93ha dairy farm entirely surrounded by the suburbs of the London Borough of Harrow. This agricultural enclave cannot in any way satisfy Purposes 1 to 3 of the NPPF as London has already completely surrounded, and spread beyond, it and the neighbouring towns (Pinner; Hatch End; North Harrow) have already merged. Purpose 4 is irrelevant as none of these are "historic towns" while Purpose 5 can only be a general catchall for Green Belts in principle and cannot apply to specific sites.<sup>21</sup> It provides 6,000 litres of milk a day, but if developed could provide almost as many homes. One does not need to rely on the working of the price mechanism to establish which is more valuable out of a pint of milk and a family home.

**<sup>20</sup>** Based on our 50 unit/ha density, it could provide 61,100 homes. At Barking Riverside densities, it could provide over 100,000 homes.

<sup>21</sup> Pinner is perhaps a thousand years old and still has some antique buildings, but the urbanisation of Middlesex in the 1920s and 1930s eliminated any claim it could have to having a historic "setting and special character."

#### EXAMPLE 4: PINNER PARK FARM IN THE LONDON BOROUGH OF $\mathsf{HARROW}^{22}$



## 5. REMOVE AGRICULTURAL LAND FROM THE GREEN BELT

Within Greater London, 59% of the Green Belt is inaccessible, environmentally unremarkable farmland.<sup>23</sup> If all agricultural land in London was removed from the Green Belt, it would free up just over 20,000ha – again, enough to meet all London's housing requirements.

In the Metropolitan Green Belt as a whole, 37% is intensive agriculture, while perhaps as much is low-intensity agriculture (e.g. paddocks; dairies). If all intensive agricultural land was removed from the Metropolitan Green Belt as a whole, it would free up just under 200,000 ha, ten times as much land as is required from development. This latter example repeats the second scenario we explored in The Green Noose.

## 6. DECLASSIFY AND RE-USE ALREADY DEVELOPED GREEN BELT LAND

What else is the Green Belt used for. Again, we have more details about the Green Belt within Greater London than we do about the Metropolitan Green Belt as a whole. Almost a quarter of London's Green Belt is public amenity space and/or protected by some other environmental designation. This land should remain protected even if the whole Green Belt designation were abolished. About 2% is already developed. The remainder is in other uses, including agriculture and golf courses, but also quarries, gravel pits, historic hospitals, airfields, water treatment works,

<sup>22</sup> Telegraph (2012).

<sup>23</sup> London First (2015).

etc.<sup>24</sup> Once we remove the already-discussed agriculture and golf courses, approximately 10% of Green Belt land in London remains. Without a detailed examination of these sites it is impossible to tell what proportion could be developed, but in total this amounts to around 3,500 ha. If even half as much of the Metropolitan Green Belt as a whole were devoted to these uses, it would be more than 20,000 ha.

#### **SUMMARY**

The table below provides a summary of these proposals. There will be significant overlap between them and so they cannot be totalled. However, in at least three cases a single proposal would free up sufficient land to meet housing demand in Greater London, the South East and East of England over the next 15 years, and in two cases sufficient land would be freed for Greater London even if neighbouring authorities did not contribute.

PROPOSAL	GREATER LONDON		WIDER LONDON URBAN	
	HECTARES	% OF DEMAND*	HECTARES	% OF DEMAND**
ALL MGB WALKING DISTANCE FROM RAILWAY STATION			20,000	100%
LONDON CYCLING DISTANCE FROM RAILWAY STATION	15,000	188%		
GREEN BELT GOLF COURSES	2,500	31%	10,000	50%
INFILL AREAS	>1,300***	>16%	20,000****	100%
AGRICULTURAL LAND****	20,000	250%	200,000	1,000%
ALREADY DEVELOPED GREEN BELT LAND	3,500	44%		

<sup>\*</sup> Hectares as percentage of housing demand in Greater London area

The aim of this discussion is not to be prescriptive. The ideas we have set out are suggestions. Perhaps their most important value is not as specific development sites but as a means of demonstrating that what would be "concreted over" is not some Arcadian rural idyll but sites that are environmentally unremarkable, inaccessible to the general public and are currently very inefficiently used. In doing so we hope we have made a contribution to the long-overdue debate on how to meet London's existing and ongoing housing crisis.

<sup>\*\*</sup> Hectares as percentage of housing demand in East of England, Greater London and the South East.

<sup>\*\*\*</sup> We do not have an estimate for the total amount of land that might be released in London. We have specifically identified over 1,300 ha of land, enough for 65,000 homes, but this represents just two sites and is far from exhaustive.

<sup>\*\*\*\*</sup> This is highly speculative as we do not have comprehensive land use figures for the wider Metropolitan Green Belt.

<sup>\*\*\*\*</sup> All agricultural land in London; only intensive agriculture in the Metropolitan Green Belt.

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