Independent Review of Build Out Rates

Draft Analysis

Rt Hon Sir Oliver Letwin MP
Chapter 1. Aims of the Review

1.1 My terms of reference require me, by the time of the Budget in the Autumn, to "explain the significant gap between housing completions and the amount of land allocated or permissioned in areas of high housing demand, and make recommendations for closing it".

1.2 The issue identified by the terms of reference is an important one, since the rate of build out is one of the determinants of the supply of new housing provided for the nation in any given year: the output of new housing is determined by the number of homes permitted and the rate at which those permissions are built out.

1.3 Planning permissions are, of course, given for sites of varying sizes around the country – and this is as true in areas of high housing need as it is elsewhere. I have, however, chosen to focus only on the largest sites in areas of high housing need, for two reasons:

- the ‘build out rate’ on small sites is intrinsically likely to be quicker than on large sites; (to take the limiting case, a site with just one house will take only as long to build out as that house takes to build); and
- the largest sites are dominated by the major house builders and other major participants in the residential property market, and it is in relation to these major firms that concern has been expressed in some quarters about “land banking” and ‘intentional delay’.

1.4 As I made clear in my initial letter to the Chancellor and the Secretary of State for Housing in March, I have in accordance with my terms of reference focused on the issue of the build out rate of fully permitted new homes rather than allowing myself to be distracted by issues related to the speed of the planning system. Much has been done recently to encourage the granting of more planning permissions for more homes; and I have inevitably been told much, in the course of my enquiry, about the operation of the planning system. But I remain convinced, as I was in March, that – notwithstanding the complex permissioning and re-permissioning that frequently occurs in very large sites – it is possible to distinguish between a ‘regulatory’ Stage 1, which consists of securing all the necessary approvals to allow development to commence on at least part of the site, and a ‘build out’ Stage 2, which starts at the moment when the house builder has an implementable consent and is therefore able to start construction on the site (i.e. has received either the grant of full planning permission or the first final, detailed planning permission under reserved matters, and has satisfied all pre-commencement conditions).

1.5 I have accordingly ‘started the clock ticking’ for my enquiries at the beginning of Stage 2, and have ‘stopped the clock’ at the moment when the last home on the site has been, or is scheduled to be completed. The amount of time between these two moments is what I mean by the ‘build out period’. By the ‘build out rate’, I mean the percentage of the site that is built out on average in each year during the build out period. My aim throughout the five months of my work to date has been to determine:

- what the build out rate on large sites in areas of high housing demand actually is;
- why the rate of build out on these sites is as it is; and
which factors would be most likely to increase the rate of build out on these sites without having other, untoward effects.

1.6 As I promised in March, the present Draft Analysis deals exclusively with these three questions. It is only in the next phase of my work that I shall consider, in the light of my analysis of build out rates, what policies the Government might adopt to ‘close the gap’ between permissions and homes completed on the largest sites and hence to increase the overall rate at which land allocated for housing is converted into new homes. I will present my recommendations on this to the Chancellor and the Housing Secretary at the time of the Budget in the Autumn.
Chapter 2. Process of the Review

2.1 I have conducted my investigation independently from the Government, but have been assisted both by a team of seconded officials from HMT and MHCLG and by an expert and senior panel consisting of:

- Richard Ehrman,
- Lord Gadhia,
- Lord Hutton of Furness,
- Baroness Prashar, and
- Professor Christine Whitehead.

2.2 Accompanied by my team, and on some occasions by members of the expert panel, I have visited and collected data on 15 large sites (ranging from over 1,000 homes to over 15,000 homes and together providing over 70,000 homes) in areas of very high housing demand (measured by a ratio of more than seven to one between the median house prices and median earnings). Five of these sites are in Greater London; of the remaining ten sites, nine are in the south of England because this is where there is typically the highest demand for housing; the tenth is in an area of the Northwest where there is exceptionally high demand. I have also visited one smaller site in an area of the West Midlands where there is high demand, and one large site in the home counties that is at too early a stage for the data to be meaningful, but which provided interesting qualitative insights to which I refer in Chapter 4. During the course of these visits, I have met large numbers of representatives of builders, local authorities, development companies and other organisations involved in the development of the sites. Records of the information conveyed at these site meetings are provided in Annex C.

2.3 In order to gain a sense of the contrasts and similarities between the way that very large sites are handled in England and the way that they are handled in comparable European countries, I have in addition visited a number of such sites in Germany and the Netherlands. The records of these meetings are provided in Annex D.

2.4 With my team, I have analysed the detailed, site-specific data provided by each of the sites visited in England. The results are presented in a series of charts and graphs in Annex A. To cross-check whether the data gathered from the inevitably limited number of detailed site visits was out of line with other data-sets, I have (with the help of the Mayor of London) compared the results of my own investigations with results derived from the Molior data-set for sites of over 500 homes in Greater London and with their smaller data-set for sites of over 1,000 homes. The results from this cross-check are also presented in relevant graphs in Annex A.

2.5 The methods used to collect, verify and analyse data are described in a note by officials which is provided in Annex B. I should emphasise that, in the course of our work, we have been somewhat dismayed by the paucity of publicly available data on land
holdings and build out rates. I recognise that the Government has commissioned work to make options and other agreements on land transparent by ensuring that they are recorded at the Land Registry; I urge Ministers to expedite this work so far as possible. I also urge MHCLG to ensure that the work that they have commissioned to construct a national database of build out rates on large sites is accelerated, and to take forward the proposal in the recent White Paper that house builders should provide data on build out rates.

2.6 I have, in addition, accumulated and absorbed a range of published materials, listed in Annex E, and have held a large number of meetings to gather evidence from:

- local authorities,
- non-government organisations,
- housing associations,
- Homes England,
- house builders,
- promoters,
- investors,
- lenders,
- consultancies,
- planners and planning lawyers,
- land agents,
- representative and membership organisations,
- utilities,
- utility regulators,
- market analysts,
- economists and other experts,
- materials suppliers, and
- training providers.

2.7 Records of my meetings with these stakeholders are provided in Annex D.
Chapter 3. Build out rates on large sites

3.1 The quantitative results of our investigation into 15 very large sites in areas of high housing demand are stark. As illustrated in graph AX25 of Annex A, reproduced below, the median build out period for these sites from the moment when the house builder has an implementable consent is 15.5 years:

![Graph showing total build out period (years) of case study sites - Stage 2 - Median 15.5 years]

3.2 To put this another way, as illustrated in graph AX24 of Annex A, reproduced below, the median percentage of the site built out each year on average through the build out period in one of these 15 large sites is 6.5%:

![Graph showing average annual build out (%) of case study sites - Stage 2 - Median 6.5%]

3.3 When we compare these figures with the figures derived from the Molior data-set for sites of over 500 homes in Greater London and with their smaller data-set for sites of
over 1,000 homes, we find that our sites are not atypical and indeed are, if anything, being built out at a faster rate than other large sites in London. This is illustrated in graph AX27 of Annex A, reproduced below:

![Graph AX27](image)

**Median annual build out rates (%)**

3.4 There is, moreover, a clear, negative (though not overwhelmingly strong) relationship between the size of the site and the percentage of the site built out each year; as illustrated by graph AX34 of Annex A, reproduced below, all three data-sets suggest that the larger the site, the more likely it is to have a low build out rate. It is worth emphasising this point: very large sites will almost always deliver a higher absolute number of homes per year than large sites with only a few thousand homes in total; but the proportion of the site built out each year is likely to be smaller.

![Graph AX34](image)

**Average annual build out rate (%) by site size**
Chapter 4. Fundamental explanations

4.1 This brings us to the question: why does it take so long to build out these large sites?

4.2 In my letter to the Chancellor and the Secretary of State of 9 March, I set out in the following terms what then appeared to me to be the fundamental explanation for the phenomenon:

The fundamental driver of build out rates once detailed planning permission is granted for large sites appears to be the ‘absorption rate’ – the rate at which newly constructed homes can be sold into (or are believed by the house builder to be able to be sold successfully into) the local market without materially disturbing the market price. The absorption rate of homes sold on the site appears, in turn, to be largely determined at present by the type of home being constructed (when ‘type’ includes size, design, context and tenure) and the pricing of the new homes built. The principal reason why house builders are in a position to exercise control over these key drivers of sales rates appears to be that there are limited opportunities for rivals to enter large sites and compete for customers by offering different types of homes at different price-points and with different tenures.

When a large house builder occupies the whole (or even a large part) of a large site, the size and style (and physical context) of the homes on offer will typically be fairly homogeneous. We have seen examples of some variation in size, style and context on some large sites; but the variations have not generally been great. It has become apparent to us that, when major house builders talk about the absorption rates on a large site being affected by “the number of outlets”, they are typically referring not only to the physical location of different points of sale on the site, but also and more importantly to differences in the size and style (and context) of the products being offered for open market sale in different parts of the site. Even these relatively slight variations are clearly sufficient to create additional demand – and hence additional absorption, leading to a higher rate of build out.

It is also clear from our investigation of large sites that differences of tenure are critical. The absorption of the ‘affordable homes’ (including shared ownership homes) and of the ‘social rented housing’ on large sites is regarded universally as additional to the number of homes that can be sold to the open market in a given year on a given large site. We have seen ample evidence from our site visits that the rate of completion of the ‘affordable’ and ‘social rented’ homes is constrained by the requirement for cross-subsidy from the open market housing on the site. Where the rate of sale of open market housing is limited by a given absorption rate for the character and size of home being sold by the house builder at or near to the price of comparable second-hand homes in the locality, this limits the house builder receipts available to provide cross-subsidies. This in turn limits the rate at which the house builder will build out the ‘affordable’ and ‘social rented’ housing required by the Section 106 Agreement – at least in the case of large sites where the non-market housing is either mixed in with the open market housing as an act of conscious policy (as we have frequently found) or where the non-market housing is sold to the housing association at a price that reflects only construction cost (as we have also seen occurring). If freed from these supply constraints, the demand for ‘affordable’ homes (including shared ownership) and ‘social rented’ accommodation on large

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sites would undoubtedly be consistent with a faster rate of build out. And we have heard, also, that the demand for private rented accommodation at full open market rents (the scale of which is at present uncertain) would be largely additional to, rather than a substitute for, demand for homes purchased outright on the open market.

4.3 The further work we have done since 9 March, and the further evidence we have heard, has done nothing to alter my view that the homogeneity of the types and tenures of the homes on offer in these sites, and the limits on the rate at which the market will absorb such homogenous products, are the fundamental drivers of the slow rate of build out. Indeed, our further work has reinforced this view.

4.4 In March, I promised to ask three questions arising from this fundamental analysis – namely:

- what are the implications of changing the absorption rate for the current business model of major house builders if the gross development value of sites starts to deviate from the original assumptions that underpin the land purchase?
- would the absorption rate be different if the reliance on large sites to deliver local housing were reduced? And
- would the absorption rate, and hence the build out rate be different if large sites were ‘packaged’ in ways that led to the presence on at least part of the site of:
  - other types of house builder offering different products in terms of size, price-point and tenure? Or
  - the major house builders offering markedly differing types of homes and/or markedly different tenures themselves?

4.5 As a result of our further work, I am now in a position to answer these questions.

Implications of gross development value deviating from assumptions of land purchase

4.6 Turning first to the question of value, I have concluded that it would not be sensible to attempt to solve the problem of market absorption rates by forcing the major house builders to reduce the prices at which they sell their current, relatively homogenous products. This would, in my view, create very serious problems not only for the major house builders but also, potentially, for the housing market and hence the economy as a whole.

4.7 To understand this dynamic, one needs to grasp the way in which pricing and land values for large permitted sites are established.

4.8 The Royal Institution of Chartered Surveyors publishes a ‘red book’ which has become the ‘bible’ for surveyors and land agents when they are required for any purpose or by any client to value land. This ‘red book’, though large and complicated in detail, contains what is in principle a very simple instruction – viz. that the valuer should start with the assumption that the open market sale value of a new home of a given kind and size in a given location will be close to that of a second-hand home of the same or similar kind and size in the same or similar location – perhaps with some slight premium for the new home to represent the extent of the depreciation on the second-hand home and, of course,
with a further assumption about the expected average rate of house price inflation across the anticipated period to completion.

4.9 It is not difficult to see why the RICS has reached this view. Clearly, an individual or family seeking to buy a home in a particular location is able to compare the cost of two alternatives – buying something newly constructed or buying something second-hand. Accordingly, the open market value of a marginal newly constructed home (the price that can be reached between a price-maximising willing seller and a price-minimising willing buyer) will bear some close relation to the price of a comparable second-hand home in the same location.

4.10 There is, however, a crucial assumption lying behind this method of valuation: namely, that the supply of new homes in the locality is not going to be sufficiently large to have any noticeable effect on the supply and demand balance in that local housing market, and is therefore not going to have any noticeable impact on the open market value of second-hand homes in that locality. Only if this assumption holds good, will the marginal valuation principle hold true. In other words, the standard method of valuation for new housing used by all reputable valuers in the UK bakes in the assumption that local housing markets will not be ‘flooded’ with new homes to the point where the current prices of second-hand homes in the local market are forced downwards.

4.11 But the significance of the valuation method goes beyond the baking in of this assumption about the number of new homes built in a locality in a given period – because it also forms the basis for land valuation.

4.12 We have heard from a range of participants in different parts of the housing industry that, when house builders come to buy land for development, they typically do so on the basis of a so-called ‘residual value’ calculation. This calculation starts with an estimate of the open market value of the new homes that can be built on the site (i.e. a value close to the current value of comparable second-hand homes in that local market) multiplied by the number of homes of that value that are expected to be built on the site under the outline planning permission. The expected costs of construction (including return on equity, costs of debt, infrastructure and policy/regulatory requirements) are then subtracted from this ‘gross development value’ to yield a ‘residual value’ that should be attributed to the land and the outline planning permission.

4.13 It appears that, in some cases, this method of valuation is directly applied by independent valuers to settle a price for the land under the terms of an option agreement that the house builder has with a landowner. In other cases, a landowner or promoter may auction the land with outline planning permission. Or an auction may be held in order to determine an open market price for the land that will form the basis for the price that has to be paid by a house builder who holds an option if the house builder wishes to exercise that option. But we have heard from everyone we have talked to in the industry about these processes that, in all of these forms of land sale, the starting point of all participants is the residual value calculation. And that residual value calculation always starts with the assumed open market value of new homes in the local area – which is always fundamentally driven by the prices of comparable second-hand homes in the local area, and hence by the assumption that the number of new homes built in any given year in that area will not be large enough to put downward pressure on the price of second-hand homes in the area.

4.14 Once a house builder working on a large site has paid a price for the land that is based on the assumption that the sale value of the new homes will be close to the current
value of second-hand homes in the locality, the house building company is not inclined to
build more homes of a given type in any given year on that site than can be sold by the
company at that value; and the house builder’s first customers (and indeed their mortgage
lenders) may tend to be unenthusiastic if they see the prospect of homes of the same type
on the same site being sold in such quantities as to reduce the prices obtained for those
homes in the market after they have bought their own homes.

4.15 The value-unaffecting rate of sale that avoids all of these effects is what the house
builders, the land agents, the council planners – and indeed independent commentators
such as the OFT – call the ‘absorption rate’ for homes on a large site by the local market.
They do not actually mean the absolute absorption rate in the sense of the rate at which
the market will absorb the homes at any price, or even the construction-cost-relative
absorption rate at which the market will absorb the homes if they are sold at or near to the
cost of construction (including the cost of capital). They mean, instead, the rate at which
new homes can be absorbed without reducing the price of the homes below the price
assumed for the purposes of the land valuation.

4.16 We have heard, likewise, that these same principles and assumptions are built into
the business plans of the house builders and the development assessments prepared for
the house builders by the land agents. So it is natural that the whole process of
construction by large house builders on a large site should thereafter be based on the
same assumptions: we have found in all of our site visits that the pattern of phasing and
financing is adapted to fit the rate at which it is believed that the new homes can be
absorbed by the local market without contradicting the pricing assumptions built into the
house builder’s business model, and hence without affecting the sale prices of second-
hand homes in that market. The same applies to the arrangements made for the provision
of labour, materials, utilities, progressive remediation and site infrastructure; all of these
are organised around the expected ‘absorption rate’ for the kind of homes being sold by
the house builder at the price baked into the land value.

Increasing build out rates by reducing reliance on large sites

4.17 It seems sensible to ask whether we could hope to increase build out rates in high
pressure areas by reducing reliance on very large sites. Would the use of more smaller
sites (and hence the presence of more builders) increase output?

4.18 There is evidence from our statistical investigation to back the common sense
intuition that smaller sites will tend to build out a greater proportion of the site each year
than larger sites – at least once they begin to be built out at all. And the theoretical under-
pinning of this proposition is not difficult to find. We have been told repeatedly that the
market absorption rate for a given type of home is to some considerable degree highly
location-specific: there is a given depth of market at a given price for a given type of home
of a given tenure in this particular place. Move only a little way away and you enter a
slightly different market, composed at least partly of people with somewhat differing
patterns of life which make that other place more attractive to them. Hence, all else being
equal, one might expect two homes, only one of which would sell at a given time at the
given price on large site A, to be sold simultaneously at the same price on two smaller
sites, B and C.

4.19 There are two principal ways in which we could increase the number of small sites.
The first would be to find some means of “packaging” large sites into smaller sites. The
second would be to use the planning system to encourage the use of more “naturally” smaller sites.

4.20 Although not within the scope of my Review, there may well be advantages in attempting to adopt the second approach by encouraging the use of more individual small sites within local planning authority land supply plans. But there are reasons to believe that doing this without also increasing the rate of build out on large sites by “packaging” those sites in ways that increase the variety of supply is not desirable. The reasons are that:

- to increase housing supply as a whole over the long-term, we require increased infrastructure – and it is often the large sites that unlock values and short-term demand sufficiently great to support major new infrastructure with the help of grants, Section 106 agreements and the like; it is true that small sites typically require less additional infrastructure than large sites – but an attempt to fund all needed major new local infrastructure through Community Infrastructure Levies (CILs) collected from a multitude of small developments would require more effort from most local authorities in areas of high housing need;

- to meet the needs of people seeking homes in high pressure areas, we need both high rates of build out and high levels of allocation. Reliance exclusively on smaller sites requires local authorities in their local plans to pick a multitude of small fights – whereas many planners and councillors have told us that it is often far easier to pick a few, larger fights; although the National Planning Policy Framework has enabled some unallocated sites to receive planning permission where five year land supplies are not at the required levels, it would be an unfortunate irony if the effect of efforts to improve build out rates by concentrating exclusively on smaller sites actually led to reduced allocations in some local authority areas; and

- given that, in many areas, we have seen very large sites that are clearly suitable for development (e.g. major brownfield sites of derelict post-industrial land), it seems counter-productive (to the point of absurdity) to allow only small bits of them to be developed at any one time in order to accelerate build out rates; the rate on permitted sites might well (indeed, probably would) increase sharply – but the rate of build out across the remainder of the undeveloped brownfield land still begging to be developed would, paradoxically, reduce to zero.

4.21 My conclusion is that we cannot rely solely on small individual sites. This cannot be a question of “either / or”. We will continue to need more new housing both on smaller sites and on large sites.

Differentiating products to address differing markets

4.22 This brings us to the question whether the problem of slow build out rates on large sites could be accelerated by means of increased differentiation within these sites.

4.23 Given my conclusion that the current low build out rates are caused by the restricted market absorption rates of the fairly homogeneous products typically being constructed at present by the major house builders on the largest sites, it seems natural to seek some means of achieving differentiation within sites. If this were achieved, it is intuitively plausible that a range of markets (each with their own absorption rates) could be addressed simultaneously, thereby accelerating the overall rate of build out.
But is this intuition an insight into the truth, or an illusion? Is the market for one type of dwelling with one type of tenure in a given place sufficiently separate from the market for other types of dwelling and other types of tenure on the same site to make simultaneous disposal of differentiated products possible?

I have not been able to find any conclusive numerical evidence of the extent of separation or overlap between the markets for different products on the same site. However, I have been able to observe some strong reasons for supposing that the degree of product separation is considerable, and that the degree of product overlap is relatively slight:

- it is a truth universally acknowledged that, in areas of high demand, the high ratio of house prices to incomes creates a serious problem of affordability; accordingly, for each individual or family that can afford to buy a home of a certain style and size on a given site in such an area, there will be other individuals or families who might like to live on that site, but who cannot afford to buy such a home at the price of such homes set by the local second-hand market; for such individuals or families, there are only two choices – to go elsewhere, or to obtain a home that has a different cost because it is of a different type or of a different tenure; and this alone is enough to imply that the market in any one site is tiered rather than homogeneous;

- I have been told, on every one of my site visits, that the need for social rented housing is far from exhausted; my interlocutors have regularly used phrases such as 'virtually unlimited' to describe the demand for such housing; and this, too, strongly implies that, in areas of high housing pressure at least, the market for social rented property is separate from the price-constrained market for open market sales of family-sized homes;

- on those visited sites where there was a significant amount of property being offered in the private rented sector, it has been repeatedly explained to me by those responsible for marketing homes on the site that the people seeking such rented property arrive seeking this particular form of tenure, due to whatever circumstances make it more appropriate for them than either open market purchase or social renting; how deep this market currently is outside the major cities, is currently in some doubt – but I have seen evidence that institutional investors are able to have private rented sector properties constructed simultaneously with properties for sale on the same site, and are able to dispose of them simultaneously, even in out-of-town locations; this, again, strongly suggests that the private rented sector is essentially a separate market;

- given these points about the separation of the social rented and private rented markets from the market for open market sales, I have not been surprised to find developers regularly telling me that they also have no difficulty disposing of ‘affordable’ rented properties at various discounts simultaneously with open market sales; on no occasion has it been suggested to me that there was any serious competition between homes offered with these four types of tenure (open market sale, open market private rented, discounted or ‘affordable’ rented and ‘social’ rented), implying that the markets for each are largely complementary rather than overlapping;

- the same seems clearly true of specialised housing for particular groups such as nurses, students or retirement living; I have seen significant amounts of housing of these kinds built right next to some of the sites I have visited, without any
suggestion from those marketing the visited sites that the specialised properties competed with the non-specialised newly built properties – once again, suggesting the existence of largely complementary, rather than significantly overlapping markets;

• in discussions both in the UK and in the Netherlands, it has become clear to me that there is a particular and separate market also for custom-build and self-build homes. The resistance to including such homes on large sites at present is considerable in some quarters; but both those who welcome (and provide) these more customised types of housing and those who resist them appear to agree that they suit a different clientele, who would not be attracted to the more uniform homes constructed on so many of our large sites at present. This, too, suggests the existence of separate markets;

• I have heard much the same said repeatedly about the market for shared ownership of various kinds; we have received testimony suggesting that this form of tenure is likely to become more established and more accepted both by the housing associations and by private investors – and it seems clear that it is a mixed tenure that will be attractive to purchasers somewhat different from those who are attracted either by outright sales or purely rented properties;

• I have learned that different types of builder, constructing different types of building, have different business models – and are clearly aiming to satisfy the demands of different market niches; for example, those building high rise flats (which are inevitably constructed in one fell swoop) are typically seeking a high proportion either of individual buy-to-let investors or institutional investors in the Private Rented Sector, whereas SME house builders typically have a very different set of customers in mind; and

• finally, I have been told many times by those engaged in marketing homes on large sites that the choice of a newly built home is much influenced not only by ‘hard’ facts such as location, size, price and tenure-type, but also by ‘soft’ facts such as architecture, interior design, garden, setting and surrounding landscape or street-scape; and this is entirely natural, as the choice of where to live is in part an aesthetic matter of huge significance to those (very many) of us who care about our surroundings as much as we care about almost any other aspect of our daily lives; accordingly, it seems extraordinarily likely that the presence of more variety in these aesthetic characteristics would create more, separate markets than can be created within the high degree of uniformity that characterises many (though not all) of the large sites that we have visited.

4.26 For all of these reasons, I conclude that if either the major house builders themselves, or others, were to offer much more housing of varying types, designs and tenures (and, indeed, more distinct settings, landscapes and street-scapes) on the large sites and if the resulting variety matched appropriately the desires of the people wanting to live in each particular part of the country, then the overall absorption rates – and hence the overall build out rates – could be substantially accelerated. The policy levers required to bring this about without damaging the economics of individual sites or the financial sustainability of the major house builders are topics for the second phase of my work, on which I shall report at the time of the Budget. But the shape of the outcome at which we should aim is, I think, clear from the work we have already done: to obtain more rapid building out of the largest sites, we need more variety within those sites.
Chapter 5. Other potential constraints

5.1 In my letter to the Chancellor and the Housing Secretary of 9 March, I promised to provide an assessment of the extent to which the rate of build out on very large sites might be held back by constraints other than the market absorption rate, if that binding constraint were removed. In particular, I said that I would consider the effects on build out rates that could be caused by:

- lack of transport infrastructure,
- difficulties of land remediation,
- delayed installations by utility companies,
- constrained site logistics,
- limited availability of capital,
- limited supplies of building materials, and
- limited availability of skilled labour.

5.2 In the course of the further work that I have undertaken since 9 March, I have looked in some detail at all of these issues, and have come to conclusions about the extent to which they could currently hold back, or might in future hold back rates of build out on large sites. I have also looked at one further issue, namely:

- alleged intentional "land banking" on the part of major house builders.

Lack of transport infrastructure

5.3 The time taken to provide major new transport infrastructure has certainly had a major impact on the speed of development in a number of the sites that I have studied. In some cases, the opportunity to develop housing was an outcome envisaged only after rapid transport links were installed for other reasons: the Olympic Park, North Greenwich and Ebbsfleet are cases in point – where rail links to central London were built, respectively, for the Olympics, the Millennium Dome and HS1, thereby opening up the possibility of major housing development that would not otherwise, in all probability, have occurred. In each of these cases, the building of the rail link took a considerable time. We have also seen a limited number of cases in which delays in provision of smaller local transport infrastructure (e.g. roundabouts, link roads and new rail stations) have caused a delay in the start of construction on site. But an outstanding example of delays in housing caused by delayed infrastructure is Barking Riverside – where a considerable period of time was spent considering whether to construct (and eventually deciding not to construct) an extension of the Docklands Light Railway. During the whole of this period, the large housing project at Barking Riverside was stalled; it moved forward only after the failed DLR proposition was replaced by a definite decision to extend the London Overground to reach the site (at far lower cost).

5.4 But these examples of the importance of new transport infrastructure, which are matched by several less dramatic examples in other large sites that I have visited, share
the characteristic that they do not, in general, appear to have had any effect on the build out rate during the periods at which I have been looking. My clock starts ticking only after the first implementable permission has been received — and, by this time, almost always, the major infrastructure issues have been sorted out. This is partly a feature of the planning system: typically, final permission to proceed with a large new site is not given until the transport infrastructure will enable the new inhabitants to take up residence without causing undue pressure on existing infrastructure. And it is partly a feature of the market: developers and builders do not generally seek final permits to build homes in places which cannot easily be accessed, because such homes are unlikely to be attractive to potential customers. Accordingly, whilst it seems clear (and an enormously important point) that faster resolution of major infrastructure issues would be likely to bring forward the dates at which new major housing construction sites could be opened up, this is largely a separate question from the acceleration of the narrowly defined ‘build out rates’ (from first implementable permission to final completion) on which I have focused, because (although later phases of development are sometimes contingent on the provision of further infrastructure) I have not found any notable example of delay in infrastructure affecting the rate of build out once construction has begun.

5.5 I accordingly welcome the effect on the release of new large housing sites that is likely to arise from the significant steps that have been taken in recent years to accelerate the provision of major new infrastructure (including the introduction of National Policy Statements for infrastructure and the establishment of the National Infrastructure Commission). I strongly urge Ministers to work collectively across government to ensure that the construction of major infrastructure is driven by the need to release large, allocated sites for development; this will require more effective coordination between the various government departments, agencies and private sector operators involved in providing infrastructure. But I do not believe that these steps, or any further (desirable) steps that may be taken in future to increase the speed of delivery of major new transport infrastructure, will have any noticeable impact on the particular question of the build out rates achieved on large sites between the time when the first implementable permission is received and the time when the last home is completed.

Difficulties of land remediation

5.6 In the course of visiting and studying the development of large “brownfield” sites, I have seen several examples of the costs and difficulties that can be caused by the need to remediate land before construction can begin. It is clear that, where a site has previously been used either by long-present heavy industry or by other, more specialised contaminants such as the MoD, such remediation is likely to be required — and the (entirely appropriate) regulatory requirements mean that the remedial work is likely to be both expensive and prolonged. Perhaps the outstanding example of this amongst those large sites I have seen is at Nine Elms, where the need for remediation of the former Battersea power station has clearly imposed very considerable financial burdens on a succession of developers.

5.7 But in such cases, as with major transport infrastructure, the remedial work is typically (and rightly) required before the first implementable permission to build homes is received. So (although remediation may in some cases continue through several phases of construction and may well affect the timing of capital requirements on a large brownfield
site) it does not tend to affect the rate of build out that I have been examining; starting the
clock at the point of first implementable permission, I have been unable to find any
systemic contrast between the rate of build out on large “greenfield” sites that require no
remedial work and the rate of build out on large “brownfield” sites that have required
intensive remediation before the housing construction could commence.

Delayed installations by utility companies

5.8 I have received somewhat conflicting evidence about the effect, or lack of effect, of
utility connections on build out rates.

5.9 The house builders that we have met on the large sites studied have repeatedly
complained about the impediments caused by slow responses from utility companies.

5.10 In discussion with the utility providers, we were told, on the contrary, that these
problems arose from insufficient clarity, coordination, and notice on the part of the house
builders. The providers took the view that a period of between nine months and two years
was needed in order to plan significant additions to utility networks, and complained that
this timetable is often not respected by the house builders and developers. (The Olympic
Delivery Authority was cited as a shining exception and as a developer who gave full and
adequate notice.)

5.11 Discussions with the utility regulators made clear that some of the reason for this
conflict of views probably arises from the difficulty of distinguishing between infrastructure
that will be paid for by utility customers, and infrastructure that needs to be paid for by
house builders and developers; it also became apparent there remains some lack of clarity
about the point at which a utility regulator will recognise a development as being
sufficiently certain to permit assets constructed in relation to that development to be added
to the regulatory asset base of the relevant utility. We also heard on some sites that there
can be very different views between local and national levels within the utility companies.

5.12 However, despite this rather messy scene – which I believe definitely and urgently
requires further attention across government – I have not in fact been able to find any
substantial evidence that delays in the provision of utility connections have caused delays
in build out once the first implementable permission has been received. My impression is
that such problems as there are in dealing with utilities mainly increase the complexity and
“bother” of development rather than impeding build out – and that, to the extent that
significant utility infrastructure does cause substantial delay, this typically occurs before
the point at which a very large site begins to be built out. For example, we discovered that,
at the very large Nine Elms development in central London, it had proved necessary to
submit a new planning application to remove an intended electricity sub-station due to late
confirmation from the utility providers that the sub-station in question could be provided at
an alternative site – thereby delaying the date of the implementable planning permission
rather than lengthening the build out period.

5.13 In short, I conclude that the serious problem of utility provision for some sites falls
broadly into the same category as the problem of transport infrastructure. Neither is
directly relevant to the focus of my Review, but both require attention from government. I
urge Ministers to establish a cross-government taskforce to address the provision of utility
infrastructure for large sites at a pace that permits development on those sites to
commence faster than at present.
Constrained site logistics

5.14 When I began my investigations, I imagined that the complexities of managing large sites might have a major impact on the rates at which such sites are built out. And I have found some instances in which the management of the site has clearly imposed constraints of certain sorts. For example, it has been pointed out to me in the course of several site visits that the developers recognised the need to avoid building simultaneously in all directions around the early inhabitants who had moved into one particular part of the site, lest their lives be made intolerable.

5.15 But I have been impressed both by the highly professional way in which the major house builders have learned to manage large sites so as to permit efficient construction without imposing unduly on the inhabitants, and by the lack of any evidence (outside highly constrained inner-city settings) that site logistics in fact currently impede the overall rate of build out on these sites. My impression has been that, if a faster rate of build out were thought to be feasible for other reasons, developers and major house builders would have all the capabilities required to organise entry to (and working on) different parts of large sites simultaneously in a way that is compatible both with efficient construction and with making life tolerable for early inhabitants.

Limited availability of capital

5.16 Capital constraints are sometimes advanced as reasons for slow development of housing – and I was therefore keen to find out whether there was any evidence of such restrictions on finance creating limits to the speed of build out on large sites.

5.17 Somewhat to my surprise, neither discussions with industry participants nor discussions with those involved in providing finance have furnished any evidence that such constraints are biting at present. It has, on the contrary, become clear that:

- The major house builders have capital structures with very low gearing. They are able to obtain large lines of credit to fund working capital requirements; but they rarely use this as a means of obtaining long-term debt finance, because at present their cash flow is typically sufficient to repay such loans in-year.

- The major house builders also have access, through structured project-financing, to debt finance for housing construction projects at low rates of interest, and over a term sufficient to fund a given phase of a given development. Because of their own strong cash positions, they do not currently appear to have any difficulty providing the cash required to fund the equity component of such projects.

- There are both major clearing banks and providers of non-bank finance who have appetite for increased lending to well-structured housing construction projects at present. We were told that the entry of challenger banks and of institutional investors had made this an increasingly competitive market for the lenders – suggesting a ready supply for the borrowers. We did not receive any evidence of inhibitions being caused at present by macro-prudential supervision.

- Both housing associations and commercial institutional investors have told us that they have appetite and equity finance available for considerable expansion into the
rented sector – but are currently held back by lack of access to large sites on which to build homes for rent.

- SME builders (who are not typically present on very large sites at the moment) are no longer able to obtain the straightforward balance sheet financing that they used to obtain from the high street banks, and are therefore driven back to project financing. We have been told that this frequently limits their capacity to engage in multiple transactions simultaneously, as each project requires a substantial equity component – but we were told by the lenders themselves that they are willing to provide the support and expertise required to enable SMEs to engage in project finance. I conclude that, if SMEs were more able to obtain a place on very large sites, they (unlike the major house builders) would probably begin to experience financing constraints that would require some attention.

- On the demand side, we were told that the only financial constraints for people seeking ordinary open-market purchases were the affordability of property in high pressure areas and the ability of potential purchasers to raise cash for deposits – in relation to which, we were also told by builders, estate agents and lenders that on large sites the availability of financial assistance through the Help to Buy scheme for first time buyers plays a role in supporting open market sales at prevailing prices. I have not reviewed the role of the Help to Buy scheme more generally, but have found no evidence of any rationing of mortgages for buyers who were able to meet the regulatory tests of affordability.

- Also on the demand side, we were told that shared ownership mortgages – though somewhat more complicated because of the requirement for close cooperation between the housing association or other landlord and the lender – are available in the market place both from the big mortgage lenders and from a handful of regional building societies. Though there are no doubt limits to the exposure that any one financial institution wishes to have to this particular risk, we were told that such mortgages do not at present have higher default rates than the traditional mortgage market, and are likely to be financeable in significantly greater quantities than at present if and when more shared ownership homes are made available on large sites.

### Limited supplies of building materials

5.18 I am aware, from my experience in government shortly after the 2008/9 crash, that the supply of adequate building materials can be a significant barrier to construction. I was consequently anxious to find out whether there is any evidence of such constraints operating at present, or being likely to operate if rates of build out on the large sites (and hence rates of construction as a whole) were to rise significantly. I am pleased to report that I have not found any such evidence. So far as the future is concerned, even if rates of housing construction were to rise as the Government hopes and plans, I see little reason to expect that supply of building materials will be unable to keep pace.

5.19 I was told that sufficient quantities of steel, glass and timber could be obtained. In relation to ceramic construction materials, likewise, there appeared to be sufficient capacity through domestic production and imports to meet demand – though it was made clear to me that investment in further domestic capacity would depend upon the industry
having a clear line of sight to new levels of demand from house builders before taking steps such as securing long-term licences for clay assets.

5.20 The tightest relevant supply market appears to be in bricks. I received conflicting accounts of the operation of the brick supply chain from brick makers and house builders – with each blaming the other for inefficient supply or procurement practices. I was told that existing UK factories in existing configurations are currently producing at capacity, with roughly 20% of the total current supply being met from use of stock by merchants and from imports; it was felt by the brick industry participants with whom I spoke that construction growth in northern continental countries could put pressure on import prices. However, I was also told that – if there were a clear demand for increased numbers of bricks – changing shift patterns and increasing the number of production lines within existing factories could increase capacity by 10-15% in under a year, and that new factories could be built within about three years, and that substitutes such as concrete bricks could be introduced.

5.21 My conclusion is that, if there is a reasonable level of assurance about the future levels of building materials required, investment in increased domestic production of all the materials is likely to follow – with any gaps in the interim being filled by imports. In the medium term, it is also likely that the increasing move towards so-called modern methods of construction such as modular (‘factory’) production of components for new houses will reduce dependence on particular items (such as bricks) that might otherwise be temporarily in short supply if the rate of construction were to accelerate rapidly.

Limited availability of skilled labour

5.22 In general, the picture I have gained of the supply of skilled labour for house construction is similar to that for construction finance and building materials.

5.23 There seems little doubt that the availability and price of labour is a significant concern for the major house builders. More than 20% of members of the Federation of Master Builders reported shortages in thirteen different types of skilled labour, and the Royal Institution of Chartered Surveyors shows 40-60% of surveyed employers identifying shortages in both professions and trades – figures similar to those reported by members of the Home Builders Federation. During the course of our site visits, we heard anecdotal evidence confirming the impression that the market for skilled labour is currently quite tight – and it was clear that a significant proportion of the workforce employed on these sites (particularly in London) came from outside the UK; this echoes the figures presented in the HBF Home Building Workforce Census, which show around 50% of the workforce in London, and over 20% in the South East, coming from abroad (mainly from the EU). We also frequently heard reports of skilled labourers moving quite large distances to work on large sites in the high pressure areas that we were visiting; and this, too, is borne out by the figures produced by the HBF and the Construction Industry Training Board, which suggest that 19% of the workforce have relocated to take up employment and that 36% have frequently worked away from home. Finally, we heard reports that one of the motivations for experimenting with modular “factory” production of major components for new homes was to clear the critical path by removing the need for people with very particular skills to be present on site at exactly the right moment in the construction of each individual new home.
5.24 It is important, however, to set these points in context. The construction workforce is composed of people with a wide range of skills and occupations, many (though not all) of which are fairly interchangeable with skills and occupations in other industries; and even within the construction industry, people with the various skills are deployed in a wide range of activities including repair and maintenance of housing, the construction and repair of infrastructure and the construction and repair of commercial and industrial buildings. Consequently, according to ONS figures, the building of new homes occupies less than a quarter of the total construction workforce. Indeed, ONS figures show that even in most of the key trades which form part of the critical path for the construction of a new home, the majority of the skilled workforce (and, in most cases, the great majority) are employed in construction activities other than the building of new homes. This suggests that, if there were a serious shortage of skilled labour in the various trades and professions required for house building, it would in general be possible to meet these demands by raising the wage rates paid to these workers in order to draw them over from other parts of the construction industry – albeit with some consequences for the rest of the industry – until such time as the level of training increased to reduce the shortages.

5.25 Accordingly, I am reasonably confident that skilled labour from within the construction industry is, or could generally become available to meet demand even if rates of build out on large sites, and hence rates of house construction as a whole, were to increase markedly. I am told by some industry participants that they have concerns about the availability of sufficient skilled labour in a few areas for which I do not have adequate data, including groundworkers and site managers; this is an issue I shall need to pursue further over coming months. There is, however, at least one definite exception to the general rule – namely, the supply of skilled bricklayers.

5.26 The official ONS figures show mean hourly pay for bricklayers at a level below the average for all employees across the economy, and also show no growth in the wage-rates for bricklayers during recent years. But this does not reflect the anecdotal evidence, and subsequent investigation has revealed that the reason lies in the fact that a very high proportion – according to some estimates, as many as 90% – of bricklayers are self-employed and are therefore excluded from the ONS figures. I have accordingly obtained information from Hudsons (a company that administers payroll for many thousands of self-employed people, with a large number of bricklayers amongst them). This gives a national average weekly wage for self-employed bricklayers around 60% higher than the ONS figure for employed bricklayers; this is roughly what one would have expected on the basis of the anecdotal evidence of rates 80-100% higher than the ONS figure, once allowance is made for the fact that our anecdotal evidence derives from sites in the high pressure areas only. But, if we take these national figures for self-employed bricklayers rather than the ONS data for employed bricklayers as the guide, then we observe also a rise in bricklayer earnings of over 30% since Q1 2014 – suggesting that the market in this particular set of skills is very much tighter than it was in 2014.
5.27 What makes this current situation concerning for the purposes of my Review is that, in contrast to the situation in most other parts of the construction workforce, the proportion of bricklayers working on the building of new homes appears to be very high. I have not been able to obtain reliable official figures – but, by combining estimates provided by the HBF for the average number of bricklayers required to build a new home with the CITB estimates for the total number of bricklayers in the country at present, and with the relatively reliable data for the number of new homes being constructed, one arrives at the conclusion that more (and perhaps significantly more) than three quarters of all bricklayers are engaged in the construction of new homes. This compares with some 20% of plasterers, 10% of carpenters and 5% of plumbers and electricians who are devoted to the building of new homes. Clearly, the opportunity to bring bricklayers across from other parts of the construction industry to work on newly built homes is restricted.

5.28 This will create a significant biting constraint if the rate of build out on large sites can be increased to the point where, in conjunction with other measures being taken by the Government, the total number of homes constructed each year rises from the present figure of around 220,000 to around 300,000 (in line with government targets). Again using HBF estimates for the average number of bricklayers currently required to build a new home, and allowing for the different types of construction typically involved in flats and houses, and further assuming that there is no rapid short-term change in methods of building, this will require an increase of about 15,000 in the total number of bricklayers, or almost one quarter of the existing size of this particular workforce.

5.29 To achieve such an increase over, say, a five year period by training more bricklayers would require more than doubling existing training levels. While it is encouraging that the Department for Education has established a new fund to increase innovative schemes for construction training, my discussions with those involved in such training lead me to believe that there is no prospect at present of the training providers being able to produce such a change in gear in the required timescale, even if sufficient funding were forthcoming. A far more realistic prospect would be for the providers to increase long-term training to a level at which it was able to provide a replenishment of the bricklaying workforce once that workforce had reached a steady state size roughly one quarter greater than its current size. Obviously, this would require an expansion of only
some 25% compared with current training provision – a realistic ambition over, say, 5 years.

5.30 The inevitable conclusion is that, in the immediate future, if there is not to be either a substantial move away from brick-built homes or a significant requirement for more skilled bricklayers from abroad, and to the extent that modular construction techniques do not sufficiently reduce demand for highly skilled bricklaying, the only realistic method of filling the gap in the number of bricklayers needed to raise production of new homes from about 220,000 to about 300,000, is for the Government and major house builders to work together (specifically without the current training providers) on a five year “flash” programme of pure on-the-job training. I therefore urge Ministers to consider now the need for measures to achieve a rapid expansion in the number of bricklayers.

Alleged intentional “land banking” on the part of major house builders

5.31 Finally, I have considered the allegation that the major house builders are reducing the rate of construction as part of an intentional attempt to “bank land”.

5.32 In one sense, as I have argued, the major house builders are certainly “land banking”: they proceed on a large site, once that site benefits from an implementable permission, at a rate designed to protect their profits by constructing and selling homes only at a pace that matches the market’s capacity to absorb those homes at the prices determined by reference to the local second-hand market. Accordingly, if we can speed up the build out rate of large sites then the amount of land with full planning permission being held by the house builders should reduce. The further question, however, is whether there is or is not also “land banking” in the sense of major builders or others attempting to influence the market by “locking up” land before they seek final implementable permissions to build.

5.33 The reasons for the allegation that there is also this other form of “land banking” are:

- the large amounts of land ‘held’ under various forms of options and agreements by the major house builders at any one time – often leading to the elapse of a long period between the moment when a piece of land comes under the control of the builder and the moment when it begins to be built out; and

- the fact that land, unlike most assets, does not depreciate, has generally tended to increase in value, and has a ‘real option’ value.

5.34 The most obvious point to make is that the first of these observations – the large amount of land held in one way or another by major house builders – has a plausible explanation. The fact that a major house builder holds large amounts of land, is explained by the fact that the major house builders need to maintain a sustainable business and seek to do this by ensuring that they, rather than their competitors, hold as much of the land on which they will later wish to build as is compatible with their capital constraints. This may well enable them to minimise market entry and thereby enable them to maintain market share while building out at a stately pace; but it does not, in itself, drive slow build out rates. Indeed, if anything, one would expect faster rates of build out to require builders to hold larger supplies of land – since we have been told by market analysts that the stock-market valuations of house builders depend not only on the current annual profits of those
builders but also on the degree to which those profits are made sustainable by the holding of supplies of land that can be developed in coming years. The faster the land is used, the larger the need for a back-up supply of land that can be used in future.

5.35 So compelling is this point, indeed, that I became worried at one stage during our work about the opposite phenomenon: namely, that concerns about sustainability of profits (and hence concerns about more rapid use of land holdings) might actually act as a brake on speed of build out. I was concerned, in other words, that the builders might be reluctant to build out faster, lest this reduce their stock of land holdings to the point where market analysts and their own boards raised concerns about the sustainability of their businesses. I have now concluded that this is not, in fact, likely to be a major concern. I have been assured by both local authorities and industry participants that the percentage of planning applications from promoters and major house builders ultimately receiving approval is now very high (probably higher than the 80% figure for national planning data as a whole). Contrary to some assertions from industry participants, I have also ascertained that (as shown in graph AX15 of Annex A, reproduced below) the variability in the time taken to obtain outline permission for building on the large sites I have seen (and on the range of sites studied by Molior), whilst undoubtedly aggravating and sometimes costly for the major house builders, is actually not so great as to cause problems of business continuity for major house builders with large property portfolios.

5.36 This suggests that major house builders can expect to obtain new additions to their portfolios of land for development within three to four years of making an application in all but the most exceptional circumstances, and typically within two to three years – thereby enabling them to accelerate the rate of build out of current sites without any substantial fear of running down their stock of land supply to levels that would reduce their long-term sustainability. This is in line with the findings of the study conducted by Professor Michael Ball in 2010 for the National Housing and Planning Advice Unit, which showed that – even before performance agreements between developers and local planning authorities...
became widespread – around 90% of outline permissions granted were approved within three years of application, and that the median time taken was under 18 months.

5.37 During the course of the Review, I have received a number of representations about the time taken by (and the difficulty involved in) the process of converting an outline permission into the first fully implementable permission on a large site. I am certainly conscious of the very large amount of paperwork (and often the large amount of cost) involved – and this no doubt in part explains the fact that it has, on some of our studied sites, taken several years to convert outline permission into an implementable permission. However, I have not received any indication that such conversion in practice ever fails to occur after whatever delay may arise, and – as shown in graph AX17 of Annex A, reproduced below – the first implementable permission is typically granted within 6 months of the first application for such permission:

![Graph AX17](image)

**Stage 1C - Distribution - From first detailed application submitted to first detailed permission granted (exc. hybrid applications)**

5.38 This is, of course, reliant on the maintenance of the current strong and effective planning system, and in particular the maintenance of the requirement for local authorities to have an adequate five year land supply. If this requirement were to be relaxed then speeding up the build out of large sites would merely bring forward housing – rather than increase the supply of housing in the long-term – as developers would struggle to replace their stock of land holdings.

5.39 The other allegation – that the ‘real option’ value attaching to the non-depreciating asset of land is inducing the major house builders to engage in “land banking” in the sense of “locking away” land from the market before receiving implementable permissions is (albeit in a slightly less obvious way) equally implausible.

5.40 It is of course true that, although the land market can be highly volatile, land (unlike most assets) does not depreciate, and has generally tended to increase in value across the cycle, and has a ‘real option’ value. By holding rights over land that benefits from (or is
soon likely to benefit from) some form of permission to build houses, the company which holds that land obtains a valuable ability to make profit by building on it at whatever time is thought likely to maximise the profitability of doing so. It would therefore be perfectly possible for financial investors of a certain kind to seek to make a business out of holding land as a purely speculative activity.

5.41 But I cannot find any evidence that the major house builders are financial investors of this kind. Their business models depend on generating profits out of sales of housing, rather than out of the increasing value of land holdings; and it is the profitability of the sale of housing that they are trying to protect by building only at the 'market absorption rate' for their products. I have heard anecdotes concerning land owners who seek to speculate in exactly this way by obtaining outline permission many years before allowing the land to have any real development upon it – and I am inclined to believe that this is a serious issue for the planning system. But it is not one that is consistent with the business model of the major house builders.
Chapter 6. Next steps

6.1 Interesting as it is to understand why the rate of build out on very large sites proceeds at its current stately pace, this analysis becomes of use only if it leads to action that will accelerate such build out rates. Accordingly, in line with my terms of reference, I shall now move on from analysis to recommendations.

6.2 By the time of the Budget in the Autumn, I shall seek – with the invaluable aid of my expert panel and my team of officials – to put forward policy options for ministers. Clearly, these options will be geared towards solving the particular problem that I have identified as the main cause of the slow build out rates on these sites: namely, the constraints imposed by the market absorption rates for the relatively homogeneous products currently being built on these sites. Clearly, also, in line with my analysis of the causes of the problem, I shall seek to find policy levers that will tend to increase the variety and differentiation of what is offered on these sites. I shall also look at the overall speed at which unconsented land can be converted into new housing on a sustained basis.

6.3 But, in constructing policy options, I shall be mindful of the need to ensure that:
   a. they should not jam up the housing market or impair the capacity of the major house builders to continue large-scale construction;
   b. they should not impose undue strains on local authorities whose planning departments are already under considerable strain;
   c. they should help to widen opportunities for people seeking homes;
   d. they should also widen opportunities for those capable of supplying new homes on large sites; and
   e. they should yield the greatest possible likelihood that such sites, as well as being built out more quickly, will in future be places that are beautiful and ecologically sustainable, so that succeeding generations can be proud of them.

6.4 In short, the policies that emerge should not “throw the baby out with the bathwater”.

6.5 Finally, I am conscious, as I embark on the endeavour of identifying policy options which can meet all of these criteria, that we are unlikely to be able to find a single prescription which will be equally applicable in the short, medium and long-term. I shall accordingly be open to the possibility that the policies designed to achieve immediate, short-term improvement in build out rates (while avoiding all of the pitfalls) may be somewhat different in character from those designed to optimise the use of large sites that come forward in future and thereby increase the overall velocity of house building in the long-term.