

Affordable Housing



Reading Borough Council Viability Testing Report

Report By



March 2018

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1 Introduction

- 1.1. BPS Chartered Surveyors has been appointed by Reading Borough Council to undertake a review of borough wide residential development viability to test whether the policy H3 of the emerging Local Plan Published Draft May 2017 meets the criteria set out in the National Planning Policy and also in the National Planning Policy Guidance.
- 1.2. The Draft policy is set out below:

H3: AFFORDABLE HOUSING

Residential development will make appropriate contribution towards affordable housing to meet the needs of Reading

- *on sites of 10 or more dwellings, 30% of the total dwellings will be in the form of affordable housing;*
- *on sites of 5 - 9 dwellings, 20% provision of the total dwellings will be in the form of affordable housing; and*
- *on sites of 1 - 4 dwellings, a financial contribution will be made that will enable the equivalent of 10% of the housing to be provided as affordable housing elsewhere in the Borough.*

For sites of more than 4 dwellings, provision should be made on site in the first instance with a financial contribution being negotiated to make up the full requirement as appropriate.

In all cases where proposals fall short of the policy target as a result of viability considerations, an open-book approach will be taken and the onus will be on the developer/landowner to clearly demonstrate the circumstances justifying a lower affordable housing contribution.

In determining residential applications the Council will assess the site size, suitability and type of units to be delivered in relation to the current evidence of identified needs. The Council will seek an appropriate tenure mix of affordable housing to include social rented, affordable rent, intermediate rent and shared ownership affordable units. The affordable units provided should be integrated into the development.

Priority needs are currently for family sized housing, specialist accommodation for vulnerable people and extra care housing. The Council will regularly monitor and review the need for, and delivery of, affordable housing.

The following types of residential development will be exempt from the requirement to provide affordable housing:

- *Replacement of a single dwelling with another single dwelling; and*
- *Conversion of a dwelling to self-contained flats where there is no new floorspace.*

1.3. In undertaking this assessment we have had regard to National Planning policy. Paragraphs of particular relevance from the NPPF shaping this exercise are set out below:

151. Local Plans must be prepared with the objective of contributing to the achievement of sustainable development. To this end, they should be consistent with the principles and policies set out in this Framework, including the presumption in favour of sustainable development

158. Each local planning authority should ensure that the Local Plan is based on adequate, up-to-date and relevant evidence about the economic, social and environmental characteristics and prospects of the area. Local planning authorities should ensure that their assessment of and strategies for housing, employment and other uses are integrated, and that they take full account of relevant market and economic signals.

173. Pursuing sustainable development requires careful attention to viability and costs in plan-making and decision-taking. Plans should be deliverable. Therefore, the sites and the scale of development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened. To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.

174. Local planning authorities should set out their policy on local standards in the Local Plan, including requirements for affordable housing. They should assess the likely cumulative impacts on development in their area of all existing and proposed local standards, supplementary planning documents and policies that support the development plan, when added to nationally required standards. In order to be appropriate, the cumulative impact of these standards and policies should not put implementation of the plan at serious risk, and should facilitate development throughout the economic cycle. Evidence supporting the assessment should be proportionate, using only appropriate available evidence.

1.4. The following paragraph sets out national policy in relation to testing plan policies together with CIL Charging schedules. Although not discussed in this report BPS is currently working in parallel on a review of the Current CIL charging schedule which was adopted in January 2015.

175. Where practical, Community Infrastructure Levy charges should be worked up and tested alongside the Local Plan. The Community Infrastructure Levy should support and incentivise new development, particularly by placing control over a meaningful proportion of the funds raised with the neighbourhoods where development takes place.

- 1.5. We have also referred to National Planning Policy Guidance with the summary guidance on viability in Plan making set out below:

How should viability be assessed in plan-making?

Local Plans and neighbourhood plans should be based on a clear and deliverable vision of the area. Viability assessment should be considered as a tool that can assist with the development of plans and plan policies. It should not compromise the quality of development but should ensure that the Local Plan vision and policies are realistic and provide high level assurance that plan policies are viable.

Development of plan policies should be iterative - with draft policies tested against evidence of the likely ability of the market to deliver the plan's policies, and revised as part of a dynamic process.

Evidence should be proportionate to ensure plans are underpinned by a broad understanding of viability. Greater detail may be necessary in areas of known marginal viability or where the evidence suggests that viability might be an issue - for example in relation to policies for strategic sites which require high infrastructure investment.

Paragraph: 005 Reference ID: 10-005-20140306

- 1.6. We refer to other relevant extracts from this guidance in the later sections of this report.
- 1.7. BPS undertook a similar role on behalf of the Council in respect of the last review of Local Plan Affordable Housing Policies and the introduction of a CIL charging schedule and our findings were set out in our reports of February 2014 and February 2013 respectively.

Local Planning Policy

1.8. The Council's current Core Strategy was adopted January 2008. The Council subsequently carried out a review of its affordable housing policies, in conjunction with introducing the Community Infrastructure Levy. This meant alterations to policy CS16 of this document, as well as policy DM6 of the Sites and Detailed Policies Document. The alterations were adopted on 27th January 2015.

1.9. The amended Policy CS16 is set out below:

Policy CS16: Affordable Housing All developments of 15 dwellings and above will provide 30% of the total number of dwellings in the form of affordable housing to meet the needs of the area, as defined in a housing needs assessment.

Affordable housing is subsidised housing that enables the asking price or rent to be substantially lower than the prevailing market prices or rents in the locality, and is subject to mechanisms that will ensure that the housing remains affordable for those who cannot afford market housing.

In all cases where proposals fall short of the policy target as a result of viability considerations, an open-book approach will be taken and the onus will be on the developer/ landowner to clearly demonstrate the circumstances justifying a lower affordable housing contribution.

In determining residential applications the Council will assess the site size, suitability and type of units to be delivered in relation to the current evidence of identified needs. The Council will seek an appropriate tenure mix of affordable housing to include social rented, affordable rent, intermediate rent and shared ownership affordable units. The affordable units provided should be integrated into the development.

Priority needs, in 2014, are for family sized housing, specialist accommodation for vulnerable people and extra care housing. The Council will regularly monitor and review the need for, and delivery of, affordable housing

1.10. The revised Policy DM6 is set out below:

DM6: AFFORDABLE HOUSING

On development sites of less than 15 dwellings, the following proportions of affordable housing provision will be provided:

- on sites of 10 - 14 dwellings 30% provision;*
- on sites of 5 - 9 dwellings 20% provision; and*
- on sites of 1 - 4 dwellings, a financial contribution will be made that will enable the equivalent of 10% of the housing to be provided as affordable housing elsewhere in the Borough.*

For sites of more than 4 dwellings, provision should be made on site in the first instance with a financial contribution being negotiated to make up the full requirement as appropriate.

In all cases where proposals fall short of the policy targets as a result of viability considerations, an open-book approach will be taken and the onus will be on the developer/landowner to clearly demonstrate the circumstances justifying a lower affordable housing contribution.

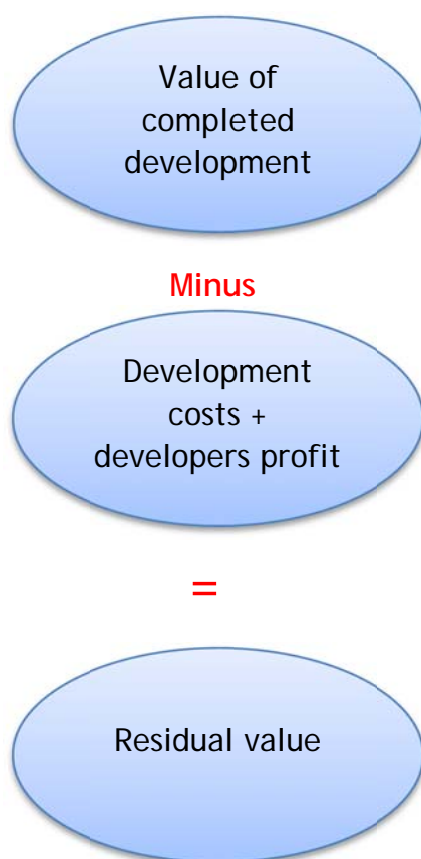
In determining residential applications the Council will assess the site size, suitability and type of units to be delivered in relation to the current evidence of identified needs. The Council will seek an appropriate tenure mix of affordable housing to include social rented, affordable rent, intermediate rent and shared ownership affordable units.

Priority needs are for family sized housing, specialist accommodation for vulnerable people and extra care housing. The Council will regularly monitor and review the need for, and delivery of, affordable housing.

- 1.11. It can be seen the proposed policies reflect the existing amended policies in terms of the proposed affordable housing obligations

2 Approach to Viability Testing

- 2.1 The standard approach to testing viability of plan policies is to prepare a number of development appraisals reflecting common site typologies including unit mix which are then modelled using relevant market derived inputs and standard development appraisals to determine residual values. These appraisals are then run reflecting different levels of affordable housing provision and mix of tenure, together sensitivity testing key inputs.
- 6.1 Residual valuations follow a common approach with the basic principles set out below:



- 2.2 Residual valuations can be used to derive a net profit output when land cost is a fixed input or a residual value which can be used to fund the acquisition of land where profit is a fixed input. In the context of testing Local Plan Policies the principle is for the policy not to be set at the margins of viability, this means we elected to put profit as a fixed input.
- 2.3 To test the viability of plan policies we have also inputted a fixed land cost. This means that variations in affordable housing quantum and tenure are the

key variable. Where the appraisal generates a positive residual value this indicates the development is viable at that given level of affordable housing provision.

Land Value

- 2.4 In considering an appropriate land value for testing site viability we have sought to apply National Planning Policy Guidance which states:

Land value

Central to the consideration of viability is the assessment of land or site value. The most appropriate way to assess land or site value will vary but there are common principles which should be reflected.

In all cases, estimated land or site value should:

- reflect emerging policy requirements and planning obligations and, where applicable, any Community Infrastructure Levy charge;*
- provide a competitive return to willing developers and land owners (including equity resulting from those building their own homes); and*
- be informed by comparable, market-based evidence wherever possible. Where transacted bids are significantly above the market norm, they should not be used as part of this exercise.*

Paragraph: 014 Reference ID: 10-014-20140306

Revision date: 06 03 2014

- 2.5 Land value should therefore represent a balance of these three considerations. The current affordable housing policy targets have been in place since the local Plan amendments were adopted in January 2015. Prior to this date the strategic targets were set at a higher level.
- 2.6 The effective reduction in the strategic policy target in 2015 reflected market conditions which were at the time still influenced by the global recession of 2009/2010 but beginning to show improvements. Subsequent to this date there have been very significant house prices rises in the borough as evidenced by the Land Registry House Price Index for all property types for over this period shown in the extract below:

Table 1. Land Registry HPI - All Residential Sales

Date	Reading	% Increase
2015-01	£247,957	100%
2015-03	£246,802	100%
2015-06	£257,891	104%
2015-09	£265,886	107%
2015-12	£282,024	114%
2016-03	£294,153	119%
2016-06	£297,137	120%
2016-09	£312,036	126%
2016-12	£295,429	119%
2017-03	£304,130	123%
2017-06	£302,489	122%
2017-09	£311,751	126%
2017-12	£311,823	126%

- 2.7 The table shows that over a period of just under 3 years house prices in the borough have increased by some 26%.
- 2.8 These increases are in part a product of returning confidence but also a continuation of large scale unmet demand. Reading also benefits from have a station on Crossrail with services on the Elizabeth Line scheduled to open from December 2019. Stations along the line of this route have in general shown significant increases in house prices compared to surrounding areas.
- 2.9 Although we recognise house price increases have slowed significantly, unit values have held up because of a continued shortage of supply with the long-term trend towards continued rising values once the uncertainty with Brexit presents a clearer position.
- 2.10 House price increases are only part of the overall viability picture with other development assumptions including construction costs being equally as important. However, price increases are often seen as a barometer for movements in land value irrespective of general costs movements.
- 2.11 It is important to note that in a planning context and reflecting on the guidance provided by PPG in 2.3 above, that land value should reflect planning policy requirements. Given the period over which the current and proposed policies have been in place it is realistic to assume that the market has now had time to embed these requirements when bidding for

land. The only potential factor militating against full compliance is where land has a high existing use or alternative use value. Land owner expectations or market competition for land should not be factors which circumscribe the application of policy.

- 2.12 In practice most planning viability assessments adopt an Existing Use Value (EUV) plus land owner premium approach or an Alternative Use Valuation (AUV) as these approaches offer the clearest ability to identify the valuation impact arising from the consent sought. The Market Value approach advocated by the RICS suffers from the problem that analysis of land transactions is highly problematic as often many of the assumptions adopted by the purchaser are not known and may not be based on an assessment of current cost and values as required by PPG. Furthermore, it is often not possible to determine the extent to which land price has reflected planning policy or has instead made assumptions of securing lower levels of planning obligations.

Revisions to the National Planning Policy Framework and PPPG

- 2.13 Relevant extracts from the draft Planning Policy Guidance have been set out in Appendix A. A revision of the guidance concerning the approach to determining land value is set out below:

- *fully reflect the total cost of all relevant policy requirements including planning obligations and, where applicable, any Community Infrastructure Levy charge;*
- *fully reflect the total cost of abnormal costs; site-specific infrastructure costs; and professional site fees;*
- *allow for a premium to landowners (including equity resulting from those building their own homes); and*
- *be informed by comparable market evidence of current uses, costs and values wherever possible. Where recent market transactions are used to inform assessment of benchmark land value there should be evidence that these transactions were based on policy compliant development. This is so that previous prices based on non-policy compliant developments are not used to inflate values over time.*

- 2.14 We have given consideration to this draft guidance and consider that an approach which fully imbeds the implication of planning policy in land value

is a realistic basis from which to assess land value. It is inevitable that on an individual site basis some sites will have high EUV's which will either prevent the site coming forward for redevelopment or may represent a barrier to full compliance with planning policy obligations such as the delivery of affordable housing. However for sites where no such barrier exists it is reasonable to disregard transactions where the price paid is the only barrier to compliance

Appraisals Typology

- 2.15 In the context of running appraisals for the purposes of testing the local plan it is usual practice to assume hypothetical developments to avoid site specific factors skewing the appraisal results. In this context it is difficult to make generic assumptions about existing use value or alternative use values as these will vary significantly from site to site. Consequently site value has been determined using a generic plot value of £60,000 per unit which has then been subject to sensitivity testing. This approach is consistent with a plan led system. However it will be seen from our results that scope exists for some development scenarios to achieve the policy target and generates surpluses which result in differing land values/profit margins to the base modelling assumptions.
- 2.16 Our specific appraisal inputs are discussed in the following sections and reflect National Planning Policy Guidance which states:

How should changes in values and costs be treated in plan-making?

Plan makers should not plan to the margin of viability but should allow for a buffer to respond to changing markets and to avoid the need for frequent plan updating. Current costs and values should be considered when assessing the viability of plan policy. Policies should be deliverable and should not be based on an expectation of future rises in values at least for the first 5 years of the plan period. This will help to ensure realism and avoid complicating the assessment with uncertain judgements about the future. Where any relevant future change to regulation or policy (either national or local) is known, any likely impact on current costs should be considered.

Paragraph: 008 Reference ID: 10-008-20140306

Revision date: 06 03 2014

- 2.17 We have frequently found that assumptions used in generic studies of this type are often quoted as forming precedents in terms of appraisal assumptions on specific cases.
- 2.18 It should be noted that the intention of our modelling reflects the National Planning Policy requirement that the plan targets are robust and not set at the margins of viability. In interpreting this requirement we have therefore deliberately not set our values and costs at ambitious levels but at levels reflecting the general housing market not the usually higher values achieved by new developments.
- 2.19 Because of this we see there is no precedent set by this study which can be readily applied to individual developments and their viability which should reflect their specific site circumstances and their viability should be justified on that basis.

3 Defining Development Options

3.1 When we previously analysed development viability in connection with the introduction of CIL and in testing Planning Policies concerning affordable housing delivery during the course of 2013 and 2014, we undertook detailed analysis of the residential land supply. This in turn informed the development of five hypothetical development sites or typologies which were then used as the basis of the development appraisals. These appraisals were used to test both the draft CIL Charging Schedule and test site viability adopting different levels of affordable housing provision with different tenure mixes.

3.2 This approach is consistent with National Planning Policy Guidance

Should every site be tested?

Assessing the viability of plans does not require individual testing of every site or assurance that individual sites are viable; site typologies may be used to determine viability at policy level. Assessment of samples of sites may be helpful to support evidence and more detailed assessment may be necessary for particular areas or key sites on which the delivery of the plan relies.

Paragraph: 006 Reference ID: 10-006

3.3 The analysis of land supply relied at this time was based on the following sources of information:

- Reading Borough Council Local Development Framework (2011) Strategic Housing Land Availability Assessment: Information to support the Sites and Detailed Policies Document
- Reading Borough Council Local Development Framework (2011) Sites and Detailed Policies Document
- Reading Borough Council Local Development Framework (2012) Sites and Detailed Policies Document Consultation on Main Modifications
- Reading Borough Council Local Development Framework (2011) Development Sites Background Paper: Information to support the Site and Detailed Policies Document
- Reading Borough Council Local Development Framework (2011) Annual Monitoring Report 2010/2011
- Reading Borough Council Local Development Framework (2009) Reading Central Area Action Plan to 2026

3.4 The land supply has generally remained consistent with these documents however we have sought to update our understanding of land supply through examination and analysis of the following additional documents:

- Sites and Detailed Policies Document adopted 2012 (altered January 2015)
- Annual Monitoring Report 2016-2017 Published December 2017
- Reading Housing and Economic Land Availability Assessment 2017 published May 2017
- Berkshire (including South Bucks) Strategic Housing Market Assessment Berkshire Authorities and Thames Valley Berkshire Local Enterprise Partnership Final Report dated February 2016 Prepared by GL Hearn Limited
- Berkshire Functional Economic Market Area Study Thames Valley Berkshire Local Enterprise Partnership Final Report February 2016 prepared by Nathaniel Litchfield & Partners
- Residential Planning Commitments as at 31 March 2017 published by Reading Council
- Residential Planning Commitments as at 31 March 2017

3.5 We have also considered additional sites identified in the Pre-Submission Draft of the new Local Plan dated November 2017.

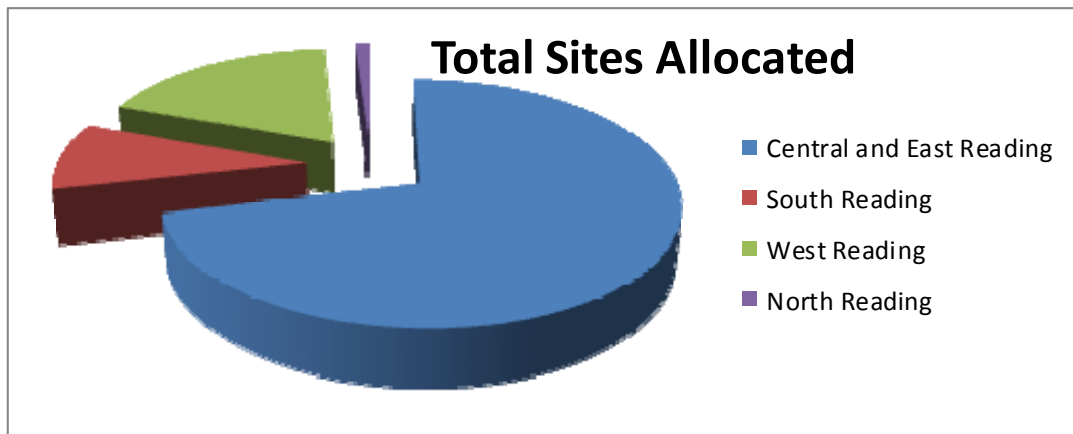
3.6 In order to comprehensively test development viability, we have updated the original five development scenarios utilised in 2013/2014 as they remain broadly relevant. In addition we have identified five new scenarios which reflect our analysis of the Annual Monitoring Report together with an additional five scenarios based on additional sites identified by the emerging Local Plan. The characteristics of the appraisal scenarios are considered below:

Original Development Scenarios

3.7 We have set out below our original assessment of the geographical distribution of sites. In order to make a clearer distinction between mixed use sites and those with a pure residential allocation a separate category was been identified entitled "Housing".

3.8 The geographical distribution of these sites can be seen more clearly in the chart below. This chart is based on the true total of sites:

Chart 1: Geographical Distribution of Allocated Sites



- 3.9 It can be seen that the majority of allocated sites are within the Central and East Reading area, with West Reading containing the bulk of the remaining allocations. North Reading provides a very limited source of land supply.
- 3.10 Sites which are allocated purely for housing have been separated from other mixed-use sites which have a residential component. The following charts illustrate the geographical distribution of both purely housing and mixed use residential sites:

Chart 2: Pure Residential Sites

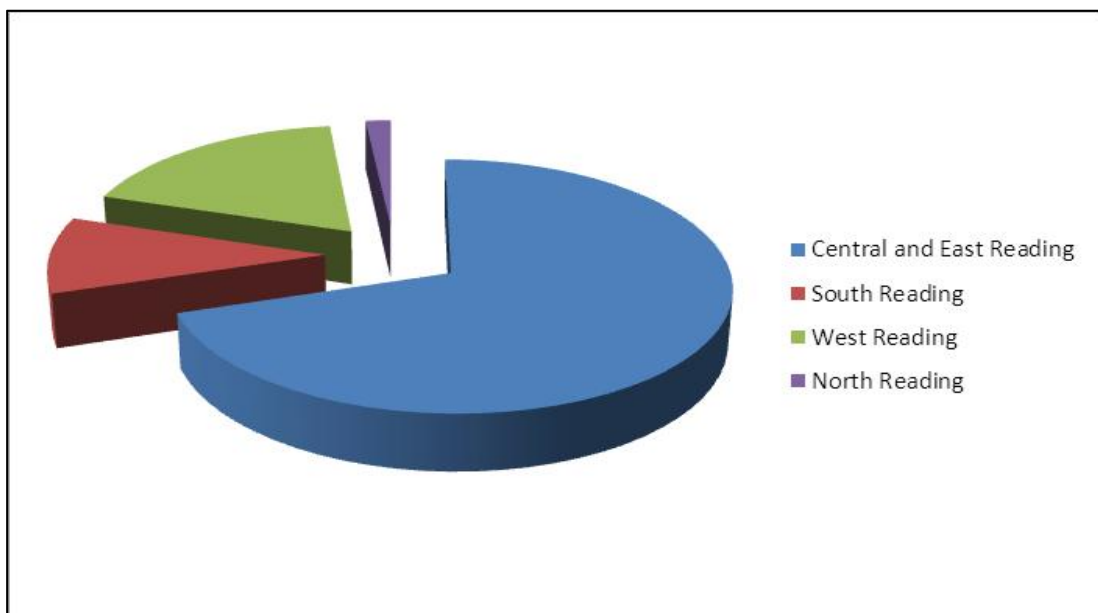
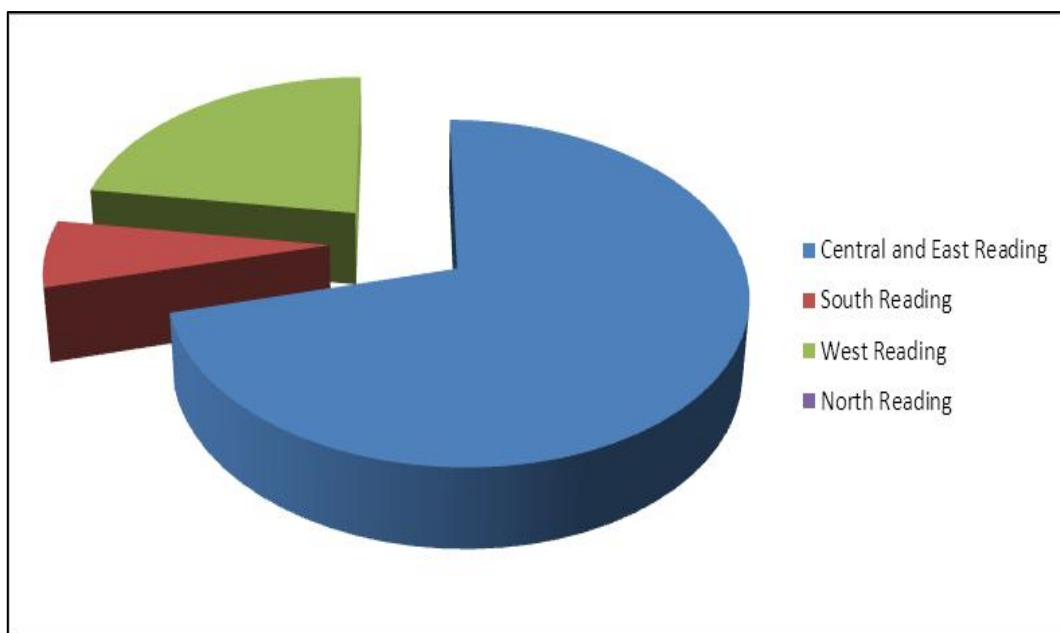


Chart 3: Residential Mixed Use Sites



3.11 Both charts clearly show that the majority of allocated sites are within Central and East Reading with the only other significant supply coming from West Reading.

3.12 The following table shows the relative unit density for pure housing sites:

Table 2: Pure residential sites

	All Sites	Central and East Reading	South Reading	West Reading	North Reading
Units	6629	2909	2476	1210	34
Hectares	98.8	32.3	45.4	20.1	0.9
Units per Ha	67	90	55	60	37

3.13 To correlate land supply to house prices sales data we note that the four areas of Reading also broadly correspond to postcodes which are shown below

Area	Central & East	South	West	West	North
Postcode	RG 1	RG2	RG30	RG31	RG4

- 3.14 We have sought to compare this picture of land supply to the residential planning commitments as at March 2017 unidentified under the Annual Monitoring Report (AMR), to highlight areas of actual delivery.
- 3.15 The AMR data is set out according to the 16 Wards in the borough. Our analysis centres on four main post codes that correspond to the four main areas of the borough. In order to reconcile the two approaches we have considered in excess of 8,000 postcodes to identify wards by postcode which is shown in the table below:

Table 3: Identification Postcodes by Ward

Ward	RG1	RG2	RG4	RG30	RG31
Abbey	Blue				
Battle	Blue			Blue	Blue
Caversham			Blue		
Church		Blue			
Katesgrove	Blue	Blue			
Kentwood			Blue	Blue	Blue
Mapledurham			Blue		
Minster	Blue	Blue		Blue	Blue
Norcot				Blue	
Park	Blue				
Peppard			Blue		
Redlands	Blue	Blue			
Southcote				Blue	
Thames			Blue		
Tilehurst				Blue	Blue
Whitley	Blue	Blue	Blue		

- 3.16 It can be seen that a number of wards have multiple post codes meaning that data from that ward could be spread across more than one area. We have focussed on data from the AMR in relation to Hard Commitments for sites which have Not Started, Under Construction and Outstanding.
- 3.17 We have adopted two methods for allocating sites by post code. The first simply applies the ward total to each post code (Equal Allocation). This has the effect of overstating the overall number of sites. The second method divides the total number of sites by the number of postcodes and allocates totals accordingly (Divisional Allocation). This latter approach maintains the correct number of sites but may not accurately allocate these to the correct post code. The results of both these methods are shown in the Charts below:

Chart 4: Equal Allocation Method - Hard Commitments

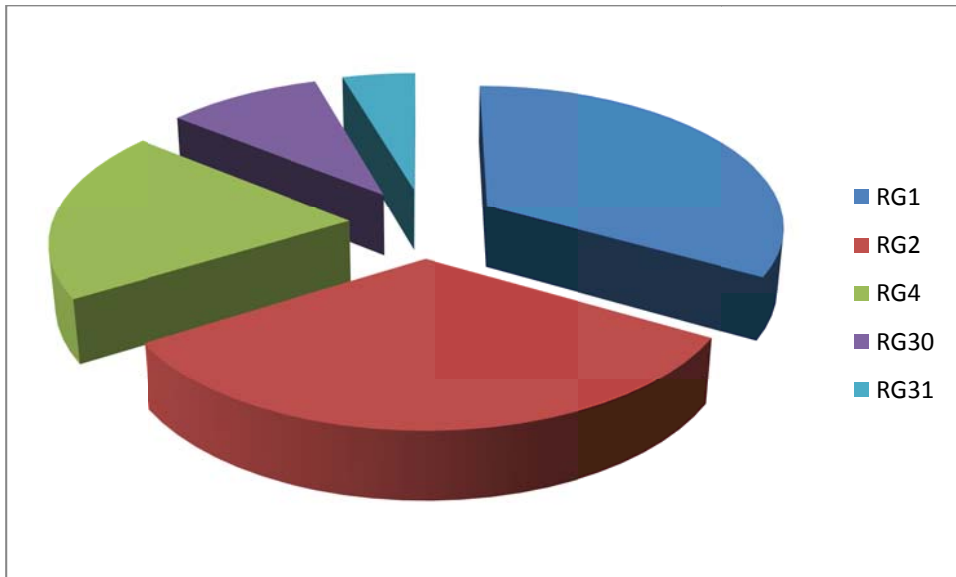
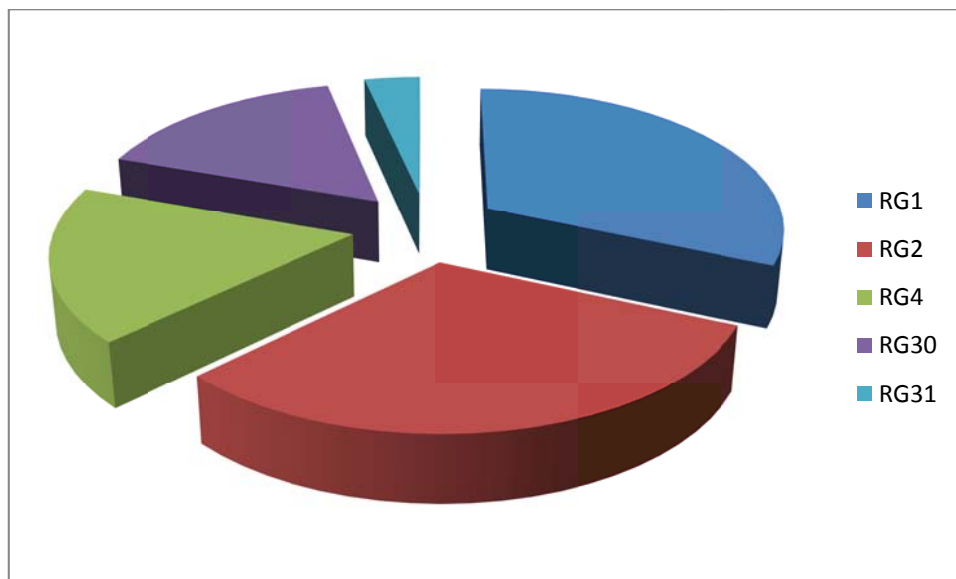


Chart 5: Divisional Allocation Method - Hard Commitments



Area	Central & East	South	West	West	North
Postcode	RG 1	RG2	RG30	RG31	RG4

3.18 It can be seen that both approaches show very similar geographical and proportional splits of development activity across the four postcodes.

3.19 In contrasting the picture of supply with that shown in Charts 2 and 3 we have drawn the following conclusions:

- A) RG1 (Central and East) is shown to be a much less prominent sources of sites reducing the area to the second largest source, whereas site allocations indicate the rea provided some 75% of the borough's land supply.
- B) RG2 (South Reading) is in fact providing the largest source of sites (with planning permission) whereas allocations shows this area to be a relatively small source of future supply.
- C) RG4 (North Reading) is broadly unchanged.
- D) RG 30/31 (West Reading) shows it does contribute development sites whereas allocations are relatively negligible.

3.20 This additional analysis shows that the Reading development market is relatively dynamic with site allocations and sites coming forward presenting different pictures. For this reason we have included a number of additional different development scenarios.

3.21 For reasons which can be seen in our analysis of house price data set out in Section 4 we have concluded that although there are some variations in house prices between these four areas, the variations are comparatively small such that there is no need to treat different areas of the borough as being effectively separate residential markets.

3.22 The original development scenarios are summarised below:

Table 4. Unit Mix Original Development Scenarios

Original Development Scenarios												
Site Area Hectares	Flats		Terraced		Terraced	Semi Detached		Detached			Total Units	
	1 bed	2 bed	3 bed	2/3 bed	4 bed	3 bed	4 bed	3 bed	4 bed	5 bed		
0.1		4		2	3							9
0.27	5	5		3	3	2	2					20
0.6	15	20		10	5	5	5					60
1.37	25	40		30	24	14						133
2.6				40	40	20	20	10	10			140

Additional Development Scenarios

3.23 Our analysis of the AMR has involved identifying every completed development in terms of location site area and unit mix. We have then

sought to identify similar sites in terms of unit outputs and then generated a number of average sites. This approach has resulted in the following additional development scenarios being identified:

Table 5. Unit Mix AMR Derived Scenarios

Additional Scenarios Reflecting 2016/17 AMR														
Site Area Hectares	Post Code	Flats			Terraced		Terraced		Semi Detached		Detached			Total Units
		1 bed	2 bed	3 bed	2/3 bed	4 bed	3 bed	4 bed	3 bed	4 bed	5 bed			
0.58	RG4							1.3						1.3
0.125	RG1		1	3	2									6
3.854	RG2	20	50	10	55	15								150
10.92	RG30	75	200	50	300	25								650

3.24 We have taken a similar approach to new sites which are identified by the Draft Local Plan. We have only included development scenarios where sites differ either in terms of unit numbers or mix from other scenarios identified above:

Table 6. Unit Mix Draft Local Plan Derived Scenarios

Scenarios Reflecting Draft Local Plan Allo														
Site Area Hectares	Post Code	Flats			Terraced		Terraced		Semi Detached		Detached			Total Units
		1 bed	2 bed	3 bed	2/3 bed	4 bed	3 bed	4 bed	3 bed	4 bed	5 bed			
0.756	RG1	20	27	7	35	9								98
3.31	RG1	76	103	32	133	33								377
2.77	RG30	34	45	34	90	22								225
1.43	RG31	8	10	8	21	5								52
3.75	RG4	19	25	19	50	13								126

Through identifying these additional development scenarios we have ensured a broader sample from which to test the proposed affordable housing policies. This increased sample also helps address the different approach taken in policy to sites under 10 units, but also ensured that the weighting reflects both allocations and also recent development typologies and newly allocated land supply.

Testing Plan Policy

3.25 Our 2013/2014 testing considered a number different percentages for overall affordable housing delivery

- 100% Private housing
- 50% affordable provision
- 30% affordable provision

20% affordable provision
10% affordable provision

3.26 For the sake of consistency we have retained these percentages in respect of updating the original scenarios however we have only sought to examine thresholds of provision up to 30% in relation to the two new sets of additional scenarios.

3.27 Within each of these thresholds we have modelled different mixes of affordable tenure summarised as follows:

50% Social Rent 20%/ Affordable Rent 30%/ Shared Ownership
70% Affordable Rent/ 30% Shared Ownership
50% Affordable Rent/ 50% Shared Ownership

3.28 When modelling the rented tenures we have sought to avoid rents which exceed the Local Housing Allowance Rates. The figures adopted for the purposes of our appraisals are shown below.

Weekly LHA rate for February 2018

Reading BRMA

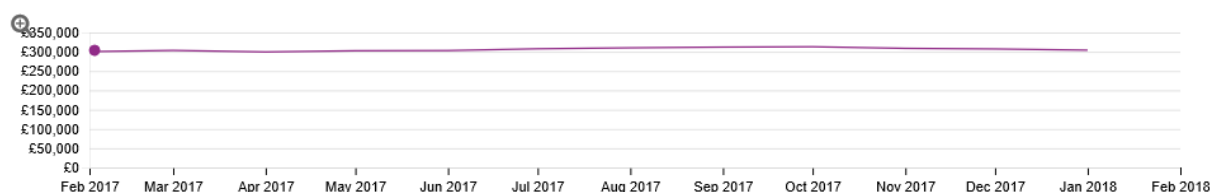
Shared Accommodation Rate:	£78.78 per week
One Bedroom Rate:	£153.02 per week
Two Bedrooms Rate:	£188.33 per week
Three Bedrooms Rate:	£221.79 per week
Four Bedrooms Rate:	£315.12 per week

4 House Prices /Market Overview

Market Overview

- 4.1 It can be seen from the Land Registry extract set out in 2.6 above that Reading has experienced considerable increases in house prices in recent years.
- 4.2 More recently the pattern of rapidly rising prices has slowed considerably as evidenced by the following Chart showing Land Registry HPI house price Growth for Reading over the last year

Chart 6: Land Registry HPI - All Housing Types



- 4.3 This chart shows growth of just 1.26%. This has also been accompanied by a significant decrease in the overall volume of sales. The causes for this relatively static market are complex and are rooted in a number of factors briefly summarised as:
- A) Brexit uncertainty generating concerns about income and job security
 - B) The first upward movements in interest rates signal rising mortgage costs. Although the introduction of mortgage regulation should prevent dramatic increases in rates from occurring this potential trend will squeeze incomes.
 - C) Given the recent significant growth in house prices there is likely to be a period of consolidation before further price rises. Price pressures results from a combination of foreign demand and new entrants to the market and buy to let investors. Brexit and current levels of stamp duty impact have a significant impact on these sources of demand.
 - D) Offsetting the above is the fact that there is still a shortage of houses in the right places. Reading as with London and the South East suffers from a shortage in supply of housing which is affordable to the majority of prospective purchasers. The current market led system which delivers

the vast majority of housing ensures that new build properties are always priced towards the top end of their locality and sector, partly as product of land competition but also through the need to maximise profit.

- 4.4 Inevitably as unfulfilled demand continues to outstrip demand the long term prospect is for rising prices but it is apparent that in the short to mid term significant growth should not be expected.
- 4.5 The impact of Brexit on the cost of materials is yet to be seen but could be both positive and negative depending on the UK's ability to access other markets.
- 4.6 In terms of this analysis our role is primarily focussed on anchoring our analysis and conclusions using current market data rather than to reflect the potential for future market movements. Inevitably the currency of our conclusions is limited to the continuance of current market conditions.

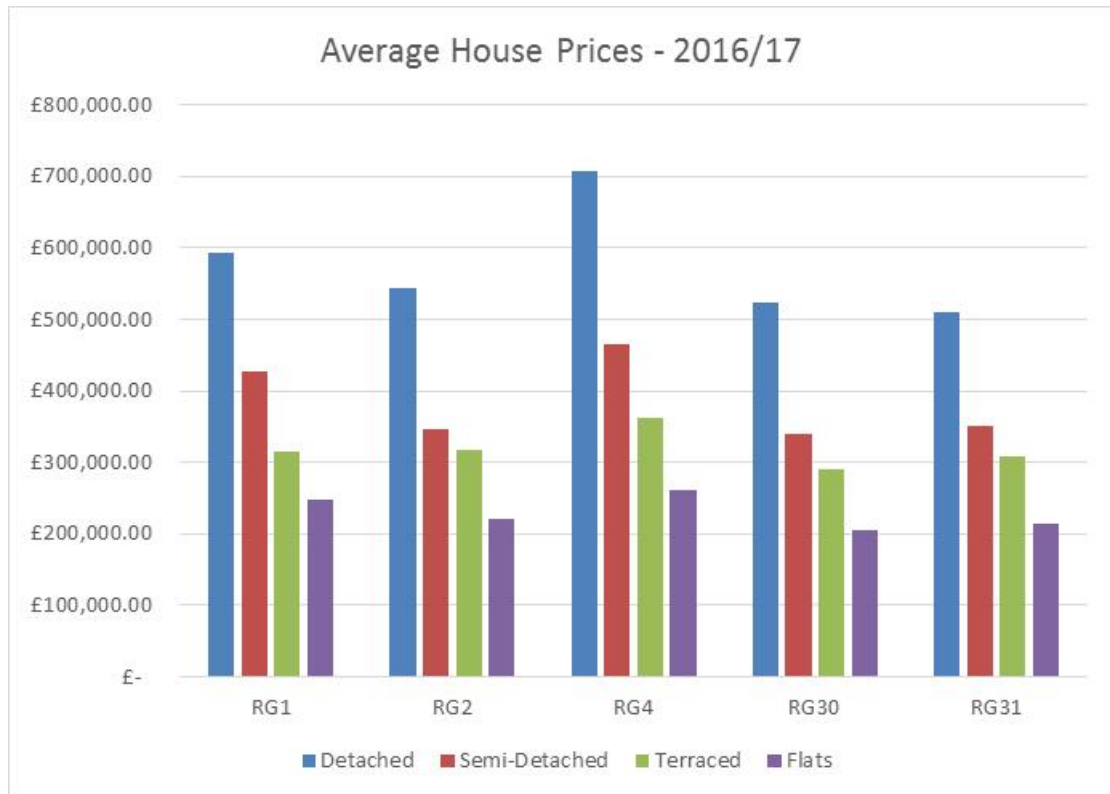
House Prices

- 4.7 When we undertook the review of the Local Plan affordable housing policies in 2014 and the CIL study in 2013 we drew upon Land Registry sales records for all relevant postcodes in the borough. These were divided into four areas in the borough. This mirrors the approach taken in the Infrastructure Delivery Plan (2011). The Plan identifies four distinct areas, Central and East Reading, South Reading, West Reading and North Reading¹.
- 4.8 The areas also correspond to the post code areas shown 3.12 above.
- 4.9 We have sought maintain this approach for consistency in this latest study. However it remains relevant to test the assumption of Reading being treated as effectively a single residential market through identify the degree to which house prices vary between each of the four locations and whether this suggests there are sufficient differences to consider them as separate housing markets.
- 4.10 All residential transactions for the relevant post codes have been downloaded from the Land Registry for the period January 2016 to end July 2017 which was the latest period available at the time of our analysis. It is inherent that with studies of this nature there will be a time lag effect between the registration of sales and their availability for analysis. We

¹ See Appendix A for a plan showing the location of these areas

have separated the sales by house type and by post code to provide the following chart:

Chart 7: Average House Prices 2016/2017



- 4.11 This chart serves to illustrate that Postal area RG4 clearly shows it commands generally higher prices than the other locations, there is in our view however, a relative conformity of pricing that suggests this can be described as more of a pricing fluctuation than identification of separate and distinct markets. For such a distinction we would expect values to exceed margins of difference of 50% or more which is clearly not the case above where the largest margin is 40% with most variation between 10-20%.
- 4.12 It should also be noted from the earlier section that the majority of land supply lies within postal areas RG1 and RG 31 which themselves show greater conformity.
- 4.13 Based on this analysis we have again concluded that there is no justification for considering separate zones where potentially differential policy targets might apply and so effectively we consider the Borough to be a single market for the purpose of our analysis.

4.14 The following table sets out our analysis of average new build achieved sales values in contrast to all sales, a category which includes both new build and predominantly second hand sales. We have included our adopted sales values to illustrate our mid-point approach to pricing:

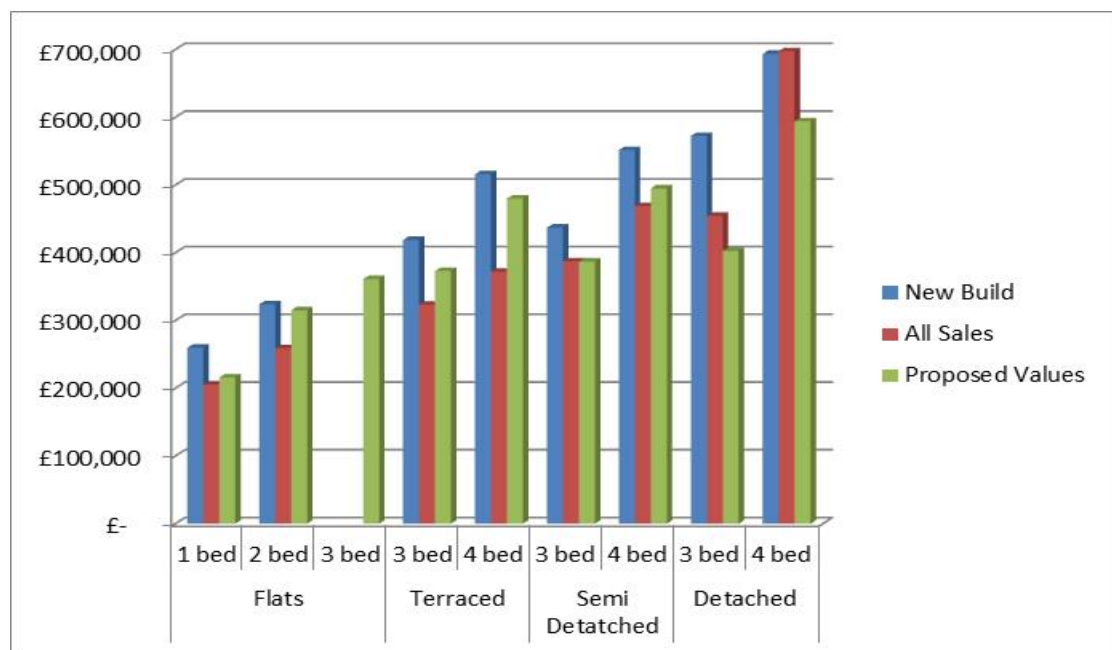
Table 7: Average Unit Values - Adopted Sales Values

	Flats		Terraced		Semi Detached		Detached		
	1 bed	2 bed	3 bed	3 bed	4 bed	3 bed	4 bed	3 bed	4 bed
New Build	£ 259,828	£ 324,039		£419,000	£516,000	£437,129	£551,667	£572,500	£693,733
All Sales	£ 205,223	£ 259,064		£323,551	£372,217	£387,356	£469,027	£454,478	£697,616
Proposed Values	£ 216,000	£ 315,018	£ 361,250	£ 373,065	£ 480,040	£ 387,000	£495,000	£ 402,500	£594,000

4.15 In order to ensure the appraisals are not priced at margins of viability it can be seen that our proposed sales values generally fall in between new build and all sales values. It should be noted that our proposed unit values are not simply mid-way points in the data but drawn from weighted average unit prices for each of the four post code areas with the figure weighted by the relative number of transactions.

4.16 The following chart provides a graphical illustration of this pricing approach:

Chart 8: Comparative Unit Values



4.17 It can be seen that in some instances we have priced units below the average prices for both new build and all sales. This reflects the weighting towards site allocations in RG1 (Central & East) and RG31 (West) where we have adjusted our unit pricing to more accurately reflect average values in these locations.

5 Development Costs

Construction Costs

- 5.1 Base construction costs have been sourced from the Build Cost Information Service All Tender Price Index 5 year sample adjusted by the relevant location factor.
- 5.2 We have then asked our retained Quantity Surveyor to provide estimates of realistic allowances for external works and contingency sums to provide a complete construction cost. The information is set out in in full Appendix B

Other Development Costs

- 5.3 We have adopted a number of generic assumptions in our appraisals which are set out below:
- Professional fees 10% of total construction costs
 - Contingency 5% of total construction costs
 - Sales Fees 1% of total revenue
 - Legal Fees 0.5% of total revenue
 - Marketing 2% of total revenue
 - Zero Carbon 1% of total Revenue*¹
 - Finance costs 6.57% of total costs including land

*1 Policy H4 d. of the Draft Local Plan requires *All major new-build residential development should be designed to achieve zero carbon homes.* The cost estimate is based on industry research and specific case studies.

- 5.4 We have included CIL contributions in accordance with the current adopted charging schedule. We have assumed 100% of the proposed development area, less the affordable element, will be subject to the charge at a rate of £120 per m² subject to indexation. In effect we have assumed there is no existing development floor area to offset the impact of this charge. The chargeable amount has been index linked using the Royal Institution of Chartered Surveyors' All-In Tender Price Index figures for the 1 Q 2018 resulting in a revised amount of £147 per m².

Developer Profit

5.5 Developer profit is a frequently contested issue in terms of viability in a planning context. We are currently typically seeing developer profit levels span 17%-20% of gross development value with profit margins on affordable housing typically around 6% of total affordable revenue and commercial risk set at a midpoint between these two rates. Profit margins are development specific and reflect the risk involved in delivery and sale as such there should in our view be no standard default assumption when looking on a site specific basis.

5.6 Draft PPG provides the following guidance in respect of plan making and developer profit:

How should a return to developers be defined for the purpose of viability assessment?

For the purpose of plan making an assumption of 20% of Gross Development Value (GDV) may be considered a suitable return to developers in order to establish viability of the plan policies. A lower figure of 6% of GDV may be more appropriate in consideration of delivery of affordable housing in circumstances where this guarantees an end sale at a known value and reduces the risk. Alternative figures may be appropriate for different development types e.g. build to rent. Plan makers may choose to apply alternative figures where there is evidence to support this according to the type, scale and risk profile of planned development.

5.7 In order to comply with this guidance we have adopted the rates as suggested, however in terms of assessing individual applications it would be expected that a scheme specific assessment of risk is the more appropriate method for determining suitable profit margins.

5.8 Build to rent products are typically pre-sold to a fund or investor as such carry much lower sales risk and we see yields of circa 14.5%. There are currently no planning distinctions between market sale and PRS developments in terms of use class, therefore we have assumed market sale as the basis for our appraisals. In general PRS developments are assumed to be less viable than market sale and we would expect that in respect of individual applications should this assumption be proven then there would

be appropriate review mechanisms to capture any subsequent reversion to a market sale product.

- 5.9 It should be noted that the intention of our modelling reflects the National Planning Policy requirement that the plan targets are robust and not set at the margins of viability. In interpreting this requirement we have therefore set our values and costs at relatively unambitious levels.

6 Appraisals Results

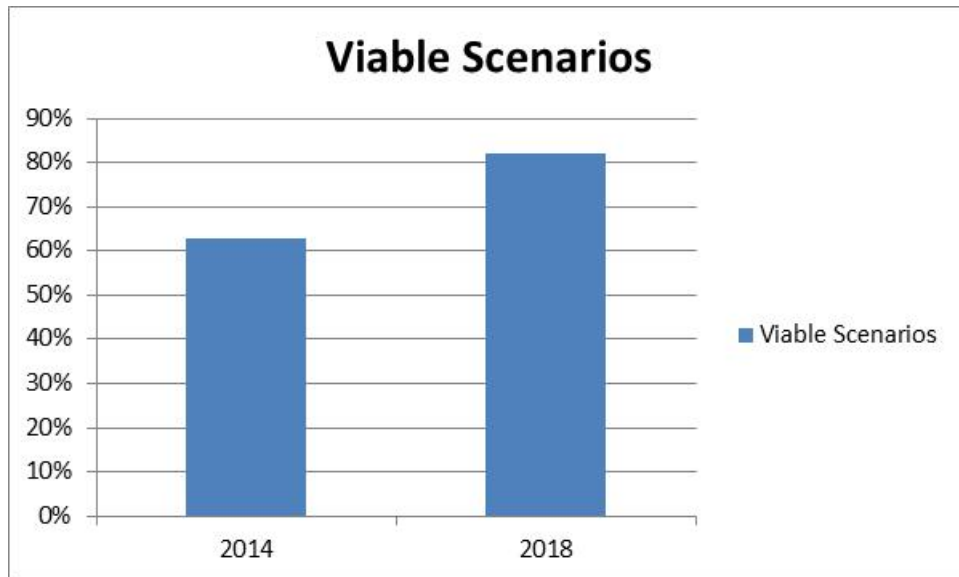
- 6.1 The approach to establishing viability is based on identifying appraisals which, based on current costs and values, demonstrate a positive residual value. A range of scenarios as discussed in section 3 above have been run reflecting differing assumptions in respect of affordable housing delivery.
- 6.2 The results are shown in three sections these being the scenarios utilised in 2013/14 updated to reflect current day appraisals assumptions. Additional scenarios reflect our analysis of the AMR for 2016/17. Finally, scenarios reflecting the major sites allocations identified by the emerging Local Plan are provided.
- 6.3 For simplicity of interpretation the residual values generated by non-viable development scenarios are highlighted in red. Also, to facilitate comparison, the residual values from the last Local Plan review are included. The appraisal inputs for these results have not been updated therefore it is possible to see whether overall development viability has improved from the last review of affordable housing policy based on movements in costs and values over the intervening period. It should be noted that land value assumptions have changed between the two sets of appraisals.

Table 8. Appraisal Results 2014 Development Scenarios

			Previous CIL	Update CIL
			£120	£147
			Base Value	(indexed)
small	100% Private	Scenario 1	£42,515	£559,733
	30% affordable 50/20/30	Scenario 2	-£298,525	£30,759
	30% aff 70AR/30SO	Scenario 3	-£450,525	-£339,590
	30% aff 50AR/50SO	Scenario 4	-£40,359	£273,716
	20%aff 50/20/30	Scenario 5	£15,641	£409,716
	20% aff 70AR/30SO	Scenario 6	£15,641	£409,716
	20% aff 50AR/50SO	Scenario 7	£15,641	£409,716
	10%aff 50/20/30	Scenario 8	£124,681	£570,690
	10% aff 70AR/30SO	Scenario 9	-£32,359	£409,716
	10% aff 50AR/50SO	Scenario 10	£132,681	£634,690
0.27	100% Private	Scenario 11	£366,752	£55,387
	50% affordable 50/20/30	Scenario 12	-£345,248	-£271,297
	50% aff 70AR/30SO	Scenario 13	-£265,248	-£529,381
	50% aff 50AR/50SO	Scenario 14	-£119,263	-£61,812
	30% affordable 50/20/30	Scenario 15	£38,752	£326,619
	30% aff 70AR/30SO	Scenario 16	£70,752	£334,619
	30% aff 50AR/50SO	Scenario 17	-£1,248	£254,619
	20%aff 50/20/30	Scenario 18	£174,752	£566,619
	20% aff 70AR/30SO	Scenario 19	£206,752	£574,619
	20% aff 50AR/50SO	Scenario 20	£214,752	£582,619
	10%aff 50/20/30	Scenario 21	£294,752	£814,619
	10% aff 70AR/30SO	Scenario 22		
	10% aff 50AR/50SO	Scenario 23		
0.6	100% Private	Scenario 24	£759,859	£2,591,943
	50% affordable 50/20/30	Scenario 25	-£1,506,541	-£1,373,251
	50% aff 70AR/30SO	Scenario 26	-£1,333,878	-£1,161,130
	50% aff 50AR/50SO	Scenario 27	-£1,845,632	-£796,145
	30% affordable 50/20/30	Scenario 28	-£536,141	£391,943
	30% aff 70AR/30SO	Scenario 29	-£352,141	£463,943
	30% aff 50AR/50SO	Scenario 30	-£798,494	£645,495
	20%aff 50/20/30	Scenario 31	£167,859	£1,247,943
	20% aff 70AR/30SO	Scenario 32	£255,859	£1,263,943
	20% aff 50AR/50SO	Scenario 33	-£80,141	£1,447,943
	10%aff 50/20/30	Scenario 34	£165,052	£1,650,854
	10% aff 70AR/30SO	Scenario 35	£213,052	£1,658,854
	10% aff 50AR/50SO	Scenario 36	£237,052	£1,690,854
1.37	100% Private	Scenario 37	£2,653,302	£6,740,726
	50% affordable 50/20/30	Scenario 38	-£3,874,698	-£1,419,274
	50% aff 70AR/30SO	Scenario 39	-£4,643,058	-£2,360,515
	50% aff 50AR/50SO	Scenario 40	-£5,931,058	-£1,816,515
	30% affordable 50/20/30	Scenario 41	-£1,731,058	£1,007,485
	30% aff 70AR/30SO	Scenario 42	-£1,379,058	£1,119,485
	30% aff 50AR/50SO	Scenario 43	-£2,099,058	£1,495,485
	20%aff 50/20/30	Scenario 44	£588,034	£3,791,834
	20% aff 70AR/30SO	Scenario 45	£860,034	£3,887,834
	20% aff 50AR/50SO	Scenario 46	£133,302	£3,924,726
	10%aff 50/20/30	Scenario 47	£1,773,302	£5,228,726
	10% aff 70AR/30SO	Scenario 48	£1,909,302	£5,252,726
	10% aff 50AR/50SO	Scenario 49	£1,765,302	£5,428,726
2.6	100% Private	Scenario 50	£6,944,331	£13,229,655
	50% affordable 50/20/30	Scenario 51		
	50% aff 70AR/30SO	Scenario 52		
	50% aff 50AR/50SO	Scenario 53		
	30% affordable 50/20/30	Scenario 54	£1,779,017	£7,821,863
	30% aff 70AR/30SO	Scenario 55	£2,307,017	£8,269,863
	30% aff 50AR/50SO	Scenario 56	£1,283,017	£8,397,863
	20%aff 50/20/30	Scenario 57	£3,954,010	£9,958,785
	20% aff 70AR/30SO	Scenario 58	£4,346,010	£10,294,785
	20% aff 50AR/50SO	Scenario 59	£3,674,950	£10,287,733
	10%aff 50/20/30	Scenario 60	£5,504,617	£11,384,669
	10% aff 70AR/30SO	Scenario 61	£5,712,617	£11,576,669
	10% aff 50AR/50SO	Scenario 62	£5,198,736	£11,430,772

6.4 It can be seen that the number of viable development scenarios has increased from 63% to 82%.

Chart 9: Comparison of Viable Scenarios



6.5 Overall net development surplus has also risen by 424%. This is largely a result of increasing unit values relative to overall costs.

6.6 The scenarios modelled include testing at 50% affordable housing provision which is well above the current 30% target. When all these scenarios are excluded from the analysis only one scenario is shown to be non-viable at the current 30% affordable housing target.

6.7 The net position shows that more development scenarios are now capable of delivering the policy target of 30% with only a few exceptions to this general picture.

6.8 The following table shows the results for AMR derived scenarios:

Table 9: Appraisal Results AMR Derived Scenarios

Scenarios Based on AMR			Residual Value
0.58	100% Private	Scenario A1	£193,550
	30% aff 50SR/50SO	Scenario A2	
	30% affordable 33/33/33	Scenario A3	
	30% aff 50AR/50SO	Scenario A4	
	20% aff 50AR/50SO	Scenario A5	
	10% aff 50AR/50SO	Scenario A6	
0.125	100% Private	Scenario B1	£210,406
	30% aff 50SR/50SO	Scenario B2	-£29,594
	30% affordable 33/33/33	Scenario B3	-£29,594
	30% aff 50AR/50SO	Scenario B4	£58,406
	20% aff 50AR/50SO	Scenario B5	£122,406
	10% aff 50AR/50SO	Scenario B6	£122,406
3.854	100% Private	Scenario C1	£5,794,067
	30% aff 50SR/50SO	Scenario C2	£522,067
	30% affordable 33/33/33	Scenario C3	£378,067
	30% aff 50AR/50SO	Scenario C4	£714,067
	20% aff 50AR/50SO	Scenario C5	£2,426,067
	10% aff 50AR/50SO	Scenario C6	£4,221,578
10.92	100% Private	Scenario D1	£24,930,517
	30% aff 50SR/50SO	Scenario D2	£2,282,517
	30% affordable 33/33/33	Scenario D3	£1,346,517
	30% aff 50AR/50SO	Scenario D4	£3,170,517
	20% aff 50AR/50SO	Scenario D5	£10,266,517
	10% aff 50AR/50SO	Scenario D6	£17,706,858

- 6.9 The small single unit development modelled under Scenario A clearly cannot deliver on site affordable being a single unit development, however at our testing level land value there is clearly scope for an in lieu payment as well as enhanced /profit land payment.
- 6.10 All the other scenarios are seen to be viable at the current and proposed policy target depending on the tenure mix proposed.
- 6.11 The following table shows the results of scenarios reflecting the additional sites identified in the emerging Local Plan:

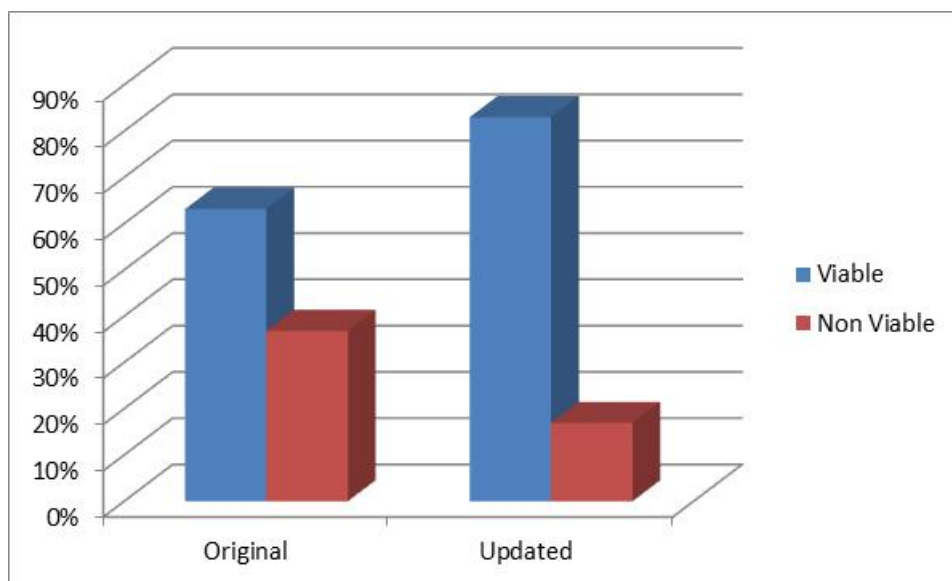
Table 10: Appraisal Results -Draft Local Plan Allocations Derived Scenarios

Scenarios based on New Allocations			Residual Value
0.756	100% Private	Scenario F1	£3,505,102
	30% aff 50SR/50SO	Scenario F2	£209,102
	30% affordable 33/33/33	Scenario F3	-£6,898
	30% aff 50AR/50SO	Scenario F4	£345,102
	20% aff 50AR/50SO	Scenario F5	£1,337,102
	10% aff 50AR/50SO	Scenario F6	£2,235,064
3.31	100% Private	Scenario G1	£13,236,865
	30% aff 50SR/50SO	Scenario G2	£972,865
	30% affordable 33/33/33	Scenario G3	£292,865
	30% aff 50AR/50SO	Scenario G4	£1,460,865
	20% aff 50AR/50SO	Scenario G5	£5,624,125
	10% aff 50AR/50SO	Scenario G6	£9,384,125
2.77	100% Private	Scenario H1	£8,656,623
	30% aff 50SR/50SO	Scenario H2	£312,623
	30% affordable 33/33/33	Scenario H3	-£215,377
	30% aff 50AR/50SO	Scenario H4	£640,623
	20% aff 50AR/50SO	Scenario H5	£3,298,113
	10% aff 50AR/50SO	Scenario H6	£6,050,113
1.43	100% Private	Scenario I1	£2,000,626
	30% aff 50SR/50SO	Scenario I2	£104,626
	30% affordable 33/33/33	Scenario I3	-£79,374
	30% aff 50AR/50SO	Scenario I4	£176,626
	20% aff 50AR/50SO	Scenario I5	£824,626
	10% aff 50AR/50SO	Scenario I6	£1,400,626
3.75	100% Private	Scenario J1	£4,887,387
	30% aff 50SR/50SO	Scenario J2	£423,387
	30% affordable 33/33/33	Scenario J3	£55,387
	30% aff 50AR/50SO	Scenario J4	£591,387
	20% aff 50AR/50SO	Scenario J5	£2,207,387
	10% aff 50AR/50SO	Scenario J6	£3,439,387

6.12 It can be seen from the above that three tenure variants are shown as non - viable with all other scenarios showing a positive residual value. These reflect different levels of rented tenure at affordable and social rent levels. This suggests in practice at site level scheme viability could influence the tenure and mix of affordable housing provision rather than likely quantum other than where sites have high EUV's or exceptional development costs.

6.13 In terms of the combined results there is an overall improvement in the number of viable scenarios from 63% to 83% in 2014 to current day as illustrated by the following Chart:

Chart 10: Original and Updated Appraisal Results



Sensitivity Testing Land Value

- 6.14 We have conducted sensitivity analysis in respect of plot values based on the results above. Where scenarios show a positive residual value we have assumed any surplus could be applied to improving the quantum of socially rented properties or meeting additional costs such as enhanced land costs or developer profit margins.
- 6.15 To place the surplus in a measurable quantum we have applied the surplus to increase the plot value from the base plot value of £60,000 to show an overall average of £81,979. This breaks down to the following plot value averages by scenario grouping:

Table 11: Adjusted Plot Values

	Adjusted Plot Value	Percentage Increase
Original Scenarios	£91,461	52%
AMR Derived Scenarios	£84,709	41%
Local Plan Allocations	£81,879	36%

- 6.16 This analysis reflects all viable scenarios including those modelling a level of affordable housing delivery below the policy target. We have then considered just those which focus on 30% affordable housing delivery on a

number of different tenure mixes. The number of scenarios reduces to 37 on this basis.

- 6.17 Looking at the available surplus residual values for just those scenarios delivering 30% affordable housing we calculate the following potential adjusted plot values:

Table 12: Adjusted Plot Values 30% Delivery Scenarios

	Adjusted Plot Value	Percentage Increase
Original Scenarios	£79,663	33%
AMR Derived Scenarios	£64,224	7%
Local Plan Allocations	£73,701	23%

- 6.18 It can be seen that even at policy target levels in most instances schemes could still viably achieve enhanced land values, equally this surplus could be applied to delivering higher levels of social rented tenure, or developer profit.

Further Sensitivity Testing

- 6.19 We have continued our focus on the 30% affordable housing scenarios and looked at how viability might change in relation to net increases and decreases in sales values. We could have widened the sensitivity analysis to reflect movements in costs however it is the relative movement between costs and values which is of significance, therefore movement in sales values alone achieves the same effect as static values and moving costs.
- 6.20 The purpose of sensitivity analysis being to see how robust our conclusions are through future potential movements of key appraisal inputs. We have again separated our results into the three groups of development scenarios.

Table 13: Original Development Scenarios - Sensitivity Testing

Original Scenarios		-10%	-5%	0%	5%	10%
30% affordable 50/20/30	Scenario 2	-£251,241	-£110,241	£30,759	£171,759	£312,759
30% aff 70AR/30SO	Scenario 3	-£482,241	-£357,741	-£233,241	-£108,741	£15,759
30% aff 50AR/50SO	Scenario 4	-£66,284	£103,716	£273,716	£443,716	£613,716
30% affordable 50/20/30	Scenario 15	-£283,381	£21,619	£326,619	£631,619	£936,619
30% aff 70AR/30SO	Scenario 16	-£276,381	£29,119	£334,619	£640,119	£945,619
30% aff 50AR/50SO	Scenario 17	-£346,381	-£45,881	£254,619	£555,119	£855,619
30% affordable 50/20/30	Scenario 28	-£1,316,057	-£462,057	£391,943	£1,245,943	£2,099,943
30% aff 70AR/30SO	Scenario 29	-£1,253,057	-£394,557	£463,943	£1,322,443	£2,180,943
30% aff 50AR/50SO	Scenario 30	-£1,094,240	-£224,740	£644,760	£1,514,260	£2,383,760
30% affordable 50/20/30	Scenario 41	-£2,948,515	-£970,515	£1,007,485	£2,985,485	£4,963,485
30% aff 70AR/30SO	Scenario 42	-£2,850,515	-£865,515	£1,119,485	£3,104,485	£5,089,485
30% aff 50AR/50SO	Scenario 43	-£2,521,515	-£513,015	£1,495,485	£3,503,985	£5,512,485
30% affordable 50/20/30	Scenario 54	£2,572,863	£5,197,363	£7,821,863	£10,446,363	£13,070,863
30% aff 70AR/30SO	Scenario 55	£2,964,863	£5,617,363	£8,269,863	£10,922,363	£13,574,863
30% aff 50AR/50SO	Scenario 56	£3,076,863	£5,737,363	£8,397,863	£11,058,363	£13,718,863

6.21 It can be seen that adopting even 5% reduced sales values 40% of development scenarios remain viable delivering the full policy target. This falls to 20% with a reduction of 10%.

Table 14: AMR Derived Scenarios - Sensitivity Testing

Scenarios Based on AMR		-10%	-5%	0%	5%	10%
30% aff 50SR/50SO	Scenario B2	-£209,594	-£119,594	-£29,594	£60,406	£150,406
30% affordable 33/33/33	Scenario B3	-£209,594	-£119,594	-£29,594	£60,406	£150,406
30% aff 50AR/50SO	Scenario B4	-£132,594	-£37,094	£58,406	£153,906	£249,406
30% aff 50SR/50SO	Scenario C2	-£3,894,933	-£1,686,433	£522,067	£2,730,567	£4,939,067
30% affordable 33/33/33	Scenario C3	-£4,020,933	-£1,821,433	£378,067	£2,577,567	£4,777,067
30% aff 50AR/50SO	Scenario C4	-£3,726,933	-£1,506,433	£714,067	£2,934,567	£5,155,067
30% aff 50SR/50SO	Scenario D2	-£16,728,483	-£7,222,983	£2,282,517	£11,788,017	£21,293,517
30% affordable 33/33/33	Scenario D3	-£17,547,483	-£8,100,483	£1,346,517	£10,793,517	£20,240,517
30% aff 50AR/50SO	Scenario D4	-£15,951,483	-£6,390,483	£3,170,517	£12,731,517	£22,292,517

6.22 It can be seen that scenarios based on the AMR are more marginal with none of the scheme scenarios being viable with net reductions in unit values, but at base values 78% are able to meet 30% affordable housing delivery.

Table 15: Draft Local Plan Derived Scenarios - Sensitivity Testing

		-10%	-5%	0%	5%	10%
New Local Plan Scenarios						
30% aff 50SR/50SO	Scenario F2	-£2,610,898	-£1,200,898	£209,102	£1,619,102	£3,029,102
30% affordable 33/33/33	Scenario F3	-£2,799,898	-£1,403,398	-£6,898	£1,389,602	£2,786,102
30% aff 50AR/50SO	Scenario F4	-£2,491,898	-£1,073,398	£345,102	£1,763,602	£3,182,102
30% aff 50SR/50SO	Scenario G2	-£9,949,135	-£4,518,135	£912,865	£6,343,865	£11,774,865
30% affordable 33/33/33	Scenario G3	-£10,544,135	-£5,155,635	£232,865	£5,621,365	£11,009,865
30% aff 50AR/50SO	Scenario G4	-£9,522,135	-£4,060,635	£1,400,865	£6,862,365	£12,323,865
30% aff 50SR/50SO	Scenario H2	-£6,340,377	-£3,013,877	£312,623	£3,639,123	£6,965,623
30% affordable 33/33/33	Scenario H3	-£6,802,377	-£3,508,877	-£215,377	£3,078,123	£6,371,623
30% aff 50AR/50SO	Scenario H4	-£6,053,377	-£2,706,377	£640,623	£3,987,623	£7,334,623
30% aff 50SR/50SO	Scenario I2	-£1,436,374	-£665,874	£104,626	£875,126	£1,645,626
30% affordable 33/33/33	Scenario I3	-£1,597,374	-£838,374	-£79,374	£679,626	£1,438,626
30% aff 50AR/50SO	Scenario I4	-£1,373,374	-£598,374	£176,626	£951,626	£1,726,626
30% aff 50SR/50SO	Scenario J2	-£3,337,613	-£1,457,113	£423,387	£2,303,887	£4,184,387
30% affordable 33/33/33	Scenario J3	-£3,659,613	-£1,802,113	£55,387	£1,912,887	£3,770,387
30% aff 50AR/50SO	Scenario J4	-£3,190,613	-£1,299,613	£591,387	£2,482,387	£4,373,387

- 6.23 Again the picture for new sites identified by the emerging Local Plan shows negative viability with a 5% fall in sales values. However it should be noted from Section 4 that our base values are not set at the top end of evidenced unit values and therefore already include a margin when assessing baseline viability.
- 6.24 It should also be noted that similar increases in net sales values show overall net surplus results in over 90% of development scenarios

7 Overall Conclusions

- 7.1 We consider the results analysed above to demonstrate that that the draft affordable housing targets are now more viable than when we previously considered this issue in 2014.
- 7.2 It is apparent from our appraisals assumptions that we have not sought to model viability on anything other than robust assumptions. Our sensitivity analysis shows scope in the majority of instances to either increase social rented tenure, land price or developer profit without impact target delivery. Equally there is scope to meet the policy target on our unambitious appraisal inputs.
- 7.3 A further consideration is that Land value should be considered a product of EUV/AUV and plan policy in a plan led system, not treated simply as a fixed cost. Therefore there remains scope for land value adjustment to assist viability should viability prove to be a consideration in respect of individual site viability.
- 7.4 Our base line viability assessments show 85% of development scenarios are able to meet the policy target level of delivery allowing that there are tenure variations within the overall 30% delivery target.
- 7.5 All development typologies show viable development scenarios at 30% affordable housing delivery levels reflecting one or more tenure variation. This suggests that at a minimum 50/50 tenure split the draft target set out in Policy H3 should be achievable for most developments other than where sites have exceptionally higher EUV or AUV values.

Appendix A - Draft National Planning Policy Guidance

How should land value be defined for the purpose of viability assessment?

To define land value for any viability assessment, a benchmark land value should be calculated on the basis of the existing use value (EUV) of the land, plus a premium for the landowner. The premium for the landowner should reflect the minimum price at which it is considered a rational landowner would be willing to sell their land. This approach is often called 'Existing Use Value Plus' (EUV+).

In order to establish benchmark land value, plan makers, landowners, developers, infrastructure and affordable housing providers should engage with and provide robust and open evidence to inform this process.

In all cases, benchmark land value should:

- fully reflect the total cost of all relevant policy requirements including planning obligations and, where applicable, any Community Infrastructure Levy charge;
- fully reflect the total cost of abnormal costs; site-specific infrastructure costs; and professional site fees;
- allow for a premium to landowners (including equity resulting from those building their own homes); and
- be informed by comparable market evidence of current uses, costs and values wherever possible. Where recent market transactions are used to inform assessment of benchmark land value there should be evidence that these transactions were based on policy compliant development. This is so that previous prices based on non-policy compliant developments are not used to inflate values over time.

What is meant by existing use value in viability assessment?

Existing use value (EUV) is the first component of calculating a benchmark land value. EUV is the value of the land in its existing use together with the right to implement any development for which there are extant planning consents, including realistic deemed consents, but without regard to other possible uses that require planning consent, technical consent or unrealistic permitted development. Existing use value is not the price paid and should disregard hope value. Existing use values will vary depending on the type of site and development types.

How should Existing Use Value be established for viability assessment?

Existing use value (EUV) for the purpose of assessing the viability of plans should be determined by plan makers in consultation with developers and landowners. When undertaking any viability assessment EUV can be established by assessing the value of the specific site or type of site using published sources of information such as agricultural or industrial land values, or if appropriate capitalised rental levels at an appropriate yield. Sources of data can include (but are not limited to): land registry records of transactions; real estate licensed software packages; real estate market reports; real estate research; estate agent websites; property auction results; valuation office agency; public sector estate/property teams' locally held evidence.

Determining the existing use value of the land should be based on the assumption that no future planning consents will be obtained, but including the value of any consented use. 10

How should the premium to the landowner be defined for viability assessment?

An appropriate premium to the landowner above existing use value (EUV) should be determined by plan makers in consultation with developers and landowners for the purpose of assessing the viability of plans.

When undertaking any viability assessment, an appropriate minimum premium to the landowner can be established by looking at data from comparable sites of the same site type that have recently been granted planning consent in accordance with relevant policies. The EUV of those comparable sites should then be established.

The price paid for those comparable sites should then be established, having regard to outliers in market transactions, the quality of land, expectations of local landowners and different site scales. This evidence of the price paid on top of existing use value should then be used to inform a judgement on an appropriate minimum premium to the landowner.

Proposed development that accords with all the relevant policies in an up-to-date plan should be assumed to be viable, without need for adjustment to benchmark land values established in the plan making viability assessment. Where a viability assessment does accompany a planning application the price paid for land is not relevant justification for failing to accord with relevant policies in the plan.

Appendix B - Construction Costs Estimate

£/m2 study

Description: Rate per m2 gross internal floor area for the building Cost including prelims.

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At 4Q2017 prices (based on a Tender Price Index of 302) and UK mean location (Location index 100).

Maximum age of results: 5 years

Building function (Maximum age of projects)	£/m ² gross internal floor area						Sample
	Mean	Lowest	Lower quartiles	Median	Upper quartiles	Highest	
New build							
320. Offices							
Generally (5)	1,923	1,280	1,993	2,038	2,081	2,177	10
Air-conditioned							
Generally (5)	1,836	1,280	1,569	2,045	2,081	2,144	6
1-2 storey (5)	1,752	1,415	-	-	-	2,090	2
3-5 storey (5)	1,827	1,280	-	2,057	-	2,144	3
Not air-conditioned							
Generally (5)	2,054	1,987	-	2,026	-	2,177	4
1-2 storey (5)	2,069	1,987	-	2,043	-	2,177	3
6+ storey (5)	2,010	-	-	-	-	-	1
341.1 Retail warehouses							
Generally (5)	961	667	752	790	954	1,771	6
Up to 1000m2 (5)	667	-	-	-	-	-	1
1000 to 7000m2 GFA (5)	1,020	742	779	800	1,005	1,771	5
345. Shops							
Generally (5)	1,506	807	-	1,582	-	2,052	4
1-2 storey (5)	1,506	807	-	1,582	-	2,052	4
810.11 Estate housing detached (5)	1,520	880	1,246	1,487	1,930	2,142	9
810.12 Estate housing semi detached							
Generally (5)	1,145	724	1,000	1,126	1,243	1,969	149
Single storey (5)	1,306	909	1,164	1,325	1,424	1,882	27
2-storey (5)	1,109	724	993	1,092	1,217	1,969	117
3-storey (5)	1,120	839	881	1,046	1,143	1,693	5
810.13 Estate housing terraced							
Generally (5)	1,178	795	1,007	1,110	1,237	3,680	112
Single storey (5)	1,284	886	1,034	1,293	1,573	1,618	6
2-storey (5)	1,145	809	1,002	1,108	1,231	2,245	94
3-storey (5)	1,171	795	1,030	1,186	1,290	1,640	11
4-storey or above (5)	3,680	-	-	-	-	-	1
816. Flats (apartments)							

Generally (5)	1,394	762	1,158	1,316	1,592	4,612	270
1-2 storey (5)	1,330	819	1,122	1,253	1,476	2,167	63
3-5 storey (5)	1,354	762	1,158	1,298	1,548	2,489	182
6+ storey (5)	1,846	1,142	1,522	1,709	1,804	4,612	25
852. Hotels (5)	1,894	1,551	-	1,941	-	2,143	4

New build costs including facilitating works, external works & contingency													
1	2	3	4	5	6	7	8	9	10	11	12		
				All mean costs max 5yrs except shell cost which are default									
				LF100	LF110	Facilitating	Sub Total	Ext wks	Sub Total	Contingency	Total		
							6 + 7	10%	8 + 9	5%	10 + 11		
Ref	Functional unit	Detail	BCIS category	£/m ²	£/m ²	£/m ²	£/m ²	£/m ²	£/m ²	£/m ²	£/m ²		
1	Flats	Typically 1B, 2B & 3B - 50/70/90 m ²	Generally	1,394	1,533	60	1,593	159	1,753	88	1,840 Flats		
2	Detached housing	3B, 4B - 110/130 m ²		1,520	1,672	60	1,732	173	1,905	95	2,000 Detached housing		
3	Semi-Detached housing	2B, 3B & 4B - 80/90/100 m ²	Generally	1,145	1,260	60	1,320	132	1,451	73	1,524 Semi-Detached housing		
4	Terraced housing		Generally	1,178	1,296	60	1,356	136	1,491	75	1,566 Terraced housing		