

T R I B A L

London Borough of Haringey

Affordable Housing Viability Study

October 2010

Contact Details**Jackie Strube**

Consultant

mobile: 07500 835134

Jackie.Strube@tribalgroup.com**Contact Address****87-91 Newman Street, London, W1T 3EY****T: +44 (0) 207 323 7100, F: +44 (0) 207 323 7210**

This report is for the benefit of London Borough of Haringey only and has been released to London Borough of Haringey on the basis that it shall not be copied, referred to or disclosed, in whole or in part, without our prior written consent. We have not verified the reliability or accuracy of any information obtained from third parties in the course of our work. Any party that obtains access to this Report or a copy (under Freedom of Information Act 2000 or otherwise) and chooses to rely on this Report (or any part of it) does so at their own risk. To the fullest extent permitted by law, Tribal do not assume any responsibility and will not accept any responsibility in respect of this Report to any party other than the original addressee. Clients should note that Tribal are not tax advisers, financial advisers or lawyers and do not assume any responsibility or accept any liability for any tax, financial or legal advice that may be given by or on behalf of Tribal. If such advice is required, advice from a relevant professional adviser should be sought.

Tribal Consulting Limited. Registered office: 87-91 Newman Street, London W1T 3EY. Company registered in England and Wales No. 4268468.

Contents

1.	Introduction	1
2.	London Borough of Haringey – context.....	3
3.	Economic viability – approach.....	9
4.	Key Findings	17
5.	Policy conclusions and recommendations	21
	Appendix A. Modelling outputs	28
	Appendix B. Assumptions.....	36
Figures and Tables		
Figure 1:	Study area – London Borough of Haringey	3
Table: 1	Haringey – example sales values £’000s	6
Figure 2:	Haringey houses prices and sales volume; August 2007 – January 2010	6
Figure 3:	London land values – quarterly price changes (%)	8
Figure 4:	Key stages.....	9
Figure 5:	Haringey land supply – site distribution.....	11
Table 2:	Haringey – site archetypes.....	13
Table 3:	Benchmark land values per hectare.....	14
Figure 6:	Percentage reduction on RLV over base sustainability options.....	20
Figure 7:	Base case modelling outputs - small sites.....	28
Figure 8:	Base case modelling outputs - small sites	29
Figure 9:	Base case modelling outputs - medium sites, medium density	29
Figure 10:	Base case modelling outputs - Medium sites, high density.....	30
Figure 11:	Base case modelling outputs – Large sites, medium density	30
Figure 12:	Base case modelling outputs –large sites, high density.....	31
Figure 13	Base case – Residual land values.....	32
Figure 14:	Base case - RLVs generated per hectare	33
Figure 15:	Base case - RLV per unit.....	34

Table 4:	Adjustments for development size	36
Table 5:	Inflation assumptions.....	36
Table 6:	Residential mix schedule.....	37
Table 7:	Open market and affordable housing mix assumptions – percentage of each unit type per tenure	37
Figure 16:	Building Costs.....	39
Table 8:	Building costs per square metre.....	40
Table 9:	Adjustments to BCIS building costs (included in the rate above)	40
Figure 17:	Costs of achieving Code for Sustainable Homes	42
Table 10:	S106 infrastructure costs.....	43
Table 11:	Allowance for fees and contingency.....	43
Table 12:	RP costs	43
Table 13:	Marketing costs	44
Table 14:	Profit levels	44
Table 15:	Acquisition costs.....	44
Table 16:	Sales values	45
Table 17:	Affordable rented housing	46
Table 18:	Land costs per hectare	48
Table 19:	District valuer	49
Table 20:	Benchmark land values per hectare.....	49

1. Introduction

1.1. Background

Planning Policy Statement three (PPS3) sets out the national planning policy framework for delivering the Government's housing objectives.

Local Planning Authorities are required by PPS3 (paragraph 29) to set an overall (i.e. plan wide) target for the amount of affordable housing to be provided. PPS3 explains that affordable housing targets and any thresholds proposed should reflect an assessment of the likely economic viability of land for housing, taking into account risks to delivery and draw on informed assessments of the likely levels of finance available for affordable housing, including public subsidy and the level of developer contribution that can reasonably be secured. This includes a consideration of :

- separate targets for social-rented and intermediate affordable housing;
- size and type of affordable housing;
- range of circumstances in which affordable housing is required – including minimum site size threshold, and:
- approach to seeking developer contributions

Regional Spatial Strategies (RSS) are required to set out regional approach to addressing affordable housing needs, including targets for the region and each housing market area.

1.2. The brief

The London Borough of Haringey (LBH) appointed Tribal to provide a robust assessment of the viability of their proposed affordable housing planning policy and, if appropriate, recommend revised planning policy targets that are viable. The scope of the study is to test viability on types of site that reflect the range of sites to be included in the Council's emerging Local Development Framework (LDF).

The focus of the assignment is to provide evidence to support the affordable housing planning policy ultimately adopted by the Council. The aim of the policy is to achieve the highest level of affordable housing possible whilst not discouraging the development of private market housing.

1.2.1. Outputs

The key outputs from this commission, based on the financial appraisal and testing of a range of policy options and sensitivities, are the identification of viability issues and policy options to support the Council's LDF process in relation to the following:

- Proportion of affordable housing required

- The threshold, if any, above which a proportion of affordable housing will be required
- Affordable housing tenure mix
- Whether public, or other, subsidy is required to support the provision of affordable housing
- Sustainability standards

This report:

- Sets out the local authority context
- Details the approach taken to establish economic viability.
- Provides a description of the findings, and summary of key findings, from the economic viability analysis.
- Makes recommendations on policy options in relation to affordable housing targets
- Contains detailed modelling outputs at Appendix A and detailed modelling assumptions at Appendix B

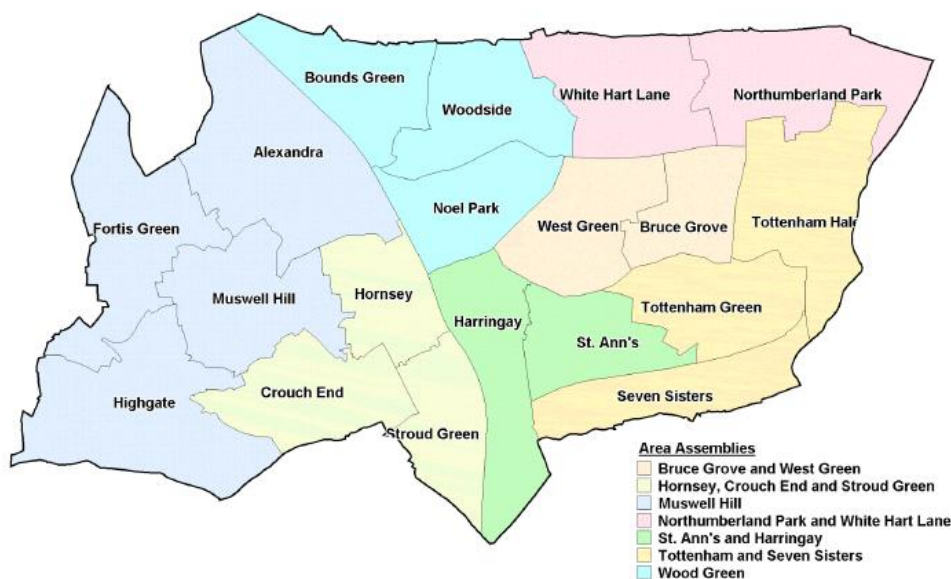
2. London Borough of Haringey – context

2.1. Overview

Haringey is a densely populated outer London Borough of some 226 000 people with this population expected to grow by more than 10.5% by 2031. Its housing market has been strong in recent years and the Borough has seen a period of growth in housing numbers and significant house price increases. Planned development exceeds London Plan targets of 680 new homes per annum to 2016/17.

Figure 1: Study area – London Borough of Haringey

Haringey Wards & Area Assemblies.



This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. LBN 100019199 (2/08). Produced by the Policy & Performance Team, March 13 2009.

Source: Haringey – draft LDF

The Council's Core Strategy went through the preferred options public consultation stage in May and June 2009 and is expected to be adopted in early 2011 following consideration by an Inspector in 2010. This report will form part of the evidence base for the Core Strategy.

Strategic policy two in the Council's Core Strategy preferred options document set out a requirement for 50% affordable housing on sites over 10 units, in accordance with the London Plan guidance. Viability modelling has been focussed on whether this target is viable, together with the consideration of a range of options.

2.2. Related policy and research documents

A number of draft and adopted planning policies, plans and studies have an impact on how new development is planned, and how much it costs to provide. As part of this study, the implications of a range of related documents have been considered, in particular:

- The **London Plan** is the London Mayor's spatial development strategy. This sets out the planning principles for London local authorities. The adopted plan was published in February 2008 and a revised draft produced in October 2009. Haringey's policies on affordable housing have been drawn up with reference to the adopted plan policies (see 2.1.2 above).
- The Council's adopted **Housing SPD** October 2008 sets out minimum space standards for all housing and mix requirements for both private market and affordable housing. These standards have been considered, together with the draft London Housing Design Guide standards produced by the GLA in July 2009, to produce an integrated set of figures as set out in the Assumptions Document.
- The Council's **Housing Needs Assessment** report produced in June 2007 indicates an extremely high level of housing need and identified a shortfall in affordable housing of 4865 units p.a.
- The Council commissioned a **Strategic Housing Market Assessment** (SHMA) jointly with neighbouring London Boroughs in 2009, however the results have not yet been published in their final form. It is clear from the preliminary results of the SHMA that there is a very high level of housing need in the Borough and that most of this consists of a requirement for social rented housing. This is consistent with previous assessments of housing need in Haringey – in particular the Housing Needs Survey of 2007. It is clear from this work that housing needs levels in the Borough can justify a target of at least 50% affordable housing on all new residential development. However, the raw data produced by the SHMA needs to be balanced against other considerations relating to viability and the need to promote balanced communities before planning policy is drafted:

In addition to the impact on established site values in the Borough which may result in landowners being unwilling to sell, there is concern that setting targets above 50% may result in a curbing of development activity with developers discouraged from developing housing for sale on sites which are dominated by affordable housing. The Council has therefore decided to retain a 50% target.

House prices are out of reach of those on low incomes in the Borough and intermediate tenure helps those who cannot afford to buy, but who are not eligible for social rented housing. The need to maintain a balance of tenures is also recognised, and this is particularly important in the lower value areas of the Borough where the introduction of intermediate tenures can help break up the mono tenure character of some areas. The target of 70% social rented and 30% intermediate affordable housing tenure is

therefore considered to strike the right balance in providing for a range of needs and promoting balanced communities.

It should be noted that affordable housing production is not entirely dependent on private sector development, with housing associations (now referred to as Registered Providers) having an important role to play in the delivery of sites for 100% affordable housing.

- The draft **Community Infrastructure Plan 2009 and SPG 10c – Educational Needs Generated by New Housing Development** (UDP 2006) set out the Council's overall infrastructure requirements and method of calculating developer contributions for education respectively. It is difficult to generalise on levels of charge as these are calculated on a site specific basis, so a guideline figure per unit for infrastructure payment was agreed with the Council for modelling purposes.
- The draft **Energy Infrastructure Plan**, September 2009, prepared by AECOM considers the viability of achieving various sustainability standards on a range of sites identified for development in the Borough. The policy guidance and views on cost of achieving various options has been taken into account in modelling the impact of these standards on development.

2.3. Local housing market overview

House prices

There is a wide range of values across the Borough, with higher figures achieved to the West of the Borough, and the lowest values found to the East. Data was gathered on actual sales figures from land registry, and information on current house prices from Hometrack, local agents, and stakeholders (developers and RPs). Sample new build developments currently on the market were considered, although these were limited in number.

Four broad value bands were identified;

- Very high value – Highgate area (N6),
- High value – typified by Muswell Hill (N10) and Crouch End (N8)
- Medium Value – typified by Wood Green (N22) and Finsbury Park (N4)
- Low value – to the East of the Borough, typified by Tottenham (N17).

The boundaries between each area could not be tightly drawn as values varied from street to street in some instances. There is also a risk in identifying fixed value areas where it is expected that the picture will evolve during the plan period; for example where major regeneration of an area produced a shift in its market profile.

It was agreed with Council officers that, as there were few new developments planned for the very high value area, residential property values in the remaining three value areas would be modelled. Details of the values applied

are set out the Assumptions Document, and a selection of values for typical unit types are set out in table 1 below.

Table: 1 Haringey – example sales values £’000s

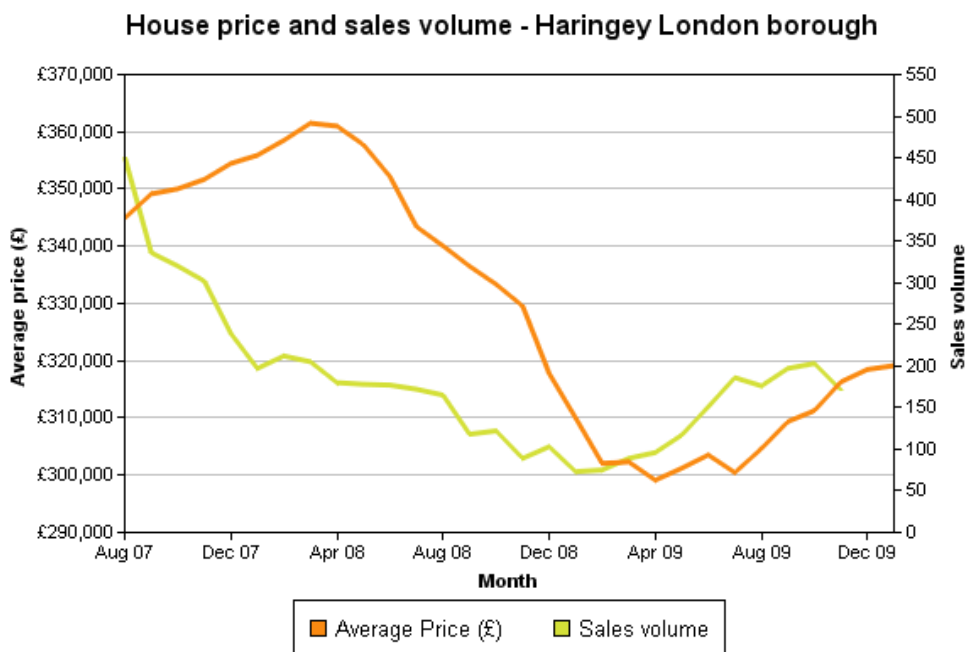
Unit Type	High Value	Medium Value	Low Value
1 bed 2 person flat	250	200	135
2 bed 3 person flat	300	225	160
3 bed 4 person flat	350	280	175
4 bed 5 person flat	375	320	190
2 bed 4 person house	500	320	195
3 bed 5 person house	580	400	245
4 bed 6 person house	620	450	290

Source: Land Registry, Hometrack, local research

Market conditions

The downturn in the housing market through 2008 and 2009 has affected house prices in Haringey dramatically, although towards the end of 2009 there was some improvement. Figure 2 shows the land registry data on house prices and sales volume for the Borough overall.

Figure 2: Haringey houses prices and sales volume; August 2007 – January 2010



Source: Land Registry

There has been much debate on whether current market values should be used as a basis for modelling, or whether more 'normal' market conditions should be represented. Modelling prices at the bottom of the market could adversely affect the viability of target levels of affordable housing, when just a small market improvement might support policy targets. The need to produce a resilient assessment that can apply throughout the plan period is challenging.

The most relevant written guidance available is contained in a recently issued Good Practice Note from the Homes and Communities Agency Investment and Planning Obligations: Responding to the Downturn. The note suggests that a robust affordable housing policy for delivering affordable housing in line with PPS12 deliverability criteria and with PPS3 Paragraph 29 financial viability criteria will:

“Ensure that any viability study carried out in today's market can not only inform the economics of development today, but also for the whole plan period. The Planning Inspectorate have advised LPAs that it would not be reasonable to base a core strategy on a short term view of the housing market, and that a reasoned assumption on what might be a normal market is needed. Any targets would also need to have been tested and justified, but that provision for flexibility will also be needed to deal with abnormal market conditions. LPAS are expected to monitor and review policies and adapt them, should abnormal conditions become the norm

”

House price data indicates an improvement in house prices in Haringey over the last six months. Whether this will be sustained is not clear, however, the figures used in the modelling, being based on house price information compiled in December/ January 2009 reflect this improvement and therefore are not set at the 'abnormal conditions' at the bottom of the market downturn. It was agreed that this was a sound basis for modelling, with further sensitivities to be modelled if required.

It is clear that land values have fallen substantially since 2007, and that the peak values being paid in the run up to the summer of 2007 are no longer relevant. However, commentary from house builders and property market professionals has highlighted the reluctance of land owners to accept greatly reduced values, preferring instead to retain the site until values improve again. This 'downward stickiness' of the price of residential land must be taken into account when considering the price at which landowners will be willing to release sites.

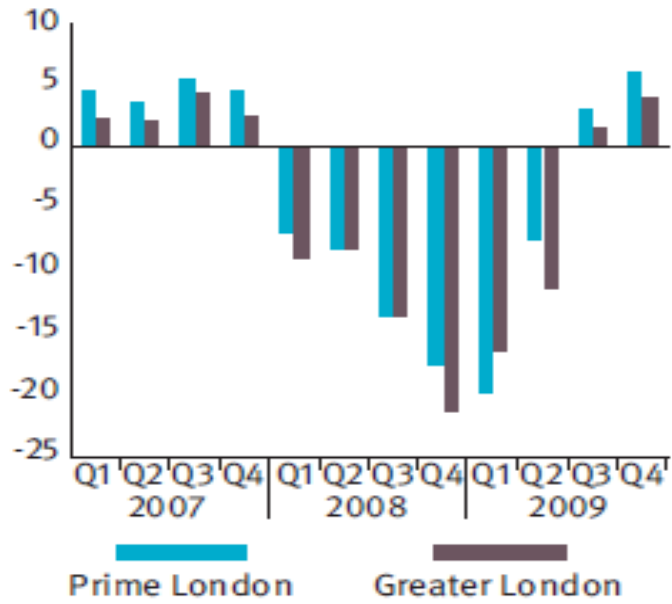
There is recent evidence of small increases in London land values, as illustrated by Knight Frank's graph at Figure 3.

“In line with the sales market, the fortunes of London's development land market have seen a dramatic turnaround over the past 12 months

Knight Frank, Development Review January 2010

”

Figure 3: London land values – quarterly price changes (%)



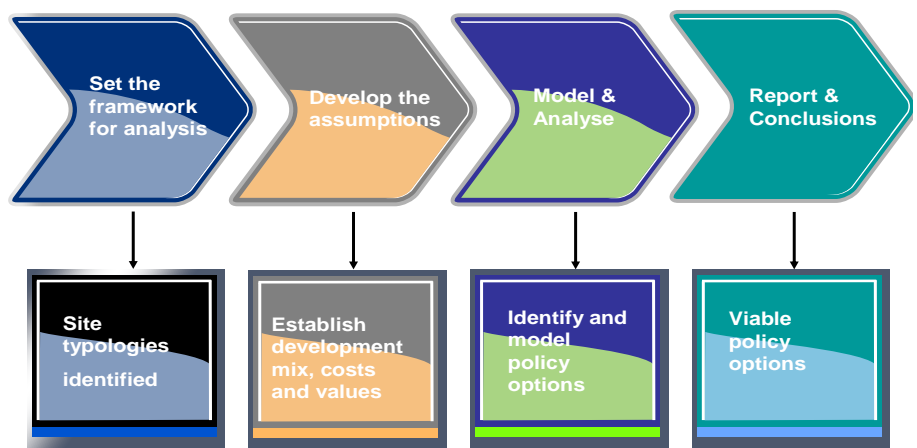
Source: Knight Frank Development Review January 2010

3. Economic viability – approach

3.1. Methodology - overview

The study was carried out in the four key work stages set out in Figure 3 below: The framework for analysis involves the identification of representative site archetypes and the policy options; developing the assumptions involves the identification of features, costs and values to apply to each archetype and policy option; financial viability modelling is used to identify which options are viable; finally allowing policy implications and options to be identified.

Figure 4: Key stages



3.2. Model development

The basic structure and purpose of the model is to calculate a site specific residual land value (RLV) for each archetype with the range of policy options applied. For this, Tribal’s cashflow based development appraisal model was used. The RLV can be expressed as a simple equation:

$$\text{Value of Development} - \text{Cost of Development} - \text{Profit} = \text{Residual Land Value}$$

The RLV calculation starts with the production of a figure for sales income from the completed development – this is made up of sales income from private market housing, together with the expected income that a developer would receive from a Registered Provider (RP) for the affordable housing. From this, the costs of construction, infrastructure and S106 contributions,

fees, interest on borrowing and developer's profit are deducted, leaving a figure which the developer could pay for land. This RLV is then compared against 'benchmark' land values.

Benchmark land values must be selected to reflect the expectations of land owners with regard to value, and are generally based upon existing or alternative use values for the sites in question (EUVs), as well as a perception of the values produced by the residential land market. EUVs may be residential or business/ industrial or other values. The comparison of the RLV dropping out of the model against the market benchmarks is some measure of the likelihood of the landowner releasing the land at this price, and thus of the capacity of the sites to provide a particular level of affordable housing.

A key part of the Study is establishing benchmark site values. In a period where the market has declined from high peak levels, a settled view on land values is difficult to establish, with few recent transactions and a concern that those that have progressed may be as a result of forced sales where a landowner might not otherwise have chosen to sell at the figure agreed.

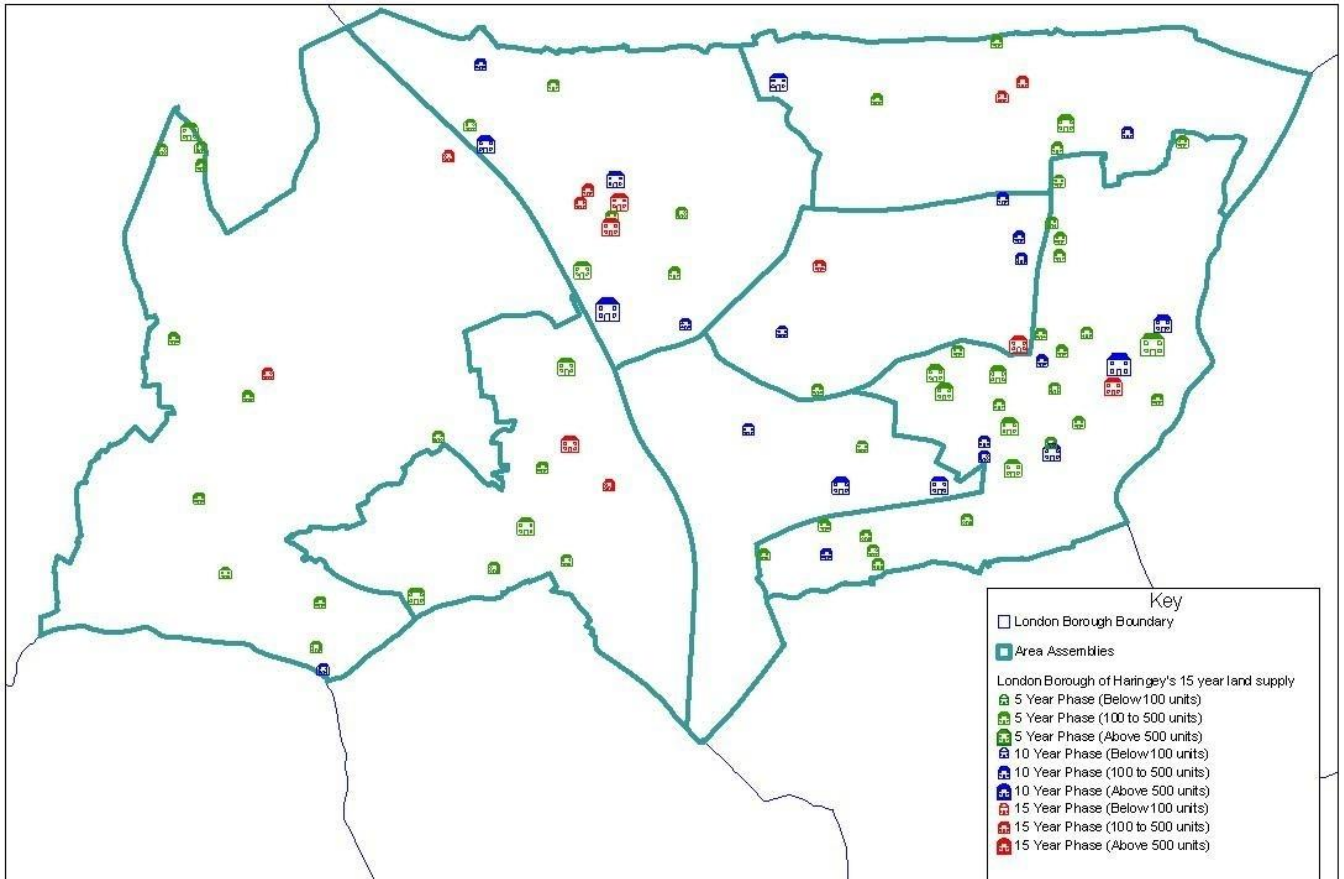
Benchmarks have been drawn up based on a consideration of existing use values, information provided by Council's Estates Department of recent land sales, input from stakeholders, and information on outer London site values provided by the District Valuer, together with observations of the residual land values emerging from modelling. A more detailed examination of the issue and the benchmark levels is contained in the Assumptions Document.

3.3. Identifying site archetypes

To identify the archetypes, consideration was given to the range of sites identified for residential development over the plan period. Figure 4 shows the location and size of sites that make up the 15 year housing trajectory compiled as part of the LDF. This is made up of sites with unimplemented planning permissions, sites identified in the UDP, and those identified through the Strategic Housing Land Availability Assessment (SHLAA). From this it may be seen that there is a wide range of site sizes, and that sites are distributed across the Borough but with few to the far West and North West.

Another key feature of the land supply is the small number of very small sites - there are only three sites which would accommodate fewer than 10 houses. While windfall sites may add to this total, the fact that the current supply is not particularly dependent on the contribution of these very small sites is significant when decisions have to be made about the thresholds to which the policy may apply.

Figure 5: Haringey land supply – site distribution



© Crown copyright. All rights reserved LBH 100019199 (2010)

Haringey's 15 year housing supply

3.3.1. Key characteristics

Details of 14 sample sites were taken from the Housing Trajectory for analysis. These sites were considered to each possess key characteristics representative of the range of housing sites across the Borough. These key development characteristics were identified to inform the set of 18 notional archetype sites.

The analysis broke down the residential site types to which any policy may be applied by the following categories:

- Site size** - the size of a site is an important characteristic, with building costs and construction periods varying according to scale. Small sites cost more to develop per unit, as building cost and fixed site set up costs are greater, so development tends to produce lower residual values. They are also subject to an existing use value 'floor' where at a certain low value, the development value and the time and expense taken to achieve this for very few units, will mean that the site would be retained for its current use. As

the policy threshold of 10 units is to be tested, two small sites (4 and 9 units) have been used, to determine the significance of this factor.

The following simple classification of sites has been used:

- Small sites: sites for 4 and 9 units – variable size (0.06-0.13Ha)
- Medium sites: 0.47 hectare; 31 -92 units
- Large sites: 1.3 hectares; 87 – 254 units

Very large sites that can support over 1000 units such as Haringey Heartlands and Tottenham Hale form an important part of new housing provision during the plan period, however it was not considered appropriate to model these as a site archetype due to the site specific, significant infrastructure works and complex phasing and land purchase arrangements likely to be required in each case. It is envisaged that, for each of these larger sites, there will be viability modelling exercise and agreement reached on a package of planning obligations, including the provision of a proportion of affordable housing.

- **Housing market demand** – house prices determine the value of new development and it is therefore vital that the range of values across Haringey's housing market are modelled. It was agreed that, as there were few new developments planned for the very high value area to the West of the Borough, the remaining three value areas, outlined in Section 2.3 above, would be used:
 - High Market Demand
 - Medium Market Demand
 - Low Market Demand

Details of the range of values are given in Section 2.3 with full details set out in the Assumptions Document.

- **Density** – Density determines the number and type of units that can be provided on a site. Next to demand it is the most important factor in determining land value and RLV per hectare. Haringey, as an outer London Borough supports a range of development densities, although none of them low. It is expected that any new housing developed will mainly consist of flats, with densities set appropriate to the location and context. The Council works to London Plan guidelines on density. The densities derived from an examination of the archetype sites are:
 - Medium Density – 67 dwellings per hectare
 - High Density – 195 dwellings per hectare

The range of site archetypes and characteristics are set out in the table at table 2 below:

Table 2: Haringey – site archetypes

Site characteristics				
Site ref	Size (Hectares)	Density	Units	Market area
1	Small (variable)	4 units	4	A
2	Small (variable)	4 units	4	B
3	Small (variable)	4 units	4	C
4	Small (variable)	9 units	9	A
5	Small (variable)	9 units	9	B
6	Small (variable)	9 units	9	C
7	Medium (0.47)	Medium	31	A
8	Medium (0.47)	Medium	31	B
9	Medium (0.47)	Medium	31	C
10	Medium (0.47)	High	92	A
11	Medium (0.47)	High	92	B
12	Medium (0.47)	High	92	C
13	Large (1.3)	Medium	87	A
14	Large (1.3)	Medium	87	B
15	Large (1.3)	Medium	87	C
16	Large (1.3)	High	254	A
17	Large (1.3)	High	254	B
18	Large (1.3)	High	254	C

3.4. Assumptions

The assumptions that drive the model consist of a number of fixed site ‘values’ for each site typology, and a range of policy option ‘variables’. The fixed assumptions comprise characteristics such as: mix, values, phasing inflation; interest / cost of finance; s106 payments; build cost per square metre by unit type; marketing costs and developer profit. The key assumptions fixed per typology are:

- **Phasing** – the length of development period is based upon site size (i.e. small sites 15 months; medium sized sites units 27 months; and large sites 39 months).
- **Unit mix** –. The mix of types of housing, number of bedrooms, and floor area is based on the Council’s Housing SPD and the expectation that almost all the sites identified for future development would be flatted, with a small proportion of houses only on medium density sites. Mix is varied

according to site density and also takes account of the RP preference for one and two bedroom flats for intermediate housing.

- **Benchmark site values** – due to the difficulty of establishing the pattern of benchmark site values across the Borough, a set of benchmark values has been used which reflect market area and allowable density. Benchmarks need to be set with reference to both existing use values and the residential land market expectation.

To reflect the degree of variation and ‘tolerance’ of specific types of development, a core benchmark has been illustrated, with higher level shown, set at a 20% addition to the core figure, shown as benchmark 2 on the output graphs and a lower level, set at a 20% reduction in benchmark figure, shown as benchmark 3. For small sites, an assumption that these will be built to a medium density has been used. Core benchmarks per hectare are as follows:

Table 3: Benchmark land values per hectare

Value Area/density	Small sites £	Medium sites £	Large sites £
Low/medium	2 800 000	3 000 000	3 000 000
Low/high	n/a	3 500 000	3 500 000
Medium/medium	4 730 000	4 500 000	4 500 000
Medium/high	n/a	6 200 000	6200000
High/medium	5 676 000	5 900 000	5900000
High/high	n/a	1 0900 000	10900000

Source: District valuer, records of land sales, stakeholder input

- **Development tariff / section 106 costs.** For the purposes of modelling the sites a standard cost to cover the package of S106 payments required of £7,000 per dwelling for small sites and £11,000 per dwelling for large sites has been used. This is based on a consideration of planning policies outlined in Section 2.2 and payment levels required to date. The increase in contribution according to site size is due to the fact that larger developments are more likely to require infrastructure improvements to support them and further payments to contribute to the cost of provision by the Council is likely to be required.
- **Building costs** - specialist cost consultant, Kim Sangster, was employed to provide cost advice. Costs are based on the BCIS figures, adjusted for site size and density. A schedule showing how these costs have been built up is included in the assumptions document.
- **Site abnormal costs** – KSA’s brief was to include the cost of ‘standard’ abnormal development costs which were likely to be encountered in the development of sites in the Borough. For example, as sites in Haringey are almost exclusively brown field in nature, an element of demolition and piling is included in the standard cost figures for all development. Site specific abnormal development costs have not been modelled, as such

costs would vary according to the nature of the development and, if significant, would be subject to separate viability assessment.

- **Code for Sustainable Homes** – the ‘base case’ modelling uses building costs which include the cost of achieving code for sustainable homes level 4 for all new dwellings. Further options for achieving higher standards were modelled as detailed in section 3.5.
- **Sales values** used in the model are based on current new build prices with a set of figures per unit type for each identified value area. Values per unit type rather than per square foot were included to minimise any distortion as a result of the Council’s minimum size and specific housing mix requirements. For example, there is a requirement for 11% 4 bed dwellings, which are likely to be flats, however the market for these is not strong and the use of a mean area based valuation could overstate the sale value of these large units. Sales values were researched from a range of sources and discussed with stakeholders.
- **Value of affordable housing** – It is assumed that all affordable housing will be purchased by a housing association (RP) under a land and build package deal arrangement. Income from affordable housing is calculated as the capitalised net rent for rented housing and for shared ownership housing (otherwise known as new build homebuy), the sales income from the proportion sold, plus the capitalised net rent of the balance.
- **Tenure split** - the base case modelling uses the Council’s policy requirement of a 70%/ 30% split between affordable rented and intermediate tenures, in favour of the former. The Council’s preferred intermediate tenure option is shared ownership so other forms of tenure were not modelled.
- **Grant Funding** – RPs receive capital grant funding from the Homes and Communities Agency (HCA) to support the development of affordable housing. This has been applied broadly at a standard rate calculated per person or per unit. Where modelled, grant rates of £26 000 per person for rented housing and £15 000 per unit for shared ownership have been allowed. These figures are based on historic grant rates in the HCA London Region and discussion on likely future rates with Council officers and the stakeholders group. Further detail is set out in the Assumptions Document section B.4.4.

3.5. Policy options tested

Affordable housing proportion - Tribal’s appraisal model was used to test the archetype site viability at rates of 0%, 40% and 50% affordable housing. The proportion of affordable housing was calculated according to percentage of habitable rooms to ensure that the true proportion of the overall development was modelled. By comparing the RLV of the sites produced from modelling each archetype against a benchmark land value it was possible to analyse the appropriateness and deliverability of each policy option across the range of site types. For the small sites of 4 and 9 units, a differentiation between 40% and 50% affordable housing could not be

achieved due to the small number of them. A 50% proportion was therefore used.

Affordable housing tenure mix – the Council’s policy mix of 70% affordable rented housing and 30% intermediate housing has been modelled as a base case. A sensitivity was modelled for sites with 50% affordable housing (the policy level) of 60%/40% split.

Grant levels – modelling was carried out with and without grant (provided at the levels outlined above) to determine the extent to which grant was essential to achieving viability.

Sustainability options - the Council’s draft policy option is to achieve a 20% reduction in CO2 through the use of on site renewable energy sources in addition to code level 4, with future requirements for code levels to be increased to levels 5 and 6. These alternative standards have been modelled in addition to the base standard of code 4 only. The estimated cost of achieving these higher standards has been based on the work carried out by the CLG and also with reference to the Council’s green infrastructure study. The policy background and basis for establishing these costs is set out in the Assumptions Document.

4. Key Findings

4.1. Methodology and assumptions - summary

Modelling has been carried out to give residual land values for the site typologies identified. In total 18 site typologies have been modelled, with key characteristics identified of location (value area), density, and size. Standard assumptions are made for each typology in relation to unit mix and sizes, sales values and costs.

These assumptions are based on market data and other sources and are set out in detail in Tribal's Assumptions Document. Using this approach offers the potential to establish whether there are patterns relating to the ability of particular site locations, sizes and densities, given particular scenarios in relation to tenure mix, grant availability and sustainability options, to deliver affordable housing at certain proportions.

This analysis enables the identification of whether any of these factors (location, size, housing market area) on their own particularly impact upon viability - and if so which, and to what extent - or if particular categories of sites created by combinations of those factors impact upon viability.

4.2. Significance of key variables

Demand is the main determinant of site value as it sets the finished sales values for private sale units and affects the value of shared ownership affordable housing units. Three value area variables were modelled – low, medium and high. There is a large difference between average sales values between the three areas, and the resulting affect on RLVs. Medium and high value areas are viable given a range of policy options, however site values in the low value area in most cases are not viable for 100% market sale development as the addition of affordable housing with grant improves site values. It is doubtful whether private residential development would come forward in low demand areas without some form of additional subsidy being made available.

Density - High density sites achieve higher site values in medium and high value areas, as the additional income from sales outweighs the additional building cost associated with high density development. This is less significant in low value areas.

Site size –The smallest site tested – 4 units, could only reach benchmark value with 50% affordable housing with grant in the highest value area. The development of 9 units however, could reach benchmark level on both high and medium value sites, with 50% affordable housing with grant. This demonstrates the sensitivity of small sites to the imposition of planning obligations.

4.3. Impact of affordable housing – modelling results

Appendix A contains a summary of the modelling results set out in tabular and graph form. The results suggest that basic underlying viability - ie the viability of developing housing on these sites without any element of affordable housing – is generally strong, other than in the low value area.

In the lowest value areas, some of the sites have **negative** residual values. The positive values are in the range £780 000 to £1.2m per ha. These fail to meet benchmark levels and so might be regarded as viable only where the existing or alternative use was a low value industrial use.

In the medium and higher value areas, the RLV results are generally much higher (ie £6-£21m per ha) than would be expected from the VOA suggested residential land values for London (£4.42- £5.19m) . However, this is an area where an affordable housing policy has applied for some time, and so one might expect values to have been moderated by the impact of policy. Thus we would expect prevailing residential values to be lower than the RLV generated by a residential project where no affordable housing requirement has been imposed.

The impact of applying affordable housing policies may be summarised as follows:

- With 50% affordable housing without grant, one third of the sites have negative residual values, and are clearly not viable. These are the sites in the lowest value areas
- With 50% affordable housing without grant, two thirds of the sites have positive values, ranging from £1.2 - £8.3 m per ha, so quite a few are actually viable, when compared to a residential EUV benchmark of £4-5m per ha. Some have values well below £4-5m, and so would only be considered viable if the alternative were a lower value industrial use.
- With 40% affordable housing without grant, one third of the sites have negative values (again the sites in the lowest value areas) and the remainder have residual values that go up to £11m per hectare

With grant, almost all the sites in medium and high value areas reach benchmark values, and sites in low value areas have positive values although fail to meet benchmark levels:

- With grant, at 40% AH, the RLV of the lowest value sites rises to £700k per ha and the RV of the highest market area site to £18m per ha
- With grant, at 50% AH, the RLV of the lowest value sites rises to £900k per ha and the RV of the highest market area site to £17m per ha

It appears that for many of the archetypes, affordable housing with grant makes high residual values possible. The differences in RLV between 40% and 50% affordable housing levels are modest, and values of from £5 to £18m per ha are possible:

- With grant, 5 of the sites generate RVs of over £10m per ha
- Two thirds of the sites generate RVs of over £5m – a figure which might be regarded as a reasonable benchmark for residential land in relation to the average values in the current VOA report.

The tables attached at Appendix A show the detailed results of the analysis. They compare the residual land value for the sites against the benchmark valuation. For each site we have included residual and benchmark values for the site and at a per hectare level on the given site. The data is presented as follows

- The summary tables show site value analysis, value per hectare analysis and value per unit analysis, respectively given the range of affordable housing thresholds with and without grant and with the tenure mix adjustment shown on the sites modelled. The “traffic light” coding indicates sites that fall above or below the equivalent benchmark land values.

4.4. Impact of varying sustainability standards

Additional testing has been carried out to test the impact of the cost of a range of sustainability standards on the RLVs of a selection of sites.

Three alternative scenarios comprising Sustainable Homes Code Level 4 plus 20% carbon reduction from renewables, Code Level 5 and Code Level 6 were modelled. For modelling purposes these costs have been taken to be £2 000, £6 000 and £15 000 per unit respectively in addition to the ‘base’ modelling of £6 000 per unit to achieve Code level 4 only. The rationale for these figures is set out in the Assumptions Document. A 10% on cost has been added to these figures for modelling purposes.

In considering the future requirements for code levels 5 and 6, the development timescales have not been projected forward or any other figures adjusted, in order to isolate the impact of this change in variable.

The sustainability options were modelled for affordable housing with grant scenarios only. As grant is required to support affordable housing in most cases, this was felt to be the simplest way to demonstrate the effect on site value of sustainability standards alone. As the effect of an absence of grant is to reduce RLV, the percentage reduction in site value is less, although the sum of the reduction in each case is similar.

The impact on RLV of the cost of achieving the higher standards of code levels 5 and 6 is significant. The results show that, whilst site values in some high value areas can achieve benchmark site values, and achieve the higher standards, this is marginal in the case of medium value sites, with higher density sites more able to accommodate the costs. No sites at all in low value areas are able to achieve any of the benchmark values with increased sustainability measures and in many cases negative site values are produced.

The percentage reduction in RLVs according to sustainability option applied is set out in the table at figure 6.

Figure 6: Percentage reduction on RLV over base sustainability options

Value area	CSH 4	CSH 5	CSH 6
	plus 20%		
High	2-3%	8-10%	15-20%
Medium	3-5%	8-13%	20-33%
Low	8-15%	20-40%	40-50%

4.5. Tenure mix

The 60% affordable rent 40% intermediate housing option with grant showed an improvement in RLV over the 70%/30% policy target for sites in medium and high value areas. This is a result of the relationship of the value of intermediate affordable housing being linked to market values, and the consequential higher price paid by RPs for intermediate units. RLVs of sites in low value areas are not much enhanced as a result of a change in tenure mix in low value areas, as the contribution from the market element is not greater than the advantage gained by the higher grant rate attributed to the rented tenure. In medium and high value areas both tenure options are viable.

The 60%/40% tenure mix without grant showed an increase in RLV and increased the viability of some sites where this had previously been marginal.

5. Policy conclusions and recommendations

5.1. Viability of the draft policy

The conclusion reached is that draft Strategic Policy 2 of the Preferred Options Report for the Core Strategy which reflects the London Plan's strategic target of 50% affordable housing on sites over 10 units with a ratio of 70:30 split between social rent and intermediate housing is viable.

A 50% affordable housing policy is viable on all but the very smallest sites with grant¹, if it is accepted that the 'benchmark' for the lowest value areas is an assumption that the only alternative is a low value industrial use. All other sites appear to comfortably meet the benchmark of residential land values for Outer London, and some exceed it by a comfortable margin, achieving residual values of over £10 million per ha.

When benchmark land values at the level modelled are considered, in addition to the consideration of EUV, sites in low value areas fail to meet benchmark levels, but this is not as a result of the imposition of an affordable housing requirement – indeed, the provision of affordable housing with grant serves to improve site viability in these areas.

There may be some sites which have exceptionally high existing use values - sites which are currently in high value residential or office use, in excess of the values indicated in our modelling. A special case would need to be made for such sites.

Recommendation:

- The policy is viable for sites above ten units, and should be applied, but there may be a need for certain exceptions to be recognised in the case of sites which have a higher existing use or alternative use value. In some cases, the policy is only viable on the assumption that current levels of grant are provided
- Without grant, the highest value sites in the strongest market areas remain viable against an expectation that mean housing land values will be attained. Sites in medium market areas will generally not meet such an expectation without grant, at 50% affordable housing, and results are still generally below the current market value for residential land at 40% affordable housing without grant.

¹ In low value areas, the four house site generates a very low value relative to most possible benchmarks

5.2. Site threshold

There are two issues with smaller sites - first of all whether their economics are fundamentally different; although smaller sites tend to incur somewhat higher costs than larger sites, it is sometimes true that the values achieved are higher, as smaller schemes can be more attractive to the purchaser and achieve a higher price. The second issue is whether it is practical to apply an affordable housing policy to a very small site, given the negotiation burdens that it can entail.

On the first point, our results are in line with the GLA comments in the London Plan Further Alterations on the viability issue, where it was noted that a GLA/GOL study had concluded that “market values do not appear to be directly or consistently influenced by scheme size” and that “individual schemes can more accurately be assessed on a site specific basis.”

Our analysis shows that small sites in low value areas only produce positive RLVs with grant, and in the case of the smallest site (4 units) failed to meet benchmark levels in medium and high value areas with 40% or 50% affordable housing with grant. Where there are low EUVs, the value generated may be sufficient for a landowner to sell for re-development however in cases where there are high EUVs, this will not be the case - for example where the site is currently occupied by one or two high value houses.

The modelling of the larger small sites (9 units) produced higher values, which achieve benchmark levels for medium and high value areas for both 40% and 50% affordable housing with grant. In practice, a policy which is applied to fewer than 20 units needs arithmetic adjustment to apply the ratios of affordable housing for sale and for rent. This can be done on a site by site basis.

With regard to the second issue - administrative efficiency and effectiveness, sites for fewer than ten houses play a very limited role in the current housing land supply in Haringey - there are currently only three sites with a capacity of fewer than 10 houses in the Council's Housing Trajectory, and so we would suggest that the time spent on negotiating an affordable housing element on very small sites (below 10 houses) may not be worthwhile. The Council would have to weigh the potential benefits of a modest increase in affordable housing from smaller sites against the additional cost and time that would be involved in running financial appraisals of the sites, negotiating with the developer on this issue and the time spent involving an RP in the development.

The strongest argument for the introduction of a sliding scale policy below 10 units is to avoid any distortion arising from the absence of such a policy, which might encourage developers with windfall sites to adjust their proposals to fall below the 10 unit level.

Recommendation:

- The policy threshold should be maintained at ten units. However, if the Council envisages significant numbers of small windfall sites coming forward, it may be appropriate to consider a sliding scale policy below 10 units, in order to discourage that threshold being used to avoid compliance with the policy. If the Council has access to suitable land for affordable housing, it may wish to consider the option of a commuted sum payment for the very smallest sites – ie below 5 units.

5.3. The impact of grant

Without grant, the highest value sites in the strongest market areas remain viable against an expectation that mean housing land values will be attained. However, sites in medium market areas will generally not meet such an expectation without grant at 50% affordable housing, and results are still below the current market value for residential land at 40% affordable housing. If grant were not available, the ratio of affordable housing would have to be reduced further. Sites in the lowest value areas are not viable without grant.

It is clear that the provision of grant at the established rates is required to support the viability on the sites in the low market areas. However in some cases in the other value areas it is clear that a reduced rate of grant could be sufficient, and indeed some of the sites could work without grant, generating a residual value of over £4-5 million per ha without grant.

It should be noted that RPs are able to purchase sites to develop as 100% affordable housing schemes in the Borough at the grant rates applied. This means that the value of affordable housing with grant is sufficient to generate positive values which in some cases achieve benchmark levels.

The Homes and Communities Agency (HCA) is increasingly moving towards a viability based judgement on whether grant is required, and this is reflected in the Council's discussions with the HCA, which form part of the 'single conversation' on planning future investment² where an 'East-West tailored package' of subsidy is suggested where more investment is provided in the low value areas to the East of the Borough, with less to the West.

Recommendation:

- Grant is essential in the lower value areas within the Borough and must be maintained there. Even with current average grants, the smallest sites in these areas would generate a very low RLV. There is scope for a gradual reduction in grant levels in the highest value parts of the Borough. A cascade mechanism will be required to provide a methodology for adjustment to affordable housing requirements should grant not be available at the level required to support scheme viability.

² Haringey Single Conversation – 3rd Borough Investment Plan December 2009

5.4. Policy variation within the Borough

The brief required a consideration of whether there is evidence in economic viability terms to support the application of different thresholds, proportions and tenure mix in different parts of the Borough.

Viability does vary sharply across the Borough. Both high and medium value areas can support 50% affordable housing with grant, with scope for increasing the proportion of affordable housing and/ or reducing the amount of grant in the highest value areas. In the mid market areas, there may be some scope for reducing grant levels as and when the market recovers. In the lowest value areas, where viability fails due to poor private market values, an increase in affordable housing with grant improves viability, so there is no case for a reduction in proportion, but a strong case for sustaining or increasing grant rates.

Recommendation:

- A Borough wide policy, but with provisions for exceptional exemptions where developers are able to demonstrate that the sales values being achieved are not high enough to support the target affordable housing ratio. Most of these exemptions would be expected where there are exceptionally high residential existing use values or on sites where there are exceptionally high remediation or infrastructure costs.
- If the policy were to be varied across the Borough, the overall level of need is such that it would have to exceed 50% in some areas – an unattractive proposition in market terms. As long as there is this level of need - and as long as there is a demand for affordable housing throughout the Borough, the case for a Borough wide policy remains strong.
- We believe however that there may be a need to use grant in a differential way, in order to support development on sites in the weaker market areas, particularly where these sites have alternative use potential.

5.5. Tenure mix

The draft policy tenure mix of a 70%/30% proportion of rented and intermediate housing with grant can be supported on all but the sites in low value areas, however in low value areas the change in tenure mix does not improve viability as viability per se is an issue. The change in tenure mix to 60%/40% proportions does however increase RLV, so could be of use where grant is not available at the rate to support the policy tenure mix target. In addition, an increase in intermediate tenure housing may be useful in developments where there is already a concentration of rented housing and a more sustainable housing mix is required.

Recommendation:

- A policy which required the 70%/30% tenure split, but where a cascade modification to this to 60%/40% can be considered where grant is not available and is required to support development, or where there are wider housing policy reasons for supporting a is support to achieving an increase in intermediate housing.

5.6. Sustainability standards

The addition of a small cost to achieve the policy target of CSH level 4 plus 20% CO2 reduction from renewable energy sources did not have a significant impact on viability over the base model of code level 4.

Achieving the higher standards planned of Code for Sustainable Homes levels 5 and 6 involves significant additional building costs and therefore has a dramatic impact on RLVs. However, the high land values generated on some medium and high value sites on high density schemes where grant is provided are able to achieve benchmark land values at code levels 5 and 6. Many sites cannot accommodate the standard: In particular, medium density sites in medium value areas, and small sites generally do not achieve benchmark land values with affordable housing at 40% or 50% with grant. Sites in low value areas cannot support the additional cost of achieving the higher sustainability standards.

Limitations

The consideration of the technical solutions and costs of achieving higher sustainability standards is a complex area, and the figures suggested here are to be used as standardised modelling assumptions only. In practice the means of achieving the required standards will be site specific.

It should be noted however that a number of changes may occur between now and implementation of the higher standards, in particular, the cost of achieving the standards may reduce as a result of new technologies and approaches becoming available; the market for greener housing may change, with purchasers prepared to pay more for it in the future, the standards themselves may be modified (with the definition of code 6, 'zero carbon' still currently under discussion); and grant contributions or payments from the CiL may be made available to support higher environmental standards.

Recommendation:

- The Council's sustainability standard should be retained but the future implementation of the higher standards will need to be considered in terms of its effect on development viability and the need to achieve other planning targets. No adjustment to the affordable housing policy targets as a result of higher sustainability standards is recommended.



Appendices

Appendices

Appendix A. Modelling outputs

A.1. Base case modelling

The graphs and tables at figures 1 to 9 set out the modelling of the range of affordable housing proportions and the affordable housing tenure mix variant on sites with 50% affordable housing. The 'traffic light' colouring to the tables indicates where the RLV fails to meet benchmark levels (red), is within 5% of it (orange) or exceeds it (green).

Figure 7: Base case modelling outputs - small sites

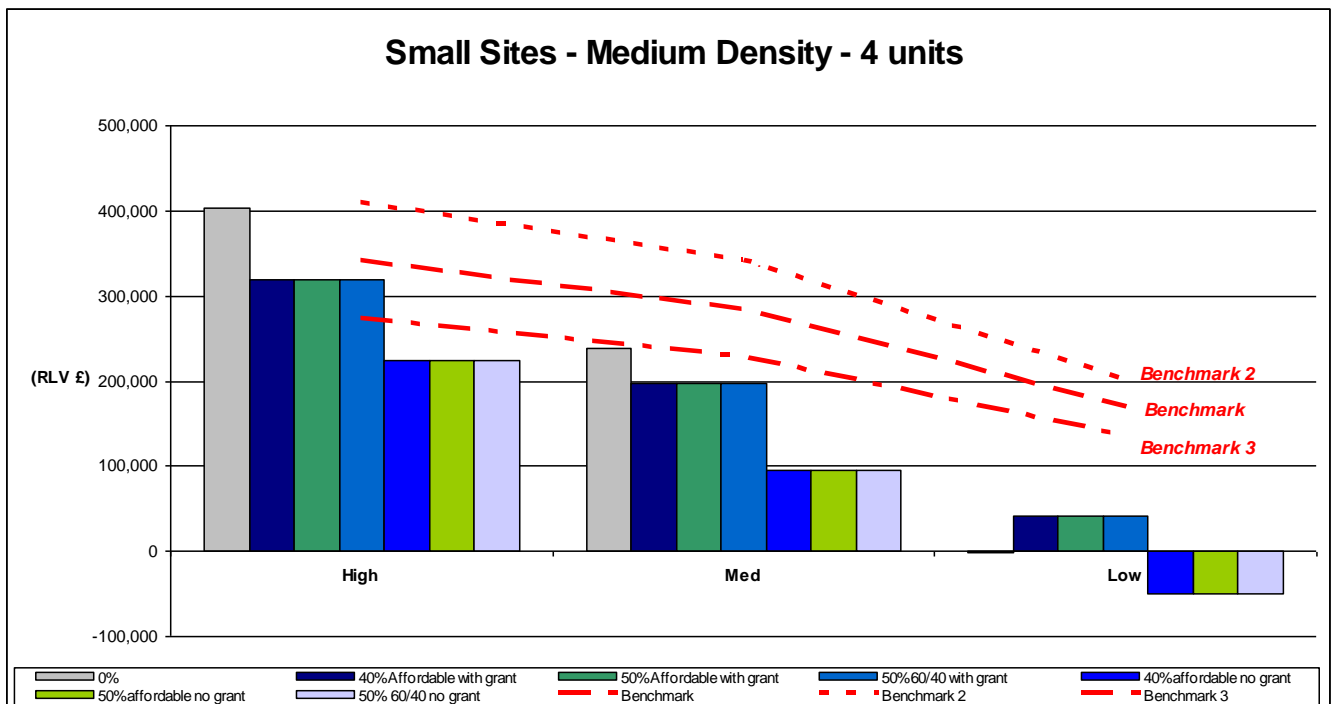


Figure 8: Base case modelling outputs - small sites

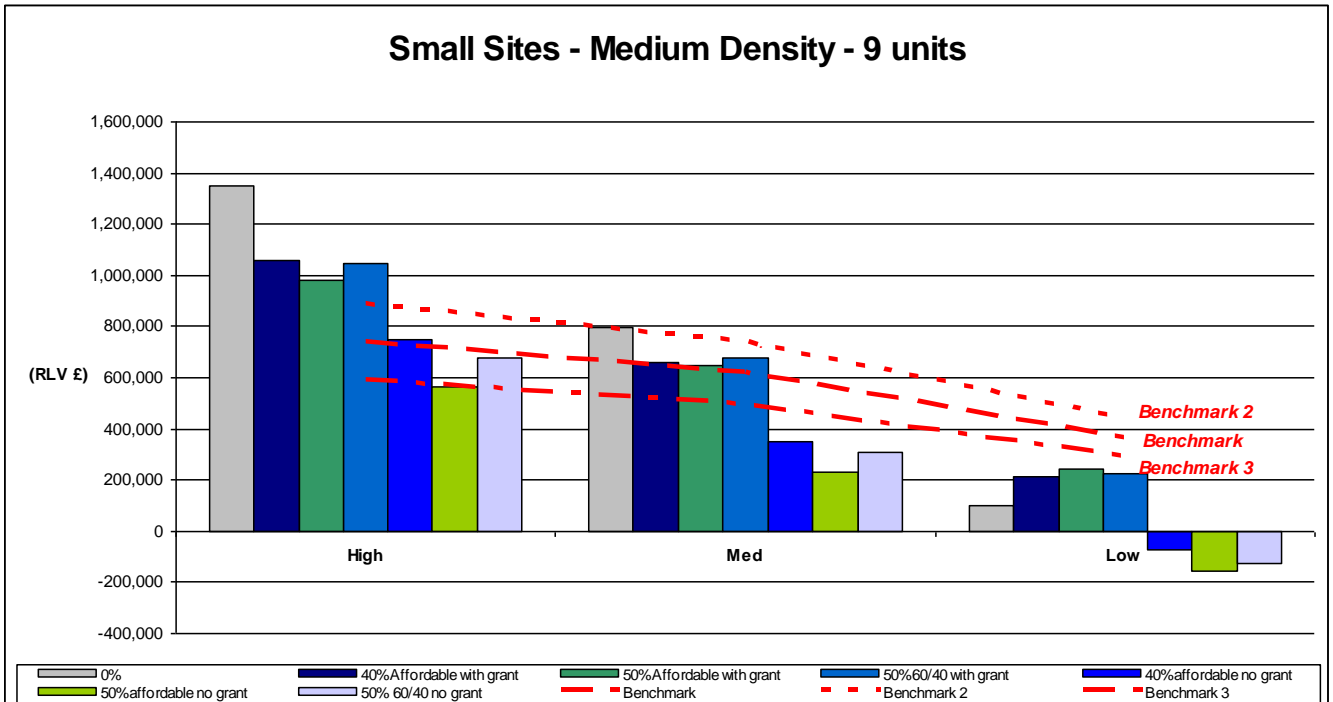


Figure 9: Base case modelling outputs - medium sites, medium density

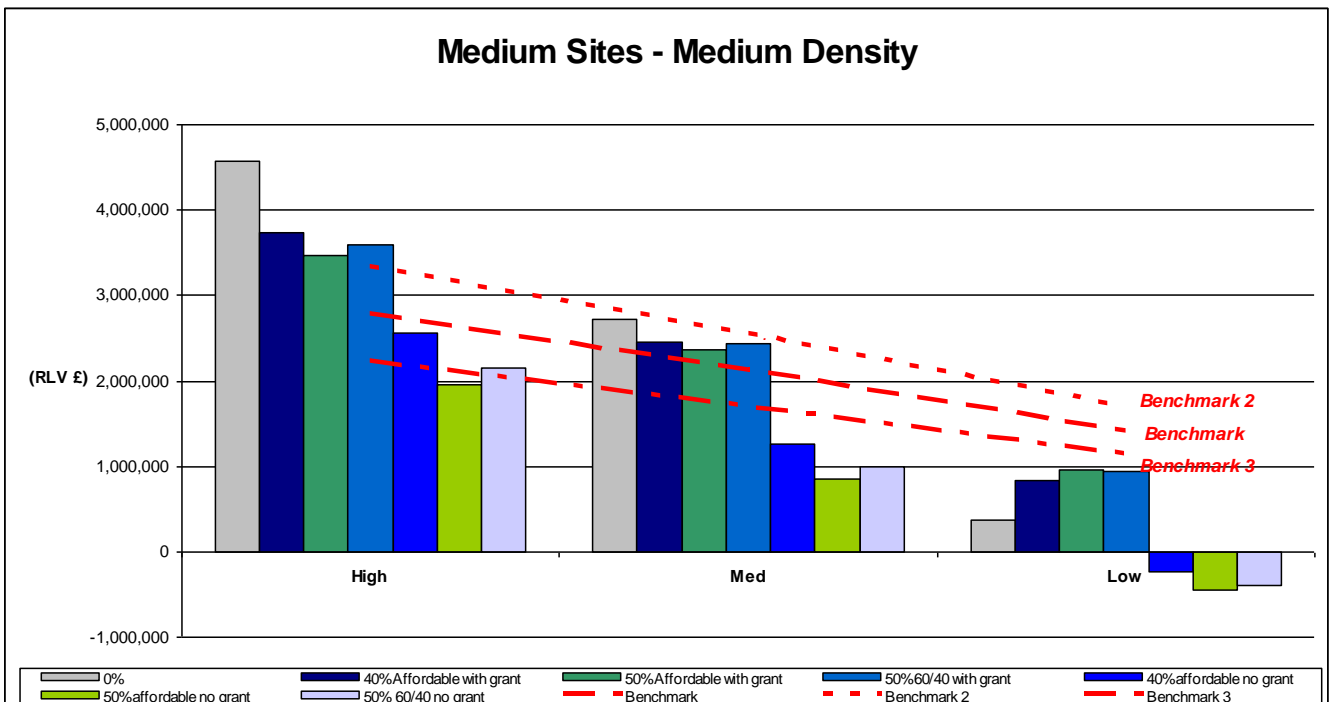


Figure 10: Base case modelling outputs - Medium sites, high density

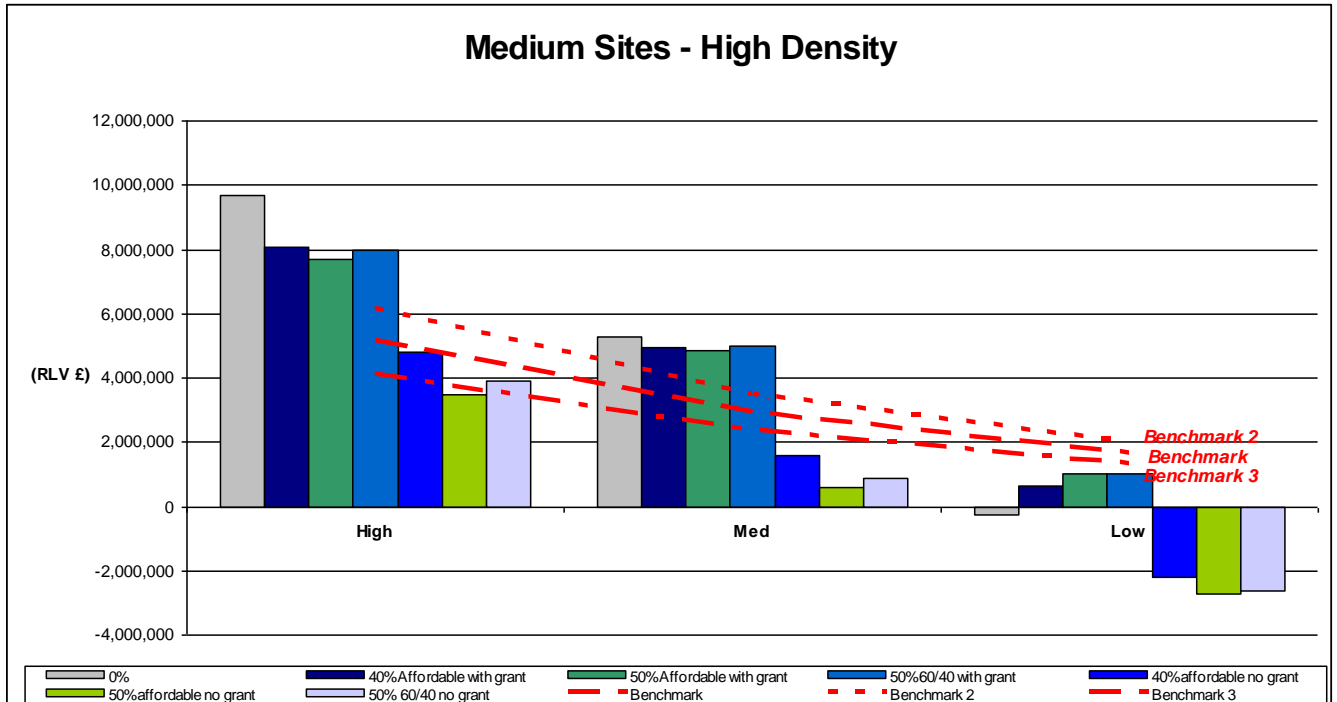


Figure 11: Base case modelling outputs – Large sites, medium density

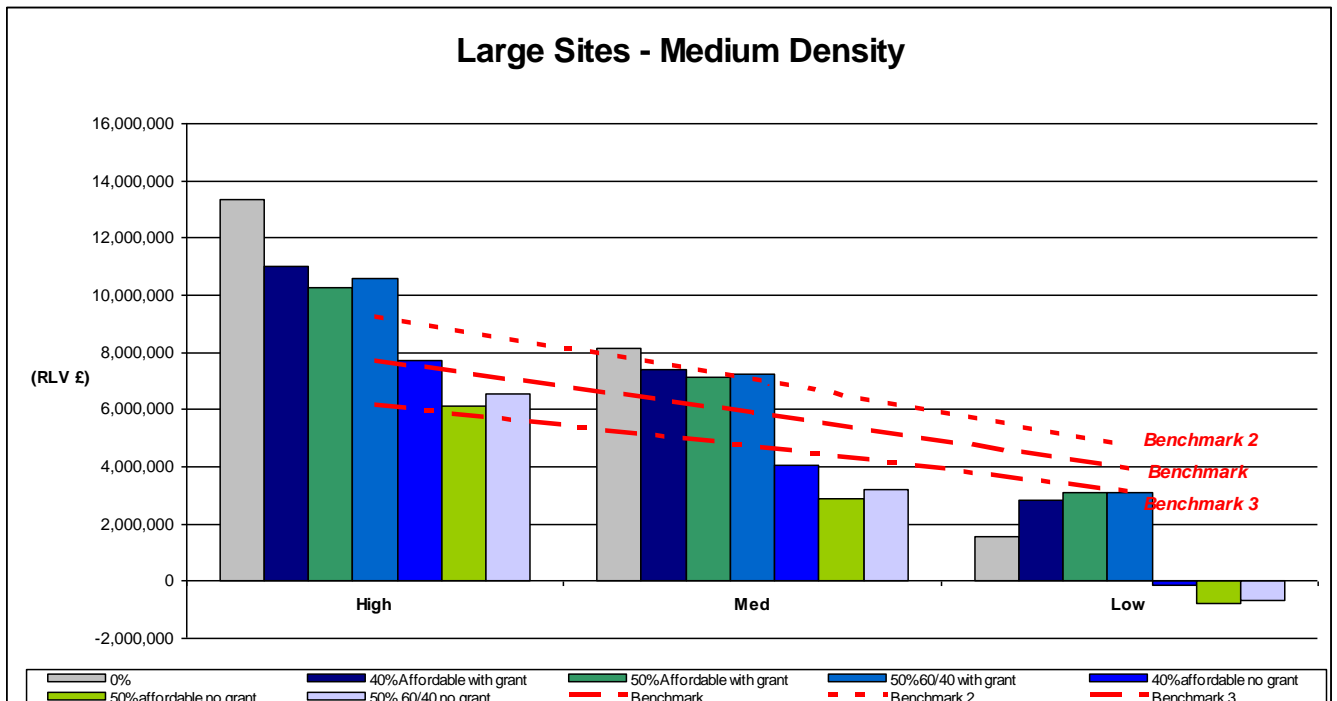


Figure 12: Base case modelling outputs –large sites, high density

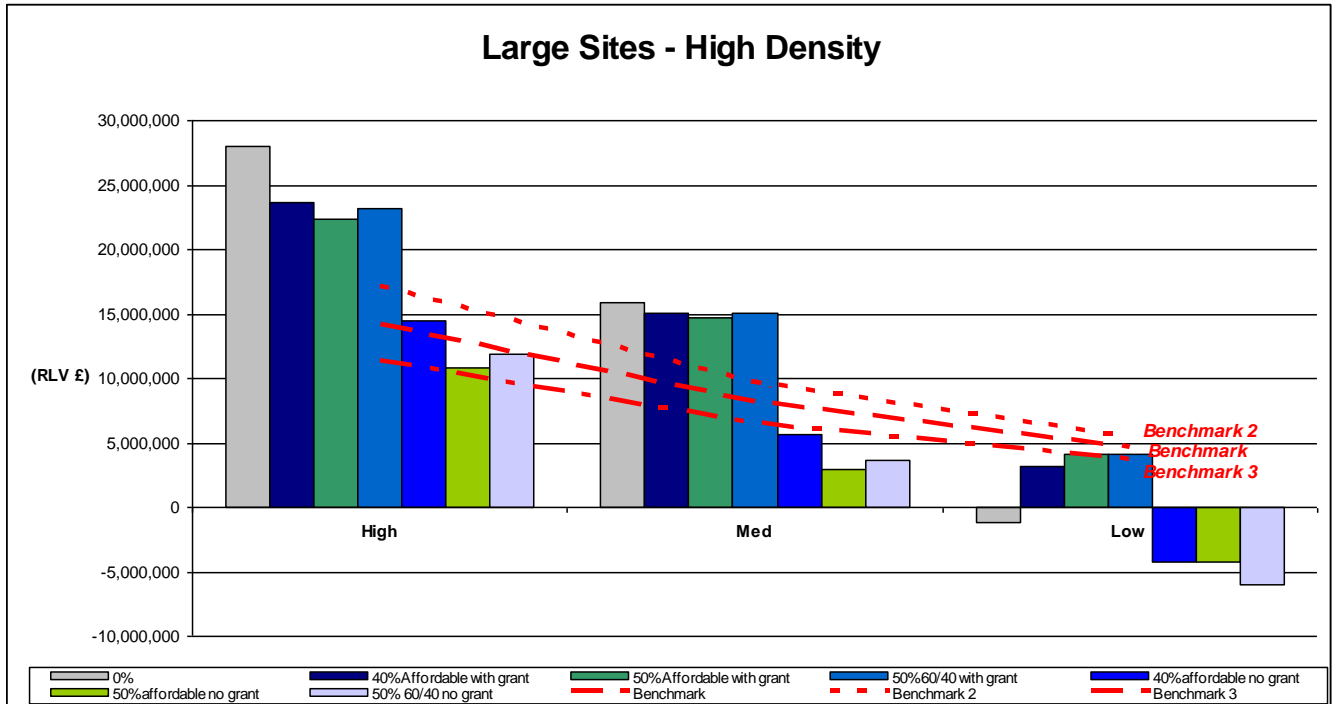


Figure 13 Base case – Residual land values

Summary 1 - Site Value						RLV (£)						Benchmark Value	Difference					
Site ref	Size (Hectares)	Density	Market area	Units	Size (ha)	0% Affordable	Affordable Housing With Grant			Affordable Housing Without Grant			0% Affordable	Affordable Housing With Grant		Affordable Housing Without Grant		
							40%	50%	50% 60/40	40%	50%			50% 60/40	40%	50%		
1	Small	Medium	High	4	0.06	403,000	318,476	318,476	318,476	223,305	223,305	223,305	340,560	62,440	-22,084	-22,084	-117,255	-117,255
			Med	4	0.06	239,262	197,076	197,076	197,076	94,706	94,706	94,706	283,800	-44,538	-86,724	-86,724	-189,094	-189,094
			Low	4	0.06	-1,347	41,788	41,788	41,788	-49,210	-49,210	-49,210	168,000	-169,347	-126,212	-126,212	-217,210	-217,210
2	Small	High	High	9	0.13	1,350,105	1,061,121	981,609	1,045,803	749,220	564,463	674,999	737,880	612,225	323,241	243,729	11,340	-173,417
			Med	9	0.13	796,314	660,007	646,283	678,660	349,585	230,057	306,618	614,900	181,414	45,107	31,383	-265,315	-384,843
			Low	9	0.13	98,510	215,695	242,429	227,480	-70,942	-155,079	-125,377	364,000	-265,490	-148,305	-121,571	-434,942	-519,079
3	Medium	Medium	High	31	0.47	4,576,838	3,732,916	3,461,862	3,595,603	2,552,443	1,949,218	2,152,336	2,773,000	1,803,838	959,916	688,862	-220,557	-823,782
			Med	31	0.47	2,727,963	2,454,295	2,373,419	2,444,997	1,261,939	843,302	988,827	2,115,000	612,963	339,295	258,419	-853,061	-1,271,698
			Low	31	0.47	366,679	826,759	959,200	946,012	-234,939	-446,756	-393,094	1,410,000	-1,043,321	-583,241	-450,800	-1,644,939	-1,856,756
4	Medium	High	High	92	0.47	9,673,251	8,088,940	7,676,566	7,954,650	4,782,512	3,477,523	3,894,610	5,123,000	4,550,251	2,965,940	2,553,566	-340,488	-1,645,477
			Med	92	0.47	5,294,879	4,947,904	4,848,347	4,999,280	1,571,588	584,773	870,591	2,914,000	2,380,879	2,033,904	1,934,347	-1,342,412	-2,329,227
			Low	92	0.47	-277,754	643,419	999,884	1,003,945	-2,197,046	-2,721,380	-2,622,507	1,645,000	-1,922,754	-1,001,581	-645,116	-3,842,046	-4,366,380
5	Large	Medium	High	87	1.3	13,345,546	11,030,218	10,290,898	10,562,462	7,731,585	6,119,954	6,530,684	7,670,000	5,675,546	3,360,218	2,620,898	61,585	-1,550,046
			Med	87	1.3	8,155,751	7,386,659	7,111,850	7,259,688	4,040,803	2,884,982	3,179,237	5,850,000	2,305,751	1,536,659	1,261,850	-1,809,197	-2,965,018
			Low	87	1.3	1,533,191	2,844,235	3,122,684	3,101,128	-151,607	-781,010	-668,089	3,900,000	-2,366,809	-1,055,765	-777,316	-4,051,607	-4,681,010
6	Large	High	High	254	1.3	27,986,479	23,634,115	22,411,373	23,182,525	14,454,507	10,828,351	11,929,930	14,170,000	13,816,479	9,464,115	8,241,373	284,507	-3,341,649
			Med	254	1.3	15,858,164	15,018,264	14,697,358	15,102,956	5,690,074	2,944,979	3,698,343	8,060,000	7,798,164	6,958,264	6,637,358	-2,369,926	-5,115,021
			Low	254	1.3	-1,199,232	3,132,545	4,169,769	4,173,219	-4,183,324	-4,183,324	-5,977,047	4,550,000	-5,749,232	-1,417,455	-380,231	-8,733,324	-8,733,324

Figure 14: Base case - RLVs generated per hectare

Summary 2 - Value per hectare																		
Site ref	Size (Hectares)	Density	Market area	Units	Size (ha)	RLV (£)						Benchmark Value	Difference					
						0% Affordable	Affordable Housing With Grant			Affordable Housing Without Grant			0% Affordable	Affordable Housing With Grant		Affordable Housing Without Grant		
							40%	50%	50% 60/40	40%	50%			50% 60/40	40%	50%		
1	Small	Medium	High	4	0.06	6,716,667	5,307,933	5,307,933	5,307,933	3,721,750	3,721,750	3,721,750	5,676,000	1,040,667	-368,067	-368,067	-1,954,250	-1,954,250
			Med	4	0.06	3,987,700	3,284,600	3,284,600	3,284,600	1,578,433	1,578,433	1,578,433	4,730,000	-742,300	-1,445,400	-1,445,400	-3,151,567	-3,151,567
			Low	4	0.06	-22,450	696,467	696,467	696,467	-820,167	-820,167	-820,167	2,800,000	-2,822,450	-2,103,533	-2,103,533	-3,620,167	-3,620,167
2	Small	High	High	9	0.13	10,385,423	8,162,469	7,550,838	8,044,638	5,763,231	4,342,023	5,192,300	5,676,000	4,709,423	2,486,469	1,874,838	87,231	-1,333,977
			Med	9	0.13	6,125,492	5,076,977	4,971,408	5,220,462	2,689,115	1,769,669	2,358,600	4,730,000	1,395,492	346,977	241,408	-2,040,885	-2,960,331
			Low	9	0.13	757,769	1,659,192	1,864,838	1,749,846	-545,708	-1,192,915	-964,438	2,800,000	-2,042,231	-1,140,808	-935,162	-3,345,708	-3,992,915
3	Medium	Medium	High	31	0.47	9,737,953	7,942,374	7,365,664	7,650,219	5,430,730	4,147,272	4,579,438	5,900,000	3,837,953	2,042,374	1,465,664	-469,270	-1,752,728
			Med	31	0.47	5,804,177	5,221,904	5,049,828	5,202,121	2,684,977	1,794,260	2,103,887	4,500,000	1,304,177	721,904	549,828	-1,815,023	-2,705,740
			Low	31	0.47	780,168	1,759,062	2,040,851	2,012,791	-499,870	-950,545	-836,370	3,000,000	-2,219,832	-1,240,938	-959,149	-3,499,870	-3,950,545
4	Medium	High	High	92	0.47	20,581,385	17,210,511	16,333,119	16,924,787	10,175,557	7,398,985	8,286,404	10,900,000	9,681,385	6,310,511	5,433,119	-724,443	-3,501,015
			Med	92	0.47	11,265,700	10,527,455	10,315,632	10,636,766	3,343,804	1,244,198	1,852,321	6,200,000	5,065,700	4,327,455	4,115,632	-2,856,196	-4,955,802
			Low	92	0.47	-590,966	1,368,977	2,127,413	2,136,053	-4,674,566	-5,790,170	-5,579,802	3,500,000	-4,090,966	-2,131,023	-1,372,587	-8,174,566	-9,290,170
5	Large	Medium	High	87	1.3	10,265,805	8,484,783	7,916,075	8,124,971	5,947,373	4,707,657	5,023,603	5,900,000	4,365,805	2,584,783	2,016,075	47,373	-1,192,343
			Med	87	1.3	6,273,655	5,682,045	5,470,654	5,584,375	3,108,310	2,219,217	2,445,567	4,500,000	1,773,655	1,182,045	970,654	-1,391,690	-2,280,783
			Low	87	1.3	1,179,378	2,187,873	2,402,065	2,385,483	-116,621	-600,777	-513,915	3,000,000	-1,820,622	-812,127	-597,935	-3,116,621	-3,600,777
6	Large	High	High	254	1.3	21,528,061	18,180,088	17,239,518	17,832,712	11,118,852	8,329,501	9,176,869	10,900,000	10,628,061	7,280,088	6,339,518	218,852	-2,570,499
			Med	254	1.3	12,198,588	11,552,511	11,305,660	11,617,658	4,376,980	2,265,368	2,844,879	6,200,000	5,998,588	5,352,511	5,105,660	-1,823,020	-3,934,632
			Low	254	1.3	-922,486	2,409,650	3,207,515	3,210,168	-3,217,942	-3,217,942	-4,597,728	3,500,000	-4,422,486	-1,090,350	-292,485	-6,717,942	-6,717,942

Figure 15: Base case - RLV per unit

Summary 3 - Value per unit																		
Site ref	Size (Hectares)	Density	Market area	Units	Size (ha)	RLV (£)						Benchmark Value	Difference					
						0% Affordable	Affordable Housing With Grant			Affordable Housing Without Grant			0% Affordable	Affordable Housing With Grant		Affordable Housing Without Grant		
							40%	50%	50% 60/40	40%	50%			50% 60/40	40%	50%		
1	Small	Medium	High	4	0.06	100,750	79,619	79,619	79,619	55,826	55,826	55,826	85,140	15,610	-5,521	-5,521	-29,314	-29,314
			Med	4	0.06	59,816	49,269	49,269	49,269	23,677	23,677	23,677	70,950	-11,135	-21,681	-21,681	-47,274	-47,274
			Low	4	0.06	-337	10,447	10,447	10,447	-12,303	-12,303	-12,303	42,000	-42,337	-31,553	-31,553	-54,303	-54,303
2	Small	High	High	9	0.13	150,012	117,902	109,068	116,200	83,247	62,718	75,000	81,987	68,025	35,916	27,081	1,260	-19,269
			Med	9	0.13	88,479	73,334	71,809	75,407	38,843	25,562	34,069	68,322	20,157	5,012	3,487	-29,479	-42,760
			Low	9	0.13	10,946	23,966	26,937	25,276	-7,882	-17,231	-13,931	40,444	-29,499	-16,478	-13,508	-48,327	-57,675
3	Medium	Medium	High	31	0.47	145,343	118,543	109,935	114,182	81,056	61,900	68,350	88,060	57,283	30,483	21,876	-7,004	-26,160
			Med	31	0.47	86,630	77,939	75,371	77,644	40,074	26,780	31,401	67,164	19,465	10,775	8,206	-27,090	-40,384
			Low	31	0.47	11,644	26,255	30,460	30,042	-7,461	-14,187	-12,483	44,776	-33,132	-18,521	-14,316	-52,237	-58,963
4	Medium	High	High	92	0.47	105,546	88,259	83,760	86,794	52,182	37,944	42,494	55,897	49,648	32,362	27,862	-3,715	-17,954
			Med	92	0.47	57,773	53,987	52,901	54,548	17,148	6,381	9,499	31,795	25,978	22,192	21,106	-14,647	-25,414
			Low	92	0.47	-3,031	7,020	10,910	10,954	-23,972	-29,693	-28,614	17,949	-20,979	-10,928	-7,039	-41,921	-47,642
5	Large	Medium	High	87	1.3	153,221	126,639	118,150	121,268	88,767	70,264	74,979	88,060	65,161	38,579	30,091	707	-17,796
			Med	87	1.3	93,637	84,807	81,652	83,349	46,393	33,123	36,501	67,164	26,472	17,642	14,487	-20,771	-34,042
			Low	87	1.3	17,603	32,655	35,852	35,604	-1,741	-8,967	-7,670	44,776	-27,173	-12,121	-8,924	-46,517	-53,743
6	Large	High	High	254	1.3	110,400	93,231	88,408	91,450	57,020	42,715	47,061	55,897	54,503	37,334	32,510	1,122	-13,182
			Med	254	1.3	62,557	59,244	57,978	59,578	22,446	11,617	14,589	31,795	30,762	27,449	26,183	-9,349	-20,178
			Low	254	1.3	-4,731	12,357	16,449	16,462	-16,502	-16,502	-23,578	17,949	-22,679	-5,592	-1,500	-34,451	-34,451

Appendix B. Assumptions

B.1. Phasing and inflation

B.1.1. Phasing

It has been assumed that the development period each site will be dependant upon the size of the development. The table below shows the size of development and construction periods. As building cost is adjusted according to site size, an adjustment factor has also been included in this table.

Table 4: Adjustments for development size

Development size	Construction Period	Build cost adjustment
Small (up to £1m)	6 months	1.025
Medium (£2-5m)	15 months	0.95
Large (£5m plus)	20 months	0.9

Source: KSA advice based on BCIS Guide to Building Contract Duration 2004. Stakeholders views 14/1/10

It has been assumed that all units will be marketed and sold 9 months after completion. And that all schemes have a June 2010 start on site date for modelling purposes.

B.1.2. Inflation

Table 5: Inflation assumptions

	2010/11	2011/12	2012/13	2013/14	2014/15 +
RPI	1.5%	2.5%	2.5%	2.5%	2.5%
HPI / Sales Prices	0.0%	0.0%	0.0%	3.0%	3.0%
Construction costs	1.0%	1.0%	0.7%	0.8%	0.8%
Other Cost Inflation	0.0%	0.0%	0.0%	0.0%	0.0%
Public sector funding	0.0%	0.0%	0.0%	0.0%	0.0%
Social Rent Inflation	-1.4%	1.25%	2.5%	2.5%	2.5%

Source: Tribal Housing Treasury Finance, November 2009, and KSA and Haringey advice

B.1.3. Interest

Interest rates assumed are as follows – based on current market data (Source: Tribal Treasury Finance Team).

- Debt interest annually: 7.5%
- Credit interest annually: 3.5%

B.2. Residential mix

B.2.1. Introduction

The unit types and sizes listed below are suggested averages for both private sale and affordable housing. They are based on the benchmark minimum unit sizes contained in Haringey's Housing SPD 2008 (which are based on

occupancy), adjusted for type of unit (flat/house) with some reference to the GLA draft housing design guide. They all exceed the minimum Housing Quality Indicator scores required by the HCA, which apply to all grant funded affordable housing.

Table 6: Residential mix schedule

Unit Type	Occupancy	Unit Size (sq m) –GIA	Haringey Min (sq m) – GIA	Addition for wheelchair (sq m)
1 bed flat	2	48	48	6
2 bed flat	3	61	60	6
2 bed flat	4	73	73	6
3 bed flat	4	76	73	6
3 bed flat	5	82	73	6
4 bed flat	5	85	82	6
4 bed flat	6	90	90	6
2 bed house	4	76	73	6
3 bed house	5	86	82	6
3 bed house	6	92	90	6
4 bed house	5	95	82	6
4 bed house	6	100	90	6
4 bed house	7	110	95	6

Source: *Haringey Housing SPD, GLA draft Housing Design Guide, HCA & Tribal*

B.2.2. Unit mix

The unit mix is based upon the requirements in Haringey’s Housing SPD 2008, which specifies target mixes for private and affordable housing. The mix has been adjusted between houses and flats to allow for site density. Following discussion with stakeholders, this mix between affordable housing tenures has been adjusted to reflect the fact that shared ownership consists of smaller units.

Housing mix assumptions

Table 7: Open market and affordable housing mix assumptions – percentage of each unit type per tenure

Density	Private		Affordable Rent		Affordable SO	
	High	Medium	High	Medium	High	Medium
1 bed 2 person flat	37	30	13	13	33	33
2 bed 3 person flat	20	10	4		37	37
2 bed 4 person flat	10	20	5	9	30	67
3 bed 4 person flat	17	10	23	15		
3 bed 5 person flat	5	10	15	18		
4 bed 5 person flat	11		20	10		
4 bed 6 person flat		4	20	25		
2 bed 4 person house						
3 bed 5 person house						
3 bed 6 person house		9		5		
4 bed 5 person house		7				
4 bed 6 person house				5		
4 bed 7 person house						

B.3. Cost assumptions

B.3.1. Building costs

Advice on building costs has been obtained from cost consultant, Kim Sangster Associates (KSA). The build costs are based on BCIS data and provide costs at a rate per square metre of gross internal floor area per unit. The rate for flats has been adjusted to allow for common areas so the net/gross calculation of floor area is avoided. The build costs have been adjusted for Outer London and contain a number of adjustments to the base BCIS figure to reflect the site characteristics and planning policy requirements in Haringey which are set out in section 3.2.

The cost advice from KSA is set out in the figure 6 below with summaries of how this is translated into the modelling assumptions in sections 7 and 8:

Figure 16: Building Costs
London Borough of Haringey Building costs

BCIS Build Cost Reference	Average unit size m2	Mean Price/m2 as at Q2-2009	Ddt for Contractor O/H&P @	Net Build Cost	Location Adjustment outer London	CfSH level 4 cost per unit	Total for affordable housing
			10%		1.17	£ 6,000.00	
810.1 Estate Housing-generally							
2 Storey	80	£ 671.00	£ 67.10	£ 603.90	£ 706.56	£ 75.00	£ 781.56
816 Flats (apartments)-generally							
1-2 Storeys	70	£ 760.00	£ 76.00	£ 684.00	£ 800.28	£ 85.71	£ 885.99
3-5 Storeys	70	£ 845.00	£ 84.50	£ 760.50	£ 889.79	£ 85.71	£ 975.50
6+ Storeys	70	£ 1,115.00	£ 111.50	£ 1,003.50	£ 1,174.10	£ 85.71	£ 1,259.81

Affordable	Buildings only rate per m2	Allow for abnormal foundations	Allow for Brownfield Site	External Works & Services	Total	Tender Price index as at Q2-2009	Adjusted Tender Price index as at Q1-2009
						218	227
Medium Density Estate Housing	£ 781.56	£ 50.00	£ 25.00	£ 200.00	£ 1,056.56		£ 1,100.18
Low Density Flats 1-2 storeys	£ 885.99	£ 70.00	£ 25.00	£ 200.00	£ 1,180.99		£ 1,229.75
Medium Density Flats 3-5 storeys	£ 975.50	£ 50.00	£ 20.00	£ 175.00	£ 1,220.50		£ 1,270.89
High Density Flats 6+ storeys	£ 1,259.81	£ 30.00	£ 15.00	£ 150.00	£ 1,454.81		£ 1,514.87

Intermediate	Buildings only rate per m2	Allow for abnormal foundations	Allow for Brownfield Site	External Works & Services	Total	Tender Price index as at Q2-2009	Adjusted Tender Price index as at Q1-2009
						218	227
Medium Density Estate Housing	£ 859.72	£ 50.00	£ 25.00	£ 200.00	£ 1,134.72		£ 1,181.57
Low Density Flats 1-2 storeys	£ 974.59	£ 70.00	£ 25.00	£ 200.00	£ 1,269.59		£ 1,322.01
Medium Density Flats 3-5 storeys	£ 1,073.05	£ 50.00	£ 20.00	£ 175.00	£ 1,318.05		£ 1,372.46
High Density Flats 6+ storeys	£ 1,385.79	£ 30.00	£ 15.00	£ 150.00	£ 1,580.79		£ 1,646.05

Private	Buildings only rate per m2	Allow for abnormal foundations	Allow for Brownfield Site	External Works & Services	Total	Tender Price index as at Q2-2009	Adjusted Tender Price index as at Q1-2009
						218	227
Medium Density Estate Housing	£ 937.88	£ 50.00	£ 25.00	£ 200.00	£ 1,212.88		£ 1,262.95
Low Density Flats 1-2 storeys	£ 1,063.19	£ 70.00	£ 25.00	£ 200.00	£ 1,358.19		£ 1,414.27
Medium Density Flats 3-5 storeys	£ 1,170.60	£ 50.00	£ 20.00	£ 175.00	£ 1,415.60		£ 1,474.04
High Density Flats 6+ storeys	£ 1,511.77	£ 30.00	£ 15.00	£ 150.00	£ 1,706.77		£ 1,777.23

Site Size Base on Contract Value - Reference BCIS

Construction Value	Factor
Up to £250,000	1.100
£250,000-£500,000	1.060
£500,000-£1million	1.025
£1million	1.100
£1-1.5million	1.000
£1.5-2million	0.990
£2-3million	0.970
£3-5million	0.930
£5-10million	0.910
Over £10million	0.890

Kim Sangster - January 2010

Kim Sangster Associates Ltd
10c Printing House Yard, London E2 7PR
<http://www.ksaonline.co.uk/>
tel: 020 7613 3597 fax: 020 7613 3578

Building costs to be used in the modelling were drawn from cost advice as follows:

Table 8: Building costs per square metre

BCIS Build Costs (£ per sq m)	Tenure		
Dwelling type	Affordable – rent	Affordable – Intermediate	Private
Houses	1100	1182	1263
Flats 1-3 storey	1230	1322	1414
Flats 3-5 storey	1271	1372	1474
Flats 6+ storey	1515	1646	1777

Source: BCIS 2009, KSA

The cost advice has been applied to site densities as follows; for medium density sites the mid point between 1-3 storey flats and 3-5 storey flats has been taken and for high density sites a mid point between 3-5 storey flats and 6+ storey flats has been taken. This reflects the fact that most sites are developed for flats with building heights varying with density.

B.3.2. Building cost adjustments

The base BCIS cost has been adjusted to allow for external works and services, site preparation and abnormalities. All sites are brown field and so this allowance will apply to all development.

Sustainability standards – It is assumed that all units will be built to a minimum of Code for Sustainable Homes (CSH) level 4 standard in accordance with the recommendations in the Council’s draft Energy Infrastructure Study September 2009. It has been assumed that in meeting Code 4, the renewables target of 20% will be met. Further modelling of sustainability options has been carried out and the approach to this is set out in section 3.3.

Table 9: Adjustments to BCIS building costs (included in the rate above)

Allowance Per m2 (£) per unit type	Houses	Flats 1-2 st	Flats 3-5 st	Flats 6+ st
Code for sustainable Homes level 4	75	86	86	86
Abnormal foundations	50	70	50	30
Brownfield site	25	25	20	15
External works and services	200	200	175	150

Source: KSA

Adjustment for site size – building costs are also adjusted for site size based on BCIS indicators, The adjustment factors are set out in the first table in this document.

Wheelchair units – fit out costs of £3 000 per unit fitted out have included as advised by KSA. KSA have pointed out that in practice, it is only the affordable rented units that are fitted out for wheelchair users and this was confirmed by stakeholder and is included in the modelling.

B.3.3. Sustainability options – establishing the costs

The draft report prepared by the Council by AECOM, 'Climate change, Site development and Infrastructure Study for Haringey' recommends that Council policy should require all developments to reduce predicted CO2 emissions by 20% through the use of on-site renewable energy generation and that residential development should be required to achieve CSH level 4 from 2010, level 5 from 2013, and level 6 from 2016. Further viability modelling has been carried out to assess the impact on viability of these options.

Two main sources³ of information have been used to establish the cost of achieving these standards; the AECOM work mentioned above and the report on the cost of achieving the Code for sustainable Homes published by the CLG in 2008. In addition independent cost advice has been available, and knowledge of the methods currently being used by RPs to achieve CSH level 4 (which is now required by the HCA as a condition of funding).

AECOM consider a range of standard methods of achieving the CSH levels 3, 4 and 5. Costs of achieving the energy requirements of the code are broadly identified as:

- Code level 4 - £8000 to £12 000 per unit,
- Code level 5 (not possible for all sites) - £15 000 to £23 000 per unit

The cost of achieving the 20% reduction in energy emissions through the use of renewables varies widely according to the solution employed from £4 000 to £14 000 per unit.

The CLG report summarises the additional costs over 2006 building regulations of achieving various levels of the code for sustainable homes. These are set out in the table below:

³ Cost Analysis for the Code for Sustainable Homes CLG 2008

Figure 17: Costs of achieving Code for Sustainable Homes

Table 4.3: Flat							
CSH Level	Mandatory (£)	Energy (£)	Water (£)	Flexible (£)	Total cost (£)	Cost £ per m2	Percentage increase on 2006 Building Regs
Best Case (Urban regeneration scenario with low ecological value and low flood risk)							
1	£0	£460	£0	£0	£460	£8	1%
2	£0	£1,648	£0	£115	£1,763	£30	2%
3	£0	£2,622	£125	£145	£2,892	£49	4%
4	£0	£4,782	£125	£580	£5,487	£93	7%
5	£0	£8,289	£805	£1,170	£10,264	£174	13%
6	£0	£16,775	£805	£1,500	£19,080	£323	24%
Medium Case (Market town scenario with medium ecological value and low flood risk)							
1	£0	£275	£0	£10	£285	£5	0%
2	£0	£1,648	£0	£115	£1,763	£30	2%
3	£0	£2,622	£125	£175	£2,922	£50	4%
4	£0	£5,054	£125	£880	£6,059	£103	8%
5	£0	£9,962	£805	£1,500	£12,267	£208	15%
6	£0	£18,596	£805	£1,850	£21,251	£360	27%
Worst Case (City infill scenario with high ecological value and medium/high flood risk)							
1	£0	£460	£0	£40	£500	£8	1%
2	£0	£1,648	£0	£205	£1,853	£31	2%
3	£0	£2,622	£125	£420	£3,167	£54	4%
4	£0	£5,054	£125	£1,020	£6,199	£105	8%
5	£0	£12,055	£805	£1,850	£14,710	£249	19%
6	£0	£18,430	£805	£3,320	£22,555	£382	28%

Source: CLG

The CLG estimated costs per unit are lower than the AECOM figures, however the CLG figures are consistent with our cost consultant’s advice.

It was agreed with Council officers that modelling should be based on the CLG figures with code 4 at £6 000 per unit remaining, and that an option is modelled with a further cost of £2 000 per unit to allow for additional provision of renewables on top of those used to achieve code 4 as this may be required to achieve the 20% renewable target.

For code levels 5 and 6 which are also to be modelled, it is assumed that the measures needed to achieve these standards will involve the use of renewable energy to provide at least 20% as required by policy. Taking the mid point from the CLG table above as a guide, rates of an additional £6000 per unit over level 4 to achieve level 5, and an additional £15 000 per unit to achieve code level 6 have been applied.

B.3.4. Other costs

S106 costs

Haringey’s Community Infrastructure plan is being prepared and sets out the Borough’s need for investment during the plan period. Further guidance from the Council has been received based on an analysis of the rates currently being achieved. The charge has a number of components (infrastructure, education, Health etc), however for the purposes of modelling a lump sum per unit has been included.

Table 10: S106 infrastructure costs

Cost	Cost per Unit
Small sites	£7000
Medium and large sites	£11000

Source: LB Haringey Community Infrastructure plan and other planning policy guidance

Build fees

The model assumes build fees covering architects, QS costs and any other additional fees associated with the build programme. A build cost contingency of 3% has been allowed.

Table 11: Allowance for fees and contingency

Cost - % of build costs	% of gross build costs
Design Fees	10%
Build Contingencies	3%

Source: HCA economic appraisal toolkit

B.3.5. Fees and margins

Affordable housing marketing costs

There are a number of costs associated with the sale of the affordable units to an RP that need to be incorporated into the model (these costs are applied to all affordable units).

- Developer cost of sale to RP - There will be a cost paid by the developer in selling the affordable units to an RP. This cost relates to the legal and admin fees borne by the developer in selling the units to an RP. An assumption of 1.5 % of build costs has been built in.
- RP costs - The RP will have certain costs that need to be included in the model.
 - RP on-costs - Typically these include employers’ agent fee, RP development administration fee, and valuation and legal fees. An overall allowance of 7% is reasonable in our experience (these costs are applied to all affordable units).
 - Intermediate Housing Sales and Marketing - Our model identifies the legal fees, marketing costs and associated interest costs for the intermediate units separately from the social rented costs. An overall allowance of around 1% is a reasonable assumption in our experience (These costs are applied to Intermediate units only).

Table 12: RP costs

Cost	Cost per unit (£)	% of build costs
Developer cost of sale to RP (£)	N/A	1.5%
RP on-costs (£)	N/A	7%
Intermediate Housing Sales and Marketing (£)	N/A	2%

Source: Tribal

Open market housing marketing costs

Standard sales and marketing costs for the sale of new build units are usually between 3% and 5%. In the model, fees of 5% have been assumed, broken down as follows.

Table 13: Marketing costs

Cost	% of sales value
Sales Fees	5%
Legal Fees	2%
Total	7%

Source: Tribal

Developer’s ‘Profit’ (before taxation)

A recent review of the GLA Affordable Housing Toolkit identified default values for Developer’s profit. It concluded that a 17.5% profit level is generally accepted by most developers using the Toolkit. Levels of developer profit on affordable units are more difficult to estimate. However in our experience between 5%-7% is an acceptable assumption, so an allowance of 6% has been made here.

Table 14: Profit levels

Housing type	% of sales value	Housing type
Open Market Housing	17.5%	Open Market Housing
Affordable Housing	6%	Affordable Housing

Land acquisition costs / fees

In order to arrive at an accurate RLV for comparison against the benchmark value it is necessary to include a number of fees and costs that would be associated with site acquisition. These fees / costs are in effect netted off the overall return to produce the RLV.

Table 15: Acquisition costs

Fees	% of Site Value
Agents Fees	2%
Legal Fees	1%
Stamp Duty	
Site Value up to £125,000	0%
Site Value £125,001 - £250,000	1%
Site Value £250,001 - £500,000	3%
Site Value £500,001 plus	4%
Other Acquisition Costs	0

Source: Tribal and HMRC

B.4. Income and values

B.4.1. Open market values

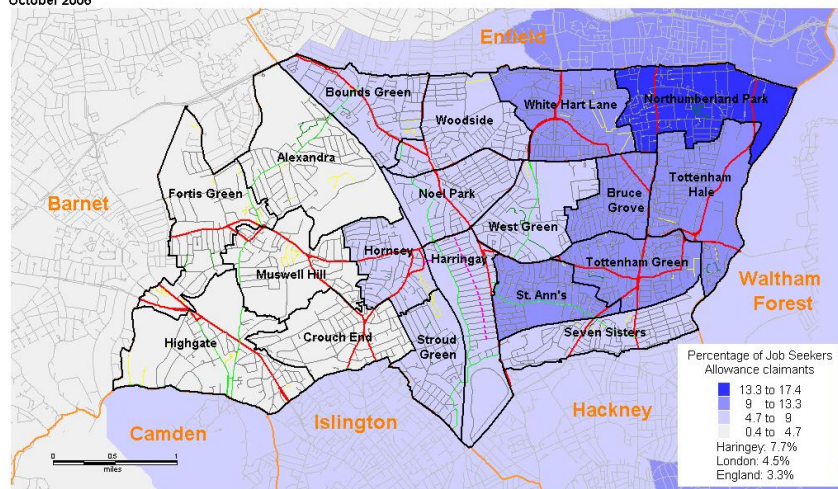
Sub- market areas – three market areas have been identified, these are

- Low value: to the East of the Borough typified by Tottenham (N17),
- Medium value: to the middle of the Borough typified by Wood Green (N22) and Finsbury Park (N4)
- High value : to the West of the Borough typified by Muswell Hill (N10) and Crouch End (N8)
- Very high value: Highgate area (N6)

As most of the sites in the LDF are not in the very high value area, it is suggested that this set of values is not included in the modelling.

There is generally quite a close correlation between the socio- economic characteristics of the population and house prices. Figure 1.1 below shows the areas with high and low incidence of unemployment, and is a useful indicator of the profile of the property market.

Job Seekers Allowance Claimants
Haringey Wards
October 2006



Source: Office for National Statistics and Greater London Authority
Produced by Policy and Partnerships
Haringey Council, December 2006
Please note: Maps on this site have been reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.
London Borough of Haringey 10017423 2006. Maps are for identification purposes only and must not be used for scaling or formal documentation.

Sales values are based on market evidence from internet sources (Home track, Land Registry and Rightmove) and discussion with agents and developers. Figures in the table below are given in £'000s.

Table 16: Sales values

Unit Type	High Value	Medium Value	Low Value
1 bed 2 person flat	250	200	135
2 bed 3 person flat	300	225	160
2 bed 4 person flat	310	250	165
3 bed 4 person flat	350	280	175

Unit Type	High Value	Medium Value	Low Value
3 bed 5 person flat	360	300	180
4 bed 5 person flat	375	320	190
4 bed 6 person flat	385	330	200
2 bed 4 person house	500	320	195
3 bed 5 person house	580	400	245
3 bed 6 person house	590	420	260
4 bed 5 person house	600	440	280
4 bed 6 person house	620	450	290
4 bed 7 person house	640	460	300

B.4.2. Affordable housing value assumptions

Affordable rented housing

Rent levels are based on published CORE Data for new lettings 2008/9 with an allowance for inflationary increase to 2009/10 and a further increase to allow for new build quality.

This information has been checked with partner RPs to ensure the rent levels reflect those currently used by them in the area to appraise new development, and that they properly reflect variations between unit types.

Table 17: Affordable rented housing

Unit type	Rent Per Week (£) 2009/10
1 bed flat	£83
2 bed flat	£99
2 bed house	£102
3 bed flat	£112
3 bed house	£115
4 bed flat	£126
4 bed house	£129

The model uses a similar approach to the HCA Economic Appraisal Toolkit to value the social rented units. The approach values social rented units by capitalising the net rental value of a unit. The gross rental levels are listed above. The following costs per annum have been assumed, to generate a net rental value (all are calculated as a % of gross rent per annum and based on the guidance in the HCA Economic Appraisal Tool).

- Management Costs -12.00%
- Voids / bad debts - 3.00%
- Repairs Fund - 18.00%

The yield rate we have assumed is 6.25% based on the HCA recommended levels and experience of recent similar housing projects. RPs have indicated that they require breakeven NPV over a 30 year cashflow and income to exceed costs by year 5.

B.4.3. Intermediate tenure values

The model has the capacity to model a number of intermediate tenure types however the Council have said that their preferred intermediate tenure is shared ownership and that all sites should be modelled at their policy target of 70% affordable rent and 30% shared ownership. A further option has been modelled of a 60%/40% tenure split on site with 50% affordable housing with and without grant.

Shared ownership assumptions

As with affordable rented units, the valuation of shared ownership units is based upon the approach used in the economic appraisal toolkit. The value of the shared ownership unit (i.e. the value at which it is sold to the RP) is as follows.

Value = Predicted equity stake sold to buyer + Capitalised value of rental income on retained equity.

The shared ownership sales model is based on the standard assumption of is an initial tranche sale of 40% with a rent of 2.75% of unsold equity. There are a series of costs associated with the rental value – again calculated as a % of gross rent.

- Management Costs - £150 per unit per annum
- Voids / bad debts - 2.00%
- Repairs Fund – 0%

The yield rate assumed is 6.25% based on the HCA recommended levels and experience of recent similar housing projects.

B.4.4. Funding and subsidies

Social housing grant and other funding

Average grant from the HCA allocation statement for 2008-11 published in April 2008 for the London North Sub-region have been used as a starting point to establish grant rates for new development. These figures are: Affordable rent: £107 260 per unit, £30 269 per person and Intermediate (LCHO and IR): £44 475 per unit, £17 807 per person

However following further discussion with Council staff, it has been agreed that lower levels will be used in the modelling to reflect recent discussions with HCA:

- Affordable rent: £26 000 per person
- Shared ownership: £15 000 per person

Stakeholders have indicated that HCA is now looking at grant on a per unit basis and that they are considering maximums of £120 000 per unit for rented units and £50 000 per unit for shared ownership.

The modelling uses the figures per person, but the resulting rates per unit were also considered.

B.5. Benchmark land values

Benchmark values have been established through further market research, including input from the District Valuer, local agents, land registry and internet based sources. The difficulty in establishing current values is that there is very little residential land on the market and there appear to be few recent transactions which can be used as comparables.

District Valuer

The latest report on residential building land from the Valuation Office gives land values for some London Boroughs and averages for inner and outer London. Land values in Haringey are not specifically mentioned. It is therefore suggested that the guide for outer London is used as a guide. Land values in the report are broken down as follows:

Table 18: Land costs per hectare

Area	Small sites	Bulk Land	Sites for flats or maisonettes
Outer London	4 730 000	4 420 000	5 190 000

Source: VOA Property Market Report July 2009

Indications from stakeholders are that land (large sites) in Haringey is from £4.2m per HA to £5.5m per HA depending on density, location and whether a site has planning consent or is being purchased subject to planning. RPS tend to buy smaller sites which cost more.

Information provided by the Council on recent sales of local authority owned land, indicate land values on medium density sites of between £3.5m and £4.2m per hectare. Land values operate on a sliding scale according to density and value area and benchmarks have been set to reflect this.

Existing and alternative use values

The expectations of landowners will be strongly influenced by both the existing use of the site, and by any alternative uses, other than housing. If the value of the site in its existing use – or an appropriate alternative use - is higher than the residual value after allowance has been made for the affordable housing policy, the development is unlikely to go ahead.

It is therefore very important to have an understanding of what the existing and alternative uses of the Borough’s housing sites are.

The Council has provided details of the existing uses of a number of the proposed LDF sites. These range from existing residential use, to mixed retail and residential, offices, industrial and education uses. The relative values generated by each of these existing uses therefore needs to be examined – it is inevitable that there will be considerable variation between sites.

Based on the Valuation Office Agency Property Market Report for July 2009⁴, the mean relevant values for **land**⁵ for the following purposes are as follows:

⁴ We would expect the January 2010 version to be issued within the next few months
⁵ These are values for land for development, not existing use values

Table 19: District valuer

	Range	Mean Value
	(price/ha)	(price/ha)
Residential		
Outer London:		
Bulk land		£4.42m
Small sites		£4.73m
Sites for flats and maisonettes		£5.19m
Industrial/ Warehouse Land		
London	£650k- £3.4 m	£1.942m
NE Enfield and Haringey		£2.19 m
B1 Land (Office Park Space)		
London	£765k- £4.136m	£2.32 m

Source: Valuation Office Agency Property Market Report , July 2009

This data is useful in that it demonstrates that, as is generally the case, industrial and business uses are lower value than residential use but industrial values are rather higher than in many parts of the UK. A number of sites have an existing residential or part residential use, which, in order for development to come forward, must produce a better value when re-developed rather than retained in an existing residential use.

Benchmark levels used for modelling

Taking the above into account the benchmark values used for modelled are set out in Table 20 below, however these need to be considered together with EUVs.

Table 20: Benchmark land values per hectare

Value Area/density	Small sites £	Medium sites £	Large sites £
Low/medium	2 800 000	3 000 000	3 000 000
Low/high	n/a	3 500 000	3 500 000
Medium/medium	4 730 000	4 500 000	4 500 000
Medium/high	n/a	6 200 000	6200000
High/medium	5 676 000	5 900 000	5900000
High/high	n/a	1 0900 000	10900000

Source: District valuer, records of land sales, stakeholder input