The HCA Area Wide Viability Model

Annex 1 Transparent Viability Assumptions

August 2010
Consultation version

AREA WIDE VIABILITY ASSESSMENT

TRANSPARENCY OF ASSUMPTIONS AND PRINCIPLES

CONTENTS

1 INTRODUCTION

Viability appraisals have become an established part of decision making with regard to both planning and use of public subsidy in residential development. The HCA provides its Economic Appraisal Tool for use in site specific appraisals, alongside other proprietary models, and it has developed an area wide appraisal model for strategic decision making on planning and investment.

The benefits of the area wide approach are outlined at the beginning of this paper, but the purpose of the paper is to focus on the assumptions used in viability appraisal and the area wide approach in particular.

The robustness of viability appraisals depends on the quality of the inputs and there is a great deal of debate in the field about the best sources of input assumptions. The RICS has commissioned consultants to produce a guidance note on the use of financial viability in planning, which should add to the clarity about the basis of assumptions used across the sector. In the interim, HCA wishes to set out transparently the basis of the assumptions that it will use in its viability modelling at an area wide level to support investment planning and consideration of the capacity of an area to support affordable housing delivery through S106. We hope this approach will provide transparency to our partners which they can factor into their decision-making, even if they use alternative assumptions for their own modelling.

We are consulting with interested parties and informed experts on a draft set of assumptions and principles, as set out in this working draft paper.

2 AREA WIDE VIABILITY ASSESSMENT

2.1 Housing Supply and the HCA Enabling Role

At the centre of the new government's proposals for housing supply is a shift in decision making to local areas through reform of the planning system, the abolition of regional targets and a new incentives approach through council tax and business rate matching in those areas that promote new house-building.

HCA can, when requested, support local authorities to achieve their housing supply ambitions. As part of this, Local Investment Planning can play a role in setting the context and priorities for housing growth and the framework for HCA's supporting investment. The Local Investment Planning process allows discussion about realism of public funding assumptions and prioritisation. Supported by Area Wide Viability Assessment, it is possible to have a structured discussion about how and where infrastructure and planning policies (including affordable housing contributions) are supporting and/or constraining development and to consider in the round a viable level of development contribution.

Where local authorities choose not to complete a Local Investment Plan, they will be seeking to make informed choices amongst policy options, taking account of the prospects for delivery. Use of area wide viability tools can inform this process.

The area wide approach can be used to assess the viability of proposed developments across an area, to underpin discussion about investment. It can also be used to inform the viability element of affordable housing policy setting (as part of a local authority's Section 106 policies), in particular the proportion of affordable housing that can be delivered on a nil grant basis on different types of site.

In this regard, it should be noted that part of the rationale for Local Investment Planning is to co-ordinate investment and planning strategies to make best use of resources to meet local objectives. The model can be used as evidence by local authorities to inform planning strategies, including both the setting of affordable housing targets and tariffs.

2.2 Area Wide and Site Specific Assessments

Area wide viability assessments do not replace site specific viability assessments. These continue to be required, to take account of the particular circumstances of each site when assessing:

- the capacity for planning obligations on the grant of planning consent; and
- the case for public investment to deliver additional outputs.

The area wide approach informs investment and planning strategies at an early stage, allowing clear policy signals to be made to the market, in advance of land acquisition and site specific investment and planning decisions. Nevertheless, it is important to recognise that the assumptions used in area wide modelling do not set a precedent for assumptions used on a site by site basis.

2.3 Transparent Assumptions

As part of the development of the area wide model, the HCA is promoting a transparent approach to assumptions to underpin viability modelling. The intention is to provide transparency to partners about what HCA will assume in using models to inform its investment decisions.

On many of the required assumptions, there is not a consensus among professionals advising local authorities and the Planning Inspectorate. The RICS has commissioned a practice note Tests of Financial Viability in Planning which will be published this autumn. We are engaged with the RICS work via membership of the project steering group.

2.4 Consultation

Through our involvement with the RICS viability project and independent routes we are consulting on a transparent assumptions framework with:

- expert practitioners and valuers in the field, including practitioners acting on the Planning Inspectorate's expert panel
- landowners and developers, including HBF and HBA
- the Valuation Office Agency, who have supplied commissioned analysis of land values to feed into the assumptions framework
- quantity surveyors and BCIS
- lenders
- local authorities
- planners
- the Planning Inspectorate
- housing associations
- housing professionals

2.5 How to Complete an Assessment

2.5.1 The Model

The HCA has developed an area wide assessment model which will be freely available to download from its website. The model can be run either by local authority staff directly, or by HCA staff on behalf of a local authority, as appropriate to the availability of capacity and skills.

2.5.2 Technical and Professional Input to the Assumptions

Part of the rationale for area wide viability assessment is that property market conditions and the costs of delivering sites tend to vary significantly across an area. Therefore, the appraisal must be based on robust and well informed views of property market conditions and realistic assessments of development costs. This requires high level advice from experienced practitioners via consultancy advice, as is noted in several places within this paper.

2.5.3 How HCA Can Help

The HCA model is available for use by any partner, as noted above. Where it is invited to by local authorities, HCA can offer a range of support, from running the model to strategic advice. More specifically, the HCA has the capability and technical expertise (from its own land development activities and ongoing liaison with developers, valuers and lenders) to offer:

- help on appropriate and cost effective ways of commissioning and interpreting advice from external experts;
- sense checks on the principles and assumptions that are used in an assessment; and
- help to source some of the data and capacity for spatial analysis, as noted in sections 6.2 and 7.1.

2.6 Structure of This Paper

The purpose of the area wide viability assessment is to provide a robust broad brush view of the economic viability of the different types of site within an area's land supply pipeline, to test different policy scenarios. The assessment process requires clarity on certain points of principle, namely:

- that land value should be an input to the appraisal, as set out in section 3;
- how any potential variation in future market conditions should be assessed, as discussed in section 4; and
- use of appropriate assumptions on developer margin, taking account of the margins required by lenders and shareholders (section 5).

The structure of the remainder of this paper follows the various stages that are required to complete an appraisal, starting with an assessment of the characteristics of the sites and their capacity in the area's land supply pipeline (section 6), then applying appropriate assumptions on house prices, rates of sale, affordable housing value, build costs and infrastructure costs (sections 7 and 8).

The final section looks at how to approach policy testing, emphasising that the starting point for investment planning is viability using a nil grant assumption, to provide clarity on the additionality gained from public investment. The nil grant position is also relevant to planning policy and strategy.

Assumptions are also required on the costs of building standards (including the Code for Sustainable Homes), planning obligations to fund infrastructure and the level at which any tariff is set, should it be implemented at a local level. In this respect, a local authority may choose to use the area wide model to test the economic viability of proposed levels of tariff, as part of its evaluation of planning strategies.

3 LAND VALUE

3.1 Threshold Land Value

The rationale of the development appraisal process is to assess the residual land value that is likely to be generated by the proposed development and to compare it with a benchmark that represents the value required for the land to come forward for development. We refer to this benchmark as threshold land value.

Threshold land value is commonly described as existing use value plus a premium, but there is not an authoritative definition of that premium, largely because land market circumstances vary widely. This paper sets out a framework of principles that can be used to set threshold land value at a level that will allow development to come forward, while achieving wider policy objectives, at value for money to the taxpayer.

3.2 Market Land Value

The market value of serviced land is a relevant benchmark, as it is tangible evidence of the value at which land has been released for development. Its weakness is that market values are influenced by expectations of planning obligations, introducing circular logic to the appraisal. More specifically, reference to market value may offer inappropriate evidence if the transaction is based on unrealistic expectations of market potential, planning obligations or public subsidy, in which case price paid is too high a benchmark.

3.3 Premium over Existing or Alternative Use Value

Nevertheless, the gap between market values and existing use values (EUV) should be understood, together with the relationships to alternative use value (AUV), if relevant. Therefore, any assessment of threshold land value in an area should start with an assessment of the gap between market values and EUV (and separately AUV if relevant) on different types of land. Typically, this gap or premium will be expressed as a percentage over EUV for previously developed land and as a multiple of agricultural value for greenfield land.

3.4 Consistency of Definition

Consistency of definition with regard to level of servicing of land is crucial here. In most instances, the market value of serviced plots will not be the relevant benchmark, as expenditure on enabling infrastructure is likely to be required on the land in question. Commentary on infrastructure costs is provided in section 8.

The residual appraisal also needs to be clear on the difference between net developable residential area, on which residential densities can be based, and gross site area, which is relevant to EUV and AUV. On large sites, where there is significant provision of open space and community facilities, the difference tends to be substantial, as is the case on mixed use sites where there are significant commercial uses which will also need financial appraisal.

3.5 Variation in the Premium over EUV

There is some practitioner convention on the required premium above EUV, but this is some way short of consensus and the views of Planning Inspectors at Examination of Core Strategy have varied. Benchmarks and evidence from planning appeals tend to be in a range of 10% to 30% above EUV in urban areas. For greenfield land, benchmarks tend to be in a range of 10 to 20 times agricultural value.

In practice, the premium over EUV/ AUV will vary according to the strength of demand for new homes, the supply of land at various stages within the planning system and the predominant attitude of landowners to a sale of land. In areas where landowners have long investment horizons and they are content with current land use, the premium will be relatively high. Conversely, the premium will be relatively low (and in extreme cases non-existent) where landowners are minded to sell or financially distressed.

3.6 Value in Existing Commercial Use

Where an urban site is currently in commercial use, rather than being a cleared site, the existing use value should be assessed as the value in that use. The assessment should apply an appropriate investment yield to the estimated rental income from the current use.

3.7 Capital Gains Tax

The Capital Gains Tax payable by a landowner will be a factor in that landowner's attitude to sale and, at an aggregate level, this will have an influence on the required premium over EUV. The increase in CGT to 28% in the June 2010 Budget may increase the premium required by 'content' landowners.

3.8 Policy Influence on the Premium over EUV

This approach allows the market premium over EUV/ AUV to be compared amongst types of site, local markets and over time. The commentary above suggests that any policy prescription on a maximum premium is unlikely to be effective where landowners are content with current land use. However, as noted above, the premium is likely to be influenced by the supply of land allocated within the planning system. Therefore, a policy decision to increase the supply of land allocated within a local plan (potentially via the use of preferred options) will increase competition amongst landowners, offering a mechanism to reduce the required premium above existing use value.

3.9 Sources of Data

Application of the approach outlined here to area wide viability appraisal is likely to require high level advice (robust indicative advice but not formal valuations) from land agents or valuers who are familiar with the local market. The commissioning of such advice will ground the area wide appraisal (and the policy decisions that follow) in the realities of the local market. This is consistent with the Inspector's finding, when assessing the Barking and Dagenham Core Strategy[1], that the assumption used on premium above existing use value "must be based on recent and convincing evidence".

3.10 Other Benchmarks

3.10.1 Percentage of Gross Development Value

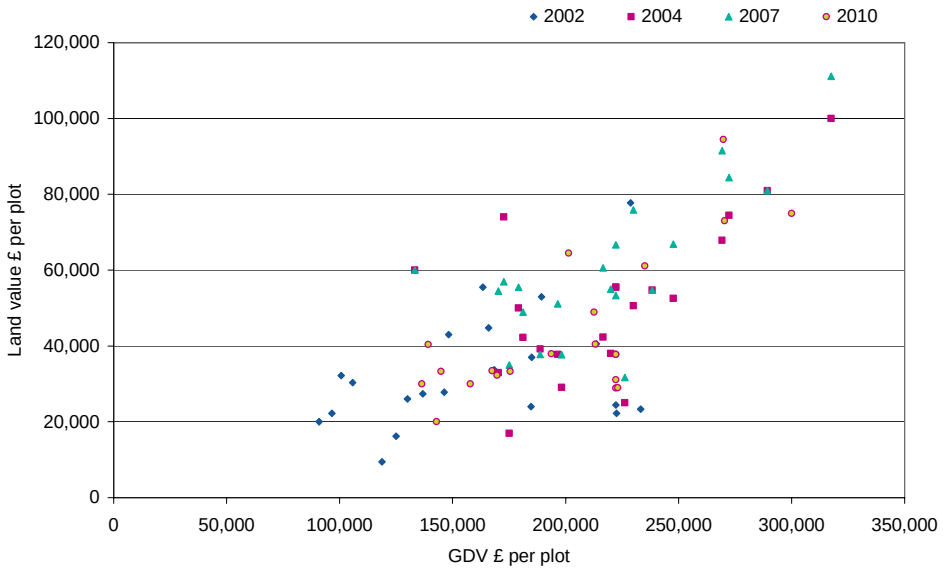
Some area wide viability studies (commissioned for planning purposes) have used percentage of gross development value (% of GDV) as a benchmark to assess threshold land value. This ratio is used by developers and valuers as a sense check during the appraisal process and it serves as a useful cross check amongst appraisals. However, there are limitations to the usefulness of this measure, namely:

- as affordable housing planning obligations tend to depress GDV, there is a circularity in using % of GDV as a benchmark in assessing financial capacity for planning obligations;
- the % of GDV benchmark tends to be used and understood with reference to serviced parcels of land, meaning that it is not an appropriate benchmark for bulk unserviced land; and
- it takes no account of variations in the efficiency of land use, expressed in terms of the net developable area as a proportion of gross area.

[1] *Report on the Examination into the London Borough of Barking and Dagenham Core Strategy Development Plan Document*. Report to the London Borough of Barking and Dagenham. 8 February 2010. The Planning Inspectorate, Bristol.

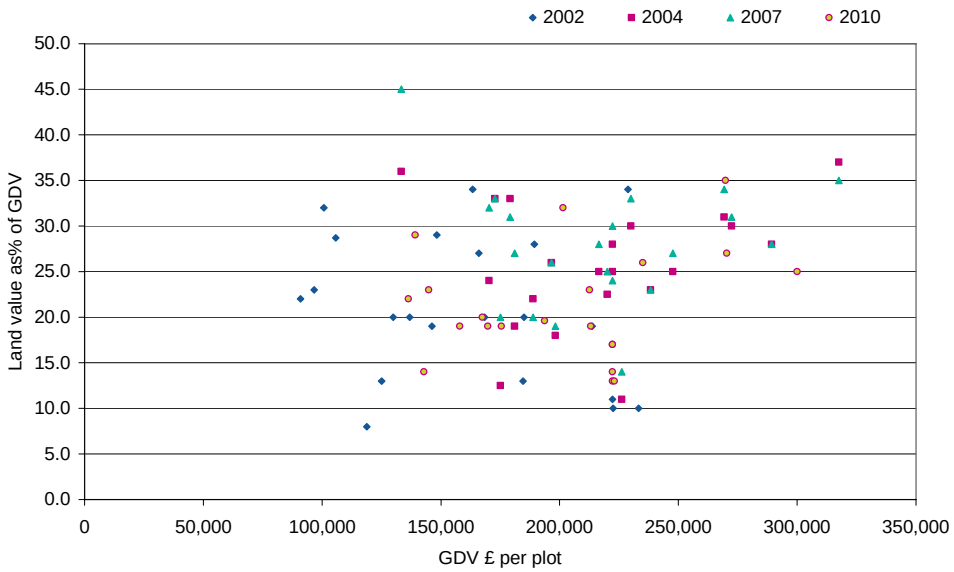
These limitations are illustrated by analysis completed by the Valuation Agency for HCA. This looked at the relationships between land value and GDV in 21 locations across England in 2002, 2004, 2007 and 2010. The study assumed a site of 0.5 hectares, serviced to the periphery, with planning obligations typical of each location at each date. The analysis shows that the relationship between GDV and land value per plot (Figure 1) is more consistent than the relationship between GDV and land value expressed as a % of GDV (Figure 2). Both charts show that these relationships vary considerably according to local market circumstances.

Figure 1 – Land value per plot v GDV



Source: VOA

Figure 2 – Land value as % of GDV v GDV



Source: VOA

With regard to definitions, the VOA analysis uses a standard assumption on the requirement for external works, infrastructure and S106 infrastructure contributions, assuming that spine roads and major infrastructure items are either already provided or separately funded. In practice, land in a local supply pipeline will have varying requirements for such infrastructure, meaning that there is a variable relationship with the type of benchmark information presented in the charts above.

3.10.2 Share of Land Value Uplift

Some area wide studies[2] have used the concept of share of uplift in land value (between existing use value and theoretical residual land value, 'unencumbered' by planning obligations). This approach has also been advocated at independent examination of a Core Strategy[3]. However, it is not clear whether or not this approach is an effective representation of landowner motives and attitudes to the sale of land.

[2] *Affordable Housing Viability Assessment for South Kesteven District Council*. Levvel Ltd, December 2009.

[3] *A Critical Review of the Affordable Housing Economic Viability Assessment prepared by BNP Paribas Real Estate on behalf of The London Borough of Barking & Dagenham*. Nigel Jones, Chesterton Humberts, for the Planning Inspectorate. November 2009.

4 MARKET CONDITIONS

4.1 Market Assumptions During a Downturn

The downturn in the residential market since 2007 has impaired the overall economic viability of residential development, as recognised in the HCA good practice note[4] on viability of planning obligations during the market downturn. This states that:

"The Planning Inspectorate have advised Local Planning Authorities that it would not be reasonable to base a Core Strategy on a short term view of the housing market, and that reasoned assumptions on what might be a normal market are needed. Any targets would need to have been tested and justified, and provision for flexibility will also need to deal with abnormal market conditions. LPAs are expected to monitor and review policies and adapt them should abnormal conditions became the norm."

The area wide appraisal will need house price and build costs assumptions to be made, appropriate to the types of site in the land supply pipeline, as discussed in sections 6 to 8. As part of this process, assumptions need to be made about market conditions during the period in which sites are likely to be developed, taking account of risk.

Much of this section relates to the potential for recovery from the currently muted market conditions. The applicability of these principles and assumptions to area wide assessment will need to be reviewed on a regular basis.

4.2 What is a Normal Market?

A review of various market indicators is set out in Appendix 1. This review demonstrates that the task of defining a 'normal market' with reference to past market conditions is highly complex and contentious. It suggests that there may never have been a normal market, but that conditions during the 2000-2005 period were 'more normal' than those prevailing in 2006 and 2007. Some (but not all) indicators suggest that the 2000-2002 market was 'more normal' than the 2003-2004 market. Some indicators remain significantly different from 'relative normality' and show signs of only a slow recovery, namely:

- Loan to value on mortgage advances
- Market turnover, including both mortgage approvals for house purchase and sales transactions
- The price premium for new homes relative to second hand stock.

4.3 Use of Current Prices and Costs

The relationship between house prices and build costs is a major determinant of viability. The analysis set out in Appendix 2 indicates that house price growth tends to exceed build cost inflation over the longer term, but that these growth factors tend to converge during the extent of a market downturn, as they have done between Q3 2007 and Q2 2010.

On this basis, it is appropriate to use current house prices and build costs to consider the viability of schemes during the next two to three years, with appropriate adjustment for the costs of meeting the Code for Sustainable Homes.

[4] *Investment and Planning Obligations: Responding to the downturn*. HCA Good Practice Note, July 2009

4.4 Inflation Assumptions

For schemes with a longer development period, there is a case for building in an explicit assumption on a gap between house price inflation and build costs, before consideration of the costs of the Code. This reflects the tendency for developers to take a forward looking view of the market, although the corollary of this may well be that profit margins should be increased to reflect the attitudes towards risk and return of developers who are prepared to take such a forward looking view.

Based on past relationships between household disposable income and build costs, there is a case for expecting house price inflation to exceed build cost inflation over the long term by a margin. The analysis in Appendix 2 suggests that this might lie in a range around a figure of 0.4% per annum, but this finding is only tentative It is also before consideration of the extra costs of future regulation and any explicit projection of future household incomes.

4.5 Sensitivity Analysis

Whatever assumptions on market conditions are used, the central set of assumptions should be accompanied by sensitivity analysis (with regard to variations in house prices, build costs and rates of sale). Typically, this will contrast high and low growth scenarios, arguably with different relationships between house prices and build costs.

Such sensitivity analysis is the basis of the dynamic approach to viability that is advocated by some practitioners[5]. Such an approach has been called into question at planning inquiry[6]. If this view prevails, then dynamic viability will be best applied to update findings on capacity for planning obligations at appropriate intervals, as the relevant market variables change, including consideration of any new variables that are impacting on the economics of development.

4.6 Rates of Sale

Site specific assumptions on rates of sale are discussed later in section 7. On larger schemes, there is a case for building in an assumption that rates of market absorption will increase slowly to levels more in line with normality over the longer term. However, this would be applicable to the larger phased schemes only and should probably be associated with an appropriate increase in risk premium, consistent with the discussion above on house price inflation.

[5] *Fordham Research Dynamic Viability Model*. Fordham Research, October 2009

[6] *Barratt Developments & City of Wakefield & SS Communities*. Mr Justice Pitchford Approved Judgment., Case No: CO/5036/2009. High Court of Justice, December 2009.

5 DEVELOPER MARGIN

Development appraisals are often completed with reference to both developer overhead and developer profit. For these purposes, we refer to developer margin as gross profit, i.e., the total of both overhead and profit, but not including overheads that are attributable to allowable development costs.

5.1 Market Housing

Developers' required returns are determined largely by the returns required by shareholders (particularly for the publicly quoted house builders) and lenders (particularly at the current time, when development finance is scarce and lenders are risk averse). The returns required to cover risk are higher in the current market than they were at the peak of the market in 2007 and there is a general consensus that the availability of development finance will be constrained during the next five years.

At a site specific level, margins should and do vary according to the risk of the project. It is important to recognise that the average margins used in area wide modelling do not set a precedent for assumptions used on a site by site basis.

The current user manual for the HCA Economic Appraisal Tool[7] states that a typical figure might be in the region of 17.5% to 20% of the value of open market housing, but that this is only a guide as it will depend on the state of the market and the size and complexity of the scheme. We are consulting with lenders and equity analysts with regard to variations in required return and the determining factors in that variation.

The HCA area wide model uses a single developer margin for all typologies in its base case, recognising that site specific margins will vary around an average. For riskier typologies where there is more cost uncertainty, this can be reflected in the allowance made for abnormals and contingencies, as discussed in section 8.3.

5.2 Affordable Housing

Conventional practice is to allow for developer's margin at a lower rate for affordable housing developed as part of a Section 106 agreement, as the risks are low relative to development of open market housing. The user manual for the Economic Appraisal Tool states that a typical figure may be in the region of 6% of affordable housing value on a nil grant basis, but this is only a guide.

[7] *Economic Appraisal Tool User Manual.* Version 2.0. HCA, July 2009.

6 SITE CHARACTERISTICS

The efficacy of an area wide viability appraisal rests on whether the initial assessment of site characteristics is adequate to give a robust broad brush basis for formulation of investment and planning strategies.

6.1 Selection of Sites

The sites chosen should be those on which investment and planning decisions will be made during the period under consideration. Typically, this will be a subset of the sites identified in the area's SHLAA. There may be merit in making the selection sufficiently wide for alternative investment and planning strategies to be evaluated.

6.2 Categorisation of Sites

In most areas, a proportion of the sites in the identified land supply pipeline will share common characteristics, such that they can be regarded as part of a site typology that will share broadly similar viability characteristics. Where this is the case, an enhanced strategic view will be obtained by grouping such sites into typologies. The criteria for grouping will vary amongst areas, but they are likely to include:

- Density
- Strength of residential market (measured by house prices)
- Size of site and requirements for spending on infrastructure
- Greenfield/ urban land
- Existing and alternative use value (which may be correlated with other criteria)

Allocation of sites amongst broad bands within each of the criteria will demonstrate the predominant characteristics of sites, allowing appropriate site typologies to be built up. The HCA model allows for up to nine site typologies.

Analysis of the selected sites via a Geographical Information System (GIS) will facilitate this process, most notably with regard to assessment of residential market potential, as noted in the next section. Clearly, this requires site location data to be available, which leads to the conclusion that best practice in completing a Strategic Housing Land Availability Assessment (SHLAA) should include provision of site location data, ideally in the form of OS co-ordinates.

6.3 Density and Net Developable Area

SHLAAs should provide site capacity data in terms of residential unit numbers, although it should be noted that the validity of assumptions on market capacity may have changed since the time at which the SHLAA was completed. Where there is a difference between net residential area and gross site area, both of these areas will need to be identified in the appraisal, in order that:

- density on the net developable area can be assessed, feeding into appropriate assumptions on build costs and sales prices; and
- residual land value can be related back to gross site area, for the purposes of comparison with threshold land value.

The difference between gross and net area may be accounted for by non income producing open space or ancillary land use, such as community facilities. Where the development is mixed use, a judgment or formal appraisal will have to be made of the residual land value generated by that use, relative to threshold land value.

6.4 Dwelling Mix

Once realistic densities have been established, a view will be needed on a dwelling mix for each site typology, to specify the size of units and the proportions of flats and houses. Reference should be made to evidence from successfully developed sites in the local market and other relevant markets, as appropriate.

Where the dwelling mix is prescribed by the terms of an existing planning consent, then it may be appropriate to use this mix, albeit that changes to the development mix may be part of the sensitivity analysis that follows, as noted in section 9.

7 REVENUE

7.1 House Prices

Spatial analysis of house prices relative to the location of sites is likely to be required for a robust broad brush assessment to be made of residential market potential. Spatial analysis of house prices across a local area can be provided by HCA as part of the Local Investment Planning process, using a combination of in house resources and bespoke reports from proprietary providers of house price data.

Data analysis should be supplemented by enquiries with agents or valuers familiar with the local market and, where relevant (which is most likely to be the case for large regeneration schemes), comparable schemes in other markets.

7.2 Rates of Sale

Timing of sales revenue is a crucial variable that will determine the speed of cash flow receipts. Most development that is currently in progress will be completed in relatively small phases, to allow for the relatively constrained rates of sale that prevail in the current market. Evidence from comparable developments should be used, via experienced developers and advisers if required, taking account of overall market capacity in an area. For the area wide model, this will need to be translated into realistic start and end dates for receipt of sales income for each site typology, taking account of the typical size of sites.

7.3 Ground Rent Receipts

Flats are usually sold in the open market on the basis of a long leasehold interest. The freehold interest will generally also have a capital value which should be assessed by reference to prevailing market rates of both ground rent income and investment yields. Reference should be made to appropriate market evidence, which may be available from valuers' reports[8].

Yields vary according to the initial ground rent income and the terms of the lease. At the time of writing, indicative opinion amongst valuers suggests that gross initial yields are in a range of 5.75% to 6.5%.

[8] *Ground Rents Uncovered*. Savills, Winter/ Spring 2010

7.4 Affordable Housing Value

Guidance on how to assess the capital value of affordable housing has been published by the RICS[9]. This states that:

"There are three main components that make up the GDV of land for affordable housing:

> *1. Rental and capital receipts from the affordable units. Income from this source will be from either:*
>
> *(a) The capitalised net annual rents (for a given time period at a given discount rate) from the social rented, intermediate rent, and the rental element of the new build HomeBuy units; or*
>
> *(b) The capital receipts from initial equity sales and future tranche sales of new build HomeBuy, shared equity and discounted market sale units.*
>
> *2 Any proceeds that may be reinvested from staircasing receipts, Right to Acquire (RTA) or external subsidies, such as Social Housing Grant (SHG).*
>
> *3 Any internal registered provider of subsidy."*

7.4.1 Grant Assumption

For the purposes of area wide viability assessment, the starting point should be to establish the viability of sites with nil payment of grant. Sensitivity to alternative grant scenarios can then be tested, to identify the additionality (i.e., the additional outputs gained) from grant expenditure.

7.4.2 Value Assuming Nil Grant

Providers of affordable housing will form a view of the value to them of the future flow of rental and capital receipts, based on a financial appraisal and the provider's attitude to risk, linked to the availability and use of internal subsidy. Site specific viability appraisals will, wherever possible, be based on the provider's own view of capital value.

For area wide appraisals, a view should be taken of the prevailing assumptions used by providers when assessing capital value (assuming nil grant), consistent with RICS Guidance, with reference to evidence from valuers and providers. With regard to tenure:

- for shared ownership, these assumptions should take account of evidence of buyer behaviour with regard to both the size of initial equity purchase and subsequent staircasing activity
- for social rented housing, assumptions will include the prevailing levels of operating costs and the effective capitalisation rate used by providers. These should be applied to estimated rent levels in the area, taking account of the level of rents that providers tend to charge, relative to target rents.

[9] *Valuation of Land for Affordable Housing*. 1st Edition, Guidance Note. GN 59/2010. RICS, June 2010.

8 DEVELOPMENT COSTS

8.1 Build Costs

Data from the Building Cost Information Service[10] are widely accepted benchmarks for build costs, albeit that they are based predominantly on the construction of affordable housing. Definitions are all important when assessing costs of development, to avoid the risk of either double counting or omission of costs.

Specialist advice may be required to assess build costs across different typologies, particularly in the case of complex or higher density typologies. For instance, in the latter case, variation in the height of the building and the inclusion of underground car parking can lead to substantial variation in costs.

8.1.1 Definitions – External Works and Gross/ Net Areas

It should be understood that BCIS figures do not include the cost of external works or on site infrastructure. Therefore, appropriate allowances needs to be made for external works and site infrastructure, to include all expenditure on site clearance and preparation, roads, pavements, sewers, utilities, street lighting and landscaping.

BCIS figures are quoted on the basis of gross internal area (GIA), whereas dwellings are sold on the basis of net internal area (NIA)[11]. For houses, these are broadly equivalent measures, but for flats the difference can be substantial, to take account of common areas and stair or lift cores. The difference will depend on the form and height of the building and is likely to lie in a range of 10% to 20% of GIA. The current Economic Appraisal Tool user manual states that a gross to net ratio of 15% may be typical.

The HCA area wide model is based on net internal areas throughout, so BCIS build costs for flats should be grossed up by a factor of, say, 15%, before they are translated into a blended build cost across both flats and houses, for each site typology.

8.1.2 Developer's Overheads

House builders often quote lower build costs than BCIS, generally because contribution to overheads is quoted as a separate figure. Developer overheads that are attributable to build costs should not be included in the assessment of developer margin, as noted in section 5.

8.2 External Works and Infrastructure

Some quantity surveyors use a rule of thumb that external works and infrastructure vary in a range of 10% to 20% of build costs, although the difficulty here is making a judgment on the type of infrastructure that has been considered in coming to that high level view.

The BCIS survey method records costs other than the cost of the building, but reports only on the cost of the building as a benchmark cost, as noted above. Analysis completed by BCIS for the Housing Corporation in 2007 indicated that the average cost of external works and infrastructure on residential schemes started since 2003 was equivalent to an additional 27% of building costs. This included averages of 16% of building cost for flats and 30% for houses. These averages included a wide range of site specific circumstances.

[10] www.bcis.co.uk

[11] Also referred to as GIA of the individual units, to differentiate this measure from commercial building NIA measures which exclude toilets and bathrooms.

Such benchmarks can be only a starting point for setting the assumption on external works and infrastructure spend, as costs vary widely amongst different types of site. On larger sites, such expenditure can be significant, whilst on small serviced sites they will be less. We are consulting with developers and quantity surveyors on the range of infrastructure costs that can be encountered in practice.

8.3 Site Abnormals and Contingencies

BCIS build costs include only costs that are directly related to the building. Therefore they do not include abnormal expenditure such as costs of site remediation, decontamination or mitigation of flood risk. Where there is a known requirement for remediation or decontamination on certain sites, this can be reflected in the allowance for abnormals. Otherwise, a suitable abnormals contingency may be appropriate on all previously developed sites. Informed advice may be needed.

Generally, for volume house building on greenfield sites, no contingency should be anticipated, assuming that proper allowance has been made for external works and infrastructure. Regeneration schemes or those with unusual design features may be expected to include some contingency to cater for the risk associated with unknowns.

The HCA area wide model allows for "Additional Costs" for each site typology. This will include an appropriate allowance for external works, infrastructure and abnormals/ contingencies.

8.4 Standards/ Code for Sustainable Homes

A view needs to be taken of the cost of standards during the period under consideration in the assessment. It is generally accepted that BCIS costs are currently based on affordable housing standards, including Level 3 of the Code for Sustainable Homes. Therefore any variation from this standard should be separately costed, as noted in section 9. Future minimum levels of the Code will be:

- Code 3 from October 2010
- Code 4 from 2013
- Code 6 from 2016

8.4.1 Sources of Data

The costs of achieving levels of the Code were assessed in a report by Element Energy and Davis Langdon to CLG in March 2010[12]. However, since that report was commissioned, changes to the definition of standards above Code 4 have been proposed. More specifically, the assessment did not consider the current proposal for 70% of the required carbon reduction for Code level 6 to be achieved on site, with the remainder being achieved via 'allowable solutions'.

[12] *Code for Sustainable Homes: A Cost Review*. Report to CLG. Element Energy and Davis Langdon, March 2010

Indicative costs for this type of arrangement were included in the Zero Carbon Homes Impact Assessment published in December 2009[13]. We are consulting on an appropriate set of working assumptions on the cost impacts of standards above Code 4, on the basis that the March 2010 report can be referenced for cost impacts up to and including Code 4.

The HCA consulted in March 2010 on the future standards applying to affordable housing[14].

8.5 Professional Fees

An allowance should be made to cover professional fees relating to construction. Expenditure on such fees will vary with the complexity of the site. A typical figure for design fees (architects and quantity surveyors) might be in the region of 8% of build costs, but a typical amount to cover all professional fees might be in the order of 10% to 15% of build costs. Planning costs may be significant on certain types of site, e.g., large strategic greenfield sites.

8.6 Sales and Marketing Costs

An allowance should be made to cover the costs of marketing open market and intermediate units. Sales fees and marketing costs will vary according to the nature of demand for the residential units. A typical figure might be in the region of 3% to 5% of sales value (including intermediate sales).

8.6.1 Legal Fees

An additional allowance should be made for legal fees incurred on sale of open market units, typically in a range of £600 to £800 per unit. Within the HCA area wide model, sales and marketing costs should be adjusted to include an allowance for such legal fees.

8.7 Planning Obligations

Clear assumptions on Section 106 planning obligations other than affordable housing are required, as noted in section 9 below. Evidence on prevailing levels of Section 106 payment for different types of site should include costs of construction that are incurred as a direct result of a planning obligation. These costs should be excluded from evidence of costs of infrastructure.

8.8 Preliminary Site Costs

The assessment should include site acquisition costs, to include:

- agency fees, typically in the region of 1% of land value
- legal fees in the region of 0.75%
- stamp duty payable as a percentage of site value. At the time of writing this applies at a rate of 4% for values over £500,000.

[13] *Zero Carbon Homes Impact Assessment*. CLG, December 2009.

[14] *Proposed Core Housing Design and Sustainability Standards Consultation*. HCA, March 2010

8.9 Finance Costs

Financing costs should be based on the current market rate of borrowing for development. The model uses the conventional assumption of 100% debt funding, as a measure of the time cost of money, acknowledging that this is a crude assumption.

The 100% debt funding assumption is often criticised by those familiar with investment appraisal, where explicit consideration is taken of the use of equity and debt, together with a more conceptually rigorous approach to alignment between growth rates and discount rates. Furthermore, the viability of large long term schemes may be enhanced by alternative forms of financing and investment, including use of patient equity and share of long term uplift in value.

A move to a more financially coherent set of conventions would require a recalibration of the prevailing assumptions used within the residential development sector with regard to appropriate profit margins. Therefore, while it may be desirable to move to a more financially coherent set of conventions in the longer term, the approach used in the area wide model is to continue with the convention of assuming 100% debt funding.

9 POLICY ASSUMPTIONS

9.1 Grant

The discussion of affordable housing value in section 7.4 made it clear that, for the purposes of area wide viability assessment, the starting point should be to establish the viability of sites with nil payment of grant. Sensitivity to alternative grant scenarios can then be tested, to identify the additionality (i.e., the additional outputs gained) from grant expenditure.

9.2 Section 106/ Tariff Contributions to Infrastructure Funding

Clarity on policy assumptions is required with regard to Section 106 developer contributions to infrastructure funding and, if appropriate, a tariff. It is commonly acknowledged that there is a trade off between the financial capacity to pay these types of payment and planning obligations to provide affordable housing.

A local authority may choose to use the area wide model to test the economic viability of proposed levels of any tariff and its potential interaction with affordable housing delivery, as part of its evaluation of planning strategies.

9.3 Environmental Standards

The Housing Minister Grant Shapps has signalled (in a press statement issued on 27 July 2010) a move to more local flexibility on how best to meet new environmental standards. Such flexibility may lead to local authorities seeking to make informed choices amongst policy options, taking into account the impact of standards on build costs and the economic viability of sites identified in the land supply pipeline. The model can be used by local authorities as a way to model different options.

9.4 Development Mix and Density

In some markets a change in the density of development may enhance viability on some site typologies. It may be appropriate to test the sensitivity of viability to such changes in the development mix.