SOUTH EAST WALES STRATEGIC PLANNING GROUP
GUIDANCE ON PREPARING AFFORDABLE HOUSING VIABILITY STUDIES

First draft

August 17 2009

Three Dragons for
South East Wales Strategic Planning Group
1 INTRODUCTION

Background to the guidance

1.1 The Welsh Assembly Government has indicated that as an integral part of Local Development Plan Preparation there is a need for Local Planning Authorities (LPAs) to ensure that, in setting site-capacity thresholds and site specific targets, local planning authorities have balanced the need for affordable housing against site viability.

1.2 In line with Technical Advice Note 2: Planning and Affordable Housing it is considered that this may involve making informed assumptions about the levels of finance available for affordable housing and the type of affordable housing to be provided. TAN 2 also indicates that local planning authorities should also take into account the impact on the delivery of the affordable housing target and the objective of creating sustainable communities across the plan area and in the individual parts of the plan area.

1.3 Against this policy background, the South East Wales Strategic Planning Group (Sewspg) have set up a sub group to explore the possibility of undertaking work at a sub-regional level to develop a standard methodology to underpin Viability Studies to inform LDPs within South East Wales.

Membership of the Sewspg Viability Sub Group

1.4 The Sewspg Viability Sub Group comprises representative from the following organisations:

Welsh Assembly Government
Home Builders Federation
Nathaniel Litchfield
Redrow
Housing Associations
  United Welsh
  Fairlake
  Hendre
Local Authority
  Rhondda Cynon Taff
  Caerphilly.

Purpose of the guidance and need for Affordable Housing Viability Studies

1.5 The purpose of this guidance is to provide local planning authorities (LPAs) with step by step advice on the preparation of Affordable Housing Viability Studies (AVHSs).

1.6 LPAs require AHVSs as part of their evidence base for use in preparing LDPs. The importance of gathering evidence about development economics was identified in TAN2 which states that, in relation to setting the affordable housing target:

"The target should take account of the anticipated level of finance available for affordable housing, including public subsidy, and the level of developer contribution that can realistically be sought". (TAN 2, Para 9.1)
1.7 Guidance from the Welsh Assembly Government on the preparation of Affordable Housing Delivery Statements (2007 – 2011) by local authorities, re-iterates the importance of viability evidence in identifying targets for affordable housing delivery.

“Targets for the amount of affordable housing to be provided should reflect an assessment of the likely economic viability of land for housing within the area, taking account of risks to delivery and on the likely levels of finance available for affordable housing, including both public subsidy such as Social Housing Grant and the level of developer contribution that could reasonably be secured. A viability calculation is equally relevant in a buoyant or a depressed market. The needs of both current and future occupiers should be provided for, building on evidence in the Local Housing Market Assessment.” (Para 1.24)

1.8 The courts have further emphasised the importance of robust viability evidence to underpin affordable housing policies in development plans. The Court of Appeal, in July 2008, decided on a case brought against Blyth Valley Council. The court stated that:

“……an informed assessment of the viability of any such percentage figure is a central feature of the PPS 3 policy on affordable housing. It is not peripheral, optional or cosmetic. It is patently a crucial requirement of the policy.”

1.9 Evidence on viability is also required to demonstrate the robustness of the site size threshold to be set out in the LDP. The threshold identifies the size of site above which the LPA can seek affordable housing. TAN2 does not provide any national guidance on appropriate thresholds and leaves this to LPAs to identify. However, TAN does comment that,

“When setting site-capacity thresholds and site specific targets local planning authorities should balance the need for affordable housing against site viability”. (TAN2 para 10.4)

1.10 For both site-capacity thresholds and percentage targets, LPAs can set different policies for different parts of their authority – provided that the evidence base will support this.

Lack of other guidance

1.11 Although the importance of providing evidence about viability in preparing LDPs is now well established, there is no government guidance (in Wales or England) or advice from other organisations (e.g. the Planning Inspectorate) to set out how this should be done. The guidance set out here is intended to fill this gap but it must be acknowledged that there may be other approaches that will provide an LPA with an acceptable evidence base.

1.12 However, Sewsgpg believe that there are benefits for LPAs in South East Wales in following a single consistent approach in preparing their AHVSs and as set out here.

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1 Published by the Welsh Assembly Government in February 2009
Principles of AHVS and policy making

1.13 AHVSs focus on the development economics of delivering affordable housing through mixed tenure developments and are typically used in preparing policy rather than considering the viability of specific schemes (although many of the principles set out in this guidance also apply to scheme specific analysis). It is important for LPAs to recognise that the completion of a detailed AHVS will not obviate the need for site specific negotiations.

1.14 The approach set out in this guidance describes the impact of affordable housing on the residual value of development. Residual value is explained in detail in the Section 2 but can be briefly described, as the difference between the revenue generated by a housing scheme and the costs of development. AHVSs also need to take into account the impact of other s106 obligations which an LPA might seek (for instance for the provision of schools, open space, highway improvements etc) and which will also reduce residual value of a scheme.

1.15 LPAs cannot expect to have a sound LDP in the absence of a robust AHVS. However, the viability study is only one piece in the LDP evidence base and other factors such as housing needs and the development of mixed communities will also need to be taken into account by the LPA in framing its affordable housing policies (both on targets and site-capacity thresholds).

1.16 Viability evidence will identify the maximum percentage of affordable housing that can generally be achieved in mixed tenure development. This may be less or more than the need for affordable housing in an authority. What an authority cannot do is set a target for affordable housing that reflects need but not viability.

Preparation and use of the guidance

1.17 The guidance has been prepared with advice from a steering group of representatives from Sewsg local authorities, housing associations, housebuilders and the Welsh Assembly Government.

1.18 Users of the guidance may find it useful also to refer to the Assembly Government’s publication, ‘Delivering affordable housing using section 106 agreements: Practice Guidance, July 2008’ prepared for the Assembly by Three Dragons and Cambridge Centre for Housing and Planning Research. The Practice Guidance is more relevant to the negotiation of individual schemes but does include comment on the relationship between policy and scheme negotiations and dealing with viability issues on individual schemes.
2 PRINCIPLES OF VIABILITY

What is viability in the context of mixed tenure development?

2.1 The LPA has to balance maximising its affordable housing target to deliver enough affordable housing to meet its needs with the importance of having policies that ensure sufficient land is brought forward to meet its overall housing requirements. Set the affordable housing target too high and the adverse impact on development viability will choke off the land supply; set the target too low and the need for affordable housing will not be met while landowners and developers get a return greater than essential to maintain an adequate land supply.

2.2 The LPA therefore has to understand how the introduction of affordable housing requirements and/or other s106 requirements impact on viability. However, there is no national guidance which defines what is and what is not considered to be viable; assessing viability has to be based on evolving experience and practice.

2.3 Where scheme costs exceed scheme revenue then the scheme is clearly not viable. Where scheme revenue exceeds costs, a scheme is theoretically viable but this does not mean that it will be brought forward for development. For a scheme to be developed out, both developer and landowner need to secure (at least in principle) an acceptable return from the development.

The residual value approach

2.4 The viability assessments set out in this guidance is that of a residual value approach. This is the approach widely accepted by the development industry and it is the approach used in the Development Appraisal Toolkit (DAT).

2.5 Figure 2.1 below shows schematically the principles of the above approach. Scheme costs are deducted from scheme revenue to arrive at a gross residual value. Scheme revenue includes the combined revenue from market and affordable housing. Scheme costs assume a return to the developer and the ‘build costs’ as shown in the diagram include other development costs such as professional fees, finance costs, marketing fees and any overheads borne by the development company. This principle is explained in the DAT Guidance Notes as follows:

“The main output of the DAT is the residual value. This is the sum of money that is available to be shared between the developer and the landowner. It is a surplus that remains after all development costs, except land costs, have been met from revenue. Development costs include a standard return for the developer and contractor. The residual value will have to cover the costs of land acquisition. Any surplus remaining after land acquisition becomes ‘super-normal’ profit for the developer. The residual value is thus not the same as the land costs, although land costs will invariably make up the larger part of the residual. For development to be economically viable the residual must be large enough to at least cover the cost of acquiring the site.

2.6 Figure 2.1 also shows that deducted from the gross residual value will be the s106 contribution (of which affordable housing is likely to make up the major part but which can include contributions e.g. for highway works, schools, open
space etc). Once this has been deducted, then what is left is a ‘net residual value’.

**Figure 2.1 Residual value approach**

2.7 The amount of revenue to the scheme from an affordable unit will vary depending on the tenure of the units, whether the payment is based on a %age of the Acceptable Cost Guidance (ACG) figure and whether grant is available. The DAT Guidance Notes provide a full description of this (see page 68).

**Relationship to Existing or Alternative Use Value**

2.8 Assessing residual value provides only part of the picture in assessing viability. A scheme is very unlikely to proceed where its costs exceed the revenue (i.e. there is a negative residual value). But simply having a positive residual value will not guarantee that development happens. The existing use value (EUV) of the site, or indeed a realistic alternative use value (AUV) for a site will also play a role in the mind of the land owner in bringing the site forward and thus is a factor in deciding whether a site is likely to be brought forward for housing.

2.9 Figure 2.2 shows how this relationship operates in theory. Residual value falls as the proportion of affordable housing increases. At some point however (shown here by point ‘b’), the scheme value will equal the existing or (where relevant) alternative use value. At this point, there is no incentive for the land owner to bring the site forward. At point ‘c’, the site isuviable as the scheme value is lower than the value of the site in its existing or alternative use.
2.10 Many sites will have only an EUV to be considered e.g. as agricultural land or a back garden or industrial use. However, some sites will have both an EUV and an AUV. This would occur, for example where a site already has permissions for another use e.g. for commercial use on currently agricultural land.

2.11 Where scheme residual is lower than the EUV and/or AUV, then its ‘easy to see that the development is unviable. However what happens where scheme residual exceeds EUV and/or AUV.

2.12 There are no guidelines on the uplift over EUV/AUV that is required to encourage land owner to bring forward their sites.

2.13 Current practice suggests a margin of between 20% and 30% over and above EUV and/or AUV. In preparing this guidance, an indicative figure of 25% has been noted with the HBF as a reasonable starting point for analysis. This figure should be tested at local development industry workshops (held as part of the preparation process for a AHVS) to identify if there are local circumstances that would justify the use of a different figure.

2.14 While this percentage increase over EUV ‘needed’ by landowners of brownfield land provides an indicative benchmark for use in viability analysis, it does not work for greenfield sites with an existing agricultural use. For this sort of site, the AHVS needs to consider current ‘going rates’ for land. But LPAs also need to understand that landowners have different circumstances and requirements and what is an acceptable return for one landowner may not for another.

2.15 In the absence of other guidance on viability assessment, land owner margins will need to be considered alongside a range of benchmarks including market land values, average EUVs and by referring to recent delivery patterns.
3 MANAGING THE PROCESS

Purpose of this section of the guidance

3.1 This section of the guidance provides practical advice about managing the process of preparing an AHVS. The suggestions are drawn from Three Dragons’ experience in preparing AHVSs and other related practice guidance e.g. for Joint Housing Land Availability Studies and Local Housing Market Assessments.

Suggested principles

3.2 There are a number of suggested good practice principles that LPAs can adopt in preparing their AHVSs.

3.3 It is good practice to establish a small project team to oversee the preparation of the AHVS. As a minimum, the project team should include relevant planning and housing officers with sufficient seniority that the day to day management of the AHVS process can be undertaken by the project team. It may also be useful to include economic development colleagues and/or officers with a specialist role in negotiating and managing s106 agreements across the authority. If the authority has a property department or equivalent, at a minimum, they should be kept informed of progress in preparing the AHVS (but may be members of the project team itself).

3.4 The project team may consider it useful to prepare a ‘study brief’ to be used in keeping a wider range of council officers and other organisations (e.g. the house builders and housing associations operating in the area) informed about the process the LPA is following.

3.5 The project team will need to consider how they will keep councillors informed of progress with preparation of the AHVS. It may be that councillors (e.g. the relevant cabinet member) are informed about the AHVS as part of a wider briefing about overall progress in preparing the LDP or are kept up to date specifically about the AHVS.

3.6 A realistic timetable for the preparation of the AHVS will be needed. This should provide for enough time for consultation with the development industry as well as time for the collection and analysis of information from within the council, for undertaking the necessary analysis and, equally important, for reviewing the results and their policy implications.

3.7 There is no ‘magic figure’ for how long a robust AHVS takes to prepare. They can be completed in a very short period if there are adequate resources available. But, as a very general ‘rule of thumb’, about 3 months is an appropriate amount of time from the start of the process through to final report.

3.8 LPAs in the South East Wales Strategic Planning Group all have access to their own version of the Development Appraisal Toolkit. This provides an easy to use model to carry out the viability analysis needed to prepare the AHVS. The LPA will need the most up to date version of the DAT available (along with the guidance notes that provide a step by step guide to the use of the DAT).
3.9 The project team (or equivalent) should check that they have the necessary skills/capacity to make best use of their DAT or agree where to get help to if it will be needed.

3.10 Help could be provided by a specialist consultant or from another organisation with whom the LPA works on a regular basis.
4 STEPS IN PREPARATION OF AN AHVS

4.1 The preparation of the AHVS can be broken down into a number of steps. Some of the steps are dependent on completion of a previous step but others can be undertaken independently of one another. The following list described each step in outline and the relationship between the steps is then shown in Chart 4.1. Subsequent chapters of the guidance describes each step in more details

- **Step 1** Develop a testing framework based on reasonable and realistic policy options and consult with development industry and other stakeholders; Appendix 1 sets out a typical invitation;

- **Step 2** High Level Testing of notional 1 hectare site to estimate residual values (per hectare) for a range of alternative scenarios, including different amounts of affordable housing and alternative development types. Undertake a range of sensitivity tests to show impact on residual value of an alternative set of assumptions;

- **Step 3** Analysis of patterns of land supply to identify ‘typical’ site types (in terms of size and previous land use) and reliance on sites of different sizes (especially to test importance of small sites to the supply). Information collected in this step is important in identifying site-capacity thresholds. Pattern of site supply also influences case study sites selected for Step 4;

- **Step 4** Identification and testing a series of case study sites. Focus is often on viability of smaller sites where a (very) low threshold is being considered;

- **Step 5** Review results from Steps 2 and 4 and compare residual values identified with a range of comparators;

- **Step 6** – report preparation.
Chart 4.1: Process for Preparing an Affordable Housing Viability Study

**Preparation**
- Set up project group, agree timetable, and study brief
- Check resources and availability of DAT

**Step 1**
**Draft High Level Testing Framework**
Including development scenarios, amount/mixes of affordable housing and level of other s106 contributions to be tested
- **Identify sensitivity tests** to be undertaken e.g. 10% increase in market values, changed assumption about Code for Sustainable Homes

**Development industry workshop**
- Discuss key issues
- Check out overall approach and detailed assumptions

**Step 2**
**High Level Testing (of notional 1 ha site)**
Provides a series of residual values for the market value areas within a LPA and for the baseline and sensitivity tests defined in Step 1 (and agreed with the development industry)

**Step 4**
**Identify case study sites and test.**
Case study sites to test will depend on local pattern of site supply. Testing will follow principles from the High Level Testing

**Step 5**
**Review results from Steps 2 and 4 and set against comparator values**
No single comparator will provide the answers but LPA will need to review how the residual values identified in steps 2 and 4 compare with other values found in their area.

**Step 6**
**Report preparation**
Draw on evidence from steps 1 to 5 to identify appropriate policies (for affordable housing targets and site-capacity thresholds). Prepare report that fully describes the process, information sources used and results of the AHVS.
5 STEP 1 – SETTING UP HIGH LEVEL TESTING FRAMEWORK

Purpose of Testing Framework

5.1 The first step in the process of analysis is to set up the ‘High Level’ Testing (HLT) framework. This involves three main steps:
   a) Agreeing baseline appraisal model;
   b) Identifying the data sources to populate the model;
   c) Agreeing the range of ‘tests’ to be carried out.

5.2 The HLT framework is based on the inputs of the local authority, the development industry and any other external advisers the Council may choose to call on.

5.3 A typical testing framework is set out in Appendix 2.

Agree baseline appraisal model

5.4 There are a number of development appraisal models in existence across the UK. They all provide a broadly similar function, which is to calculate residual value. The key differences in the models lies in their accessibility (some require a high degree of technical skill to achieve a result) and in their ability to calculate and model affordable housing revenue.

5.5 As far as we aware the only bespoke model for Wales is that developed by Three Dragons. This model, the Development Appraisal Toolkit (DAT) has the specific advantage in already being populated with the base data. This includes house price, development costs, ACG revenue calculations and intermediate affordable housing revenue calculations.

5.6 To carry out an AHVS with maximum efficiency and cost effectiveness, we would therefore recommend that authorities adopt the DAT as the preferred model.

5.7 The model adopted should be agreed at the developer workshop before the HLT is commenced.

Identifying the data sources to populate the model

5.8 As stated in the previous section, the DAT is available to local authorities and it contains the key data sources necessary to carry out an AHVS. In theory therefore there is no need for the authority to generate any new data.

5.9 However, depending on the whether the DAT is fully up to date (it is now at its second updating) it may be necessary for authorities to generate their own data. There are five key data sources required in this case:
   i) House prices;
   ii) Build costs;
   iii) Benchmark rents;
   iv) Market rents;
   v) ACGs

5.10 The house prices in the DAT as based on sub markets within the local authorities. There are typically between five and seven sub markets for each

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local authority. Updating the data on the basis of the current sub market framework can be done by reference to any property market index. Recommended sources are HM Land Registry or DCLG. Website references as follows:

http://www.landreg.gov.uk/
http://www.communities.gov.uk/housing/housingresearch/housingstatistics/housingstatisticsby/housingmarket/livetables/

5.11 The house prices in the DAT are based on Land Registry data. The methodology for producing sub markets from this data was carried out by Three Dragons. If the sub markets are to be changed we recommend that Three Dragons are commissioned to carry out the work.

5.12 Build cost data is sourced from the Royal Institution of Chartered Surveyor’s Building Cost Information Service. Councils are recommended to subscribe to the BCIS’s Housing Online service which will then enable them to track changes in costs.

5.13 Other development costs are set out in the DAT. The updated (2009) version will set out the following assumptions:

Professional fees – 12% of build costs;
Overheads – 6% of build costs;
Finance – 7% of build costs;
Marketing fees – 3% of gross development value;
Developer margin – 17% of GDV of market units;
Margin on affordable units – 6% of affordable housing construction costs

5.14 Benchmark rents are best provided through the local authority itself. The authority will need to ensure it has a full range of rents to fit DAT template which ranges from studio flats through to 5 bed detached houses.

5.15 We are aware that in some instances the District Valuer has a role in determining how much is to be paid for Intermediate affordable housing products [Sewspg – is this correct – we have heard this recently via housing associations). This role may in some instances, in the current difficult housing market conditions, limit what RSLs can pay for these products. Local authorities, should, when considering how to model affordable housing revenue, refer the local practice where the Valuation Office are placing values on affordable housing products.

5.16 Market rents. These are needed to enable calculations of the value of Intermediate Rented housing. This information is best obtained through local agents.

5.17 Authorities will need to decide on an appropriate figure for other (than affordable housing) Section 106 contributions. Ideally this figure will be inputted on a per unit basis and will cover such items as educational contributions, open space contributions, highway works and e.g. public art. The figure used should reflect the level of s106 contributions that is currently collected on a regular basis – a ‘current going rate’. The figure used should
not be aspirational. The LPA can test the potential impact of a higher level s106 contribution through the sensitivity testing process (see later).

5.18 For the purposes of carrying out an AHVS, updated data can be inputted to the white cells within the DAT. Where the updated data is required to become the new defaults, authorities will need this to be done via Three Dragons.

**Agreeing the range of tests to be carried out**

5.19 Normally with the HLT a notional one hectare site is adopted. However, this could equally be a half hectare site if that size of site is more relevant for example in a particular authority. However, since most of the comparable information is on the basis of hectares, it is useful to use this as the main unit used in the AHVS.

5.20 Authorities will then need to decide whether to test the notional site in the context of all of their sub markets (market value areas), or just within a sample of them. Where sub markets have prices that are very close together, then for the purposes of testing, they may decide that it is not necessary to test all sub markets.

5.21 The next step is for the authority to decide the range of affordable housing targets it needs testing. Normally this choice will reflect the current policy position as well as some more optimistic as well as pessimistic scenarios. For South Wales we would suggest the following range: 10%; 15%; 20% 25%; 30% and 35%. In some instances, with higher value sub markets, the authority could look at 40%.

5.22 Local authorities will need also to decide what tenure balance to adopt between Social Rented housing and other forms of affordable housing.

5.23 Authorities will need to set out the densities to be tested. The DAT has a range of densities which activate specific development mixes. These mixes were agreed as a starting point by the authorities who supported the production of the DAT.

5.24 For each density, there is default development mix – as shown in the Table below.
5.25 Local authorities can choose to adopt the densities and mixes set as defaults in the Toolkit, or produce their own derivative mix at each density they choose to run.

5.26 In reality, the differences between local authorities are significant such that it would probably not be appropriate for some variables such as densities to be consistent as it would range from e.g. Cardiff's 100 dph to Monmouthshire's 20 dph rural.

5.27 As with all other aspects of the Testing Framework, it will be important that the densities and development mixes are discussed at an industry workshop to ensure confidence in the testing process.

### Consultation with the development industry

5.28 The establishment of the HLT framework needs to be done in conjunction with the development industry who may have a view on key data sources, viability benchmarks and the range of tests to be carried out.

5.29 Key parties to be invited to the workshop include:

- Developers (ideally national and local);
- RSLs – local operators;
- Land owners and/or their agents;
- Market/estate agents;
- The local authority itself

5.30 The ideal number for the workshop (including LA representatives) is between 15 and 20 people

5.31 The format is usually round table, with a discussion lasting around two to 2.5 hours. The discussion can be managed either through a written agenda or via a Powerpoint Presentation which serves to highlight the key issues to be
tackled and shows progress made by the local authority thus far with the project.

5.32 The issues to be covered should include:

- A general discussion about issues in delivering affordable housing that set the context for more detailed technical discussions;
- Base methodology (the DAT – if being adopted);
- Testing framework including:
  - House prices;
  - Development costs;
  - Density and Mix issues;
  - Affordable housing tests;
  - Section 106 assumptions;
- Thresholds and small sites (viability and other issues related to the management of affordable housing in small numbers)
- Related issues e.g. commuted sums

5.32 It is very important that the local authority keeps a good record of the discussion. The meeting notes should be circulated to all attendees and interested parties who should be given a chance (a week to 10 days is typical) to feed back prior to the commencement of the High Level Testing (see Section 6 below).
6  **STEP 2 – HIGH LEVEL TESTING**

**Getting started**

6.1 To carry out the HLT, the authority will need to identify the component data necessary to populate the model along with the agreed testing framework. As previously stated, we recommend that the DAT is used, as this contains the data necessary for the testing process.

6.2 By ‘testing’ we mean carrying out a series of calculations, each of which will have a residual value which needs to be recorded and which can then be used for comparison between sub markets, different development mixes and densities and varying proportions of affordable housing.

6.3 The flow chart below shows the linkages in the process of High Level Testing.

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**What does Stage 1 tell us?**

- Impact of affordable housing at sub market level
- Most and least likely viable sub markets
- Likely viable SPs (%)
- What density and mix works best (and worst)

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6.4 In the diagram, the basis of the High Level Testing is a notional one hectare site. This could also be for example a notional half hectare site, although we recommend that a one hectare site is adopted as the unit of assessment so that the results are then comparable with published data on land values (e.g. Valuation Office data Property Market Report).

6.5 The idea of the High Level Testing is to examine the impacts of sub markets (a proxy for house prices), development mix and density and proportions of affordable housing on the residual values of the notional one hectare site.

6.6 The scope, complexity and extent of testing is entirely at the discretion of the local authority. A very simple HLT process could involve just testing a notional one hectare scheme in one high value and one low value sub market at say 40 dph at say 20% and 30% affordable housing. More specifically this would involve four tests (and hence calculation of residual value). As follows:
• High value sub market at 20% affordable housing;
• Low value sub market at 20% affordable housing;
• High value sub market at 30% affordable housing;
• Low value sub market at 30% affordable housing;

6.7 This may suffice in some instances for a quick ‘policy check’. However, we suggest that to produce a fully robust AHVS, it will be necessary to carry out a full range of tests across all the key variables. Typically this involves testing:
• At least four sub markets;
• At least three density:development mixes;
• At least three affordable housing percentages

6.8 This will mean doing 36 tests (4 x 3 x 3). In practice this is not a laborious process using the DAT.

6.9 As well as the baseline testing, LPAs it is good practice to include a number of sensitivity tests. These can be undertaken for all the market value areas, development scenarios and amounts of affordable housing used in the baseline testing. Alternatively the LPA can undertake the sensitivity tests for a selection of circumstances to illustrate the impact on viability of the different sensitivity tests. For example, for a high and low value market value area, at 30dph and 45 dph and with 10%, 20% and 30% affordable housing.

6.10 The LPA will need to identify the sensitivity tests undertaken in the light of local circumstances but the box below illustrates a possible range of sensitivity tests that can be used.

\begin{tabular}{|l|}
  \hline
  i) With grant and payment by the housing association based on 100% of ACG; \\
  ii) A higher percentage of Intermediate affordable housing; for example 50% Social Rent and 50% Homebuy; \\
  i) Increase and/or decrease in house prices e.g. at 10% and 20% higher and 10% lower (with an associated increase/decrease in build costs); \\
  ii) A higher level of s106 contribution; \\
  iii) Alternative level of the Code for Sustainable Homes \\
  \hline
\end{tabular}

(The tests can be run separately and compared with the baseline residual values and/or in combination e.g. to show the impact of an increase in the level of s106 contributions and a higher level for the Code for Sustainable Homes)

Crunching the numbers

6.11 To carry out this analysis we recommend that results are presented in an Excel spreadsheet and graphs generated therefrom. The screenshot below shows how we recommend authorities carry this out.
6.12 The table is created as results are ‘read off’ the final page of the Toolkit. Results are created for each density:development mix at different %s of affordable housing across the range of sub markets selected. The data is then transferred to the cells shown in blue and a graph generated therefrom. As further results are generated, they can be ‘cut and pasted’ into the blue cells to generate graphs of consistent format.

6.13 The graphs should demonstrate very clearly where residual values are positive and negative and the actual residuals for all instances. This is because these results will form the basis of policy setting for the authority.

6.14 The process by which the residual values are generated is usually carried out manually; i.e. by the person testing changing the data inputs according to the testing framework. We recommend this as the most appropriate way of carrying out the analysis.

6.15 Where a very extensive number of tests are carried out Three Dragons have, for internal purposes only, ‘re-cast’ the Toolkit so that results can be produced in a more automatic manner. Authorities should approach Three Dragons where this facility is required.
7  **STEP 3 – ANALYSIS OF LAND SUPPLY**

**Context**

7.1 The pattern of site supply found in an LPA will have a bearing on the approach an LPA take towards setting its site-capacity threshold.

7.2 TAN2 recognises this and the importance of viability testing in setting site-capacity threshold(s).

> “If, for example, 90% of all housing completions are expected from sites of less than 5 units, then it may be appropriate to seek affordable housing on sites of 3 or more dwellings. However, site viability will be a critical factor to be considered in determining thresholds, particularly on small sites.” (TAN 2 10.6)

7.3 TAN2 also sets out that the site-capacity threshold should apply to allocated and unallocated windfall sites (see TAN 2 10.5) and that an LPA can have different site-capacity thresholds for different parts of its area (see TAN 2 10.7).

**Data requirement and sources for assessing site supply patterns**

7.4 Land supply information to be used in an AHVS needs to:

- Be available on the basis of individual schemes;
- Be available for a defined time period (e.g. X years worth of completions or Y years worth of future development sites);
- Show the size of each scheme as an area (hectares) and gross number of dwellings (to be) provided;
- Identify where a scheme involves the demolition of an existing residential unit;
- Show the current/previous land use of the site.

7.5 There are three main data sources that LPAs can use in reviewing site supply:

- Historic data on housing completions – say for the most recent 3 or 5 years;
- Historic data on residential permissions (whether built out, under construction or not yet started) – say for the most recent 3 or 5 years;
- Joint Housing Land Availability Study (and which are mentioned in TAN2 – 10.6)

7.6 None of the data sources is perfect for identifying site-capacity thresholds and their relative advantages and disadvantages for this purpose are summarised in the table below.
### Table 7.1: Data sources for reviewing site supply patterns

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<thead>
<tr>
<th>Source</th>
<th>Strengths</th>
<th>Drawbacks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Completions</strong></td>
<td>Usually readily available information – including nos of dwellings, site area and showing past land use. Data usually available for different areas within the authority. Consistent historic dataset</td>
<td>Completions in one year will reflect permissions granted over a number of years and so do not show up to date pattern of land supply. Records may not always indicate where development involves demolition of a residential unit and/or previous land use. Backward looking and using the data implies an assumption that the future land supply is likely to be similar to that of the past.</td>
</tr>
<tr>
<td><strong>Permissions</strong></td>
<td>Usually readily available information – including nos of dwellings, site area, gross and net dwellings and showing past land use. Data usually available for different areas within the authority. Consistent historic dataset Provides a reasonable up to date picture of the kinds of site being brought forward for development</td>
<td>Not all sites with permission will be developed out; If more than one years worth of permissions is used, care will be needed to avoid duplications e.g. where a permission is simply updated in some way. Backward looking and using the data implies an assumption that the future land supply is likely to be similar to that of the past.</td>
</tr>
<tr>
<td><strong>JHLAS</strong></td>
<td>Forward looking land supply information</td>
<td>Limited to sites with planning permission or allocated sites – will does not take into account potential windfall sites (and these are often smaller sites). Small sites may be systematically excluded and LPA may only seek out information on sites of more than 5 or 10 dwellings. Not all authority have an up to date JHLAS.</td>
</tr>
</tbody>
</table>

7.7 The choice of the data source to use will depend on their quality and availability and local preferences. But, all other things being equal, the most useful approach is likely to be a detailed analysis of recent permissions, reviewed these against up to date land availability information.

7.8 It will be necessary to decide how many years worth of permissions to use. – this will depend on the size of the dataset. Generally 3 years’ worth of permissions will be sufficient but, where the number of permissions granted
per annum is limited, taking 4 or 5 years’ worth of permissions can provide a more robust dataset.

7.9 But there is a trade-off between providing a large dataset of permissions and drawing in permissions which are dated. There is no absolute rule here but it is recommended that permissions ‘older’ than 5 years are only used in exceptional circumstances.

**Practical tips for the analysis of site supply**

7.10 There are two issues the LPA needs to think about in deciding how to analyse the data on land supply.

7.11 The first is whether the LPA wants to explore the option of identifying **different site-capacity thresholds for different parts of the authority** and therefore whether it wants to consider patterns of land supply by sub area. This can be particularly important in mixed urban and rural areas where larger sites will be found in the main towns but land supply in the smaller settlements is more reliant on small sites. But this is not exclusively an urban/rural pattern and there may be important differences in the pattern of land supply within a large urban area.

7.12 The second is the **level of detail for the analysis**. For larger sites (e.g. over 50 dwellings) there is rarely need to consider more refined size bands than ‘50 -99’ and ‘100 or more’. But, for small sites, a finer grain of analysis will be needed. Again there are no ‘rules’ for this but size bands of 5 dwellings up to around 20 dwellings would seem appropriate. If an LPA wants to review the possibility of a threshold below 5 dwellings, it should include analysis on a single dwelling basis, at least up to 5 dwellings.

7.13 The following tables illustrate two alternative approaches to analysis of site supply. Both are based on a notional analysis of 3 years worth of planning permission and are stylised examples drawing on Three Dragons experience but they do not represent any particular authority.

7.14 The first is an urban authority where land supply mainly comes from large allocated sites and the occasional windfall and where it is known that there is no significant variation in the pattern of supply from across the authority. The second is an authority with two main market towns and a large rural hinterland. There have been some large development sites in one of the market towns – and the LPA wants to explore the option of a zero threshold in its rural areas and possibly in the market towns.
### Table 7.2: Alternative approaches to site supply analysis (using 3 year’s worth of permissions)

#### Example A – the urban authority

<table>
<thead>
<tr>
<th>Size of site by number of dwellings</th>
<th>% of dwellings in sites of this size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5 dwellings</td>
<td>5.0%</td>
</tr>
<tr>
<td>5 – 9 dwellings</td>
<td>5.0%</td>
</tr>
<tr>
<td>10 – 14 dwellings</td>
<td>5.0%</td>
</tr>
<tr>
<td>15 – 19 dwellings</td>
<td>5.0%</td>
</tr>
<tr>
<td>20 – 24 dwellings</td>
<td>10.0%</td>
</tr>
<tr>
<td>25 – 49 dwellings</td>
<td>20.0%</td>
</tr>
<tr>
<td>50 – 99 dwellings</td>
<td>20.0%</td>
</tr>
<tr>
<td>100 + dwellings</td>
<td>30.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

#### Example B – the mixed market town and rural authority

<table>
<thead>
<tr>
<th>Size of site by number of dwellings</th>
<th>% of dwellings in sites of this size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Market town A</td>
</tr>
<tr>
<td>1 dwelling</td>
<td>5.0%</td>
</tr>
<tr>
<td>2 dwellings</td>
<td>2.0%</td>
</tr>
<tr>
<td>3 dwellings</td>
<td>2.0%</td>
</tr>
<tr>
<td>4 dwellings</td>
<td>1.0%</td>
</tr>
<tr>
<td><strong>Total under 5 dwellings</strong></td>
<td>10%</td>
</tr>
<tr>
<td>5 – 9 dwellings</td>
<td>5.0%</td>
</tr>
<tr>
<td>10 – 14 dwellings</td>
<td>5.0%</td>
</tr>
<tr>
<td>15 – 19 dwellings</td>
<td>5.0%</td>
</tr>
<tr>
<td>20 – 24 dwellings</td>
<td>10.0%</td>
</tr>
<tr>
<td>25 – 49 dwellings</td>
<td>20.0%</td>
</tr>
<tr>
<td>50 – 99 dwellings</td>
<td>20.0%</td>
</tr>
<tr>
<td>100 + dwellings</td>
<td>25.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
In the above examples, the urban authority might be considering a site-capacity threshold of, say, 15 or 20 dwellings. If the latter were used, affordable housing would be sought on 80% of all dwellings coming forward for permission. With the second authority, different site-capacity thresholds might be considered for the two market towns and the rural area and a zero threshold could be one option to review.

It will be important that the output from the analysis of the site supply is a clear view of the threshold options that need to be tested through the case study analysis (and described in the next chapter).
8  STEP 4 – CASE STUDY SITES

Role of case studies

8.1 To complement the analysis of the notional 1 hectare site (see Step 2), LPAs should consider the review of a selection of case study sites. These sites should illustrate site types typically found in the authority and, in particular, should include analysis of a selection of small sites if the LPA is considering introducing a low threshold (including zero).

8.2 The case studies can be one of two kinds:

- Actual sites which are typical of a particular type of site found in the area and for which the authority has the relevant information to run through the DAT. If ‘real world’ sites are used, the LPA needs to be sure that the site is representative of a type of site likely to come forward in the future;

- Generic examples based on the dataset of permissions but which do not represent any actual site.

8.3 We would recommend the application of the generic site approach, not least because testing actual schemes may set precedents for viability at site specific level.

Drawing up the case study sites

8.4 The dataset of recent permissions (described in the previous chapter) can be used to draw up the case studies based on generic examples of permissions. Suggested steps in doing this are as follows:

- Sort the permissions into the different areas of the authority for which the site size analysis has already been undertaken (see example at Table 7.2 above);

- For each area, sort the permissions in terms of number in dwellings and previous land use (including residential conversions and changes of use). Ensure that schemes which involve demolition of existing residential properties are identified and check if they are i) significant in numbers ii) associated with a particular scheme type e.g. in sub area A, there have been a number of demolition of 1 dwellings and development of three dwellings;

- Judgement is then needed to select the case studies to analyse. The case studies need to reflect the possible site-capacity thresholds identified in the previous Step (Step 3) and the profile of the site supply.

8.5 The following table indicates the kinds of case study sites which could be selected.
Table 8.1: Illustration of possible case study framework

<table>
<thead>
<tr>
<th>Urban area</th>
<th>Example of size of site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fringe land</td>
<td>Minor extension 15 dws</td>
</tr>
<tr>
<td>Town centre</td>
<td>Low rise apartments 50 dws</td>
</tr>
<tr>
<td>Inner town commercial</td>
<td>Higher density – flats &amp; town houses 50 dws</td>
</tr>
<tr>
<td>Edge of town commercial</td>
<td>Medium density housing, small scale 50 dws</td>
</tr>
<tr>
<td>Back land</td>
<td>Small infill housing dev 10 dws</td>
</tr>
<tr>
<td>Rural scenarios</td>
<td></td>
</tr>
<tr>
<td>Green field</td>
<td>Village extension 10 dws</td>
</tr>
<tr>
<td>Infill village PDL</td>
<td>Family dwellings 4 – 6</td>
</tr>
<tr>
<td>Exception sites</td>
<td>Small affordable development 6-8 dws</td>
</tr>
</tbody>
</table>

8.6 Some other practical considerations that an LPA will need to take into account in drawing up its list of case study sites include:

- Whether it is worthwhile identifying larger schemes as case studies. If the scheme type is covered by the high level testing (because it is around 1 hectare or more in size and is not an unusual site type) then identifying the scheme as a case study is probably unnecessary;

- If the LPA is considering a zero threshold, it must test sites down to 1 dwelling and would be advised to test a full range of small sites, for example at 1, 2, 3, 5, 7, 10, 12 dwellings;

- If the LPA is considering a low threshold but not zero, it will need to test a range of site sizes around the possible threshold. For example, if a threshold of 10 dwellings is an option, the LPA should consider testing at, for example, 8, 10 and 12 or 13 dwellings;

- Whether the LPA should identify a different range of case studies for different parts of the authority. This will be important if, for example with Example B shown in Table 7.2, there is a different site supply profile in different parts of the authority.

Undertaking the case study testing

8.7 Once the selection of the case studies has been agreed, they will need to be defined in terms of the mix of dwellings, the size of site and number of dwellings. The following table illustrates this – this example is weighted towards testing small sites and where a low threshold is being considered.
Table 8.2: Illustration of case studies for testing

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Site Area (ha.)</th>
<th>No. Dwellings</th>
<th>Density (dph)</th>
<th>Unit Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.05</td>
<td>1</td>
<td>20</td>
<td>1 x 4 bed detached</td>
</tr>
<tr>
<td>B</td>
<td>0.03</td>
<td>1</td>
<td>33</td>
<td>1 x 3 bed detached</td>
</tr>
<tr>
<td>C</td>
<td>0.15</td>
<td>3</td>
<td>20</td>
<td>3 x 4 bed detached</td>
</tr>
<tr>
<td>D</td>
<td>0.25</td>
<td>8</td>
<td>32</td>
<td>3 x 4 bed det 5 x 3 bed semi</td>
</tr>
<tr>
<td>E</td>
<td>0.25</td>
<td>13</td>
<td>52</td>
<td>8 x 2 bed flat 5 x 3 bed terrace</td>
</tr>
</tbody>
</table>

8.8 The LPA may have more than one list of case studies which will vary between market value areas e.g. if the LPA wants to test a low threshold in its rural market value areas and a much higher threshold in its urban market value areas.

8.9 Whatever profile of case studies is selected, the DAT should be used for analysis of the residual values of each, using the following process:

- Ensure that the relevant case studies are analysed for the appropriate market value areas;
- Ensure that the same assumptions are used for the case study analysis as for the higher level testing e.g. unit sizes, s106 package, development costs, grant levels and the percentages and types of affordable housing. There may be occasions when the LPA wants to change assumptions for a particular case study but when this is done, it needs to be made explicit;
- But - ensure that the dwellings types entered are specific for the case study being tested;
- Undertake any sensitivity tests that are required;
- Produce the results in terms of the residual value for the scheme and its equivalent residual value per hectare (so that the residual value can be compared with comparator land values and with the results from the high level testing).

The particular case of small sites

8.10 A particular purpose of the case study analysis is to investigate the economics of small sites. It is often thought that they will be less viable than larger sites and therefore there is less potential to seek affordable housing and other s106 obligations from small sites. However, there is no evidence that small sites are systematically more expensive to develop and/or produce lower residual values than large sites. While large sites may benefit from economies of scale e.g. in purchase of materials, there are other costs e.g. marketing, office overhead, which are much lower for the typical developer of small sites.

8.11 Views on the development economics of small sites will need to be tested at the development industry workshop but the experience of Three Dragons is

---

2 For small sites, it may seem odd to test a scheme with a % of affordable housing that is clearly less than a real number of dwellings e.g. 30% of a 2 dwelling scheme. For viability analysis to assist in policy making, this is a reasonable way to approach the analysis of small sites.
that issues such as location and site condition play as much of a role in influencing viability as does the size of the site.

8.12 There is one particular circumstance which can cause viability difficulties with small sites. This is where the development involves the demolition of an existing property on the site. The existing use value of the site will be that of an a second-hand dwelling and, as such, will have a much higher existing use value than nearly every other site type.

8.13 Where the LPA has identified demolition and redevelopment of residential units as an important source of its supply of small sites and it is considering adopting a low threshold, the case study analysis will need to:

- Identify the scale of demolitions as a source of supply of small sites and how much importance should be attached to the viability issues found with them;

- Take care in comparing out-turn residual values from such sites with those of second-hand properties in the area. To do this, the LPA should obtain the best possible information about dwelling types which are demolished (in terms of their size and market value).
9 STEP 5 REVIEWING RESULTS AND COMPARING WITH OTHER EVIDENCE

Benchmarking

9.1 In Chapter 2 we set out a number of potential benchmarks against which viability might be assessed. In terms of published data on benchmark values, we would recommend that LPAs take account of the Valuation Office’s Property Market Review:

http://www.voa.gov.uk/publications/property_market_report

9.2 This sets out land values for different locations across England and Wales. The table below shows land values for selected locations in Wales. For bulk land, it suggests a range of £2.7 million (Cardiff) to £1.0 million (Merthyr Tydfil and Carmarthen).

<table>
<thead>
<tr>
<th>REGION</th>
<th>Small Sites (sites for less than five houses)</th>
<th>Bulk Land (sites in excess of two hectares)</th>
<th>Sites for flats or maisonettes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£ per hectare</td>
<td>£ per hectare</td>
<td>£ per hectare</td>
</tr>
<tr>
<td>Cardiff</td>
<td>2,700,000</td>
<td>2,750,000</td>
<td>2,600,000</td>
</tr>
<tr>
<td>Carmarthen</td>
<td>900,000</td>
<td>1,000,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Merthyr Tydfil</td>
<td>1,250,000</td>
<td>1,000,000</td>
<td>1,050,000</td>
</tr>
<tr>
<td>Bridgend</td>
<td>1,550,000</td>
<td>1,550,000</td>
<td>1,850,000</td>
</tr>
<tr>
<td>Swansea</td>
<td>1,750,000</td>
<td>1,750,000</td>
<td>2,200,000</td>
</tr>
<tr>
<td>Llandudno</td>
<td>1,250,000</td>
<td>1,000,000</td>
<td>1,250,000</td>
</tr>
<tr>
<td>Newport</td>
<td>2,000,000</td>
<td>2,000,000</td>
<td>1,600,000</td>
</tr>
<tr>
<td>Wrexham</td>
<td>1,250,000</td>
<td>1,000,000</td>
<td>1,250,000</td>
</tr>
</tbody>
</table>

9.3 The table, it should be emphasised, provides only a measure of land values. It does not provide a measure of viability. Viability will depend on the relationship, as described in Chapter 2, between existing (EUV) or alternative use value and scheme value (at the appropriate level of affordable housing and other s106 contributions).

9.4 The Valuation Office also provides data on industrial land values, which can be a helpful measure of EUV. Industrial land values are set out in the table below.

9.5 Both tables (Residential and Industrial land values) are taken from the Valuation Office’s Property Market Report of 2009. The report is currently produced in January and July of each year.
9.6 The values in these tables may or may not influence land owner expectations. In some instances the broad headline figures will be important; in others personal or local circumstances will determine that a site will be brought forward at a price either well above or well below the benchmark.

9.7 We understand that the District Valuer can provide bespoke land value data for authorities, where a particular authority is not covered in the Property Market Report. Appendix 3 shows a brief from a typical authority to the District Valuer.

Policy development

9.8 The HLT will provide a range of residual values that can be used to underpin policy targets for affordable housing. There are several issues to be considered in framing policy based on viability analysis. These can be summarised:

- Middle market residual values. What level of residual values are being generated in the middle market locations of the local authority area? If a single target is to be adopted, then the middle range residual value will be significant as an indicative starting point but the LPA will also need to consider viability in lower market value areas, especially if these are to deliver a significant proportion of future housing provision;

- What range of residual values are generated from highest to lowest value sub markets? What then are the implications for setting policy targets. For example, an authority may find that in a high value area a 30% affordable housing target is likely to generate a higher residual value than at 100% market housing in a lower sub market. Under these circumstances a differential policy approach with differential affordable housing targets may be justified.

- Implications for policy of grant availability. If grant is available, where should it be directed? In most instances this will be towards the weaker housing market locations but in some authorities it may be necessary to obtain grant across the whole area in order to deliver affordable housing.

- Implications of types of site supply for target setting. Does the local authority have specific types of site which are routinely difficult to deliver with affordable housing? What does the evidence in the case study analysis say about these sites? Should the authority have a policy which

<table>
<thead>
<tr>
<th>WALES</th>
<th>From £s per ha</th>
<th>To £s per ha</th>
<th>Typical £s per ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiff</td>
<td>210,000</td>
<td>315,000</td>
<td>270,000</td>
</tr>
<tr>
<td>Carmarthen</td>
<td>160,000</td>
<td>210,000</td>
<td>190,000</td>
</tr>
<tr>
<td>Merthyr Tydfil</td>
<td>135,000</td>
<td>200,000</td>
<td>160,000</td>
</tr>
<tr>
<td>Taff Ely</td>
<td>125,000</td>
<td>205,000</td>
<td>140,000</td>
</tr>
<tr>
<td>Swansea</td>
<td>190,000</td>
<td>245,000</td>
<td>235,000</td>
</tr>
<tr>
<td>Colwyn Bay/Llandudno</td>
<td>220,000</td>
<td>330,000</td>
<td>275,000</td>
</tr>
<tr>
<td>Newport</td>
<td>200,000</td>
<td>280,000</td>
<td>250,000</td>
</tr>
<tr>
<td>Deeside</td>
<td>220,000</td>
<td>330,000</td>
<td>247,000</td>
</tr>
</tbody>
</table>
specifically excludes certain types of sites - based on the evidence available?

- Thresholds: the authority will need to re-visit its chapters on site supply and case studies to decide whether there is a case for reducing the threshold. The balance of small to larger sites will be a deciding factor. There is usually little point for example in an authority reducing its threshold if only a marginal addition of qualifying sites then results. However some authorities will have very high housing needs and may therefore wish to reduce their threshold to zero units in order to capture all additional supply.

9.9 A number of related viability issues should be considered at the policy development stage. The calculation of commuted sums is a key question.

9.10 Where commuted sums are collected a possible approach to calculating the appropriate sum sought is to base this on the equivalent amount which would be contributed by the developer/landowner were the affordable housing provided on site. This is expressed as follows:

\[
RV_{100\%\ M} = \text{Residual value with 100\% market housing}
\]

\[
RV_{AH} = \text{Residual value with X\% affordable housing (say 20\%)}
\]

Equivalent commuted sum = RV_{100\% MV} minus RV_{AH}

Where

RV = residual value
M = market housing
AH = affordable housing

9.11 The DAT can be used to model this approach and we suggest that LPAs follow it in a consistent manner.

9.12 Where commuted sums are collected, the Council will need to have in place a strategy to ensure the money is spent effectively and in a timely manner. Options for spending will be a matter for the authority to consider but could include supporting schemes which would otherwise not be viable, increasing the amount of social rented housing in a scheme, increasing the proportion of family units in a scheme, seeking higher quality affordable housing (e.g. a higher level of the Code for Sustainable Homes).
10 THE AHVS REPORT

The AHVS report

2.16 As part of the LPA’s evidence base, the information collected and analysed for the affordable housing viability study should be brought together in the AHVS report. The report will need to set out:

- The process of evidence collection that lies behind the AHVS (including the role of the development industry workshop);
- All the assumptions used in the analysis – both those which are integral to the DAT (e.g. the market value areas and ACG bands), where the LPA has varied default values in the DAT (e.g. on house prices or build costs) and those that the LPA have used for their AHVS (e.g. level of s106 package);
- The range of tests undertaken for the High Level Testing and the case studies (and any sensitivity tests undertaken);
- A full set of results from all the testing undertaken and the source of any comparator land value information used.

2.17 The report should explain how the LPA has used the information from the AHVS to develop its policy options and/or preferred policy for its LDP.

Structure of the AHVS report

2.18 There is no ideal template for the AHVS report but the following is put forward as a possible structure that LPAs may find useful to follow.
Figure 10.1: A possible structure for an AHVS report

i. **Introduction**
   - Purpose of AHVS and relationship to LDP
   - Policy context – national and local (including AHDS)
   - Progress in delivery of affordable housing
   - Level of need for affordable housing
   - Research method - process of data collection, viability testing and consultation with development industry
   - Coverage of remainder of the report

ii. **Principles underlying the viability testing approach**
   - Use of residual value approach
   - Benchmarking residual values against existing/alternative use values

iii. **High Level Testing**
   - Principle of testing a 1 hectare scheme
   - Use of the DAT for calculations
   - Market value areas in DAT, variance from these and MVAs used for analysis
   - Key modelling assumptions – development scenarios, %age AH and tenure mix, s106 package, no grant/grant, any variations of default values in DAT
   - Baseline results (with further detail in an annex)
   - Sensitivity tests undertaken and results
   - Comparator land values and implications for policy making.

iv. **Land supply analysis**
   - Purpose of review of the land supply and policy context for thresholds
   - Results of site supply analysis
   - Practical considerations of providing AH on (small) sites
   - Approach to commuted sums

v. **Case study sites**
   - Purpose of analysis of case study sites
   - Selection of case study sites (and whether apply in all MVAs)
   - Modelling assumptions used
   - Results, comparator land values (especially for developments involving residential demolitions) and implications for policy making

vi. **Key findings and conclusions**
   - Summary of key findings from the AHVS
   - Review of policy options for target percentages and site-capacity thresholds – including using different targets and thresholds for different parts of an authority
   - Dealing with individual scheme viability – onus on developer to demonstrate why a scheme cannot meet policy and how DAT will be used in the process
   - Approach to use of commuted sums
   - Market conditions – any comments LPA wishes to make re short term market uncertainty versus need for policy for the longer term

**Annexes**
- Assumptions used in the modelling process
- Agreed development industry workshop notes
- Results from all the modelling undertaken (including sensitivity tests)
APPENDIX 1 – TYPICAL INVITATION TO WORKSHOP

Dear Sir or Madam

Affordable Housing Viability Study for ABC CBC Council: Consultation Workshop

ABC CBC are preparing an Affordable Housing Viability Study to inform the Council’s planning policy on affordable housing. The study will review the issue of viability, affordable housing and site supply in the borough.

An important element of the study is to obtain the views of local experts and stakeholders in the field of housing delivery. To this end we will be holding a workshop to enable housebuilders/developers, their agents, RSLs and others to participate in a discussion of the issues that will inform the study.

We would value your attendance and contribution at this workshop.

The workshop will be held at XYZ on Monday 11th January 2008

Lunch will be provided from 1.00pm with the workshop programmed from 2.00-5.00pm.

Some of the key questions that will be addressed at the workshop are:

• What are the key factors constraining the delivery of affordable housing?
• Is there an appropriate level of affordable housing that can be delivered?
• Is there a case for setting different targets for affordable housing throughout ABC CBC, reflecting the difference in house prices?
• Is there a minimum size of development needed to make affordable housing viable?
• What housing mix should be built to meet needs and demands?
• Are off-site financial contributions appropriate in the local housing market?

If you would like to attend the workshop please confirm by phone or e-mail to XYZ by Friday 7 August 2007. As places are likely to be restricted, we would ask that only one representative from an organisation attend.

Further information on the format of the workshop will be sent to those who are due to attend prior to the event.

If you have any further questions relating to the workshops please contact ABC on 0123-456-789

Yours sincerely
APPENDIX 2 – EXAMPLE OF A HIGH LEVEL TESTING FRAMEWORK

1 Baseline model

DAT

2 Site size base

Use a standard one hectare site for all testing.

3 Market areas

Test all four market areas for ABC CBC

4 Density and mix

Test, for all market areas according to chart (from DAT):

<table>
<thead>
<tr>
<th>MUSES</th>
<th>Density Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Ref. Description</td>
<td>Rooms</td>
</tr>
<tr>
<td>1 Studio Flat</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2 Bed Flat</td>
</tr>
<tr>
<td>3</td>
<td>2 Bed Flat</td>
</tr>
<tr>
<td>4</td>
<td>3 Bed Terraced Town House</td>
</tr>
<tr>
<td>5</td>
<td>3 Bed Terraced Town House</td>
</tr>
<tr>
<td>6</td>
<td>3 Bed Terraced Town House</td>
</tr>
<tr>
<td>7</td>
<td>4 Bed Terraced Town House</td>
</tr>
<tr>
<td>8</td>
<td>2 Bed Semi Detached</td>
</tr>
<tr>
<td>9</td>
<td>3 Bed Semi Detached</td>
</tr>
<tr>
<td>10</td>
<td>3 Bed Semi Detached</td>
</tr>
<tr>
<td>11</td>
<td>3 Bed Detached</td>
</tr>
<tr>
<td>12</td>
<td>4 Bed Detached</td>
</tr>
<tr>
<td>13</td>
<td>5 Bed Detached</td>
</tr>
<tr>
<td>14</td>
<td>2 Bed Bungalow</td>
</tr>
<tr>
<td>15</td>
<td>3 Bed Bungalow</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>

RUN ONLY HOWEVER AT 30 DPH, 40 DPH AND 50 DPH

On page 4 ‘Characteristics of development’:

- Assume all low rise flats (2 storey) – unless these are normally higher? – NB selecting a 6 storey flat will probably make things look unviable!
- Parking – set to ‘n/a’ (Page 4 of Toolkit – Characteristics of Development)
5 Affordable housing targets

5.1 Affordable housing targets

Test at:
10%;
15%
20%;
25%
30%;
35%

Test the range of targets at:

75% Social Rent and 25% HomeBuy. At a 40% Equity Share. Is this correct (if so – set up as follows in DAT):

6 Other Section 106 obligations

Test at £5,000
7 Build costs

Set up build costs sheet as per screenshot (as agreed at meeting 7th July with HBF):

8 Unit sizes (sq m)

As per the DAT (as it brings them forward on Page 4)

9 Target Rents (Weekly rents)

These are the current rents running in the Toolkit. LAs need to check recent rents.

<table>
<thead>
<tr>
<th>Type</th>
<th>Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio Flat</td>
<td>£46.45</td>
</tr>
<tr>
<td>1 Bed Flat</td>
<td>£48.56</td>
</tr>
<tr>
<td>2 Bed Flat</td>
<td>£50.67</td>
</tr>
<tr>
<td>1 Bed Terrace/Town House</td>
<td>£57.58</td>
</tr>
<tr>
<td>2 Bed Terrace/Town House</td>
<td>£60.51</td>
</tr>
<tr>
<td>3 Bed Terrace/Town House</td>
<td>£63.44</td>
</tr>
<tr>
<td>4 Bed Terrace/Town House</td>
<td>£66.37</td>
</tr>
<tr>
<td>2 Bed Semi Detached</td>
<td>£60.51</td>
</tr>
</tbody>
</table>
### 3 Bed Semi Detached
£63.44

### 4 Bed Semi Detached
£66.37

### 3 Bed Detached
£63.44

### 4 Bed Detached
£66.37

### 5 Bed Detached
£69.30

### 2 Bed Bungalow
£60.51

### 3 Bed Bungalow
£63.44

#### 10 Affordable housing – gross to nett page

As per screenshot (LAs may wish to run this sheet past the RSLs?)
APPENDIX 3: - BRIEF FOR DISTRICT VALUER

ABC Council

Viability Testing

Brief for District Valuer

1. Introduction

1.1 ABC Council wishes to appoint the District Valuer to provide relevant information on current land values for defined market areas in the Borough.

2. Background

2.1 The Welsh Assembly Government has indicated that as an integral part of Local Development Plan Preparation there is a need for Local Planning Authorities to ensure that in setting site-capacity thresholds and site specific targets local planning authorities have balanced the need for affordable housing against site viability. In line with Technical Advice Note 2: Planning and Affordable Housing it is considered that this may involve making informed assumptions about the levels of finance available for affordable housing and the type of affordable housing to be provided. TAN 2 also indicates that local planning authorities should also take into account the impact on the delivery of the affordable housing target and the objective of creating sustainable communities across the plan area and in the individual parts of the plan area.

2.2 Against this policy background, the South East Wales Strategic Planning Group (SEWSPG) have set up a sub group to explore the possibility of undertaking work at a sub-regional level to develop a standard methodology to underpin Viability Studies to inform LDPs within South East Wales.

2.3 In order to ensure that this work is undertaken in an open transparent manner and is not unduly influenced by any members of the sub group, Three Dragons have been approached with a view to providing the strategic guidance for the preparation of this work. As appropriate, members of XYZ can used this methodology to inform their own viability assessments using the Three Dragons Development Appraisal Toolkit (DAT) should they choose.

2.4 As part of the local authority level work, it is necessary to obtain recent information on current land values to be considered against residual values produced by the DAT. ABC C.B.C. wishes to commission the District Valuer to provide this information on land values in order to inform the assessment of viability based on housing markets in the local authority.

2.6 Other local authorities in XYZ may commission similar information independently in due course to inform their own studies.
3. Market areas

3.1 The current version of the DAT identifies 6 market areas within XYZ based on geographical areas that exhibit similar house prices. These markets are:

<table>
<thead>
<tr>
<th>Sub Markets</th>
<th>Postcode Sectors include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>AB1; AB2; AB3</td>
</tr>
<tr>
<td>B</td>
<td>BB1; BB2</td>
</tr>
<tr>
<td>C</td>
<td>CB1; CB2; CB3; CB4</td>
</tr>
<tr>
<td>D</td>
<td>DB1</td>
</tr>
<tr>
<td>E</td>
<td>EB1; EB2</td>
</tr>
</tbody>
</table>

3.2 A map of each of the sub-market areas will be provided.

4. Requirements

4.1.1 The DV should provide the local authority with a figure for average current land values for each of the market areas as shown on the map for the following land uses:

- Residential
- Industrial
- Commercial
- Agricultural

5. Responding to the brief

5.1 In responding to this brief we would welcome a fee proposal for undertaking the work for the five market areas identified.

- A fee proposal to be received by...
- Appointment as appropriate on...
- Work to be completed by ...

5.2 The fee proposal should be sent to xxx the contact details below.

Address details...