

# **Bridgend CBC Affordable Housing Viability Study**

**Final Report**

**August 2010**

**Dr Andrew Golland BSc, PhD, MRICS**  
drajg@btopenworld.com



## INTRODUCTION

### Review of project aims

- 1.1 Bridgend County Borough Council appointed Three Dragons to prepare an Affordable Housing Viability Study (AHVS) compliant with the requirements of the Welsh Assembly Government's Technical Advice Note (TAN) 2: Planning and Affordable Housing which emphasises the importance of viability testing policy targets.
- 1.2 The overall aim and purpose of the study is to:
  - Advise on the most ambitious yet achievable and viable target(s) and threshold(s) for affordable housing which fully reflect the availability of a range of finance towards affordable housing and reflects priority infrastructure needs;
  - To assess the impact of the profile of sites within Bridgend on housing viability;
  - Advise on a robust policy position with respect to the setting of thresholds which do not impact on the delivery of housing in the County Borough.

### National Policy Context

- 1.3 This study focuses on the percentage of affordable housing sought on mixed tenure sites and the size of site from above which affordable housing is sought (the site size threshold). 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 TAN 2 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)*
- 1.4 Guidance from the Welsh Assembly Government on the preparation of Affordable Housing Delivery Statements (2007 – 2011)<sup>1</sup> 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)*
- 1.5 The courts have further emphasised the importance of robust viability evidence to underpin affordable housing policies in development plans. The

---

<sup>1</sup> Published by the Welsh Assembly Government in February 2009

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.”*

- 1.6 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. TAN 2 does not provide any national guidance on appropriate thresholds and leaves this to LPAs to identify. However, TAN 2 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”.* (TAN 2 para 10.4)

### **Existing Local Policy**

- 1.7 The Bridgend Unitary Development Plan (UDP) was adopted on the 12th May 2005. Policy H7 of the Plan specifically refers to Affordable Housing and states that:

*‘Where a local need is demonstrated, the council will expect an appropriate element of ‘affordable housing’ to be provided on suitable sites capable of accommodating 15 or more units or exceeding 0.5 hectares in size. Such affordable housing will be implemented through the use of appropriate planning conditions and/ or obligations/agreements and/or through contractual arrangements between the council, developers and registered social landlords’.*

- 1.8 It was recognised by the Council that the developer may ‘avoid’ an affordable housing contribution by amending the scheme to 14 units or less and that in such circumstances no affordable housing contribution would be forthcoming.

- 1.9 In November 2007 the Council adopted SPG 13 in relation to Affordable Housing. This stated that:

*‘In the northern housing market area of the County Borough, at least 15% of the housing constructed on sites which meet the threshold requirements of policy H7 will be affordable. In the southern housing market area of the County Borough, at least 30% of the housing constructed on sites which meet the threshold requirements of policy H7 will be affordable’.*

- 1.10 This means a split target which currently operates on a ward boundary basis as set out in SPG 13.

- 1.11 The SPG expands upon UDP Policy H7, recognising the fact that small sites often generate a number of dwellings in excess of 15. The SPG therefore stated that on sites less than 0.5 ha a provision of affordable housing will be sought based on the number of units that exceed the 15 unit threshold of

policy H7. It explained that ‘for example, in Bridgend where the area target is 30%, where a developer proposes to build 21 flats on a 0.4 Ha site the contribution will be 30% of 6 = 2 units (where 6 is the difference between the threshold of 15 and the proposal of 21). This approach is only relevant on sites that do not meet the area threshold of 0.5Ha stipulated in Policy H7, but nevertheless exceed the unit threshold’.

### **Housing Needs**

- 1.11 The Council have recently (October 2009) completed a Local Housing Market Assessment (LHMA). This concluded that over the next 12 years, 42% of all new dwellings in the County Borough should be affordable, and the remaining 58% market.
- 1.12 The report stated that the ‘Council will wish to view these results in the context of viability when deciding on an appropriate affordable housing target [and] in the interim an affordable housing target of 42% is recommended.’ The model driving the findings suggested that the northern market could support a target of 39%, with the southern one, a target of 42%.
- 1.13 The LHMA looked at tenure balance, and suggested that in the light of longer term trends, 25% of the affordable element within development should be intermediate affordable housing.

### **Research undertaken**

- 1.14 There were four main strands to the research undertaken to complete this study:
- Discussions with a project group of officers from the five commissioning authorities which informed the structure of the research approach;
  - Analysis of information held by the authority, including that which described the profile of land supply;
  - Use of the Welsh Development Appraisal Toolkit (DAT) to analyse scheme viability (and described in detail in subsequent chapters of this report);
  - A workshop held with developers, land owners, their agents and representatives from a selection of Registered Social Landlords active in the Borough. A full note of the workshop is shown in Appendix 1.

### **Structure of the report**

- 1.15 The remainder of the report uses the following structure:
- Chapter 2 explains the methodology we have followed in undertaking the analysis of development economics. We explain that this is based on residual value principles;
  - Chapter 3 provides analysis of residual values generated across a range of different development scenarios (including alternative percentages and mixes of affordable housing) for a notional 1 hectare site.

- Chapter 4 considers options for site size thresholds. It reviews national policy and the potential future land supply and the relative importance of small sites. The chapter considers practical issues about on-site provision of affordable housing on small sites and the circumstances in which collection of a financial contribution might be appropriate (and the principles by which such contributions should be assessed);
- Chapter 5 identifies a number of case study sites (generally small sites which are currently in use), that represent examples of site types found in the authority. For each site type, there is an analysis of the residual value of the sites and compares this with their existing use value.
- Chapter 6 summarises the evidence collected through the research and provides a set of policy options.

## **2 METHODOLOGY**

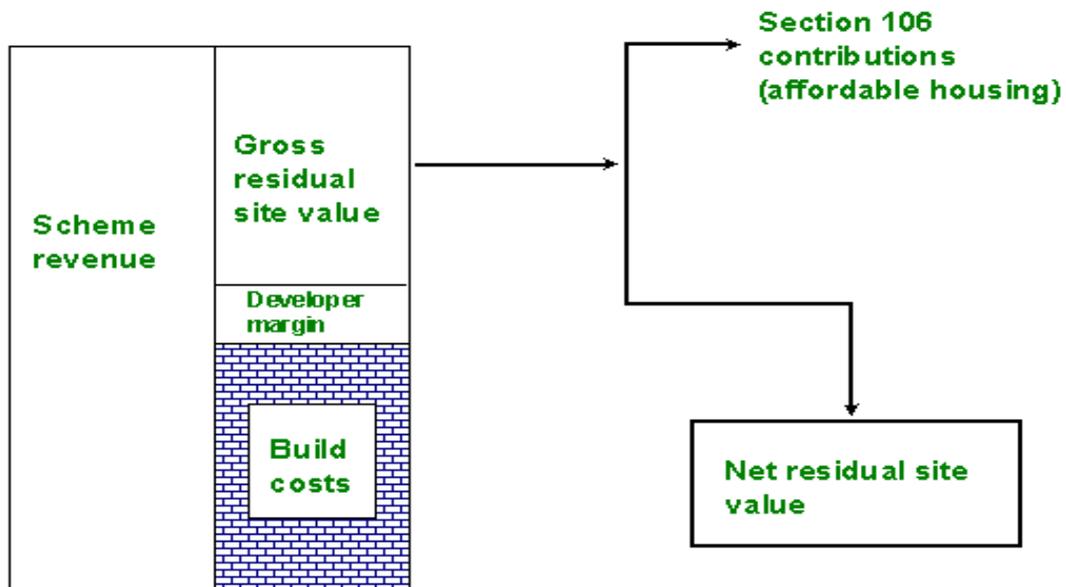
### **Introduction**

- 2.1 In this chapter we explain the methodology we have followed in, first, identifying sub markets (which are based on areas with strong similarities in terms of house prices) and, second, undertaking the analysis of development economics. The chapter explains the concept of a residual value approach and the relationship between residual values and existing/alternative use values.

### **Viability – starting points**

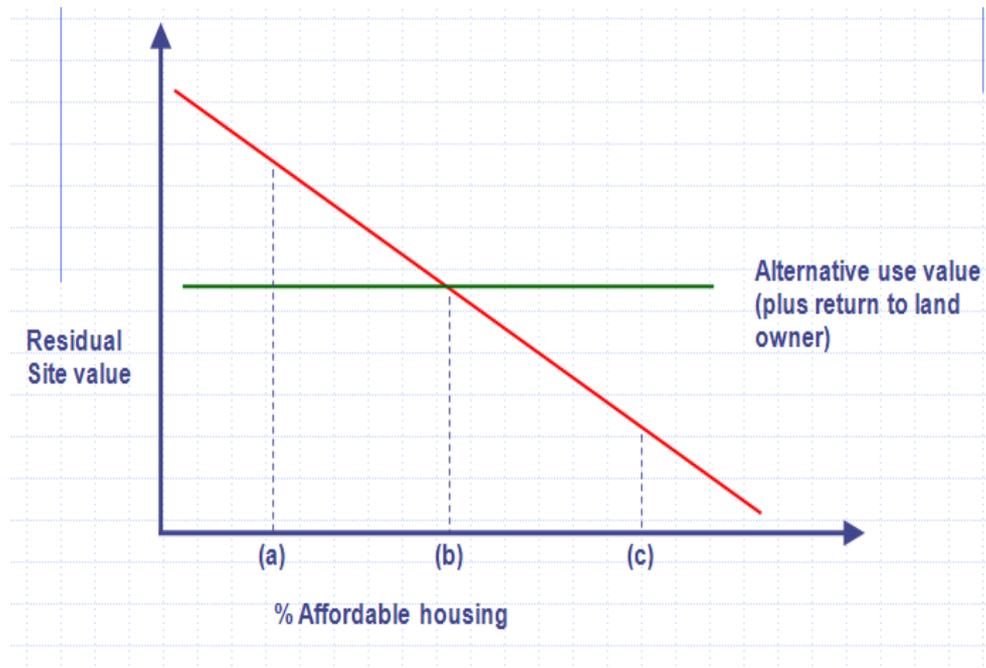
- 2.2 We use a residual development appraisal model to assess development viability. This mimics the approach of virtually all developers when purchasing land. This model assumes that the value of the site will be the difference between what the scheme generates and what it costs to develop. The model can take into account the impact on scheme residual value of affordable housing and other section 106 contributions.
- 2.3 Figure 2.1 below shows diagrammatically the underlying principles of the approach. Scheme costs are deducted from scheme revenue to arrive at a gross residual value. Scheme costs assume a profit margin to the developer and the 'build costs' as shown in the diagram include such items as professional fees, finance costs, marketing fees and any overheads borne by the development company.
- 2.4 The gross residual value is the starting point for negotiations about the level and scope of section 106 contribution. The contribution will normally be greatest in the form of affordable housing but other section 106 items will also reduce the gross residual value of the site. Once the section 106 contributions have been deducted, this leaves a net residual value.

**Figure 2.1 Theory of the Section 106 Process**



- 2.5 Calculating what is likely to be the value of a site given a specific planning permission, is only one factor in deciding what is viable.
- 2.6 A site is extremely unlikely to proceed where the costs of a proposed scheme exceed the revenue. But simply having a positive residual value will not guarantee that development happens. The existing use value of the site, or indeed a realistic alternative use value for a site (e.g. commercial) 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.
- 2.7 Figure 2.2 shows how this operates in theory. Residual value falls as the proportion of affordable housing increases. At some point (here 'b'), alternative use value (or existing use value whichever is higher) will be equal to scheme value. If there is a reasonable return to the land owner at point 'b' i.e. 'b' reflects best possible current use value (alternative or existing) and there is a sufficient return, then the scheme will come forward. At point 'c', affordable housing will make the site unviable. At 'a' the scheme should be viable with affordable housing. The diagram does not assume grant. Grant should be used to 'lever out' sites from their existing or best alternative uses.

**Figure 2.2 Affordable housing and alternative use value**



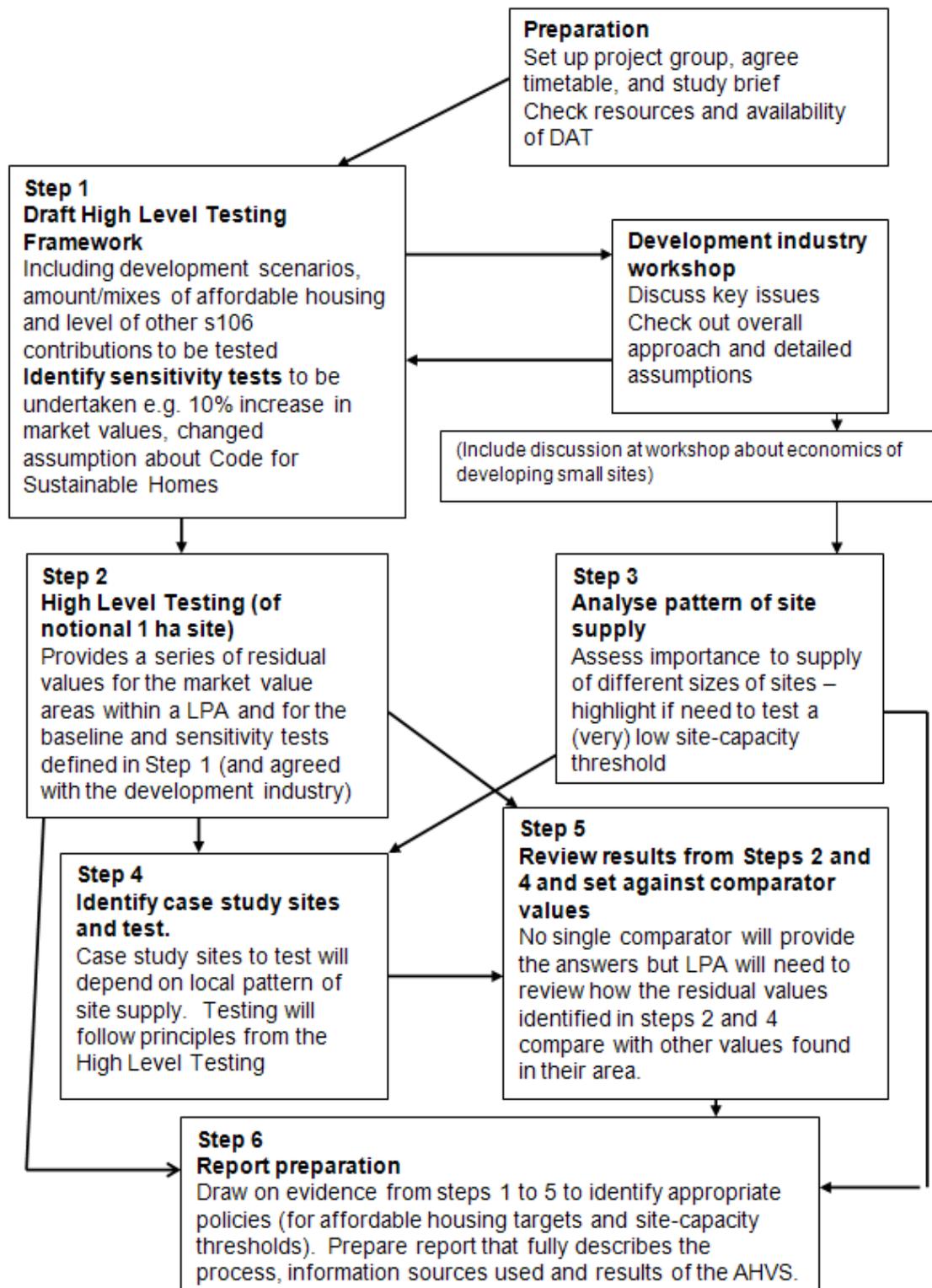
2.8 The analysis we have undertaken uses a Three Dragons Viability model. The model is explained in more detail in Appendix 2, which includes a description of the key assumptions used.

**Good practice approach**

2.9 We have adopted the approach promoted in SEWSPG's (South East Wales Strategic Planning Group) Good Practice Guide to carrying out affordable housing studies. The general approach has been endorsed by the development industry in Wales.

2.10 A summary of the approach is shown in Figure 2.3 below.

**Figure 2.3 Good practice approach to carrying out affordable housing viability studies (SEWSPG Guide)**



### 3 HIGH LEVEL TESTING

#### Introduction

- 3.1 This chapter of the report considers viability for mixed tenure residential development for a number of different proportions and types of affordable housing. The analysis is based on a notional 1 hectare site and has been undertaken for a series of market value areas that were identified as part of the analysis underpinning the development of Wales DAT (Development Appraisal Toolkit). The chapter explains this and explores the relationship between the residual value for the scenarios tested and existing/alternative use values.

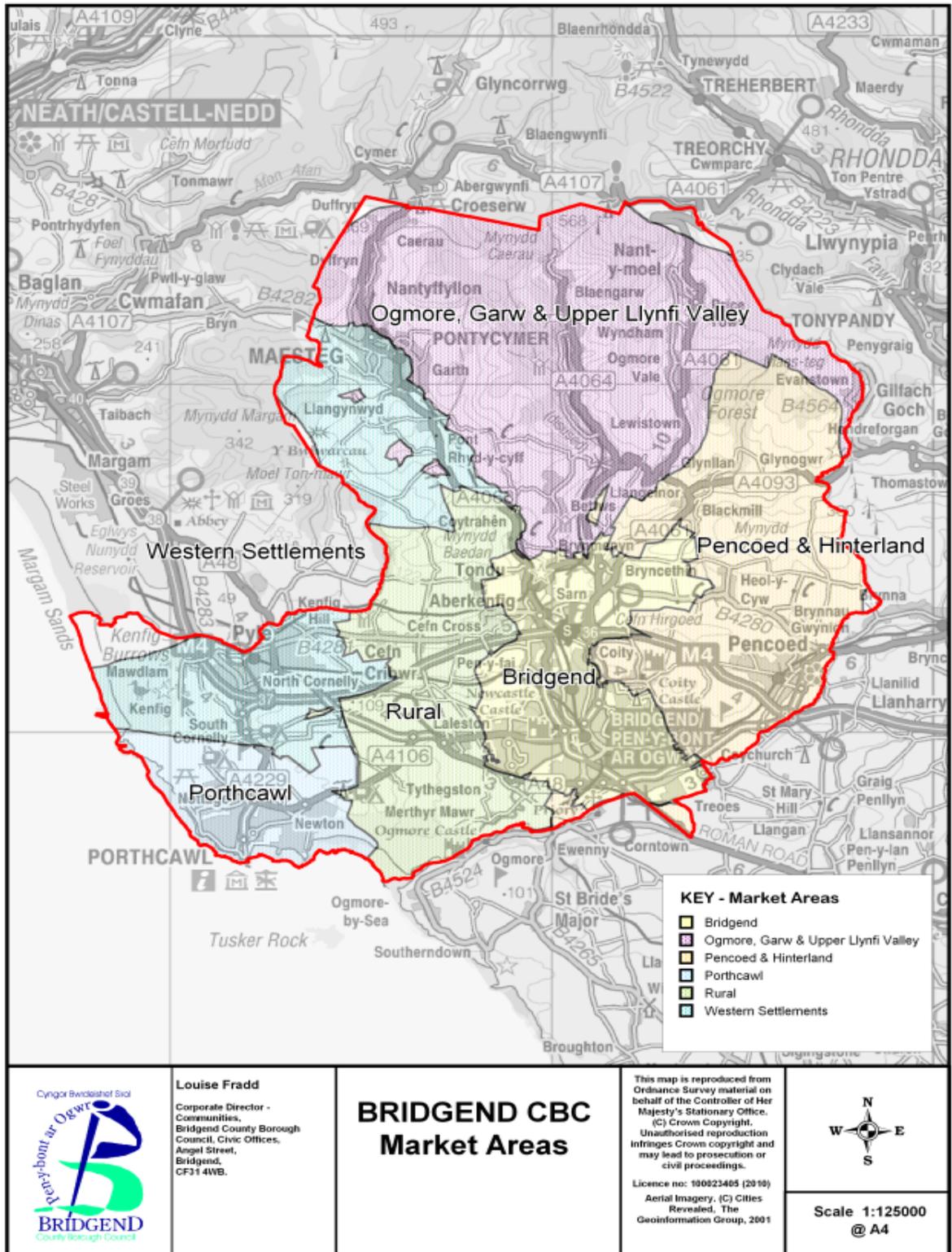
#### Market value areas

- 3.2 Variation in house prices will have a significant impact on development economics and the impact of affordable housing on scheme viability.
- 3.3 We have undertaken a full analysis of development across the housing market, using HM Land Registry data to identify market value or sub market areas in the District. The purpose of this analysis is to help establish a broad starting point for target setting in the light of the general relationships between development revenues and development costs. The data is relevant as at November 2009. Table 3.1 below sets out the market value areas or sub markets for the CBC.
- 3.4 The map below depicts the sub markets in GIS form.

**Table 3.1 Sub markets in the Bridgend area**

Sub Market	Major Settlements	Minor Settlements	Post Codes
Porthcawl	Porthcawl		CF36 3, CF36 5
Rural		Laleston, Merthyr Mawr & Cefn Cribwr	CF32 0
Pencoed & Hinterland	Pencoed	Blackmill, Coity & Coychurch	CF35 6, CF35 5
Bridgend	Bridgend, Aberkenfig & Sarn		CF31 1, CF31 2, CF31 3, CF31 4, CF31 5, CF31 9, CF32 9
Western Settlements	North & South Cornelly, Pyle, Kenfig Hill, Maesteg & Lower Llynfi Valley		CF33 4, CF33 6, CF34 9
Ogmore, Garw & Upper Llynfi Valley			CF32 7, CF32 8, CF39 8, CF34 0

Source: Bridgend CBC and Three Dragons



### **Testing assumptions (notional one hectare site)**

- 3.5 For the viability testing, we defined a number of development mix scenarios, using a range of assumptions agreed with the council and as applying in the DAT.
- 3.6 The development mixes were as follows:
- 30 dph: including 10% 3 bed terraces; 10% 3 bed semis; 10% 4 bed semis; 20% 3 bed detached; 30% 4 bed detached; 20% 5 bed detached.
  - 35 dph: including 10% 2 bed flats; 15% 2 bed terraces; 20% 3 bed terraces; 10% 3 bed semis; 10% 4 bed semis; 10% 3 bed detached; 15% 4 bed detached; 10% 5 bed detached.
  - 40 dph: including 5% 1 bed flats; 10% 2 bed flats; 20% 2 bed terraces; 20% 3 bed terraces; 5% 4 bed terraces; 10% 3 bed semis; 10% 4 bed semis; 10% 3 bed detached; 10% 4 bed detached.
  - 50 dph: including 15% 1 bed flats; 20% 2 bed flats; 25% 2 bed terraces; 30% 3 bed terraces; 5% 3 bed semis; 5% 4 bed semis.
  - 75 dph: including 5% studio flats; 25% 1 bed flats; 40% 2 bed flats; 5% 1 bed terraces; 15% 2 bed terraces; 10% 3 bed terraces.
- 3.7 We calculated residual site values for each of these (base mix) scenarios in line with a further set of tenure assumptions. These were 10%; 15%; 20%; 25%; 30%, 35% and 40%. These were tested at 75% Social Rent and 25% HomeBuy in each case. For HomeBuy, the share purchase was assumed to be 70%. All the assumptions were agreed with the authority and tested via the workshop.
- 3.8 We are aware that the current difficulty in obtaining mortgages for households on lower incomes is affecting the intermediate affordable housing sale market. In the short term, this may mean that the mix of affordable tenures which is provided will be different from that which we have modelled. However, the figures we have used are intended to provide information for the local authority to use in planning for the longer term and hence the balance of tenures we have modelled. In the short term, the authority will be able to consider the economics of individual schemes with a different affordable housing mix, using the DAT.

### **Other section 106 Infrastructure contributions**

- 3.9 For the modelling we have undertaken (and unless shown otherwise) we have assumed that other planning obligations have a total cost of £5,000 per unit. This was a figure agreed with the Council as being a reasonable requirement on a per unit basis based on the current level of contributions. It is also a figure adopted by similar local authorities elsewhere.
- 3.10 We also consider separately the impact on viability of the Code for Sustainable Homes at code level 4.

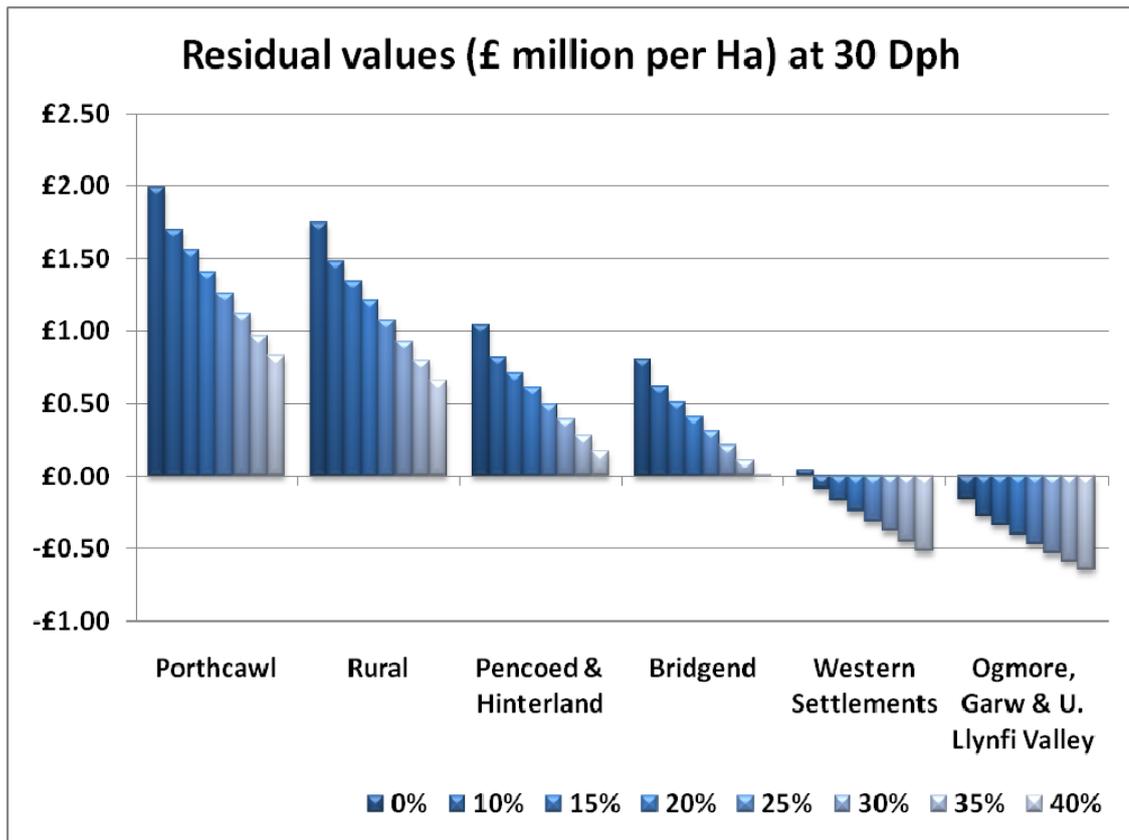
### Results: residual values for a notional one hectare site

3.11 This section looks at a range of development mixes and densities. It shows the impacts of increasing the percentage of affordable housing on residual site values. Unless otherwise indicated, all the results are **without grant**. The full set of these results are shown in Appendix 3.

#### Lower density housing (30 dph)

3.12 Figure 3.1 shows lower density housing (30dph) and the residual values for each of the market value areas outlined in Section 3.

**Figure 3.1 Low density housing (30 dph) – Residual value in £s million**



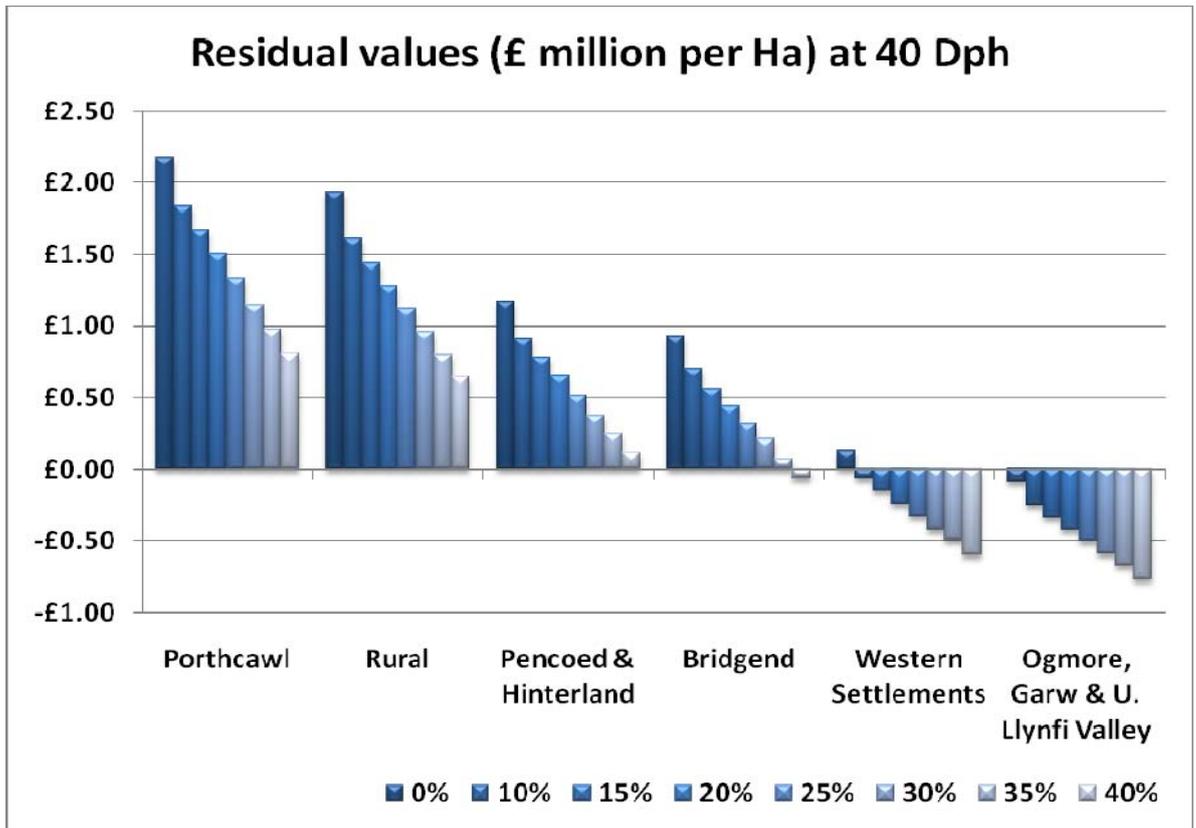
- Figure 3.1 shows residual values on a per hectare basis for the six sub markets. It shows the broad division between locations generating positive residual values and those with negative residual values. Whilst Porthcawl and Rural areas generate residual values of over £1 million per hectare at 25% affordable housing, residual values, according to the assumptions we have made here, are negative in Ogmores, Garw and Upper Llynfi valley for all scenarios tested.
- This does not mean that all sites in the lower two value markets will be unviable. There will inevitably be ‘hot’ spots where selling prices approximate more closely to the higher value sub markets. However, we would expect development in the lower two sub markets to be generally difficult and affordable housing contributions not routinely viable.
- The range in values has potentially important implications for policy making. The graph shows the very significant difference in residual

values between areas and this difference creates a strong case for the Council to promote a split affordable housing target.

**Medium density housing (40 dph)**

3.13 Figure 3.2 shows medium density housing (40 dph) and the residual values for each of the market value areas.

**Figure 3.2 Medium density housing (40 dph) – Residual value in £s million**

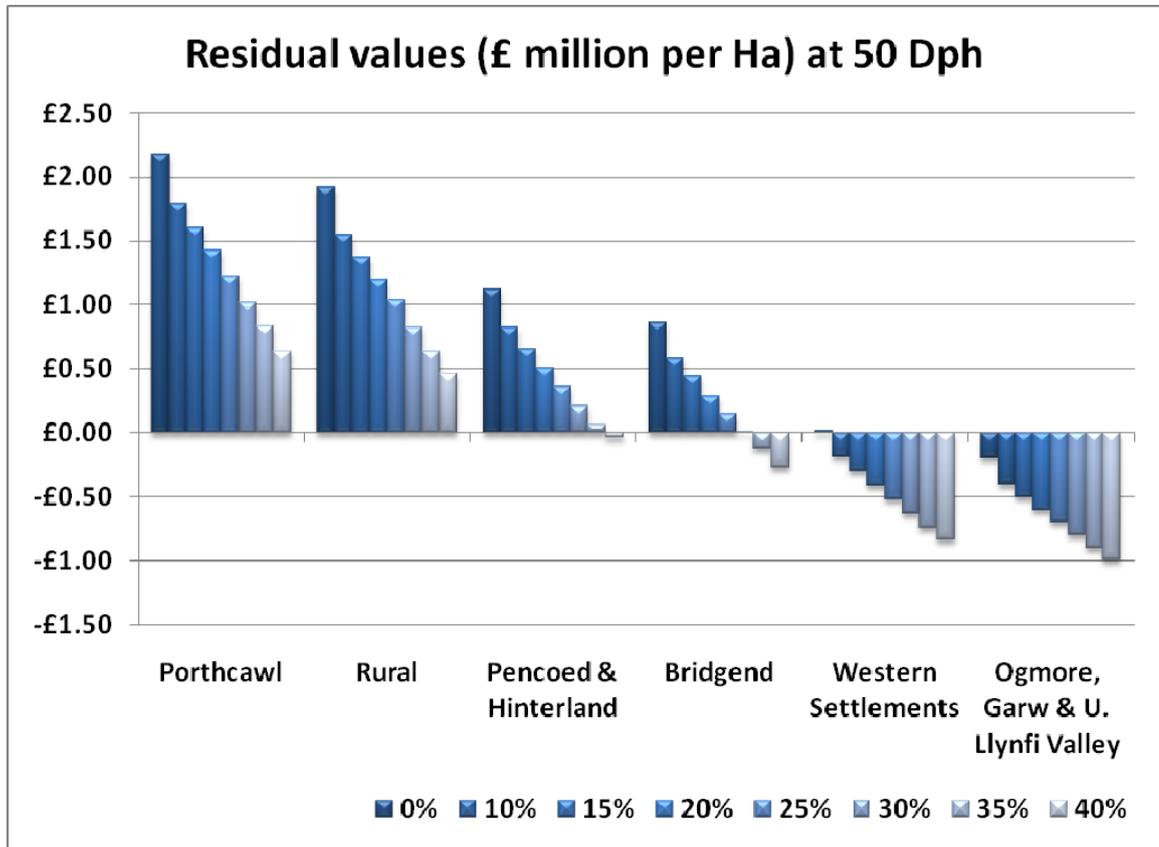


- The scenario at 40 dph generates a similar pattern of residual values as at 30 dph. Locations such as Porthcawl and Rural generate significantly higher residual values than the Western Settlements (Cornelly, Pyle, Maesteg, Kenfig Hill and Lower Llynfi Valley). Values in Pencoed and Bridgend are around average for the CBC area.
- A comparison of Figures 3.2 and 3.1 (see also Appendix 3), shows that increasing density (from 30dph to 40dph) will, in most instances, increase residual value. In the lower value sub markets this will not be the case however at higher levels of affordable housing.
- At higher than 15% affordable housing in the Ogmore, Garw and Upper Llynfi Valley sub market, residual values are lower at 40dph than is the case at 30dph. In the Western Settlements, residual values are lower at 40 dph than 30 dph where more than 20% affordable housing is included within a scheme.

### Higher density (50 dph) scheme

3.14 Figure 3.3 shows a higher density scheme – at 50 dph, and the residual values for each of the market value areas.

**Figure 3.3 Higher density housing (50 dph) – Residual value in £s million**

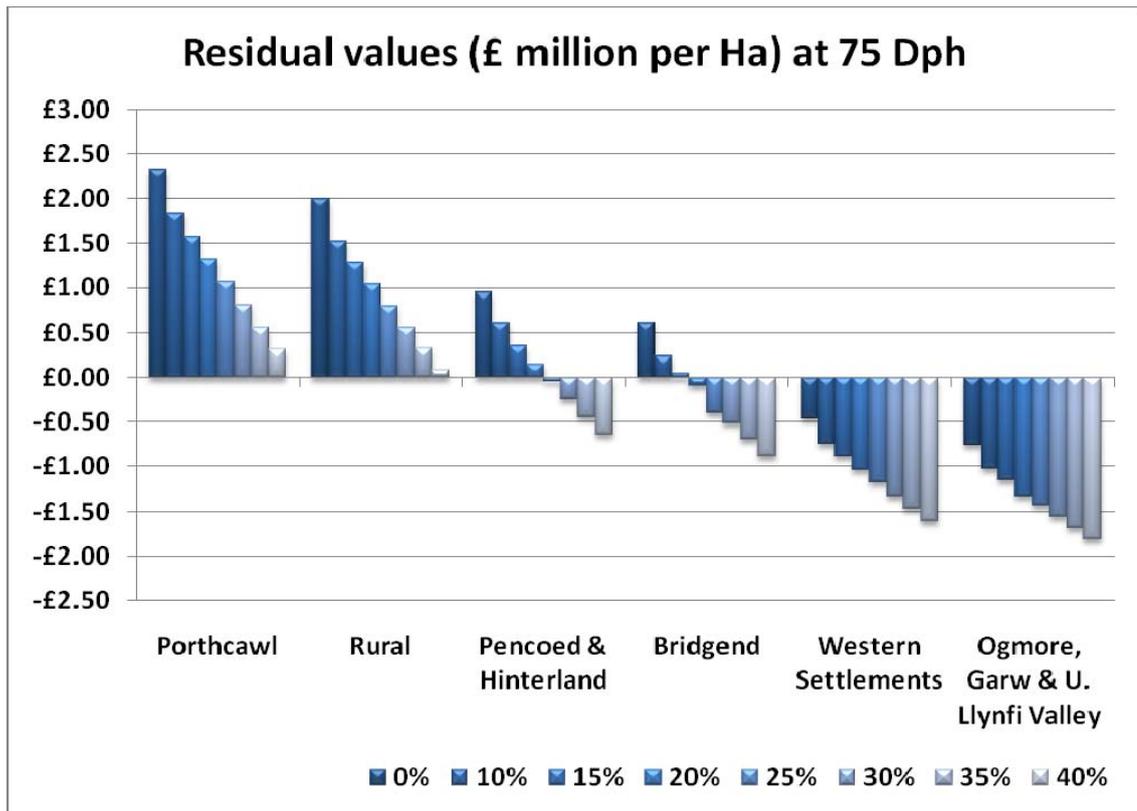


- Increasing density to 50 dph (from 40 dph) will reduce residual values in all instances (at all percentages of affordable housing and at all densities) except one. That being, 100% market housing in the highest value area, Porthcawl.
- This is instructive in that it suggests that optimal density in terms of generating the highest residual values occurs between 40dph and 50 dph, although this will depend on the sub market under consideration.
- The reason why higher density does not generally assist viability through higher residual values in a location such as Bridgend lies in the fact that smaller units provide only a marginal return over larger ones. Bridgend is not a location where flats for example generate significant revenue. Only in very exceptional circumstances (hot spots within the higher value locations) will apartment developments generate high values.
- The impact of affordable housing, where the gap between revenue and cost is marginal, is therefore very significant. A mix of larger, and family type housing, is likely to generate the best returns for land owners

### High density (75 dph) scheme

- 3.15 Figure 3.4 shows a higher density (75 dph) scheme. The main impact here is to decrease viability in all the scenarios tested (versus the 50 dph scenario) with very significant negative residual values found in the lowest three value sub markets.
- 3.16 Only in Porthcawl at 0% and 10% affordable housing are residual values higher (than at 50 dph) and in the Rural sub market – at 100% market housing.

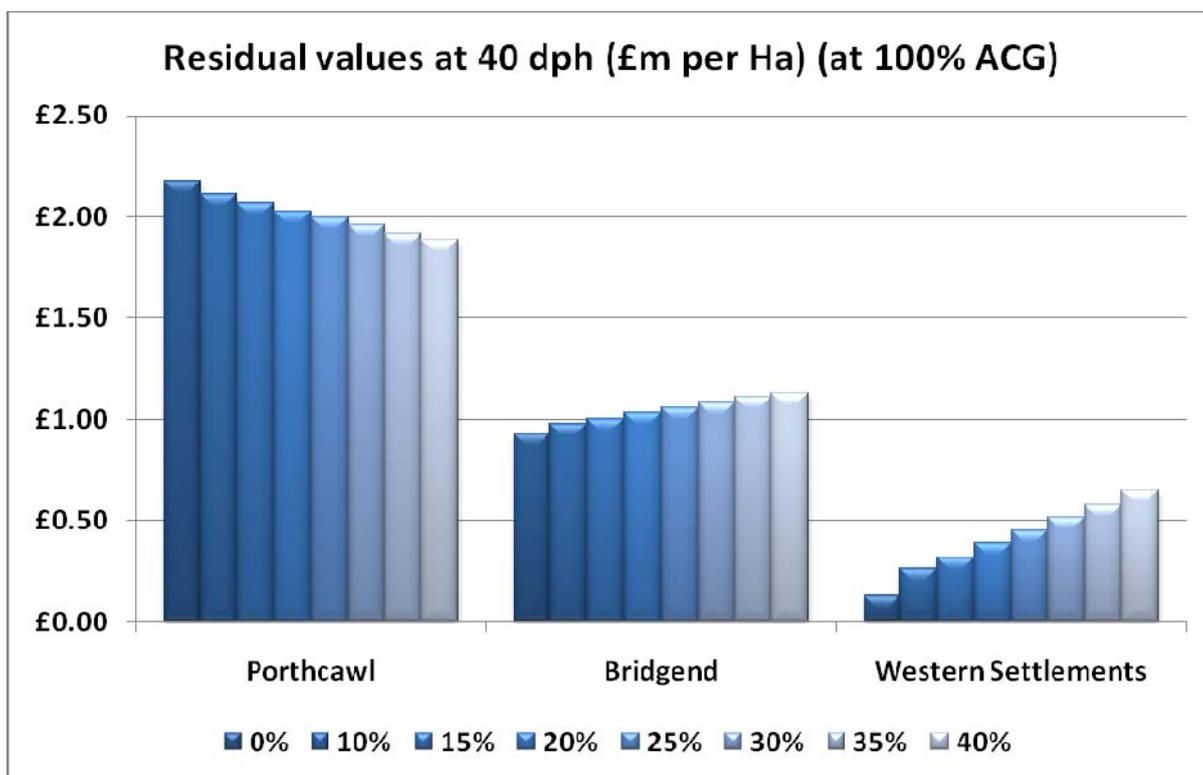
**Figure 3.4 High density housing (75 dph) – Residual value in £s million**



### Impacts of potential grant funding

- 3.17 The availability of public subsidy, in Wales in the form of ACG (Acceptable Cost Guidance) money, can have a significant impact on scheme viability. Grant given to the affordable housing providers enables them to pay more for affordable housing units, thus increasing overall scheme revenue and therefore the residual value of a mixed tenure scheme.
- 3.18 We look here at the impact of the ACG funding regime on viability. We select here ACG Band Level 3, as a mid-point band range for the authority. We run the scenarios assuming ACG at 100%. Figure 3.6 shows the results taking a case study of three sub markets – Porthcawl, Bridgend and Western Settlements.

**Figure 3.5 Medium density housing (40 dph) – Residual value in £s million; ACG at 100%**



- 3.19 Figure 3.5 shows the specific impacts of subsidy in a location such as Bridgend. It shows two main impacts.
- 3.20 In the higher value areas (and we choose here the example of Porthcawl – the highest value location), residual value falls as affordable housing is increased with a scheme. In other words, the ACG subsidy scheme, whilst it significantly bolsters residual value, does not increase residual value as the affordable housing percentage increases.
- 3.21 In a middle value location such as Bridgend, and indeed a lower value sub market such as Western Settlements, the pattern moves in the opposite direction. In other words, residual values actually rise as affordable housing is increased within a scheme. The lower the value of house prices in an area (when considering these two locations), the greater the impact of the ACG input to residual value. Residual value in Bridgend at 40% affordable housing is 21% higher than at 100% market housing (nil affordable housing); in the Western settlements, residual value at 40% affordable housing is five times that at nil affordable housing.
- 3.22 The reason for the diverse trends is that in the higher value areas the opportunity cost of providing affordable housing is greater than in the lower value areas. Where house prices are high, the cost of producing an affordable unit is relatively greater than in lower value areas, where house prices are lower.
- 3.23 The trends are significant for policy making. Where grant can be obtained for schemes, the impact in terms of viability is significantly more ‘elastic’ in lower than higher value areas. This does not mean that higher value areas should not require grant (as for example existing use values can be commensurately

higher, but that the relative ability of higher value areas to cross subsidise affordable housing is greater).

### Testing at 60% Social Rent : 40% Homebuy

- 3.24 It was agreed at the Workshop that a 60%:40% baseline test would be carried out to reflect the potential increase in residual value created by having a higher percentage of affordable housing in a scheme. We choose here selected locations across a range of values within the County Borough.

**Table 3.2 Residual values at 40 dph assuming 60% Social Rent: 40% Homebuy**

	10%	20%	30%	40%
<b>Porthcawl</b>	<b>1.9</b>	<b>1.61</b>	<b>1.32</b>	<b>1.03</b>
<b>Bridgend</b>	<b>0.72</b>	<b>0.46</b>	<b>0.31</b>	<b>0.1</b>
<b>Western Settlements</b>	<b>-0.03</b>	<b>-0.18</b>	<b>-0.34</b>	<b>-0.49</b>

- 3.25 The impacts at lower percentages of affordable housing (as against the main baseline test of 75:25%) are negligible. Typically residual values increase at 20% affordable housing by around 5%. At high percentages of affordable housing the impacts are more significant. At 30% affordable housing in Bridgend for example, the increase in residual is around 50%.
- 3.26 The Council, adopting the DAT, will have the capacity to marry up housing needs and housing viability by ‘trading’ affordable housing tenure as is demonstrated by this test. This can be done using the DAT which the Council has at its disposal.

### Impacts of achieving Code for Sustainable Homes Level 4

- 3.27 A further consideration in relation to viability is the achievement of a higher standard of build as envisaged in the Code for Sustainable Homes.
- 3.28 There are a number of problems in analysing the impacts of a higher code (we consider here Code 4) not least that there is a large range of costs which can impact on a scheme which operate within the same code.
- 3.29 The estimated costs of achieving Code Level 4 range from £2,000 to £12,000 per dwelling (Cyril Sweet, 2007 – Cost Review of the Code for Sustainable Homes). This depends on the extent to which different energy sources are adopted. We take here scenario 2 as a broad indication of costs (an additional £4,260 per end terrace) which represents ‘Initial energy efficiency measures initially followed by use of small scale wind turbines and then biomass systems’. We model at £5,000 per unit; across a scheme at 40 dph this means £200,000 per hectare taken off residual value.
- 3.30 Table 3.3 shows the impacts of achieving Code for Sustainable Homes Level 4.

**Table 3.3 Residual value (£s million per hectare) with Code for Sustainable Homes Level 4, at 40 dph (no grant)**

	Porthcawl	Bridgend	Western Settlements
<b>0% AH</b>	£1.98	£0.73	-£0.29
<b>10% AH</b>	£1.64	£0.50	-£0.45
<b>20% AH</b>	£1.30	£0.24	-£0.62
<b>30% AH</b>	£0.95	£0.01	-£0.79
<b>40% AH</b>	£0.61	-£0.26	-£0.97

3.31 Whilst residual values in the stronger market value areas will hold up, particularly at the lower percentages of affordable housing, the impact at higher percentages of affordable housing in the weaker market areas now becomes substantial.

3.32 It is important to state with respect to this analysis that it is only a sensitivity test, and one which increases costs whilst holding all other variables constant. In practice, it is not improbable that selling prices may have increased by the time the code is introduced thus allowing viability to be maintained.

#### **Impacts of a higher Section 106 contribution**

3.33 It was agreed at the workshop that a higher Section 106 planning gain package would be considered: at £10,000 per unit.

3.34 On this basis, the same results as shown in Table 3.3 above will be generated.

3.35 This suggests that in Porthcawl for example, at the top end of the market, residual values will fall by around 13%. In Bridgend itself, residual values will fall by around 45%. This is a significant figure in a location such as Bridgend. These figures relate to 20% affordable housing.

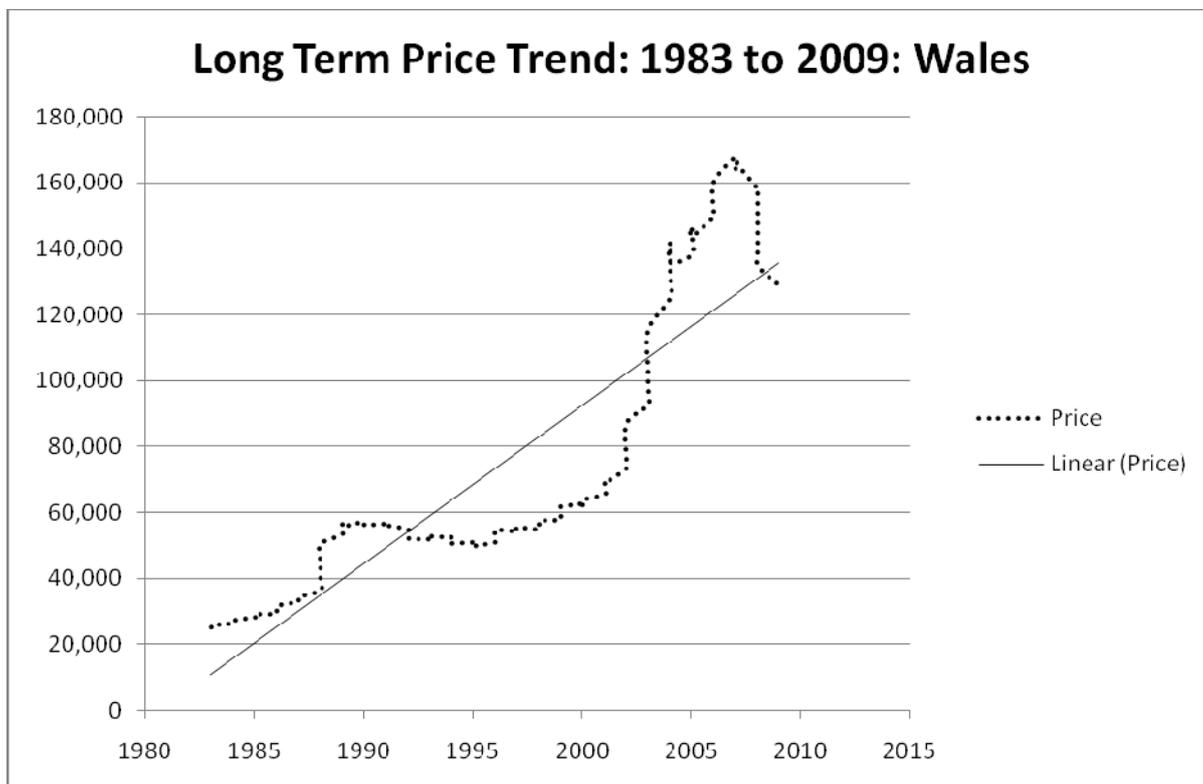
#### **Currency of market data**

3.36 The analysis set out above relates to current house prices and development costs. In practice this situation may vary over the period of the Development Plan and therefore innumerable scenario tests are possible.

3.37 Figure 3.6 shows the current housing market position in relation to the long term trend. The chart shows the short term (fluctuating) trend as 'prices'. The

long term trend is plotted by a straight regression linear line which minimises the variations between the range of price observations. Excel carries out this function.

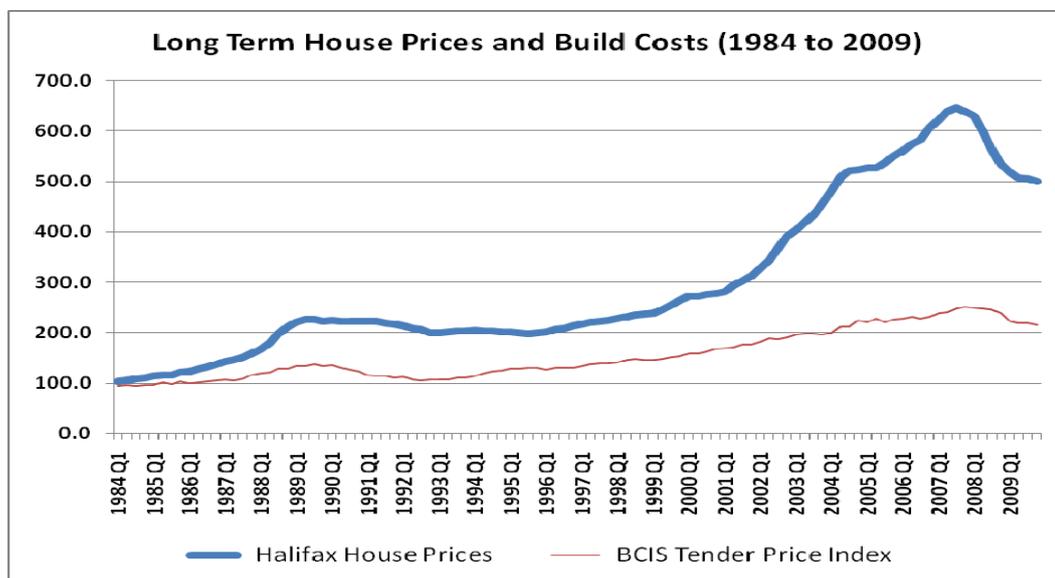
**Figure 3.6 Long and short term housing market trends in Wales**



**Source: Halifax House Price Index**

- 3.38 The chart shows that as at Quarter 4 2009, the market is marginally under the longer term trend. It is very close to it. Therefore our analysis has not taken an unrealistically optimistic approach to calculating residual value. It can be seen that 2007 and 2008 were high points in the housing market in Wales.
- 3.39 We would expect our analysis to hold for the Plan period therefore, although we would urge the Council to review the findings in the medium term to test whether there has been a widening or narrowing in the relationship between selling prices and development costs.
- 3.40 Another measure is the longer term price and build cost trend. We show here both variables (for the UK) where it can be seen that over time viability of development has improved with a widening gap between prices and costs (Figure 3.7).

**Figure 3.7 Long term house price and build costs trends**



- 3.41 In so far therefore, that the housing market replicates in some measure its former trends, we would expect our analysis to hold for the Plan period, although we would urge the Council to review the findings in the medium term to test whether there has been a widening or narrowing in the relationship between selling prices and development costs.
- 3.42 Short term fluctuations will need to be dealt with by the Council through the development control process, ideally using the DAT to reflect any changed circumstances. In a market such as Bridgend, house price falls could quite quickly make development unviable in the weaker sub markets.

### **Benchmarking results**

- 3.43 There is no specific guidance on the assessment of viability which is published by national government. In Section 2, we set out that we think viability should be judged against return to developer and return to land owner.
- 3.44 One approach is to take “current” land values for different development uses as a kind of ‘going rate’ and consider residual values achieved for the various scenarios tested against these. Table 3.4 shows residential land values for selected locations across Wales.

**Table 3.4 Residential land values regionally**

<b>WALES</b>			
<b>REGION</b>	<b>Small Sites (sites for less than five houses)</b>	<b>Bulk Land (sites in excess of two hectares)</b>	<b>Sites for flats or maisonettes</b>
	<b>£s per hectare</b>	<b>£s per hectare</b>	<b>£s per hectare</b>
Cardiff	2,750,000	2,750,000	2,600,000
Carmarthen	900,000	900,000	850,000
Merthyr Tydfil	1,100,000	1,000,000	1,000,000
Bridgend	1,550,000	1,550,000	1,550,000
Swansea	1,400,000	1,400,000	1,800,000
Llandudno	1,000,000	850,000	1,000,000
Newport	1,900,000	1,900,000	1,400,000
Wrexham	1,000,000	850,000	1,000,000

**Source: Valuation Office; Property Market Report, July 2009**

- 3.45 The table indicates residential land values of around £1.5m per hectare for Bridgend. This equates to between 15% to 20% affordable housing in the higher value areas of the County Borough, although the VO data may not reflect transactions in lower value areas.
- 3.46 Another benchmark which can be referred to is that of industrial land. Table 3.5 shows values of between £140,000 to £270,000 in the weaker areas with an overall average for the larger urban areas (Cardiff, Newport and Swansea as examples) of around £250,000 per hectare.
- 3.47 Residual values at 25% affordable housing will clear this figure in Bridgend itself.

**Table 3.5 Industrial land values in Wales**

<b>WALES</b>			
	<b>From £s per ha</b>	<b>To £s per ha</b>	<b>Typical £s per ha</b>
Cardiff	210,000	315,000	270,000
Carmarthen	160,000	210,000	190,000
Merthyr Tydfil	135,000	200,000	160,000
Taff Ely	125,000	205,000	140,000
Swansea	190,000	245,000	235,000
Colwyn Bay/Llandudno	200,000	300,000	250,000
Newport	180,000	250,000	225,000
Deeside	200,000	300,000	250,000

**Source: Valuation Office; Property Market Report, July 2009**

3.48 The 'benchmark' of industrial land value is helpful in understanding the potential uplift from industrial to residential land and thereby the further potential for affordable housing contributions, although in many instances the Council will wish to retain employment land as it will be required to meet local demand.

## **4 LAND SUPPLY, SMALL SITES AND USE OF COMMUTED SUMS**

### **Introduction**

- 4.1 This chapter reviews the policy context and options for identifying the size of sites above which affordable housing contributions would be sought, in the national policy context.
- 4.2 The chapter provides an assessment of the profile of the likely future land supply and the relative importance of small sites. It then considers practical issues about on-site provision and the circumstances in which collection of a financial contribution might be appropriate (and the principles by which such contributions should be assessed).

### **Purpose of analysis**

- 4.3 Evidence on viability is 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. TAN 2 does not provide any national guidance on appropriate thresholds and leaves this to LPAs to identify. However, TAN 2 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”.* (TAN 2 para 10.4)
- 4.4 By reducing site size thresholds and ‘capturing’ more sites from which affordable housing can be sought, an authority can potentially increase the amount of affordable housing delivered through the planning system.

### **Site supply analysis**

- 4.5 We have analysed data based on the Council’s Housing Land Availability Database. We understand that this information is based on site survey work and includes sites which currently have planning permission.
- 4.6 The data relates to the total number of dwellings either permitted or with an assessed capacity for each scheme. Schemes may not be started, are under construction and in some cases have been completed in part.
- 4.7 Table 4.1 sets out the overall picture in the Borough. It shows the number and percentage of dwellings falling under each site size category. Sites of one to four dwellings are the smallest sites considered; sites with capacity for more than 100 dwellings are the largest. We have excluded two major sites from the analysis: Porthcawl Regeneration Area (1350 dwellings) and the Parc Derwen site in North East Bridgend (1500 dwellings) as they are significantly larger than all other sites in the area.
- 4.8 Nevertheless, the analysis shows that the Council has a significant proportion of its housing supply concentrated in larger sites. Over 50% of all new dwellings, according to the 2009 baseline data will be developed on sites of more than 100 dwellings.
- 4.9 However, a significant proportion of dwellings – 24% - will still be built on sites with a capacity of less than 25 dwellings. In practice this provides we feel a

reasonable justification for the Council to seek affordable housing contributions below 15 units.

**Table 4.1: No of dwellings in different sizes of sites – Bridgend CBC Land Availability Database**

All the CBC		
Site Size	No of Dwellings	% of Total
1 to 4	389	8.59
5 to 9	206	4.55
10 to 14	226	4.99
15 to 24	255	5.63
25 to 49	338	7.47
50 to 100	676	14.93
> 100	2437	53.83
	4527	100.00

**Source: Bridgend CBC**

4.10 Table 4.2 utilises the same data set but breaks the analysis of supply down by settlement. This shows in Bridgend and Porthcawl (two largest sites again excluded) 12% of dwellings will be developed on sites of less than 15 dwellings. In the larger settlements (Maesteg, Pencoed, Pyle and Kenfig Hill) the equivalent figure (dwellings from sites of less than 15 dwellings) is 13%. In the smaller settlements, there is greater reliance on small sites at 26%.

**Table 4.2: No of dwellings in different sizes of sites – Bridgend CBC Land Availability Database**

Site Size	Bridgend and Porthcawl		Larger Settlements		Smaller Settlements	
	No of Dwellings	% of Total	No of Dwellings	% of Total	No of Dwellings	% of Total
1 to 4	119	6.79	52	5.42	218	12.01
5 to 9	37	2.11	57	5.94	112	6.17
10 to 14	64	3.65	13	1.35	149	8.21
15 to 24	55	3.14	74	7.71	126	6.94
25 to 49	187	10.67	40	4.17	111	6.12
50 to 100	553	31.56	70	7.29	160	8.82
> 100	737	42.07	654	68.13	939	51.74
	1752	100.00	960	100.00	1815	100.00

4.11 Although in the smaller settlements, as may be expected, there is a higher reliance on smaller sites, these settlements will nevertheless see, according

to the Council's database, over half of all dwellings built on sites of more than 100 dwellings.

### **Management of affordable housing**

- 4.12 We discussed the suitability of different site types (including small sites) for affordable housing at the workshop with the development industry and which included representatives from developers and Registered Social Landlords (RSLs).
- 4.12 Neither small nor large sites were said to be more economically viable to develop on a systematic basis. Small sites might not attract the economies of scale of larger schemes but, on the other hand, small sites can be relatively easy and quick to develop.
- 4.13 From the RSL perspective, there is no reason why affordable housing cannot be provided in small numbers within mixed tenure schemes, provided that there is a housing association with a local management presence, to take on the affordable housing.

### **Use of commuted sums**

- 4.15 As a general principle, we recognise that seeking on-site provision of affordable housing will be the first priority and that provision of affordable housing on an alternative site or by way of a financial payment in lieu (or commuted sum) should only be used in exceptional circumstances.
- 4.17 Our approach is that the commuted sum should be equivalent to the 'developer/landowner contribution' if the affordable housing was provided on site. One way of calculating this is to take the difference between the residual value of 100% market housing and the residual value of the scheme with the relevant percentage and mix of affordable housing.
- 4.18 If the 'equivalence' principle is adopted, then the decision of the local authority to take a commuted sum will be based on the acceptability or otherwise of on-site provision as a housing and spatial planning solution and in the light of sustainability criteria.
- 4.19 Any concerns about scheme viability (whatever size of site) should be reflected by providing grant or altering tenure mix, or by a 'reduced' affordable housing contribution whether provided on-site, off-site or as a financial contribution. Other planning obligations may also need to be reduced under some circumstances.

## 5 CASE STUDY VIABILITY ANALYSIS

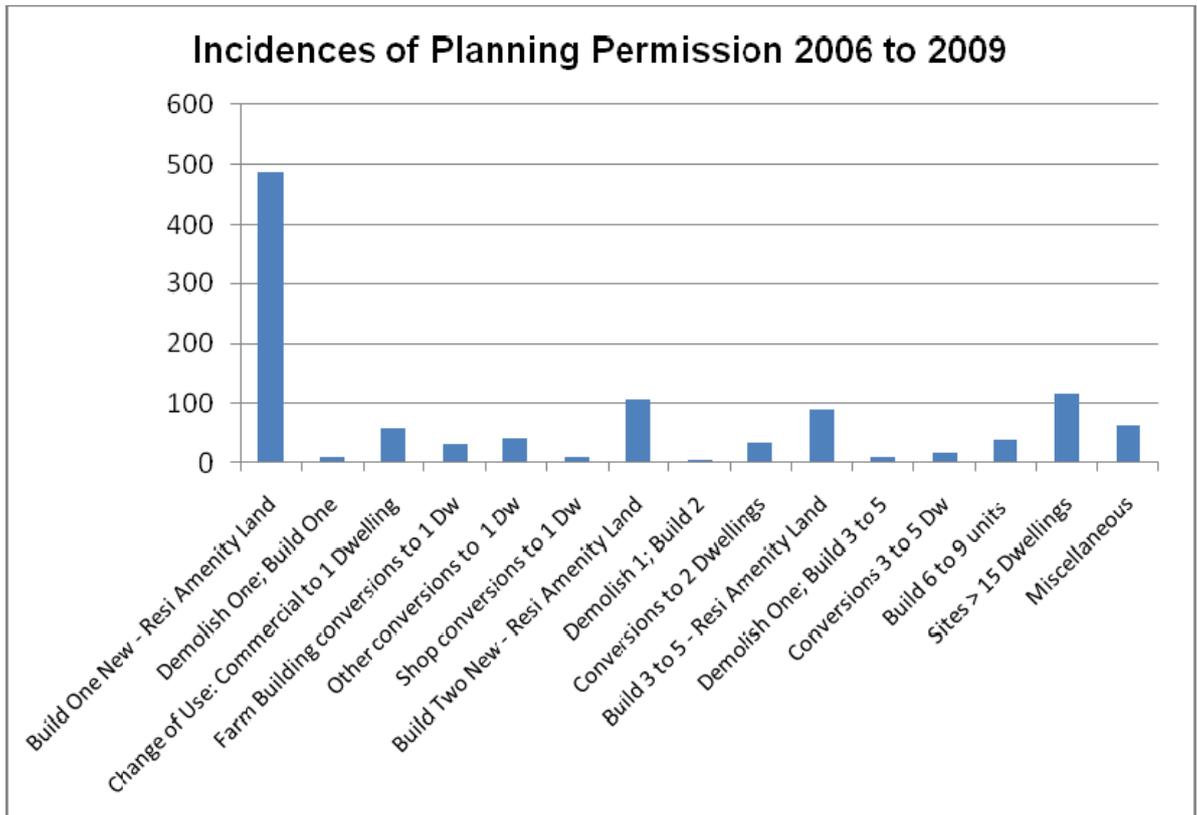
### Introduction

- 5.1 The analysis in Chapter 3 provides a good indication of the likely viability of sites in the Borough. The residual values can be compared with existing use values to establish whether land owners are likely to make a return over and above existing use value, taking into account a developer margin.
- 5.2 The analysis in Chapter 3 will apply for large as well as small sites (on a pro rata basis). We do not have any evidence from this or related studies to suggest that the economics change significantly between large and small sites.
- 5.3 It will be noted (Table 3.4) that small sites can achieve higher land values than larger ones, suggesting that the economics of developing smaller sites could actually be more favourable than developing larger ones.
- 5.4 In theory therefore there is no real need to review in detail viability issues for small sites. However, for the sake of further illustration, and recognising that there may be special circumstances which impact on the viability of some types of smaller sites, it was felt helpful to review the development economics of some illustrative case studies.

### Case study sites

- 5.5 In this section we review a number of case study developments which are examples of small sites for residential development. This is based on permissions between 2006 and 2009.

**Figure 5.1 Incidence of planning permissions 2006 to 2009**



**Source: Bridgend CBC**

- 5.6 Figure 5.1 shows the range of scheme types coming forward. The development of a single dwelling is a very significant source of supply in the CBC area. We estimate these to be on residential or residential amenity land. These sites make up 43% of all incidences of planning permission and hence are highly significant in terms of the overall picture of housing supply.
- 5.7 Schemes of one unit (from all sources of supply) are highly significant in the CBC area. 57% of all incidences of planning permission involve the provision of one (gross) dwelling. Schemes involving the demolition of a dwelling to make way for a new build constitute less than 2% of all incidences of planning consent. Thus almost all schemes involving the construction of one dwelling are gross schemes (i.e. there is no loss of an existing home).
- 5.8 Schemes of two dwellings on what we believe are mostly sites from residential amenity land (gardens, infill plots) make up 10% of all incidences of planning permission and similar schemes involving the construction of three to five dwellings make up another 8% of all incidences.
- 5.9 There are a range of smaller schemes coming forward involving conversion. Farm buildings (including barns) make up 30 of all incidences and other types of conversion (including shop conversions) make up around 4% of all incidences.

- 5.10 Sites including ten or more dwellings make up around 10% of all incidences of planning consent, although it will be appreciated that as a sub set of this analysis, this group of sites contribute disproportionately to supply.
- 5.11 There are then a number of schemes which do not fit neatly into any of these categories. These are included as miscellaneous. A proportion of these involve minor changes of use.
- 5.12 On the basis of the planning data, we have selected four case studies for further investigation. These are shown in Table 5.1

**Table 5.1 Case study sites**

<b>Case Study</b>	<b>Number of dwellings</b>	<b>Type of new development</b>	<b>Site Size (Ha)</b>	<b>Resulting density</b>
<b>A</b>	<b>1</b>	1 x 4 bed detached house	0.05	20
<b>B</b>	<b>3</b>	1 x 4 bed detached house; 2 x 3 bed terraced houses	0.1	30
<b>C</b>	<b>5</b>	1 x 4 bed detached house; 2 x 3 bed detached house; 2 x 3 bed terraced houses	0.125	40
<b>D</b>	<b>8</b>	2 x 4 bed detached houses; 4 x 3 bed terraces; 2 x 2 bed terraces.	0.2	50

- 5.13 For each case study we have undertaken an analysis of residual values at levels of affordable housing from 0%; 10%; 20% and 30%. We have selected Porthcawl, Pencoed and Hinterland, Bridgend and Western Settlements as case examples. All the other assumptions used are the same as for the main analysis described in Chapter 3.
- 5.14 We have assumed no grant in all scenarios tested here.

## Case study A – Develop one detached house on a 0.05 ha site

- 5.15 The first scenario assumes the development of one four bed detached house. The results, with the affordable housing impacts are shown in Table 5.2:

**Table 5.2 Develop one four bed detached house**

Case A	AH0%	AH10%	AH20%	AH30%
<b>Porthcawl</b>	<b>£85,000</b>	<b>£73,000</b>	<b>£60,000</b>	<b>£48,000</b>
	<b>£1.70</b>	<b>£1.46</b>	<b>£1.20</b>	<b>£0.96</b>
<b>Pencoed &amp; Hinterland</b>	<b>£43,000</b>	<b>£34,000</b>	<b>£25,000</b>	<b>£16,000</b>
	<b>£0.86</b>	<b>£0.68</b>	<b>£0.50</b>	<b>£0.32</b>
<b>Bridgend</b>	<b>£33,000</b>	<b>£25,000</b>	<b>£16,000</b>	<b>£8,000</b>
	<b>£0.66</b>	<b>£0.50</b>	<b>£0.32</b>	<b>£0.16</b>
<b>Western Settlements</b>	<b>-£1,000</b>	<b>-£17,000</b>	<b>-£12,000</b>	<b>-£18,000</b>
	<b>-£0.02</b>	<b>-£0.14</b>	<b>-£0.24</b>	<b>-£0.36</b>

AH = affordable housing percentage

Table shows residual values in a selection of market value areas: the upper figure is the residual value for the scheme and the lower figure is the equivalent residual value per hectare (in £s million)

- 5.16 Table 5.2 shows residual values at the different proportions of affordable housing. Positive residual values are achieved in the three higher value areas up to 20% affordable housing.
- 5.17 Where one dwelling of this type is built on infill or backland sites, we would expect there to be a sizeable uplift in site value in the higher value areas, although at 30% affordable housing in a location such as Pencoed (and by default those areas with lower house prices) the actual return to land owner may not offset any devaluation to the existing house that could occur as a result of a new dwelling being built in say a garden.
- 5.18 This type of development is unlikely to be viable where the scheme involves the demolition of an existing dwelling. Acquisition costs are likely to be too high in most cases, although it should be stated that the planning permission data showed that in some instances the existing dwelling was derelict and hence could probably be acquired at a relatively low value.
- 5.19 It is important to state that although development looks marginal in the lower value areas, it is nevertheless going on. This will occur where selling prices are higher than assumed (hot spots) prices or where development costs are lower. Nevertheless, we think that the relationship between revenues and costs in the weaker market areas is too close to promote a policy for this type of site which is not subject to flexibility with respect to Section 106 contributions.

**Case study B – Develop three houses (one detached and two terraces) on a 0.075 ha site.**

5.20 The viability of developing three houses rather than one will depend on the site size and existing use value. There will be some instances where the relationship between existing use value and residual development value is favourable and some where this may not be the case. Table 5.3 shows residual values for the development of three dwellings.

**Table 5.3 Develop three dwellings**

Case B	AH0%	AH10%	AH20%	AH30%
<b>Porthcawl</b>	<b>£200,000</b>	<b>£169,000</b>	<b>£140,000</b>	<b>£110,000</b>
	<b>£2.00</b>	<b>£1.69</b>	<b>£1.40</b>	<b>£1.11</b>
<b>Pencoed &amp; Hinterland</b>	<b>£105,000</b>	<b>£82,000</b>	<b>£60,000</b>	<b>£38,000</b>
	<b>£1.05</b>	<b>£0.82</b>	<b>£0.60</b>	<b>£0.38</b>
<b>Bridgend</b>	<b>£82,000</b>	<b>£61,000</b>	<b>£40,000</b>	<b>£19,000</b>
	<b>£0.82</b>	<b>£0.61</b>	<b>£0.40</b>	<b>£0.19</b>
<b>Western Settlements</b>	<b>£7,000</b>	<b>-£8,000</b>	<b>-£23,000</b>	<b>-£39,000</b>
	<b>£0.07</b>	<b>-£0.08</b>	<b>-£0.23</b>	<b>-£0.39</b>

AH = affordable housing percentage

Table shows residual values in a selection of market value areas: the upper figure is the residual value for the scheme and the lower figure is the equivalent residual value per hectare (in £s million)

- 5.21 Very similar arguments apply to Case Studies 1 and 2. For infill, backland and garden plots, there will be considerable uplift in land value in the higher value areas. This will need to be balanced against any devaluation to existing property.
- 5.22 The results show here a higher density. Generally this scenario, as a small scheme, generates higher residuals than at the 20 dph (Case Study A), with the exception of in the Western Settlements at 30 dph. This reflects the closer gap between development costs and revenues with smaller (here terraced) type units.
- 5.23 The residuals generated here are generally not sufficient to support an affordable housing contribution where three dwellings replace one. In Bridgend for example, even where a unit for outright sale is considered, the residual is £82,000 which is unlikely in many instances to generate enough to purchase an existing property.

- 5.24 Much does depend on development mix. If we were to test for example, three detached houses, we would expect to see similar results to those in Table 5.2 on a per hectare basis.

**Case study C – Develop five houses (three detached and two terraces) on a 0.125 ha site.**

- 5.21 The viability of developing five houses rather than one will depend on the site size and existing use value. There will be some instances where the relationship between existing use value and residual development value is favourable and some where this may not be the case. Table 5.4 shows residual values for the development of five dwellings.

**Table 5.4 Develop five dwellings**

<b>Case C</b>	<b>AH0%</b>	<b>AH10%</b>	<b>AH20%</b>	<b>AH30%</b>
<b>Porthcawl</b>	<b>£370,000</b>	<b>£319,000</b>	<b>£267,000</b>	<b>£216,000</b>
	<b>£2.96</b>	<b>£2.55</b>	<b>£2.14</b>	<b>£1.73</b>
<b>Pencoed &amp; Hinterland</b>	<b>£205,000</b>	<b>£166,000</b>	<b>£129,000</b>	<b>£90,000</b>
	<b>£1.64</b>	<b>£1.33</b>	<b>£1.03</b>	<b>£0.72</b>
<b>Bridgend</b>	<b>£164,000</b>	<b>£128,000</b>	<b>£94,000</b>	<b>£58,000</b>
	<b>£1.31</b>	<b>£1.02</b>	<b>£0.75</b>	<b>£0.46</b>
<b>Western Settlements</b>	<b>£33,000</b>	<b>£8,000</b>	<b>-£15,000</b>	<b>-£42,000</b>
	<b>£0.26</b>	<b>-£0.06</b>	<b>-£0.12</b>	<b>-£0.33</b>

AH = affordable housing percentage

Table shows residual values in a selection of market value areas: the upper figure is the residual value for the scheme and the lower figure is the equivalent residual value per hectare (in £s million)

- 5.22 The development of five units on the basis of this site size (equivalent density 40 dph) will generate higher residual values on a pro rata basis in all instances (versus Case Study B for example).
- 5.23 Where the existing use value of a site is industrial, then all sub markets with the exception of Western Settlements, should generate residual values, even at 30% affordable housing, above this (industrial land value).
- 5.24 Where five dwellings replace an existing house, then in the higher value sub markets, we believe that the Council may be able to justify a modest affordable housing contribution (say up to 20%).

## Case study D – Develop eight dwellings

5.25 We look here at a scheme of eight dwellings, including two detached houses and six terraces (two and three beds).

**Table 5.5 Develop eight dwellings**

Case D	AH0%	AH10%	AH20%	AH30%
<b>Porthcawl</b>	<b>£527,000</b>	<b>£447,000</b>	<b>£369,000</b>	<b>£289,000</b>
	<b>£2.64</b>	<b>£2.23</b>	<b>£1.84</b>	<b>£1.44</b>
<b>Pencoed &amp; Hinterland</b>	<b>£291,000</b>	<b>£230,000</b>	<b>£171,000</b>	<b>£109,000</b>
	<b>£1.45</b>	<b>£1.15</b>	<b>£0.86</b>	<b>£0.54</b>
<b>Bridgend</b>	<b>£234,000</b>	<b>£178,000</b>	<b>£121,000</b>	<b>£65,000</b>
	<b>£1.17</b>	<b>£0.89</b>	<b>£0.60</b>	<b>£0.32</b>
<b>Western Settlements</b>	<b>£47,000</b>	<b>£5,000</b>	<b>-£36,000</b>	<b>-£78,000</b>
	<b>£0.23</b>	<b>-£0.02</b>	<b>-£0.18</b>	<b>-£0.39</b>

AH = affordable housing percentage

Table shows residual values in a selection of market value areas: the upper figure is the residual value for the scheme and the lower figure is the equivalent residual value per hectare (in £s million)

5.26 Table 5.4 shows the results where eight dwellings are developed. On the basis of per hectare residual values, the results are not significantly different to those shown in Table 5.3.

5.27 However, the absolute residual values (£ notes) have gone up significantly which may encourage some land owners to bring sites forward. As previously, the economics are difficult in the weaker sub markets.

### Commentary on the results

5.28 This section on case studies is primarily illustrative, looking at the economics with particular reference to smaller sites and including consideration of achieved residual values for different sites and how they compare with existing use values.

5.29 The results for the small sites reflect in large measure, the previous analysis which considered the notional 1 hectare site. This analysis however shows more clearly the focus that is needed on location, rather than site size. Residual values on a per hectare basis do not vary significantly between the one hectare examples and the smaller sites tested here.

- 5.30 The analysis shows that the smallest development (case studies of one and three dwellings) can generate positive residual values in the higher value sub markets.
- 5.31 As previously stated with respect to the High Level Testing, scheme viability is significantly enhanced by grant and the Council will need to think about this solution, particularly with a focus on the weaker sub market areas.

## 6 MAIN FINDINGS AND CONCLUSIONS

### Key findings

- 6.1 Six sub markets were identified within the Bridgend CBC area. These are: Porthcawl, Rural, Pencoed and Hinterland, Bridgend, Western Settlements and the Ogmore, Garw and Upper Llynfi Valley. These sub markets are based on an analysis of postcode sectors and were agreed with the local authority and the developer workshop.
- 6.2 Market values vary significantly between these areas. These differences in market values were reflected in differences in residual values (for the different scenarios tested). We found that residual value is dependent not only on location but also on the density adopted.
- 6.3 The County Borough is broadly split in viability terms between the south and the north. The Porthcawl, Rural and Pencoed sub markets cover mainly areas in the south half of the County Borough area; Bridgend is located broadly in the centre with the Western Settlements and the Ogmore, Garw and Upper Llynfi Valley located in the north. The southern sub markets have higher values and a greater potential to deliver Section 106. Residual values in the north and in particular in the Ogmore, Garw and Upper Llynfi Valley are low, with, we think insignificant potential to deliver affordable housing and other contributions.
- 6.4 In Porthcawl, residual values at 35% affordable housing (at 40 dph) are around £1,000,000 per hectare. In the north, taking the example of the Western Settlements, residual values at 100% market housing (i.e. no affordable housing) are £130,000.
- 6.5 This presents a particular challenge to the authority. Because residual values are marginal or negative in the north, a split affordable housing target is almost certainly desirable, reflecting the stronger development viability in the south.
- 6.6 At 30% affordable housing in a mid value location such as Bridgend itself, residual value is around £200,000 per hectare. This will be close, according to Valuation Office data, to the value of land for industrial use in South Wales.
- 6.7 Our analysis suggests that development would appear most viable around 30 dph to 40 dph, with the optimal situation then being dependent on location. At higher densities, lower house price areas will not deliver Section 106 as well as they would do at lower density.
- 6.8 The introduction of grant significantly improves residual values across the Borough area. It matters most in the lower value areas although a significant improvement in viability will be achieved in Bridgend town itself. In the weakest two sub markets, where house prices are very low, grant through the ACG route will make a very significant difference to viability. This is because of the relative generosity of the ACG calculation in relation to house prices in those areas.
- 6.9 The analysis shows that ACG actually increases residual values as the proportion of affordable housing is increased. In Porthcawl, although residual rises with the application of the ACG system, we see a more 'traditional' relationship between residual values and percentages of affordable housing,

with residuals falling as the proportion of affordable housing within a scheme increases.

- 6.10 The use of grant in locations such as the Western Settlements and the Ogmore, Garw and Upper Llynfi Valley is critical if affordable housing is to be delivered in any significant measures.
- 6.11 Viability is highly sensitive to the relationship between existing (or, where relevant, alternative) use value. Our analysis suggests that sites will be brought forward on a variety of different types of sites. The analysis suggests that many of the smaller sites will be brought forward on existing use values which are low – in particular residential and residential amenity land.
- 6.12 However, some sites could be delivered within commercial areas and on land which is in current industrial use subject to planning. Existing use values here are likely to be higher.
- 6.13 Our analysis suggests that small sites are not problematic in terms of viability. Rather it is the specific location and nature of development (e.g. new build and/or demolition) that will be the key factor in determining viability.
- 6.14 From a housing management perspective, we did not find at the workshop any in-principle objections to the on-site provision of affordable housing on small sites. There may be particular schemes where on-site provision is not the preferred option, but as a general rule, on-site provision of small numbers of affordable homes is acceptable to a housing association. This finding is very consistent with the views of RSLs across Wales and England in our experience.
- 6.15 The analysis indicates the importance of larger sites to the supply of housing in the County Borough. According to permissions data, almost 75% of all new dwellings will be delivered on sites of 15 or more dwellings. Very small sites are nevertheless significant with around 16% of all dwellings being built on sites of less than five dwellings.
- 6.16 Where a financial payment in lieu of on-site provision of affordable housing (or commuted sum) is to be sought, it should be of “broadly equivalent value”. This approach is, on the evidence we have considered, a reasonable one to take in policy terms.
- 6.17 If this ‘equivalence’ principle is adopted, then the decision of the local authority to take a commuted sum will be based on the acceptability or otherwise of on-site provision as a housing and spatial planning solution, not in response to viability issues.
- 6.18 We would expect our analysis to hold for the Plan period, although we would urge the Council to review the findings in the medium term to test whether there has been a widening or narrowing in the relationship between selling prices and development costs.

### **Conclusions and policy options**

- 6.19 There is no detailed government guidance setting out how targets should be assessed, based on an assessment of viability. In coming to our conclusions, we have reviewed the residual values generated for the different sub markets in the County Borough at the alternative levels of affordable housing tested

and considered how these values relate to a range of factors including prevailing and alternative land values.

- 6.20 From this review, we have highlighted the considerable variation in residual values achieved across the County Borough and in particular the viability divide between the higher value south and the lower value north. This pattern has important consequences for the way we have framed the options for the targets for affordable housing which we set out below:
- A split target which seeks 30% affordable housing in the higher value areas of Porthcawl, Rural, Pencoed and Hinterland and Bridgend, and, 15% affordable housing in the Western Settlements and Ogmore, Garw and Upper Llynfi Valley.
  - A more refined (three way) split target aiming to deliver 30% affordable housing in Porthcawl and Rural, 20% affordable Housing in Pencoed and Hinterland and Bridgend and 15% in the Western Settlements and the Ogmore, Garw and Upper Llynfi Valley.
  - A final option could be, effectively the same as the second option, but increasing the target for Porthcawl alone to 35%.
- 6.21 In recommending a 15% target in Western Settlements and the Ogmore, Garw and Upper Llynfi Valley, we recognise that the analysis suggests a routine challenge in delivering affordable housing. However, we also recognise that there are some 'hot spot' locations where we would expect affordable housing to be routinely deliverable. The settlements of Cornelly and Pyle are two examples.
- 6.22 With respect to the options above, the first, two way split, follows broadly the approach set out in the Council's Affordable Housing SPG (November 2007). This research justifies the SPG policy position on the sub market division, although we note that the policy requires 'at least' (30% and 15%) respectively. We would add that a 30% target for the mid market locations such as Bridgend and Pencoed is a more ambitious position. In addition, we believe that 15% affordable housing in the weakest two sub markets looks routinely difficult, although as stated, there will be 'hot spots' within these areas where that target may be achievable.
- 6.23 As policy is set out in the SPG with a defined map, there may be logic in the Council maintaining that policy split on a target, rather than an 'at least' stance. However, we feel that the variation in the market does warrant a more refined target option. In this respect, we would urge the Council to recognise for example the difference in viability potential between locations such as Bridgend and Porthcawl and hence reflect this in the policy options set out under the second and third options above.

### **Viability on individual sites**

- 6.24 Our analysis has indicated that there will be site-specific circumstances where achievement of the affordable housing proportions set out above may not be possible. This should not detract from the robustness of the overall targets but the council will need to take into account specific site viability concerns when these are justified.

- 6.25 If there is any doubt about viability on a particular site, it will be the responsibility of the developer to make a case that applying the council's affordable housing requirement for their scheme makes the scheme **not viable**. Where the council is satisfied this is the case, the council has a number of options open to it (including changing the mix of the affordable housing and supporting a bid for grant funding from the WAG and/or using their own funds) before needing to consider whether a lower level of affordable housing is appropriate. In individual scheme negotiations, the council will also need to consider the balance between seeking affordable housing and its other planning obligation requirements.

### **Thresholds**

- 6.26 Plan policy H7 sets the current policy threshold at 15 or more dwellings on sites of more than 0.5 hectares. The SPG recognised the fact that small sites often generate a number of dwellings in excess of 15. The SPG therefore stated that on sites less than 0.5ha a provision of affordable housing will be sought based on the number of units that exceed the 15 unit threshold of policy H7. It explained that 'for example, in Bridgend where the area target is 30%, where a developer proposes to build 21 flats on a 0.4ha site the contribution will be 30% of 6 = 2 units (where 6 is the difference between the threshold of 15 and the proposal of 21). This approach is only relevant on sites that do not meet the area threshold of 0.5ha stipulated in Policy H7, but nevertheless exceed the unit threshold'.
- 6.27 The analysis of this report, taking into account the case studies and feedback from the workshop, suggests that small sites do not systematically present viability challenges in comparison to larger sites. In other words, there is no significant evidence against the Council reducing thresholds below 15 on viability grounds.
- 6.28 We would support the Council if it chose to reduce thresholds below 15. We think that this is a more apposite approach than the current one set out in the SPG which may implicitly assume that higher density developments are more viable than lower density ones. We think that this is generally a wrong conclusion, particularly in an area where apartment schemes in most locations will not realise a large gap between revenues and costs.
- 6.29 A more workable and realistic approach will be to reduce thresholds down below the 15 dwelling 'marker'.
- 6.30 The profile of site supply however suggests that the Council will see a high proportion of its development delivered on large sites and this to some extent makes the requirement for a lower threshold less pressing. However it should be recognised that housing needs are high (42% requirement) in Bridgend CBC and a significant number of dwellings will be developed on small sites which under the current threshold policy framework will not yield any affordable housing.
- 6.31 If the threshold were to be reduced to say 5 dwellings (schemes of one to four excluded from the policy) then an additional 9% of supply, according to recent

planning permissions, would be 'captured'. This may be considered not significant. For the full additional 18% of dwellings currently falling under the 15 dwelling threshold to be 'captured' by the policy, the threshold would need to be reduced to zero.

- 6.32 A zero threshold could be justified in the Borough on viability grounds. There are many small sites, particularly residential amenity land, which could provide an affordable housing contribution and re-development sites, typically very challenging, are not significant in number. However a zero threshold or making requiring a contribution from one (gross) dwelling would mean the Council's negotiation workload increasing significantly. This could be done and funded externally. Councils are increasingly requiring developers to pay the costs for appraisals. We leave this as an option for the Council.
- 6.33 The County Borough has a relatively high reliance on large sites. However, we would suggest an amendment to the current SPG as we find little evidence (except in the highest value areas) for higher density increasing viability. A more uniform or simplified approach is in our view appropriate.

#### **Commuted sums**

- 6.34 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 = Residual value with 100% market housing  
RV AH = Residual value with X% affordable housing (say 40%)  
Equivalent commuted sum = RV 100% MV minus RV AH

- 6.35 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 council to consider but could include supporting schemes which would otherwise not be viable, increasing the amount of social rented housing in a scheme, and 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).

## Appendix 1

### Affordable Housing Viability Study Workshop

Wednesday 9<sup>th</sup> September 2009

#### BRIDGEND COUNTY BOROUGH COUNCIL AFFORDABLE HOUSING VIABILITY STUDY – WORKSHOP

##### Delegates

Dr Andrew Golland	Three Dragons
Richard Cresswell	Taylor Wimpey
Richard Price	House Builders Federation (HBF)
Jon Matthews	Lovell
Kate Rees	Lovell
Huw Jones	Cooke & Arkwright
Andrew Smith	Valleys to Coast Housing Wales & West Housing Association
Elaine Williams	Senior Strategy Officer, BCBC
Peter Green	Housing Strategy Manager, BCBC
Huw Owen	Housing Strategy & Solutions Team Leader, BCBC
Helen Jones	Senior Surveyor, Disposals Section, BCBC
Nick Lloyd	Policy Team Leader, BCBC
Stuart Ingram	Principal Planning Officer, BCBC
Gareth Denning	Principal Section 106 Officer, BCBC
Susan Jones	Development Planning Manger, BCBC

##### Workshop Notes

A workshop was held on the 9<sup>th</sup> December 2009 at the Council Offices in Bridgend. Representatives of the development industry, landowners and RSLs were in attendance.

Bridgend County Borough Council and Three Dragons would like to thank all those in attendance for their inputs to the study.

At the workshop Three Dragons gave a presentation summarising the methodology and outlining the process of higher level and detailed testing which would be carried out to determine viability targets.

It was agreed that the Powerpoint presentation (attached) would be made available to all Workshop participants in conjunction with feedback notes.

## 1 Introduction

Three Dragons has been commissioned to carry out an Affordable Housing Viability Appraisal in accordance with the requirements of TAN2 in order to establish a robust evidence base to support emerging policy requirements as set out in the LDF. There are two parts to the commission:

- i) An Affordable Housing Viability Study to guide the setting of new affordable housing targets and thresholds for the Local Development Plan;
- ii) A Financial Appraisal Toolkit to assist negotiations on specific sites.

The purpose of the meeting was to discuss strategic policy and the overall methodology. The purpose of the study was to support the evidence for realistic and accurate policies which reflect the conditions of the general areas to reflect brownfield / greenfield sites.

## **2 Basis for interpreting viability**

Three Dragons outlined the methodology of the viability model which is based upon scheme revenue versus development costs (including developer margin and S106 agreements).

Delegates agreed in principle to the over-riding method for assessing viability proposed by Three Dragons. This measures viability by reference to residual scheme value less the existing or alternative use value of a site.

However, it was suggested that an alternative measure of viability should look at the ratio of the site value to gross development value. Three Dragons stated that they would not normally look at viability in this way although the analysis will comment on the approach where feasible.

The challenges in establishing existing use values were discussed. It was agreed that it will normally be up to the developer/land owner to provide this information if the Section 106 contribution is in dispute. The issue of best value was discussed where public sector land is being disposed of.

## **3 Overall methodology**

Three Dragons explained that the approach to the study will be two stage with the first stage focusing on testing a notional one hectare site, assuming different development mixes and different percentages of affordable housing, with the second stage looking at a range of generic site types, ranging from large green field through to small and large brown field sites.

Participants at the workshops generally supported the approach set out (see also Powerpoint which explains the approach diagrammatically). Three Dragons replied that this was an approach which has been accepted elsewhere at Core Strategy Exam and is also adopted in the SEWSPEG Good Practice Guide.

Data sources (e.g. HMLR for house prices and BCIS for build costs) were explained to participants. The need for best primary data sources based on a large sample was understood and agreed.

## **4 Sub markets and market values**

A key part of the study will involve the analysis of viability at a sub market level. Sub markets will be defined primarily by house prices. The Powerpoint presentation

shows a table of areas. Participants were invited to submit comments on submarkets by email to the Council.

It was explained by Three Dragons that prices were derived from three years worth of HM Land Registry data and then adjusted to today's values. AG clarified that the prices are indicative new build for December 2009.

AG explained the intention of the submarket area analysis could be to provide different area policy recommendations to the Council which reflect any house price differences.

It was stated that there is a broad division of the housing market in Bridgend County Borough – north and south of the M4. It was stated that a split affordable housing target, reflecting the broad differences has a strong logic to it. It was noted that the HBF might be able to provide price data from their database.

All – please note – prices and market areas are included in the Powerpoint Presentation.

## **5 Land values**

Delegates were asked what they thought current land values were as follows:

For good, serviced greenfield site: £1m per acre (circa £2.5 million per hectare) and £500,000 per acre for unserviced land (£1.2 million per hectare). But – these values are influenced to some extent by hope value of land owners from two years ago.

## **6 Density and development mix**

Three Dragons set out the suggested range of schemes which the DAT will test. These ranged from 30, 35, 40, 50, 75, and 100 dph.

It was stated by developers that apartment schemes are unlikely to be developed in the short term due to difficulties in marketing. However it was agreed that a 75 dph scheme should be tested, but not the 100 dph.

## **7 Thresholds and the viability of smaller sites**

Three Dragons set out the policy position within TAN 2 (citing Para 10.4). AG noted that the evidence produced could indicate there is a need for a zero threshold in Bridgend.

The importance of smaller sites to total housing supply in Bridgend was noted.

There was no particular objection to smaller sites carrying an affordable housing contribution. It was agreed that location and type of development is more significant in terms of determining viability.

One delegate however suggested that RSLs sometimes find smaller sites do not cover overheads so well as larger ones.

If any delegate can provide any comparable information in relation to small sites and viability issues, please can they send it on with any comments.

## **8 Development costs**

Three Dragons presented the proposed page that will be used for the testing framework. This is included in the Powerpoint presentation. It was explained that the base build costs per square metre will be calculated from the BCIS data source.

It was stated that Three Dragons will test the analysis at a 17% return rate on gross development value for the market element of a scheme and at 6% for the affordable element of a scheme.

Two figures were given for base build costs - £90 per sq Ft (£968 per sq m) and £850 per sq m.

Code for Sustainable Home costs were discussed. It was suggested Code 3 costs are currently reflected in the BCIS build costs as these reflect RSL schemes and it is understood that recent RSL schemes will be built to Code 3 Level.

It was stated that an additional cost of around £10,000 would be incurred to get from Building Regs standards to Level 4.

## **9 Section 106 costs (in addition to affordable housing)**

It was recognised that Section 106 costs (in addition to affordable housing) can vary. It was suggested that a costs of £5,000 per unit would be a reasonable baseline figure.

Three Dragons agreed that they will test also at £10,000 per unit.

£5,000 per unit (baseline)

£10,000 per unit (higher level test)

Feedback from delegates on this would be welcomed.

## **10 Affordable housing tests and issues**

Three Dragons suggested a range of policy scenarios which should be tested and questioned whether they were reasonable for the LDP plan period and the various areas of Bridgend.

These were: 10%, 15%, 20%, 25%, 30%, 35% and 40% based on a 75% Social Rent to 25% Homebuy split.

It was agreed that a split of 60% (SR) and 40% (Homebuy) is more appropriate for Bridgend and this will form the baseline test.

The question of the form of the Intermediate housing was discussed. It was stated that HomeBuy is the correct product to test longer term – over the period of the Plan. However, the % Share might vary from site to site based on local affordability

criteria. For the purposes of policy testing, a figure of 70% of open market value will be adopted.

It was agreed that the testing should be carried out assuming a baseline position of no grant.

## **11 Next Steps**

If you could direct your comments to Andrew Golland at the email address below by the 7<sup>th</sup> January 2010, this would greatly assist in finalising the study.

Andrew Golland     drajg@btopenworld.com

## Appendix 2 Three Dragons model: Method statement

The DAT provides the user with an assessment of the economics of residential development. It allows the user to test the economic implications of different types and amounts of planning obligation and, in particular, the amount and mix of affordable housing. It uses a residual development appraisal approach which is the industry accepted approach in valuation practice.

The Toolkit compares the potential revenue from a site with the potential costs of development before a payment for land is made. In estimating the potential revenue, the income from selling dwellings in the market and the income from producing specific forms of affordable housing are considered. The estimates involve (1) assumptions about how the development process and the subsidy system operate and (2) assumptions about the values for specific inputs such as house prices and building costs. These assumptions are made explicit in the guidance notes. If the user has reason to believe that reality in specific cases differs from the assumptions used, the user may either take account of this in interpreting the results or may use different assumptions.

The main output of the DAT is the residual value. In practice, as shown in the diagram below, there is a 'gross' residual value and a 'net' residual value. The gross residual value is that value that a scheme generates before Section 106 is required. Once Section 106 contributions have been taken into account, the scheme then has a net residual value, which is effectively the land owner's interest.

### Key data assumptions

#### Market areas and prices:

Sub Market	Detached			Semi-Det			Terraced			Flat/Mais			
	5 Bed	4 Bed	3 Bed	4 Bed	3 Bed	2 Bed	4 Bed	3 Bed	2 Bed	3 Bed	2 Bed	1 Bed	Studio
Porthcawl	£311,000	£283,000	£240,000	£216,000	£188,000	£160,000	£198,000	£180,000	£157,000	£178,000	£155,000	£108,000	£65,000
Rural	£296,000	£270,000	£229,000	£206,000	£179,000	£153,000	£189,000	£172,000	£149,000	£170,000	£148,000	£104,000	£62,000
Pencoed & Hinterland	£254,000	£231,000	£196,000	£176,000	£154,000	£130,000	£162,000	£147,000	£128,000	£146,000	£126,000	£90,000	£53,000
Bridgend	£240,000	£218,000	£185,000	£167,000	£145,000	£123,000	£153,000	£139,000	£121,000	£138,000	£119,000	£84,000	£50,000
Western settlements	£193,000	£176,000	£150,000	£135,000	£117,000	£101,000	£125,000	£113,000	£98,000	£112,000	£97,000	£69,000	£41,000
Ogmore, Garw & Upper Lynfi Valley	£181,000	£165,000	£140,000	£127,000	£111,000	£94,000	£116,000	£106,000	£92,000	£104,000	£91,000	£64,000	£38,000

The development mixes were as follows:

- 30 dph: including 10% 3 bed terraces; 10% 3 bed semis; 10% 4 bed semis; 20% 3 bed detached; 30% 4 bed detached; 20% 5 bed detached.
- 35 dph: including 10% 2 bed flats; 15% 2 bed terraces; 20% 3 bed terraces; 10% 3 bed semis; 10% 4 bed semis; 10% 3 bed detached; 15% 4 bed detached; 10% 5 bed detached.
- 40 dph: including 5% 1 bed flats; 10% 2 bed flats; 20% 2 bed terraces; 20% 3 bed terraces; 5% 4 bed terraces; 10% 3 bed semis; 10% 4 bed semis; 10% 3 bed detached; 10% 4 bed detached.
- 50 dph: including 15% 1 bed flats; 20% 2 bed flats; 25% 2 bed terraces; 30% 3 bed terraces; 5% 3 bed semis; 5% 4 bed semis.
- 75 dph: including 5% studio flats; 25% 1 bed flats; 40% 2 bed flats; 5% 1 bed terraces; 15% 2 bed terraces; 10% 3 bed terraces.

**Affordable housing targets:**

10%;  
 15%  
 20%;  
 25%;  
 30%;  
 35%;  
 40%;

Affordable housing split: 75% to 25% Social Rent to Shared Ownership

**Development costs**

Based on RICS BCIS database:

Costs as set out below:

## 11 - DEVELOPMENT COSTS

Depress this button to  
clear these tables

Clear Tables

### Build Costs per sq m

If you wish to use your own values then you can enter them in the white cells below. If you leave any blank the Toolkit Value for that row will be

	Toolkit Values	User Values
Bungalows	£1,120	
Flats (16+ storeys)	£1,985	
Flats (6-15 storeys)	£1,490	
Flats (5 & less storeys)	£1,086	£1,140
Houses <= 75m2	£945	£915
Houses > 75m2	£905	£800

### Other Development Costs

If you wish to use your own values then you can enter them in the white cells below. If you leave any blank the Toolkit Value for that row will be used

	Toolkit Values	User Values
Professional Fees %	12%	of build costs
Internal Overheads	5%	of build costs (Market and ES)
Finance (Market)	6%	of build costs (Market and ES)
Finance (Affordable Housing)	6%	of build costs (SR, NH and IR units)
Marketing Fees	3%	of market value (Market and ES)
Developers Return	17%	of market value (Market and ES)
Contractors Return	5%	of development costs (excl finance) applies to SR, NH and IR units

Land Finance  Please see guidance notes

### Wheelchair Costs

	Toolkit Value	User Values
Unit size increase	25%	
Build cost increase	15%	

### Exceptional Development Costs

Costs for Code SH	£0
<Enter cost description>	£0
<Enter cost description>	£0
<Enter cost description>	£0
Scheme Total	£0

Previous Page

Next Page

### Appendix 3 Results – Residual values in £s million per hectare (no grant)

30 Dph								
	0%	10%	15%	20%	25%	30%	35%	40%
Porthcawl	£1.99	£1.70	£1.56	£1.41	£1.26	£1.12	£0.97	£0.83
Rural	£1.75	£1.48	£1.34	£1.21	£1.07	£0.93	£0.80	£0.66
Pencoed & Hinterland	£1.04	£0.82	£0.71	£0.61	£0.50	£0.39	£0.28	£0.17
Bridgend	£0.81	£0.62	£0.51	£0.41	£0.31	£0.21	£0.11	£0.01
Western Settlements	£0.04	-£0.09	-£0.17	-£0.24	-£0.31	-£0.38	-£0.45	-£0.52
Ogmore, Garw & U. Lynfi Valley	-£0.16	-£0.27	-£0.34	-£0.40	-£0.47	-£0.53	-£0.59	-£0.65
40 Dph								
	0%	10%	15%	20%	25%	30%	35%	40%
Porthcawl	£2.18	£1.84	£1.67	£1.50	£1.33	£1.15	£0.98	£0.81
Rural	£1.93	£1.61	£1.44	£1.28	£1.12	£0.96	£0.80	£0.64
Pencoed & Hinterland	£1.17	£0.91	£0.78	£0.65	£0.51	£0.38	£0.25	£0.12
Bridgend	£0.93	£0.70	£0.56	£0.44	£0.32	£0.21	£0.07	-£0.06
Western Settlements	£0.13	-£0.06	-£0.15	-£0.24	-£0.33	-£0.42	-£0.49	-£0.60
Ogmore, Garw & U. Lynfi Valley	-£0.09	-£0.25	-£0.34	-£0.42	-£0.50	-£0.59	-£0.67	-£0.77
50 Dph								
	0%	10%	15%	20%	25%	30%	35%	40%
Porthcawl	£2.18	£1.79	£1.60	£1.43	£1.22	£1.02	£0.83	£0.64
Rural	£1.92	£1.55	£1.37	£1.19	£1.04	£0.82	£0.64	£0.46
Pencoed & Hinterland	£1.12	£0.82	£0.66	£0.51	£0.36	£0.21	£0.06	-£0.04
Bridgend	£0.86	£0.58	£0.44	£0.29	£0.15	£0.01	-£0.12	-£0.27
Western Settlements	£0.02	-£0.19	-£0.30	-£0.41	-£0.52	-£0.63	-£0.74	-£0.84
Ogmore, Garw & U. Lynfi Valley	-£0.20	-£0.40	-£0.50	-£0.60	-£0.70	-£0.80	-£0.90	-£0.99
75 Dph								
	0%	10%	15%	20%	25%	30%	35%	40%
Porthcawl	£2.33	£1.83	£1.57	£1.32	£1.07	£0.81	£0.56	£0.31
Rural	£2.00	£1.52	£1.28	£1.04	£0.80	£0.56	£0.32	£0.08
Pencoed & Hinterland	£0.95	£0.61	£0.35	£0.15	-£0.05	-£0.25	-£0.45	-£0.64
Bridgend	£0.61	£0.24	£0.05	-£0.09	-£0.40	-£0.51	-£0.69	-£0.88
Western Settlements	-£0.46	-£0.75	-£0.89	-£1.04	-£1.18	-£1.33	-£1.47	-£1.61
Ogmore, Garw & U. Lynfi Valley	-£0.76	-£1.03	-£1.16	-£1.33	-£1.43	-£1.56	-£1.69	-£1.82

## Worked Example – 40 dph scheme at 20% Affordable Housing in the Pencoed and Hinterland sub market

### 1 - SITE IDENTIFICATION

Site Details

Site Address

Site Reference

Application Number

Scheme Description

I have read and accepted the terms and conditions set out in the [license agreement](#)

### 2 - SITE LOCATION

Please select the local authority, ACG band and market area from the drop down lists. If you subsequently change one of the three components in this sheet – remember to check that the other two components are still correct.

Local Authority

ACG Band

House Price Area

### 3 - BASIC SITE INFORMATION

Total Size of Site In Hectares

#### Density / Number of Dwellings

Specify either a number of dwellings or a density for this site. If a scheme already exists in the Toolkit then adjusting the density will result in clearance of the unit details on the next page.

Enter a Number of Dwellings (Density is then calculated)

Number of dwellings

Enter your own density

Enter density

Adjust density

Resulting Number of Dwellings

Resulting Density  dph

#### Bedspaces

Specify the number of bedspaces:

Specify the number of habitable rooms:

### 4 - CHARACTERISTICS OF DEVELOPMENT

You can either enter the details for each unit type in the cells below or press the button 'Use default unit types' to call up the Toolkit values

Click this button to clear table contents

Release the button to enter your own unit descriptions and mix

Ref.	Description of Dwelling	No of Bed-Rooms	Dwelling Type	No of Units	Size in sq.m Affordable	Size in sq.m Market	Parking (flats only)	No. of Storeys (1-99)
1								
2	1 Bed Flat	1	Flat	2	48	50	none	2
3	2 Bed Flat	2	Flat	4	60	55	none	2
4								
5	2 Bed Terrace/Town House	2	House	8	73	55	Surface	n/a
6	3 Bed Terrace/Town House	3	House	8	80	80	Surface	n/a
7	4 Bed Terrace/Town House	4	House	2	100	100	Surface	n/a
8								
9	3 Bed Semi Detached	3	House	4	80	75	Surface	n/a
10	4 Bed Semi Detached	4	House	4	100	105	Surface	n/a
11	3 Bed Detached	3	House	4	80	100	Surface	n/a
12	4 Bed Detached	4	House	4	100	130	Surface	n/a
13								
14								
15								
16								
17								
18								
19								
20								
Total Number of units				40.00				

The number of dwellings may be expressed as fractions for purposes of financial calculations

## 5 - MARKET VALUES

DAT default values may be used

:  Bridgend: Pencoed & Hinterland

Market Value price adjust (%)  %

Ref.	Dwelling Type	No of Bed-Rooms	Market Value	Adjusted Market Value
1				
2	1 Bed Flat	1	£89,000	£89,000
3	2 Bed Flat	2	£126,000	£126,000
4				
5	2 Bed Terrace/Town House	2	£128,000	£128,000
6	3 Bed Terrace/Town House	3	£147,000	£147,000
7	4 Bed Terrace/Town House	4	£162,000	£162,000
8				
9	3 Bed Semi Detached	3	£154,000	£154,000
10	4 Bed Semi Detached	4	£176,000	£176,000
11	3 Bed Detached	3	£196,000	£196,000
12	4 Bed Detached	4	£231,000	£231,000
13				
14				
15				
16				
17				
18				
19				
20				

## 6 - TENURE MIX

Entering units by quantity is not possible as a default mix has been selected. Please enter the percentage distribution of units across the tenures.

Input by Percentages  Input by Quantity

Ref.	Description	SALE 80%	AFFORDABLE			No of Units
			Social rent 15%	Homebuy 5%	Intermediate rent	
1						
2	1 Bed Flat	1.6	0.3	0.1		2.0
3	2 Bed Flat	3.2	0.6	0.2		4.0
4						
5	2 Bed Terrace/Town House	6.4	1.2	0.4		8.0
6	3 Bed Terrace/Town House	6.4	1.2	0.4		8.0
7	4 Bed Terrace/Town House	1.6	0.3	0.1		2.0
8						
9	3 Bed Semi Detached	3.2	0.6	0.2		4.0
10	4 Bed Semi Detached	3.2	0.6	0.2		4.0
11	3 Bed Detached	3.2	0.6	0.2		4.0
12	4 Bed Detached	3.2	0.6	0.2		4.0
13						
14						
15						
16						
17						
18						
19						
20						
Total		32.0	6.0	2.0		40.0

Percentage purchased by purchaser for Homebuy	Default:	70%	User:	
Percentage purchased by purchaser for Equity Share	Default:	70%	User:	

The number of dwellings may be expressed as fractions for the purposes of financial calculations



## 11 - DEVELOPMENT COSTS

Depress this button to clear these tables

Clear Tables

### Build Costs per sq m

If you wish to use your own values then you can enter them in the white cells below. If you leave any blank the Toolkit Value for that row will be

	Toolkit Values	User Values
Bungalows	£1,120	
Flats (16+ storeys)	£1,385	
Flats (6-15 storeys)	£1,490	
Flats (5 & less storeys)	£1,086	£1,140
Houses <= 75m2	£945	£915
Houses > 75m2	£905	£800

### Other Development Costs

If you wish to use your own values then you can enter them in the white cells below. If you leave any blank the Toolkit Value for that row will be used

	Toolkit Values	User Values
Professional Fees %	12%	
Internal Overheads	5%	
Finance (Market)	6%	
Finance (Affordable Housing)	6%	
Marketing Fees	3%	
Developers Return	17%	
Contractors Return	5%	
Land Finance		

of build costs  
of build costs (Market and ES)  
of build costs (Market and ES)  
of build costs (SR, NH and IR units)  
of market value (Market and ES)  
of market value (Market and ES)  
of development costs (excl finance) applies to SR, NH and IR units

Please see guidance notes

### Wheelchair Costs

	Toolkit Value	User Values
Unit size increase	25%	
Build cost increase	15%	

### Exceptional Development Costs

Costs for Code SH	£0
<Enter cost description>	£0
<Enter cost description>	£0
<Enter cost description>	£0
Scheme Total	£0

Previous Page

Next Page

## 12 - PLANNING OBLIGATIONS

For each type of contribution you may either enter a total figure (for that row) or you may enter values per unit (for each tenure). To enter one total value for a row, tick the corresponding box in the "Enter Total?" column and enter a value in the "User Total" column. To enter the values by tenure leave the box un-ticked.

You have the option to enter a Planning Obligation package per unit. This value supercedes any values entered by unit or tenure.

Depress this button to clear the page

Clear Table

	Input by Total		Sale	Input by Unit				Calculated Total (Affordable and Sale)
	Enter Total?	User Total		Social rent	Homebuy	Intermediate rent	Equity share	
Education Contribution	<input type="checkbox"/>							£0
Highway Works	<input type="checkbox"/>							£0
Contribution to public transport	<input type="checkbox"/>							£0
Contribution to community facilities	<input type="checkbox"/>							£0
Provision for open space	<input type="checkbox"/>							£0
Contribution to public realm	<input type="checkbox"/>							£0
Contribution to public art	<input type="checkbox"/>							£0
Environmental improvements	<input type="checkbox"/>							£0
Town centre improvements	<input type="checkbox"/>							£0
Waterfront Improvements	<input type="checkbox"/>							£0
Support for employment development	<input type="checkbox"/>							£0
Flood Defence Strategy	<input type="checkbox"/>							£0
Employment related training	<input type="checkbox"/>							£0
Other	<input type="checkbox"/>							£0
Obligations package per unit		£5,000						
Total for Scheme								£200,000
Total for Scheme per hectare								£200,000
Total for Scheme divided by total number of units								£5,000
Total for Scheme divided by number of sale units								£6,250

Previous Page

Next Page

## 14 - CAPITAL VALUE OF AFFORDABLE HOUSING

Please select the method by which the capital value of the scheme is generated

- Capital value is based on ACG - Grant is available
- Capital value is based on ACG - Grant is not available
- Capital value is based on income to the housing association - grant may be available
- Capital payment is agreed between the housing association and the developer

Previous Page

Next Page

## 21 - SCHEME RESULTS

### Site Economics

<b>RESIDUAL VALUE</b>	<b>£ 717,000</b>
Total scheme revenue	£ 5,389,000
Total scheme costs	£ 4,672,000

<b>Residual</b>	Per hectare	£ 717,000
	Per dwelling	£ 18,000
	Per market dwelling	£ 22,000
	Per bedspace	No Info
	Per habitable room	No Info

<b>Revenue</b>	Market housing	£ 4,987,000
	Affordable Housing	£ 402,000
	- Social rent	£ 184,000
	- Homebuy	£ 218,000
	- Intermediate Rent	£ -
	- Equity Share	£ -
	Capital Contribution	£ -
Commercial Elements	£ -	

<b>Costs</b>	Market housing	£ 3,739,000
	Affordable Housing	£ 678,000
	- Social rent	£ 508,000
	- Homebuy	£ 169,000
	- Intermediate Rent	£ -
	- Equity Share	£ -
	Planning Obligations	£ 200,000
	Exceptional Development Costs	£ -
	Commercial Elements	£ -
Land Finance	£ -	

<b>Alternative Site Values</b>		Against residual
Existing Use Value	£ -	£ -
Acquisition Cost	£ -	£ -
Alternative Use Value 1	£ -	£ -
Alternative Use Value 2	£ -	£ -
Alternative Use Value 3	£ -	£ -

### Site Details

Site	Pencoed and Hirerland - Example of a 40 Dph scheme at 20% Affordable
Address	
Site Details	0

Site Reference	0
Application Number	0
Site Location	Bridgend
Scheme Description	0

<b>Total number of units</b>	Dwellings	40
	Bedrooms	No Info
	Bedspaces	No Info
	% Wheelchair Units	0%

<b>Density (per hectare)</b>	Dwellings	40.0
	Bedrooms	No Info
	Bedspaces	No Info

<b>Affordable Units</b>		Quantity	% of All Units
	Total	8.0	20%
	Social rent	6.0	15%
	Intermediate	2.0	5%

<b>Grant</b>	Whole scheme	£ -
	Per Social Rental dwelling	£ -
	Per HomeBuy dwelling	£ -

Cost Components

Discounting Function

Save Results

View Results

Previous Page