

Affordable  
Housing  
Viability  
Study

**West Lancashire  
Borough Council**

**Final Report  
November 2010**

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RESEARCH



# Executive summary

## Introduction

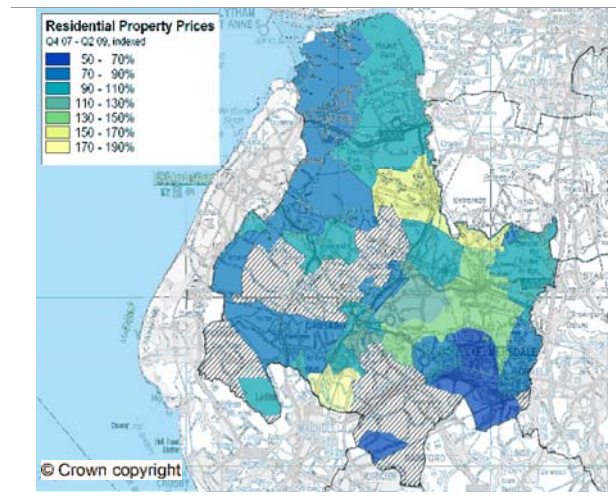
- S1 This study is part of a suite of five reports by Fordham Research carried out during 2009-10 for West Lancashire Borough Council:
- A. Housing Need and Demand Study (HNDS)
  - B. Affordable housing discussion paper (Framework Formulation Part 1)
  - C. Affordable housing definition
  - D. Affordable Housing Viability Study (AHVS)
  - E. Housing solutions (Framework Formulation Part 2)
- S2 This Viability Study is intended to inform ongoing work on the preparation of the Local Development Framework (LDF). Government Guidance in Planning Policy Statement 3: Housing (PPS3, 2006, paragraph 29) requires Councils to set a

*'Plan-wide' affordable housing target, and to test this for 'deliverability' by means of the 'economic viability of land for housing within the area'.*

## The approach to valuation

- S3 The study involved preparing financial appraisals for a representative range of sites. These appraisals assessed the capacity of such sites throughout West Lancashire to support different levels of affordable housing. The approach was to 'model' viability using a range of variables and our bespoke spreadsheet software.
- S4 We agreed 19 sample sites across the Borough to assess 'broad-brush' viability, in order to suggest a future affordable housing target. An input to the study is the existing pattern of house prices. The prices are percentages of the England and Wales values from the Land Registry. The hatched areas have too few sales to be given a value. As can be seen, the highest values are in the centre of the Borough.

**Figure S1 Postcode price indices**



*Indices compare prices to value for median postcode sector in  
England & Wales*

Source: Land Registry data

### Testing the sample sites

- S5 We tested the 19 sites under reasonable assumptions as to the types of new development involved and across a range of affordable housing targets. We built up assumptions as to the likely development on each site. The assumptions included the mix of build types and many other site development characteristics.
- S6 One important feature is the 'alternative use value'. This is the land use which the site would most profitably fall into if it were not housing. The use might on the one hand be agricultural or it might be warehouse/industrial or retail. These alternative use value figures are essential to a credible valuation. It is no use proposing an affordable housing target which is apparently viable, but is not in reality because it lowers the price of the land to the point where it would be more profitable in some other use such as industrial. The following table shows the values. The smaller sites (at the bottom of the list) mostly show agriculture as the alternative use, but there is a wide range of other uses in the table.

Table S1 Alternative use value bases				
	<i>Site</i>	<i>Basis</i>	<i>£k per acre</i>	<i>£k per ha</i>
1	Ormskirk Hospital	Hospital	250	618
2	Former GS	Industrial/warehouse	175	432
3	Redcliffe Convent	Industrial/warehouse	175	432
4	Former TPT site	Industrial/warehouse	175	432
5	Land at JJ Bullen	Industrial/warehouse	175	432
6	Aveling Drive	Agricultural land	75	185
7	Silcocks Site	Industrial/warehouse	175	432
8	22 Glebe Lane	Industrial/warehouse	175	432
9	The Stiles	Industrial/warehouse	175	432
10	College Farm	Agricultural land	75	185
11	Land at Moss Lane	Res dwellings	450	1,112
12	The Comrades Club	Club	740	1,829
13	Nursing Home	Nursing Home	975	2,409
14	Liverpool Road South	Agricultural land	75	185
15	Nixons Lane	Agricultural land	100	247
16	Hesketh Ln	Vacant Land	75	185
17	Tatlock Farm	Agricultural land	50	124
18	La Mancha Barns	Agricultural land	75	185
19	263-267 Mossy Lea Rd	Res dwellings	950	2,348

Source: Table 4.6 of this report; Fordham Research 2009

### Results of the viability analysis

- S7 Using the wide range of assumptions mentioned the valuations were then carried out. The following diagram illustrates the results: green being viable, amber marginal and red unviable.

Table S2 Appraisal outcomes: base appraisals, without grant						
No	Site	All use value	Value £k per acre			
			No Affordable	25%	35%	45%
1	Ormskirk Hospital	250	360	63	-62	-188
		290	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
2	Former GS	175	508	130	-26	-187
		215	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
3	Redcliffe Convent	175	645	294	161	8
		215	VIABLE	VIABLE	NOT VIAB	NOT VIAB
4	Former TPT site	175	-92	-364	-475	-587
		215	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
5	Land at JJ Bullen	175	1,141	709	533	354
		215	VIABLE	VIABLE	VIABLE	VIABLE
6	Avaling Drive	75	882	545	408	271
		115	VIABLE	VIABLE	VIABLE	VIABLE
7	Silcocks Site	175	853	489	342	194
		215	VIABLE	VIABLE	VIABLE	MARGINAL
8	22, Glebe Lane	175	814	454	310	164
		215	VIABLE	VIABLE	VIABLE	NOT VIAB
9	The Stiles	162	714	397	270	141
		202	VIABLE	VIABLE	VIABLE	NOT VIAB
10	College Farm	75	365	66	-59	-186
		115	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
11	Land at Moss Lane	450	684	325	185	35
		490	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
12	The Comrades Club	740	-71	-588	-797	-1,008
		780	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
13	Nursing Home	975	156	-267	-440	-615
		1,015	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
14	Liverpool Road South	75	343	-5	-152	-299
		115	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
15	Nixons Lane	100	37	-183	-272	-362
		140	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
16	Heslop Lane	75	703	391	270	140
		115	VIABLE	VIABLE	VIABLE	VIABLE
17	Tatbok Farm	50	227	-41	-161	-262
		90	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
18	La Mancha Bams	75	837	473	327	173
		115	VIABLE	VIABLE	VIABLE	VIABLE
19	263-267 Mossy Lea Rd	950	703	391	270	140
		990	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB

Source: Affordable Housing Viability Study 2009 Table 6.3 of report

S8 The ability to afford the target can be summarised:

Table S3 Viability results summary – without grant					
	No of sites in category with affordable at:				
	No aff	25%	35%	45%	50%
Viable	13	8	7	4	2
Marginal	0	0	0	1	2
Not viable	6	11	12	14	15
Total	19	19	19	19	19

Source: Table 6.4 of report; Fordham Research 2009

S9 Half a dozen of the sample sites were not viable at all, even with no affordable housing. Over 35% the majority of sites became unviable (only four viable and one marginal at 45%). This is the picture assuming no Homes and Communities Agency (HCA) grant.

S10 The parallel diagrams including current levels of grant would, in contrast, permit a 50% target as shown below. Discounting the six sites which are unviable even without any affordable housing, the majority (seven) of the 13 sites which are now developable could carry a 50% target.

**Table S4 Appraisal outcomes: base appraisals with grant**

No.	Site	All use value	Value £k per acre			
			No Affordable	25%	35%	45%
1	Omskiirk Hospital	250	360	138	49	-45
		290	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
2	Former GS	175	508	221	107	-12
		215	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
3	Redcliffe Convent	175	645	373	264	152
		215	VIABLE	VIABLE	MARGINAL	NOT VIAB
4	Former T.F.T. site	175	-91	-289	-370	-461
		215	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
5	Land at JJ Bullen	175	1,143	774	625	474
		215	VIABLE	VIABLE	VIABLE	VIABLE
6	Aysling Drive	75	884	605	491	377
		115	VIABLE	VIABLE	VIABLE	VIABLE
7	Sijcocks Site	175	855	562	443	325
		215	VIABLE	VIABLE	VIABLE	VIABLE
8	22 Glebe Lane	175	814	523	408	290
		215	VIABLE	VIABLE	VIABLE	VIABLE
9	The Stiles	162	715	467	366	266
		202	VIABLE	VIABLE	VIABLE	VIABLE
10	College Farm	75	365	147	57	-34
		115	VIABLE	VIABLE	NOT VIAB	NOT VIAB
11	Land at Moss Lane	450	683	400	284	169
		490	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
12	The Comrades Club	740	-69	-440	-593	-744
		780	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
13	Nursing Home	975	156	-165	-280	-407
		1,015	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
14	Liverpool Road South	75	344	62	-55	-175
		115	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
15	Nixons Lane	100	37	-109	-167	-226
		140	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
16	Hesketh Lane	75	703	451	356	252
		115	VIABLE	VIABLE	VIABLE	VIABLE
17	Tatlock Farm	50	227	20	-65	-149
		90	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
18	La Mancha Bams	75	837	530	413	286
		115	VIABLE	VIABLE	VIABLE	VIABLE
19	263-267 Mossy Lea Rd	950	-27	-78	-123	-168
		990	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB

Source: Affordable Housing Viability Study 2009 Table 6.5 of report

S11 However, it is clear that in present national circumstances a cautious ‘no grant’ assumption is more robust.

### Thresholds

S12 We also examined what threshold could be sustained. The national minimum is 15 dwellings, and the above analysis relates to that. We took two sample sites and ‘modelled’ them down to very small scales. This suggests that the 35% zero grant target could be applied to sites of six or more dwellings (i.e. giving two affordable dwellings out of six) and a 25% zero grant target on five and four dwellings (giving one out of four).

**Addressing market uncertainty: the Dynamic Viability model**

- S13 We used our own Dynamic Viability model to produce sets of tables which will permit the Local Development Framework to include a policy which allows adjustment of the affordable housing target in future, as the housing market fluctuates over the plan period.
- S14 The model generates the full plausible range of target variations based on three indexes for price change, building costs and change and alternative use values. The following illustration is one of a set of eight (one for each of the values for the alternative use values). In the example below it is the 'base' alternative use value. The full set of Dynamic Viability tables is presented in Appendix 6.
- S15 As will be noticed, the table below focussed upon the 35% target discussed as being deliverable in Chapter 8: the zero/zero point when looking at the percentage version of the indexes.

**Figure S2 Coarse Matrix with base alternative use value**

		Price Change HPI								
		-20%	-10%	0%	10%	20%	30%	40%	50%	60%
		402	453	503	553	603	654	704	754	805
Cost Change BCIS Index	-20%	229	35%	45%	55%	55%	55%	55%	55%	55%
	-10%	257	15%	35%	45%	50%	55%	55%	55%	55%
	0%	286	0%	20%	35%	40%	50%	55%	55%	55%
	10%	314	0%	5%	20%	30%	40%	45%	50%	55%
	20%	343	0%	0%	10%	25%	30%	40%	45%	50%
	30%	372	0%	0%	0%	15%	25%	30%	40%	45%
	40%	400	0%	0%	0%	5%	15%	25%	30%	40%
	50%	429	0%	0%	0%	0%	10%	20%	25%	30%

Note that the figure shows proposed % target for each cost/price combination, with 0% change in alternative use value. The table also provides, inside the percentages, the actual values of the indexes, so that they can be read off in future

Source: West Lancashire Affordable Housing Viability Study, Fordham Research, 2009, Figure 9.1

- S16 In effect, once the Core Strategy Inquiry has approved whatever the starting target is, the rest follows automatically from the index changes. There is one further point, which is that since the array of possible index changes is extremely large, when viewed as possibilities over a decade or two, the work is done in two stages:

- *Coarse Matrix*: this is calculated in 10% intervals of the indexes (all three). The result provides broad coverage, but the change from one cell to another can produce large changes in targets: e.g. from 20% to 35%. But this stage provides wide coverage
- *Fine Matrix*: This takes the area around the chosen target and uses 4% intervals in the indexes (the intervals can be varied). This produces results for the area around the chosen target that yield much smaller target changes: mostly 5% intervals and sometimes 10%

S17 Figure S3 shows the *Fine Matrix* outputs that relate to the Figure S2 *Coarse Matrix*. Again the full set of tables will be found in Appendix 5. As will be seen from Figure S3, the intervals in the targets around the base case of 35% are smaller than in Figure S2. They permit more sensitive adjustments of the target as the index numbers change in future.

**Figure S3 Fine Matrix with base alternative use value**

		Price Change HPI									
%		-8%	-4%	0%	4%	8%	12%	16%	20%	24%	
		463	483	503	523	543	563	583	603	624	
Cost Change BCIS Index	-8%	263	35%	35%	40%	45%	45%	50%	55%	55%	55%
	-4%	274	30%	35%	35%	40%	45%	45%	50%	50%	55%
	0%	286	25%	30%	35%	35%	40%	45%	45%	50%	50%
	4%	297	20%	25%	30%	35%	35%	40%	40%	45%	45%
	8%	309	15%	20%	25%	30%	30%	35%	40%	40%	45%
	12%	320	10%	15%	20%	25%	30%	30%	35%	40%	40%
	16%	332	5%	10%	15%	20%	25%	30%	30%	35%	40%
	20%	343	0%	5%	10%	15%	20%	25%	30%	30%	35%

Source: West Lancashire Affordable Housing Viability Study, Fordham Research, 2009, Figure 9.2

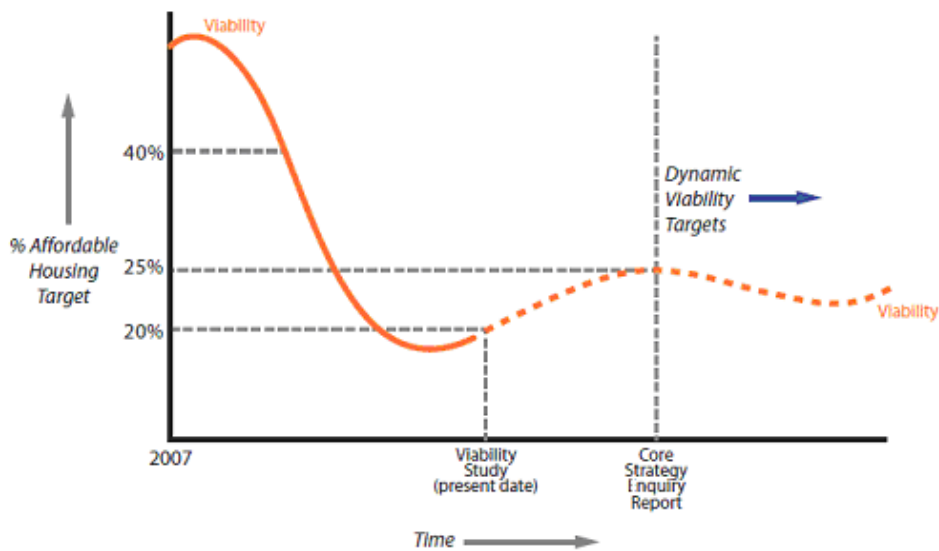
S18 As can be seen, in the Fine Matrix the target shifts are normally about 5% within the body of the table and represent manageable levels of change. By way of example, the House Price Index (HPI) was 520.4 at the date of the survey findings, and the buildings cost index (BCIS) was 288.1. If by the next annual inspection the BCIS remained nearer to 288.1 than to the figures above and below it, and the HPI had moved to 533, then the target would move to 40%. The new HPI figure is nearer to the 541.2 in the top row of index numbers than to 520.4. Hence the change. But the change could be in any direction depending on the movement of the two indexes.

S19 Thus if the LDF's Examination in Public (EiP) results in the adoption of a 35% Borough-wide affordable housing target it can be updated for the whole plan period using this Fine matrix and its parent, the Coarse matrix. The process is simply a matter of checking the three indexes: Halifax for price, BCIS for building costs and the Valuation Office Agency for alternative use values (the latter not shown on this table). The current (at the time of the fieldwork) HPI was 503 and BCIS was 286 (the 0%/0% point currently showing a grey box with 35% in it. Depending on how the indexes move, the appropriate box in a year's time may well be different from the 0%/0% point. If so the affordable target will be replaced by whatever target is in the cell indicated by the changed matrices.

### Implementing Dynamic Viability

- S20 The Viability study which is the input into Dynamic Viability is likely to be done as part of the preparation of the Core Strategy Affordable Housing Policy. There will then be a delay of months or years until the actual Inquiry. During that period there may well be changes in the market. Thus it is likely to be necessary to redo the base viability analysis at the time of the Core Strategy Inquiry to ensure that the Dynamic Viability process starts from the period of the Inquiry.
- S21 Since the automatic target varying procedure cannot begin until approved by the Inspector's Report, it is desirable to have it as up to date as possible. Figure S4 indicates this process schematically.

**Figure S4 Implementing Dynamic Viability**



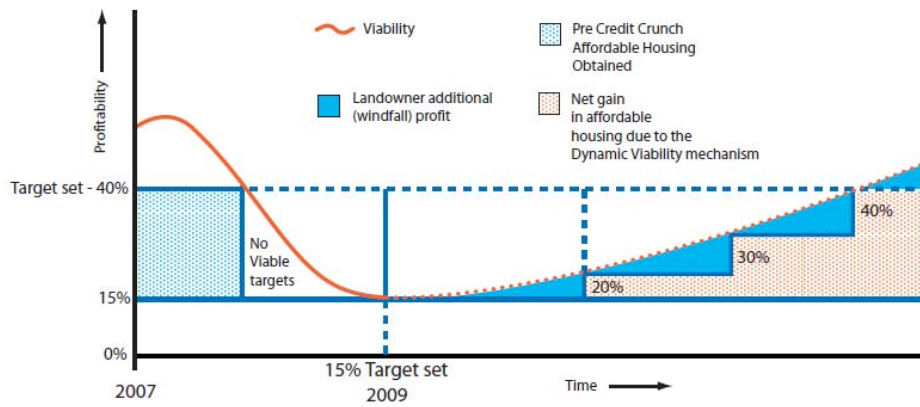
Source: Fordham Research, 2009

- S22 The diagram illustrates the possible change in viability between study and Core Strategy Inquiry. After that, of course, the Dynamic Viability matrix will take account of future variations in viability. As the diagram suggests, these could be downward as well as upward. The future course of the market is uncertain.

### Conclusion

- S23 The main point is that the Dynamic Viability matrices will ensure that all future changes in the housing market are tracked by deliverable affordable housing targets.

**Figure S5 Gain of Affordable Housing from Dynamic Viability**



Note: This diagram is schematic and does not apply to West Lancashire

Source: Fordham Research, 2009

- S24 This figure also shows that the landowners/developers will gain from any uplift in the market (the 40% pre-credit crunch target shown is general and not specific to West Lancashire). The basic viability assessment assures the landowner and the developer of a reasonable return. When the market goes up, the private sector will gain a windfall profit (shown by the blue areas under the viability curve) and the public interest will gain affordable housing as the targets are periodically altered.
- S25 The Dynamic Viability procedure ensures that the maximum of deliverable affordable housing is achieved.



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**Appendix 3 Small plots for sale** ..... Error! Bookmark not defined.

**Appendix 4 Construction cost calculation** ..... Error! Bookmark not defined.

**Appendix 5 Financial appraisal summaries** ..... Error! Bookmark not defined.

**Appendix 6 Dynamic Viability tables**..... Error! Bookmark not defined.



## List of abbreviations

£ k	thousand pounds
£ m	million pounds
dw	dwelling
dwgs	dwellings
ft	foot
ha	hectare
m	metre
sq	square
Q1	Quarter 1
LA	Local Authority



# 1. Introduction

## Introduction

- 1.1 Fordham Research has been commissioned by West Lancashire Borough Council to produce guidance on the financial viability implications of alternative targets and site size thresholds for affordable housing provision within the Borough.

## Context

- 1.2 The context for this study consists of the Government Guidance and the broad principles of viability analysis which has existed, in some form, since settled civilisation meant that land was bought and sold.

## Guidance

- 1.3 The national guidance, Planning Policy Statement 3: Housing 2006 (PPS3), requires Councils to set a target for the proportion of affordable housing to be delivered through new developments. The recently completed Strategic Housing Market Assessment (SHMA) and more recent Housing Need and Demand Study (HNDS) were intended to provide guidance on the levels of affordable housing target that would be justified by the analysis of the area's housing requirements.
- 1.4 This SHMA advice was based on an assessment of the balance between the need for market housing and the need for affordable housing. In doing so it did not take into account the commercial factor – i.e. what is viable and what it is realistic to ask developers to provide. Whilst a target of, say, 40% may be the appropriate figure to balance the overall housing market over time it may not be the appropriate, deliverable target now.
- 1.5 The purpose of the present study is to enable the Council to set a robust affordable housing target in the light of current commercial circumstances in West Lancashire. This target is just that – a target. The actual amount of affordable housing required on any particular site must be assessed for that actual site and take into account the peculiar factors of developing that site at that point of the economic cycle.
- 1.6 The Guidance has been supplemented by the Homes and Communities Agency (HCA) in a recent Good Practice Note: *Investment and Planning Obligations: responding to the downturn* (July 2009). The range of guidance is reviewed below.

- 1.7 This study is designed to set the current target in an informed way. Given the pattern of housing market conditions since late 2007, and more particularly a general expectation that house prices may continue to fall for some time to come, or may rise, it will be necessary for any proposed target to be reviewed regularly so to reflect the resulting changes in the profitability of development.

***The land market***

- 1.8 The availability and cost of land are matters at the core of the viability for any development of new houses. The format of the typical valuation has been standard for centuries:

**Gross Development Value**  
(The combined value of the complete development)

LESS

**Cost of creating the asset, including a profit margin**  
(Construction + fees + finance charges)  
+ profit

=

**RESIDUAL LAND VALUE**

- 1.9 The result of the calculation indicates a land value, which acts as the top limit of what a bidder could offer for that site. In this study we use the procedure in reverse:

*Given the likely land values will a development including X% target for affordable housing be viable?*

- 1.10 The calculation involves the same basic information but is designed for a different purpose. The 'likely land value' is a difficult topic since clearly a landowner will never be entirely frank about the price that would be acceptable: always seeking a higher one. This is one of the areas where an informed assumption has to be made about the 'cushion': the margin above the 'existing use value' which would make the landowner sell.
- 1.11 This study does not attempt to assess the specific price that could or should be paid for each site. The appraisal works out what land on a site may be worth if a range of scenarios were to occur, and then compares that amount with its value in some other use to which it could be put. This study also does not attempt to predict when a landowner may sell the land, or even if he will sell, since that is a very site specific matter.

**Reasons for this study**

- 1.12 PPS3: Housing (2006) contains a paragraph which says that affordable targets should:

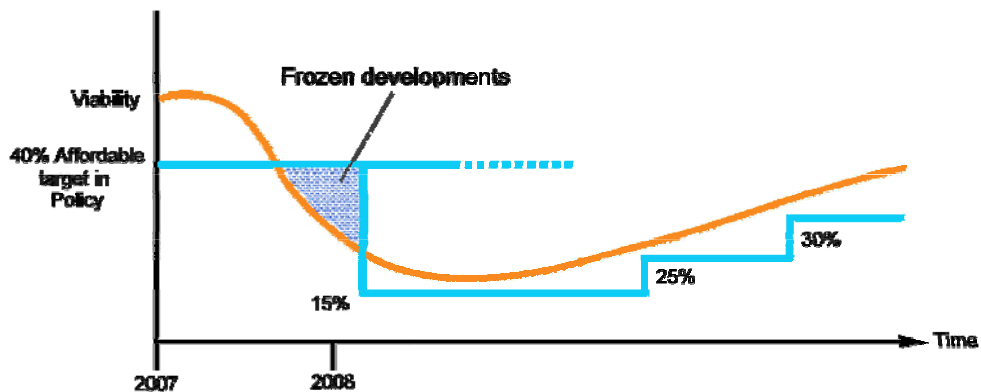
‘...reflect an assessment of the **likely** economic viability of land for housing within the area, taking account of the risks to delivery and drawing on informed assessments of the likely levels of finance available for affordable housing, including public subsidy and the level of developer contribution that can reasonably be secured.’ (S29) (our emphasis)

- 1.13 Until the Court of Appeal decision of August 2008 over the Blyth Valley Core Strategy Inspector’s report, nobody really understood that this statement in PPS3 conferred a new duty on local authorities. In summary:

*‘There is now a duty on every local authority to ensure that any affordable housing target is broadly deliverable within the area.’*

- 1.14 The word ‘likely’ in the above quotation from PPS3 is taken to mean that the duty is a ‘broad-brush’ one: the typical site in the local authority should be able to bear whatever target is set. Some sites within the area will not be able to do so, but of course they still have the original scope to make specific submissions at the planning applications stage.
- 1.15 The date at which this new duty was legally defined to exist coincided with the Credit Crunch downturn. This had the effect of reducing the profitability of new housing developments, and hence their viability. This situation is shown schematically in the figure below:

**Figure 1.1 The effect of the credit crunch on viability**



Source: Fordham Research 2009

- 1.16 The diagram shows that where once a 40% target was easily viable, at the time shown in the diagram only a 15% target is viable. Projected future improvements in viability mean that at various times in the future 25% and 30% targets may be viable.

- 1.17 The situation depicted in Figure 1.1 has caused difficulty in setting targets. The Homes and Communities Agency (HCA) issued Good Practice Guidance on affordable housing target setting in July 2009. This sets out (in paragraph 19) two alternative bases for target setting:
- i) Set the target to the minimum (probably current) level of viability: 15% in the example. This would evidently under-provide affordable housing when taken over a plan period
  - ii) Set the target for a 'normal' market and treat it as flexible
- 1.18 The second approach is based on an unpublished note from the Planning Inspectorate and the Good Practice note advises its use. But the result will not be robust:
- i) The concept of the 'normal' market is unsound. Prices have always varied, and it is not possible to state which of them is 'normal'. Prices rose unevenly for the whole period 1991 to 2007 but no part of the curve can be labelled 'normal'
  - ii) In the present recession there is no agreement as to how long it will last, and what the curve of viability over time (as illustrated in Figure 1) will look like. It could be 'V' shaped, 'U' shaped, 'W' shaped or 'bath' shaped. Nobody knows. The falls in prices have steadied but it is quite possible that things will get worse before they get better, and that there will be reverses along the way. In short, any 'normal market' target is likely to be undeliverable for much of its life. Some attempts to set one have based themselves on the 2007 peak. This is unlikely ever to repeat, as the cost and price environment will be quite different in future (e.g. due to requirements to meet increasing environmental requirements and the more limited access to credit (mortgages)). There is no safe basis for guessing a 'deliverable' target for a 'normal' market
- 1.19 The 'normal market' target would therefore be vulnerable to S78 appeal, probably for much of its life, and applicants who went to appeal saying that it was 'undeliverable' would be likely to succeed. Such targets are therefore not robust, or sensible to set.
- 1.20 The Dynamic Viability model was constructed by Fordham Research to provide a third option: affordable targets that are both deliverable, and provide a reasonable maximum of affordable housing.

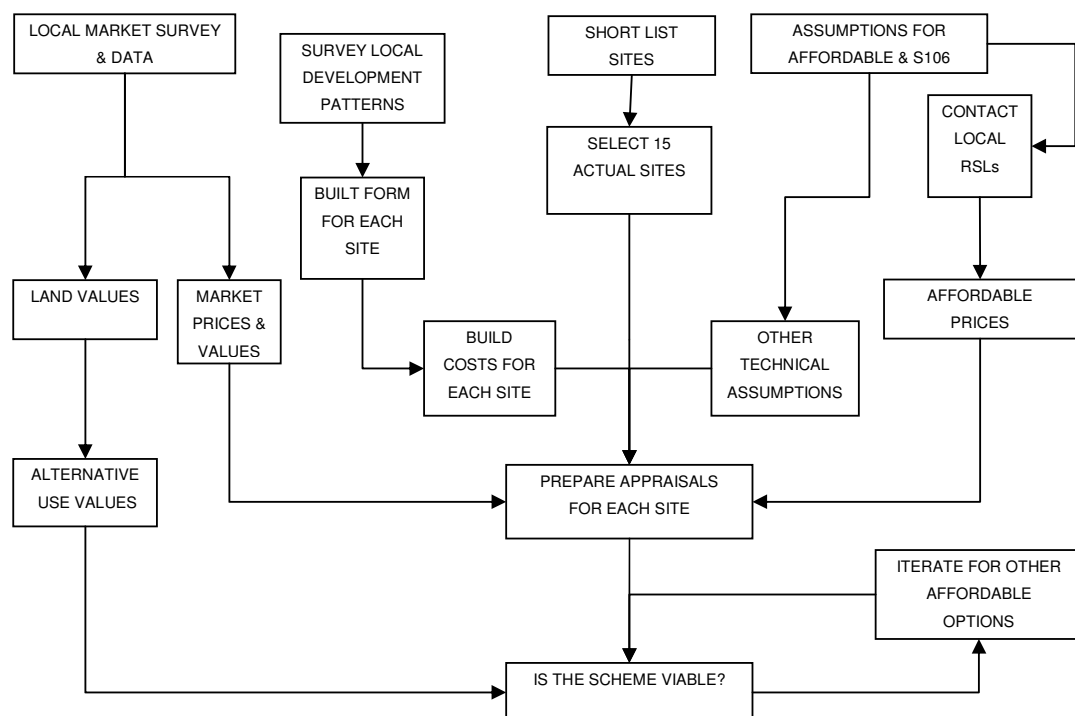
### **What this means for the study**

- 1.21 This means that the study is in two stages: the first being the standard viability analysis (in Chapters 4-8) and then the second stage containing the Dynamic Viability analysis in Chapter 9.

## Stage 1 viability methodology

- 1.22 The Stage 1 viability methodology is summarised in Figure 1.2 below. It involves preparing financial appraisals for a representative range of sites across the study area. In this case a selection of sites was chosen from a shortlist.
- 1.23 The appraisals tested alternative levels of affordable housing provision: in each case a combination of social rented and intermediate housing. We considered the likely purchase prices RSLs would pay for units in each category. Assumptions were also required for the developer contributions that would be sought under other headings like education and open space.
- 1.24 We surveyed the local housing market in order to obtain a picture of sales values for the market housing. In order to assess alternative use values we surveyed land values for residential and industrial developments. Furthermore, we considered local development patterns, in order to arrive at appropriate built form assumptions for those sites where information from a current planning permission or application was not available. This data informed the appropriate build cost figures.

**Figure 1.2 Stage 1 viability methodology**



Source: Fordham Research 2009

- 1.25 A number of other technical assumptions were required before appraisals could be produced. The appraisal results were in the form of £ per acre/ha 'residual' land values, showing the maximum value a developer could pay for the site and still return a target profit level.

- 1.26 Finally, the residual value was compared to the benchmark alternative use value for each site. Only if the residual value exceeded the benchmark figure, and by what is explained in due course to be a satisfactory margin (the 'cushion'), could the scheme be judged to be viable.

### Fordham Research

- 1.27 Fordham Research has been providing advice to Councils in respect of planning gain and development viability since the late 1980s. The firm's approach throughout this time has involved the preparation of financial appraisals. Over the last few years in particular Councils have increasingly commissioned the firm to evaluate financial appraisals which have been prepared by developers in order to support a case for a reduced affordable housing contribution, for enabling development and so on.
- 1.28 Since 1993 Fordham Research has become a leading consultancy in carrying out Housing Needs Surveys and more recently the more wide ranging Strategic Housing Market Assessments that have largely replaced them and advising Councils on affordable housing policy issues.
- 1.29 Since that time the firm has assisted Councils on very many occasions by providing expert witness services at Local Plan and S78 Inquiries, successfully supporting housing need and affordable housing policies. Particularly in recent years, this has regularly included evidence in respect of viability issues.

### Structure of this report

- 1.30 The remainder of the report covers the following topics:

*Chapter 2* - The individual development sites

*Chapter 3* - Affordable housing and developer contributions assumptions

*Chapter 4* - Local market conditions

*Chapter 5* - Assumptions for viability analysis

*Chapter 6* - Results of viability analysis

*Chapter 7* - Threshold modelling

*Chapter 8* - Implications of viability results

*Chapter 9* - Dynamic viability

## 2. Individual development sites

### Introduction

- 2.1 This chapter deals with the sites identified for study first outlining the key characteristics of each site and then considering the assumptions made about proposed development upon each site for the purpose of producing a financial appraisal. The individual sites chosen were visited at an early stage in the work.

### The Borough

- 2.2 The Borough of West Lancashire covers an area of approximately 34,000 hectares (130 square miles). It is the southernmost Borough in Lancashire, lying to the north of the Metropolitan Boroughs of Knowsley and St Helens, to the north-east of Sefton (all within Merseyside), and to the west of Wigan (within Greater Manchester). West Lancashire is bordered by the Ribble Estuary to the north, whilst the Lancashire Districts of Chorley and South Ribble lie to the north-east. The housing markets are heavily influenced by Liverpool to the south and Preston to the north and to a lesser extent by the coastal development to the west.
- 2.3 West Lancashire comprises a mix of vibrant towns, tranquil countryside and picturesque villages. The civic centre of the Borough is Ormskirk, a bustling market town that draws in visitors from neighbouring rural areas, and functions as a natural shopping centre. The largest town in the Borough is Skelmersdale, a new town built in the 1960s which is now in need of regeneration. The other main settlements are Burscough, which has seen significant expansion over the past decade, and the linear settlement of Tarleton/Hesketh Bank. The remainder of the Borough is predominately rural, and contains some of the best quality agricultural land in the North West. The topography is generally flat, becoming more undulating the further east one moves.
- 2.4 West Lancashire is well-served by an excellent transport infrastructure with good road and rail links to neighbouring areas and regions. The M58 and M6 connect the Borough to the rest of the country whilst the A570 and A59 link to Southport, Preston and St Helens. There are rail links to Manchester, Liverpool, Southport and Preston and frequent bus services to surrounding areas. There are demands however, particularly in the rural communities, for more frequent and varied transport services.

- 2.5 According to the Council's 2008 Annual Monitoring Report, like most areas, West Lancashire has pockets of deprivation, particularly in Skelmersdale, and a significant lack of affordable housing. A large amount of retail expenditure is lost to outlying areas such as Southport, Wigan and Preston whilst there is a lack of diversity in employment and industry. There are poor public transport services, particularly in the rural parts of the Borough and so residents increasingly depend on cars. West Lancashire has the largest amount of Green Belt in the country, and although this adds to the Borough's attractiveness, it also becomes a prohibiting factor to new development and expansion.
- 2.6 The Annual Monitoring Report states that future development will be affected by issues surrounding climate change, the impact of wider/global economic forces such as changes to food supply and prices that may affect its farming industry. The Borough has an ageing population to be taken care of and to ensure they can access a full range of services. Work is needed to reduce deprivation and worklessness, including the regeneration of areas and the provision of training and employment opportunities. Further threats to future development include pressures on the infrastructure (utilities, transport), loss of the countryside and changes occurring in neighbouring authorities that can impact on the Borough.
- 2.7 Finally, the Annual Monitoring Report suggests that the Borough has the opportunity to tackle deprivation through regeneration, provide affordable housing, increase employment and retail opportunities and encourage investment. West Lancashire has a large amount of agricultural land and its use could be maximised to benefit the local economy. Providing a greater range and frequency of public transport services would help to reduce dependency on cars and improve sustainability whilst it is hoped that improving key road facilities will help to reduce congestion. Further opportunities are available to improve the Borough's tourism, utilising its attractive environment and heritage, and developing the knowledge industry by capitalising on Edge Hill University and other higher education facilities within the Borough.

### **Identifying a range of sites**

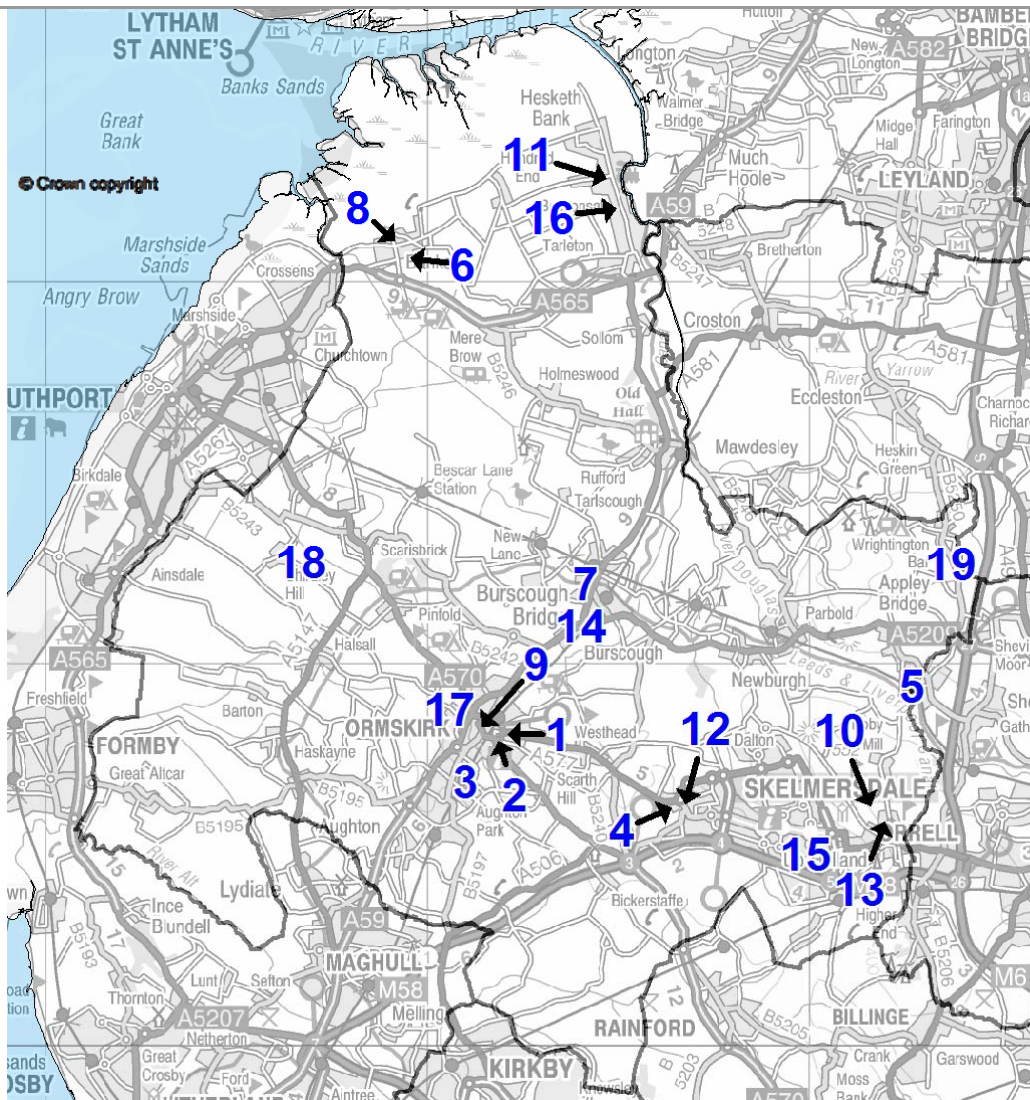
- 2.8 It was decided that, for West Lancashire, the required guidance on viability would best be achieved by looking at a range of site sizes and at sites that were actual rather than notional. In discussion with the Council it was decided that a total of 19 representative sites should be examined, and this number would provide some scope for exploring viability on sites below the current national guidance size threshold of 15 dwellings.
- 2.9 A final list of 19 sites was established in discussion. They were chosen to reflect a range of typical development situations: an appropriate balance between previous uses, a range of site sizes, and to give coverage across the main market sub-areas of West Lancashire.
- 2.10 The sites ranged in size from three to 120 dwellings. All but five of the sites were on previously developed land.

- 2.11 The sites were at various stages in the planning process. Five had gained planning permission and ten were under consideration (per u/c). Four sites identified by the Council's Strategic Housing Land Availability Assessment (SHLAA) had no approved or pending planning application associated with them.
- 2.12 Information available from the various planning applications was taken into account in considering the appropriate development forms to use in our appraisals.

**The sites**

- 2.13 Locations for the sites identified by the Council are shown in the map below:

**Figure 2.1 Site locations**



Source: Fordham Research 2009

2.14 Summary details of the sites identified by the Council are set out in the table below. The table shows total site area and, where a significant area of non-developable area applied, the net residential area.

2.15 The sites total 568 dwellings on a net area of just over 14 ha, at an average density of 40.0 dwellings per ha. There is an emphasis on medium and smaller sites, and eight are below the national guidance threshold for affordable housing of 15 dwellings.

Table 2.1 Site details						
Site No	Name	Location	Net Area	No dwgs	net dw ha	Planning status
1	Ormskirk Hospital, Wigan Rd	Ormskirk	2.380	120	50.42	per u/c
2	Former Grammar School, Mill St /Ruff Ln	Ormskirk	1.600	72	45.00	per u/c
3	Redcliffe Convent, Black Moss Ln	Ormskirk	1.550	81	52.26	per u/c
4	Former TPT site, Railway Rd	Skelmersdale	1.440	63	43.75	SHLAA site; no application
5	JJ Bullen, Mill Ln	Standish	1.490	29	19.46	per u/c
6	Aveling Dr	Banks	0.550	20	36.36	per u/c
7	Silcocks Site, adj to Canal, Burscough	Burscough	0.693	28	40.40	SHLAA site; no application
8	22 Glebe Ln	Banks	0.470	19	40.43	permission
9	The Stiles	Ormskirk	1.230	37	13.82	permission
10	College Farm, Stoney Brow		0.450	15	33.33	per u/c
11	Moss Lane	Skelmersdale	0.450	14	31.11	per u/c
12	Comrades Club, Witham Rd	Hesketh Bank	0.110	12	109.09	permission
13	Former Brooklands Nursing Home, 77 Dingle Rd	Skelmersdale	0.135	12	88.89	per u/c
14	Adj 172 Liverpool Road South	Skelmersdale	0.594	18	30.30	SHLAA site; no application
15	South of 155 Nixons Ln, Skelmersdale	Burscough	0.170	9	52.94	permission
16	Land at 172-186 Hesketh Lane	Tarleton	0.280	8	28.6	SHLAA site; no application
17	Tatlock Farm, Asmall Ln	Skelmersdale	0.200	5	25.00	per u/c
18	La Mancha Barns, Renacres Ln	Ormskirk	0.214	3	14.02	per u/c
19	263-267 Mossy Lea Rd Wright'n	Ormskirk	0.190	3	15.79	permission
<b>Total</b>			<b>14.196</b>	<b>568</b>	<b>40.0</b>	

Source: Fordham Research 2009

### Development assumptions

- 2.16 In arriving at appropriate assumptions for residential development on each site, the development form in an approved planning application must always be an important consideration. The application could, conceivably, now be so historic that it represents something that would either not now be proposed or not be permitted. After consideration we took the view that in each case the built form in the current application remains the best basis for carrying out appraisals.
- 2.17 Most Council areas in which we have carried out studies like the present one display a range of development situations and corresponding variety of densities. We have developed a typology which responds to that variety, which is used to inform development assumptions for sites (actual, or potential allocations) where no guidance is available from a submitted or permitted application. That typology enables us to form a view about floorspace density – the amount of development, measured in net floorspace per acre/hectare, to be accommodated upon the site, and which will vary with the intensity of the built form. This is a key variable because the volume of floorspace which can be accommodated on a site has a crucial key impact on its profitability, and is an amount which developers will normally seek to maximise (within the constraints set by the market).
- 2.18 The typology uses as a base or benchmark a typical post PPG3/PPS3 built form which would provide development at around 15,500 sq ft per acre (3,550 sq m per ha) on a substantial site, or sensibly shaped smaller site. A representative density might be 40-45 dwellings per ha. This has been a common development format for significant sized brownfield sites and some greenfield sites in most urban centres, and increasingly also smaller centres. It provides for a majority of houses (with perhaps 15-25% flats) in a mixture of two storey and two and a half to three storey form, with some rectangular emphasis to the layout.
- 2.19 Alongside this, there would of course be some schemes of appreciably higher density development providing largely or wholly apartments, in blocks of three storeys or higher, with development densities of 30,000 sq ft per acre (6,900 sq m per ha) and dwelling densities 100 dw/ha, upwards; and schemes of lower density, in sensitive rural or rural edge situations. However the 'base' category as a common urban form referred to above, i.e. 15,500 sq ft per acre (3,550 sq m per ha), might well provide appropriate development assumptions for a majority of the sites in the study, with variations from the base informing the remainder.
- 2.20 In pressured housing locations like London and the adjoining areas, this standard typology will often be less reliable in providing model development assumptions for the sites where actual information on planning proposals is not available. This is because the great majority of development may be built at development densities significantly higher than the 15,500/3,550 benchmark. We have to be guided by information on typical development patterns from the sites where application details exist, or by other examples of recent development close to the site in question.

- 2.21 In West Lancashire's case the market for high density apartment blocks, and currently flats of any kind, appears to be limited. Much of the recent development appears to have been at the benchmark development density, or only slightly higher – say 17,000 sq ft per acre – with a greater emphasis on larger units, on two and a half or three storeys, rather than flats.
- 2.22 The standard built form typology does therefore have some relevance in West Lancashire. It is set out in the table below. We would stress that the short titles used to describe the categories have been adopted for convenience only and must not be taken to imply anything specific about where, or when, they might apply.

Table 2.2 Typology of development form			
Category title	Density		Built form characteristics
	Floorspace net sq ft/acre (sq m/ha)	Dwellings (typical dw/ha)	
Lower density	12,500 (2,875)	20-33	Edge of settlement, less pressured location. Mostly 2 storey, largely 3 & 4 bed detached houses with garages.
<b>Base</b>	<b>15,500 (3,550)</b>	<b>40-45</b>	<b>Mixture of 2 &amp; 2.5/3 storey houses, many terraced; some (15-25%) flats, limited garaging.</b>
Urban	19,500 (4,480)	50	30-35% flats, and/or fewer 2 storey units than base
High	30,000 (6,900)	100+	Flats in small blocks on 3 storeys, parking spaces
Very high	50,000 (11,500)	150+	Flats in larger blocks on 4-6 storeys, parking limited or underground

Source: Fordham Research 2009

- 2.23 The above typology was used to develop model development assumptions for the sites where actual information on planning proposals was not available.
- 2.24 The resulting assumptions for residential development for each of the 19 sites are set out in the following table. The sites where actual data was available conform fairly well with the two sites using model data informed by the typology.
- 2.25 Among the 19 sites there is quite a spread across the density range. There are seven sites in the Base category, seven with lower density and five with higher density. This pattern is felt to be representative of development opportunities in the area.

Table 2.3 Site development assumptions					
No	Site	Category	Net floorspace density (rounded)		Ave dwg net sq ft (m)
			Sq ft/acre	Sq m/ha	
1	Ormskirk Hospital	Base/Urban	16,750	3,850	820 (76)
2	Former GS	Urban	20,000	4,600	1,101 (102)
3	Redcliffe Convent	Urban+	22,750	5,200	1,075 (100)
4	Former TPT site	Base	15,500	3,550	875 (81)
5	Land at JJ Bullen	Low/Base	14,000	3,200	1,766 (164)
6	Aveling Drive	Low	12,500	2,850	848 (79)
7	Silcocks Site	Base	15,500	3,550	948 (88)
8	22 Glebe Lane	Base-	14,700	3,350	897 (83)
9	The Stiles	Base	15,000	3,450	1,232 (115)
10	College Farm	Base+	16,900	3,900	1,250 (116)
11	Land at Moss Lane	Base	15,100	3,500	1,201 (112)
12	The Comrades Club	High	29,500	6,750	667 (62)
13	Nursing Home	Urban/High	22,900	5,250	636 (59)
14	Liverpool Road South	Low/Base	14,000	3,200	1,141 (106)
15	Nixons Lane	Base	15,000	3,500	701 (65)
16	Hesketh Lane	Low	12,500	2,850	1,080 (100)
17	Tatlock Farm	Low	12,500	2,850	1,240 (115)
18	La Mancha Barns	Low	12,500	2,850	2,200 (205)
19	263-267 Mossy Lea Rd	Low-	10,000	2,300	1,565 (106)

Source: Fordham Research 2009



## 3. Affordable housing and other developer contributions

### Introduction

- 3.1 This chapter considers the assumptions used to test a range of affordable housing scenarios for the individual sites and similarly the developer contributions assumed for each site.

### Affordable housing assumptions

- 3.2 We undertook appraisals for a number of development scenarios involving varying proportions of affordable housing and tenure split. The assumptions in respect of proportions, and the financial terms on which they are to be provided, are considered below.

#### *(i) Affordable proportion*

- 3.3 Following discussions with the Council we agreed to test the following options:

- **NO** affordable housing
- 25% affordable
- 35% affordable
- 45% affordable

- 3.4 The Council's current policy provides for a target proportion of 25% for Skelmersdale and between 30% and 50% for the remainder of the Council area.

- 3.5 New targets have been proposed in emerging Local Development Framework Documents. Any such targets would, of course, be informed by the recent Housing Need and Demand Study as well as by the present viability study. The Housing Need and Demand Study recommends a target of 35%.

#### *(ii) Tenure split*

- 3.6 The Council currently seeks a mixture of social rented and intermediate housing, though with a large majority (80%) provided as social rented. The HNDS has suggested a ratio of 65%/35%. We were asked to test the 80%/20% option, but also to provide some guidance on the impact of a reduction in the proportion of social rented.

3.7 In principle, intermediate tenure could constitute a wide range of different housing propositions. It was decided that intermediate housing should be assumed to be equivalent to 25% shared ownership with rent at 2% of the unsold equity. It might be provided in various forms, but the outgoings and RSL purchase price would be broadly similar.

**(iii) Size profile**

3.8 After consideration we assumed that the mix of affordable housing on each site should broadly follow the market housing, achieving an average dwelling size (i.e. net sq ft/sq m) in line with that of the market housing. As well as providing the maximum integration between market and affordable provision, this assumption is also a convenient one which ensures that as the affordable housing proportion varies between the options being tested, the floorspace density remains constant. That is a desirable aim if the appraisals are to constitute a realistic development scenario, consistently, across the range of affordable options tested. It should be noted that the HCA are moving from a grant calculated per bed place to one calculated per home delivered. It is possible that this will have a downward pressure on the size of affordable units over time. Consequently, it is possible that this may lead, in time, to more of the affordable units being smaller units.

3.9 In working up development assumptions for the sites we made assumptions about the indicative mix of dwellings on each individual site. Collectively these deliver an overall mix profile as set out in the table below:

Table 3.1 Aggregate size mix profile		
	<i>No of dwellings</i>	<i>%</i>
1 bed flat	44	8.03
2 bed flat	190	34.67
2 bed house	46	8.39
3 bed flat/house	170	31.02
4 bed house	84	15.33
4 + bed house	14	2.55
<b>Total</b>	<b>548</b>	<b>100.0%</b>

Source: Fordham Research 2009

3.10 The profile reflects the particular characteristics of the sites chosen for assessment. The largest numbers of dwellings are two bedroom flats and three bedroom units.

**(iv) Financial terms**

- 3.11 To be consistent with national guidance, the viability study must take into account the likely availability of public subsidy i.e. Social Housing Grant. The future availability of grant – both the total quantum of grant, and the amounts forthcoming for different sizes of dwelling and tenure – is typically subject to some uncertainty as increasingly the available funding has been directed to achieving specific regional or strategic priorities.
- 3.12 An assumption based on a ‘default position’ of zero Social Housing Grant has become a common starting point in this situation. The zero grant assumption also has the incidental advantage of allowing the requirement for grant in individual cases to be calculated more simply than if a set level were already allowed for.
- 3.13 After consideration it was decided that appraisals should be produced with an assumption that Social Housing Grant would be available at £12k per bedspace for social rented dwellings and £6k per bed space for intermediate dwellings. As mentioned at 3.8 above, it should be noted that the HCA are moving away from basing grant on bed spaces and moving to per unit. This is having a considerable downward pressure on the form of development with housing associations naturally moving towards the smaller flatted units for affordable housing.
- 3.14 It was necessary to determine the financial terms on which RSLs should be able to purchase properties of various sizes from the developer under this grant scenario. We drew on recent experience from elsewhere to suggest indicative levels of purchase price.

Table 3.2 Selling prices: zero grant basis				
	£ per sq ft (sq m)			
	Social rented		Intermediate	
	Flat	House	Flat	House
Purchase price with grant	140 (1,505)	140 (1,505)	160 (1,720)	160 (1,720)

Source: Fordham Research 2009

**Other developer contributions**

- 3.15 Aside from affordable housing, developer contributions could potentially be sought by the Borough under a number of headings such as highways, education or open space. They might be either made in kind or as financial payments. In either case it is necessary to allow for the additional financial cost of such contributions, in preparing appraisals for each site.
- 3.16 The Council has a current policy which seeks a contribution from developers. We have assumed a contribution of £3,500 per unit and applied this uniformly across the whole Borough and across market and affordable housing.

- 3.17 It must be emphasised that this approach is simply intended to treat the 19 sites consistently and equitably in order to allow financial appraisals to be produced which provide a strategic overview. The figures do not purport to represent necessarily what would be sought, offered or negotiated on specific sites.

## 4. Local market conditions

### Introduction

- 4.1 This chapter sets out an assessment of the local housing market in the Borough of West Lancashire, providing a basis for the assumptions on house prices and costs to be used in financial appraisals for the 19 sites tested in the study.
- 4.2 As well as house prices, land values are also considered. They are required in order to form a view of likely alternative use values for all of the sites, and it is such values which will represent a minimum viability threshold when appraisals are prepared for the range of affordable housing scenarios.
- 4.3 Before looking at the results from the market assessments, there are some general points arising from the nature of the exercise.

### Issues to consider

- 4.4 It is necessary to assess property market conditions in the study area in order to provide a reasonable guide as to likely values to use in evaluating different development proposals.
- 4.5 Although development schemes do have similarities every scheme is unique to some degree, even schemes on neighbouring sites. While market conditions in general will broadly reflect a combination of national economic circumstances and local supply and demand factors, even within a town there will be particular localities, and ultimately site specific factors, that generate different values and costs. There are indeed quite significant value variations in different parts of the study area.
- 4.6 Property market forces are in a constant state of flux and assessments of viability can change over relatively short periods of time in response to broader economic fluctuations such as the impact of changes in interest rates on the costs of borrowing, the actual availability of funding and the outlook in the employment market. Equally significant, sub-area market conditions are often changed by local factors.
- 4.7 For example, high value areas encourage demand in lower value neighbouring areas where new developments encourage changes in value growth in what perhaps were previously less popular areas.

## The residential market

4.8 The housing market in the Borough will, to some extent, reflect national trends but there are local factors that underpin the market including:

- A mix of vibrant towns, tranquil countryside and picturesque villages
- The bustling market town of Ormskirk which draws in visitors from neighbouring rural areas
- A large amount of agricultural land that could be maximised to benefit the local economy
- The opportunity to improve the local knowledge economy through Edge Hill University
- A good transport infrastructure with good road and rail links to neighbouring areas and regions
- Poor public transport services, particularly in the rural parts of the Borough
- A shortage of smaller properties for social rent across most parts of the Borough, especially in Ormskirk and parts of Skelmersdale
- Affordability pressures due to the high demand for accommodation in rural and market town areas
- Issues of deprivation and market vulnerability in parts of Skelmersdale

4.9 We analysed various sources of market information but the most relevant are the prices of units on new developments. A list setting out details of relevant new developments in the area, as at September 2009, is provided in Appendix 1. Analysis of these and other schemes in the study area shows that prices for newbuild homes vary across the area ranging between a little less than £200 and to about £300 per square foot (£2,150-£3,300 per square metre). This is the range for individual properties. Averaged over the complete scheme the degree of variation would, of course, be somewhat less.

4.10 Table 4.1 shows average prices in West Lancashire for the latest quarter available from the Land Registry, Q3 2009. Although the Land Registry data covers both second-hand and newbuild prices, the former will predominate. The average prices in the table are compared to a corresponding England and Wales figure and expressed as indices.

Table 4.1 Average house prices Q3 2009: comparison with England & Wales average					
Area		Ave price (£k & % index)			
		Detached	Semi	Terrace	Flat
Q3 09	Ave £k	£269.30	£161.00	£107.80	£180.50
	No of sales	80	78	51	15
	Index	84%	84%	59%	88%

Index compares LA's ave £k price figure to the median LA value across England & Wales for house type.

Source: Land Registry data.

- 4.11 Prices in the West Lancashire area are between 10% and 40% below the average (median local authority area). This is particularly the case for terraced housing which is at 59% of the national median prices. However, most sales consist of either semi-detached or detached dwellings.
- 4.12 As in the country generally, prices fell back between late 2007 and the third quarter of 2009. However, because Land Registry data reports sales after completion there is some lag and the figures show the decline to only a limited extent, although the decline in sales numbers does show up quite clearly (sales are seasonally low in the first quarter).

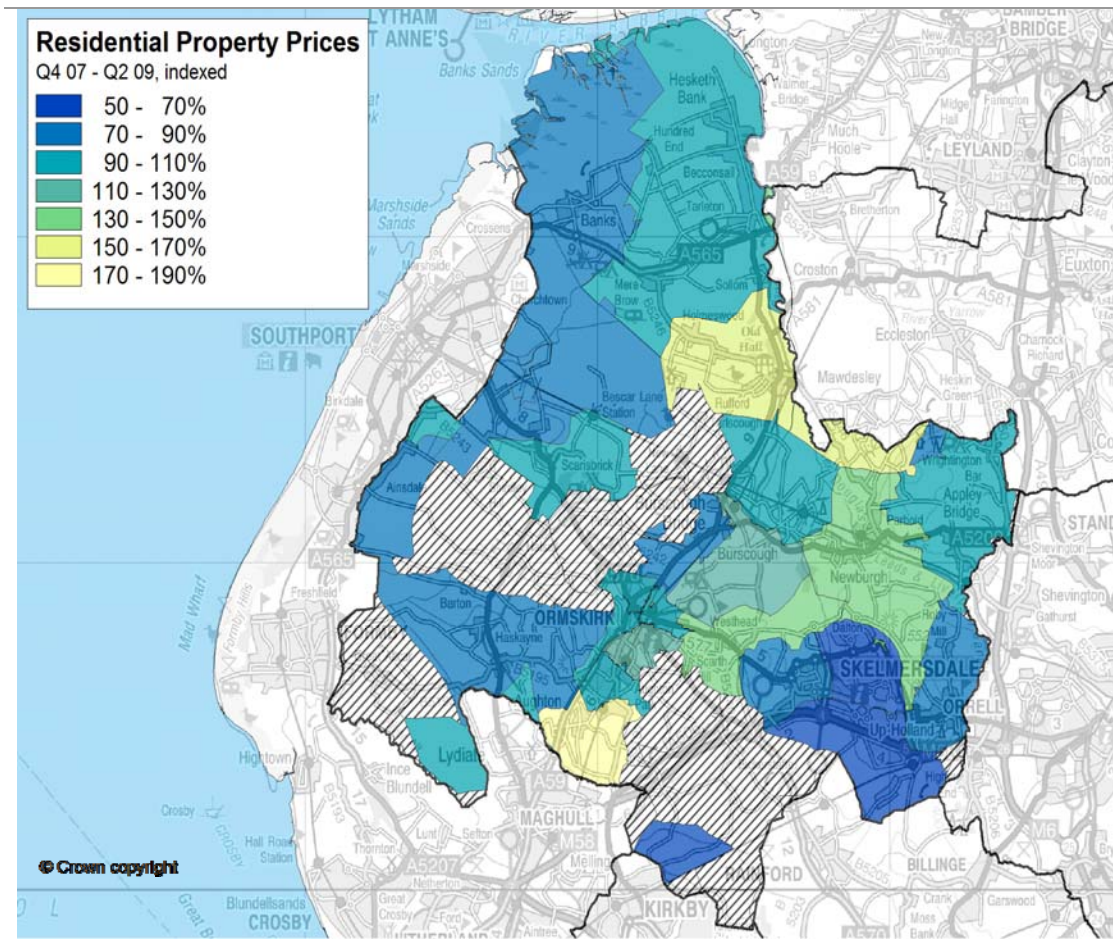
Table 4.2 Average house prices in previous quarters					
Area		Average price £k			
		Detached	Semi	Terrace	Flat
Q4 07	Average £k	£304.7	£176.3	£126.5	£99.7
	No. of sales	125	174	139	32
Q1 08	Average £k	£320.0	£171.5	£100.1	£117.2
	No. of sales	65	104	65	14
Q2 08	Average £k	£278.5	£161.1	£108.9	£97.8
	No. of sales	82	94	82	16
Q3 08	Average £k	£480.3	£293.9	£219.7	£148.4
	No. of sales	35	50	88	70
Q4 08	Average £k	£320.4	£163.5	£110.0	£129.3
	No. of sales	56	67	48	9
Q1 09	Average £k	£282.6	£147.0	£111.1	£155.8
	No. of sales	34	52	40	5
Q2 09	Average £k	£244.4	£154.9	£101.0	£146.5
	No. of sales	46	81	40	9
Q3 09	Average £k	£269.3	£161.0	£107.8	£180.5
	No. of sales	80	78	51	15

Source: Land Registry data

- 4.13 Within a Council area there can be considerable variations in price, and Land Registry house price data at postcode sector level helps to illuminate these variations. Because the number of sales in individual postcode areas in a single quarter can be quite small, we looked at information for four separate quarters (Q2 2009, Q4 2008, Q2 2008, and Q4 2007). The data has been expressed as an index – as a percentage of the nationwide average price level – and standardised, so as to allow for variations in type mix.
- 4.14 Appendix 2 provides a worked example of the index calculation and sets out the resulting price index figures for the four quarters examined.

- 4.15 It can be seen from Appendix 2 that whilst the variations between individual quarters are mostly quite modest, in some postcode areas, the variations between the four quarters' indices are more substantial. Such price fluctuations may be due to the relatively small number of sales and indeed variations tend to be greater for rural areas, which are mostly numerically smaller and/or more diverse, than for urban areas where postcode sectors are larger numerically and can also often be more uniform.
- 4.16 The average figures for the four quarters are mapped in Figure 4.1 below. This shows that prices in most postcode sectors are between 65% and 110% of the national average level. One postcode sector – covering Aughton – is substantially more expensive at 186% of median prices. In contrast, house prices in Skelmersdale are only between 59% and 73% of the median average.

**Figure 4.1 Postcode price indices**



Indices compare prices to value for median postcode sector in England & Wales

Source: Land Registry

### Price assumptions for financial appraisals

- 4.17 It is necessary to form a view about the appropriate prices for the 19 individual schemes to be appraised in the study. The preceding analysis suggests that although prices in much of the area will be quite close there will be some areas where prices are appreciably lower than or higher than the price 'standard'.
- 4.18 It is also clear that we should allow for differences between apartments, two storey houses and town houses, particularly in locations where flats are going to be attractive. Finally, in drawing on the newbuild price data we have to bear in mind that, particularly in the present market conditions, the prices at which homes are offered may include appreciable discounts such as deposit paid for first-time purchasers or stamp duty.
- 4.19 Taking these points into consideration we considered what sale prices should be for flats, for two storey and for town houses on each of the 19 sites. These were then to be combined on the basis of the proportions of each type on each scheme to produce a single composite average price.
- 4.20 We established across the study area a range of current newbuild schemes and a number of recently completed schemes. The number of newbuild schemes currently active is very limited to just the Ormskirk area and the area to the north of the Borough around Banks. The specific details are set out within Appendix 1 of the report. These provided a useful basis to inform the market assessment and provide a guide for a number of sites.
- 4.21 Values within Skelmersdale were generally cheaper and ranged around a base level of £195-£205 per square foot. The units at JJ Bullen (site 5) were subject to a premium commensurate with the particular location, and supported by evidence of schemes or individual properties that were on the market.
- 4.22 The site figures resulting from our type-specific assumptions are set out in the table below.

Table 4.3 Price bands							
Site/location		Price £ per		Site/location		Price £ per	
		Sq ft	Sq m			Sq ft	Sq m
1	Ormskirk Hospital	207	2,228	11	College Farm	238	2,562
2	Former GS	213	2,293	12	Land at Moss Lane	199	2,142
3	Redcliffe Convent	225	2,422	13	The Comrades Club	205	2,207
4	Former TPT site	198	2,131	14	Nursing Home	247	2,659
5	Land at JJ Bullen	286	3,078	15	Liverpool Road South	179	1,927
6	Aveling Drive	259	2,788	16	Hesketh Ln	243	2,615
7	Silcocks Site	240	2,583	17	Nixons Lane	219	2,357
8	22 Glebe Lane	243	2,616	18	Tatlock Farm	270	2,906
9	The Stiles	225	2,422	19	La Mancha Barns	188	2,024
10	College Farm	199	2,142				

Source: Fordham Research

- 4.23 The figures cover a range from the cheapest £179 per sq ft (£1,927 per sq m) at Liverpool Road South, to £286 per sq ft (£3,078 per sq m) at JJ Bullen.
- 4.24 It is necessary to consider whether the presence of affordable housing would have a discernible impact on sales prices. In fact affordable housing will be present on many of the sites whose selling prices have informed our analysis. Our view is that in any case any impact can and should be minimised through an appropriate quality design solution.

### Land values

- 4.25 We have considered general figures from the Valuation Office Agency (VOA) relating to residential land values. Land values vary dramatically depending upon the development characteristics (size and nature of the site, density permitted etc.) and any affordable or other development contribution.
- 4.26 The VOA publishes figures for residential land in the Property Market Report. These cover areas which generate sufficient activity to discern a market pattern. That means that we have used figures for cited locations which are closest to West Lancashire Borough.
- 4.27 These values can only provide broad guidance because it is likely that the figures will, to some degree, be net of allowances for developer contributions and/or affordable housing requirements. They can therefore be only indicative, and it may be that values for 'oven ready' land with no affordable provision or other contribution, or servicing requirement, are in fact higher.

Table 4.4 Residential land values half year to July 2009			
Area	Land Value £m per acre (hectare)		
	Small sites (< 5 dwgs)	Bulk sites (> 2 ha)	Land for apartments
Wigan	1.550 (3.829)	1.400 (3.458)	1.400 (3.458)
Preston	1.650 (4.076)	1.560 (3.853)	1.560 (3.853)
Blackburn	1.300 (3.211)	1.100 (2.717)	1.100 (2.717)
Bolton	1.600 (3.952)	1.485 (3.668)	1.485 (3.688)
Knowsley (Prescot/Huyton)	1.000 (2.470)	0.950 (2.347)	0.950 (2.347)
Manchester	3.500 (8.645)	3.200 (7.904)	3.200 (7.904)

Source: VOA Property Market Report July 2009

- 4.28 With the decline in the market and general economic conditions these values may now be rather historic. We therefore sought information about values from residential land currently on sale in the Borough.
- 4.29 There are a small number of sites for residential development currently available in the immediate and adjacent areas. Those within the Borough area with sufficient detail pointed to an asking price of around £1.2m per acre. A more detailed schedule of residential land available is set out in Appendix 3.

### Current and alternative use values

- 4.30 In order to assess development viability, it is necessary to analyse current and alternative use values. Current use values refer to the value of the land in its current use, for example, as agricultural land. Alternative use values refer to any potential use for the site. For example, a brownfield site may have an alternative use as industrial land.
- 4.31 To assess viability, the value of the land for the particular residential scheme adopted needs to be compared to the alternative use value to determine if there is another use which would derive more revenue for the landowner. If the assessed value does not exceed the alternative use value then the development is not viable.

- 4.32 For the purpose of the present study it is necessary to take a comparatively simplistic approach to determining the alternative use value. In practice a wide range of considerations could influence the precise value that should apply in each case, and at the end of extensive analysis the outcome might still be contentious.
- 4.33 Our 'model' approach is outlined below:
- i) For sites previously in agricultural use, then agricultural land represents the existing use value
  - ii) Where the development is on former industrial, warehousing or similar land, then the alternative use value is considered to be industrial, and an average value of industrial land for the area is adopted as the alternative use value
  - iii) Where the site is occupied by buildings capable of beneficial use we would estimate their broad value
  - iv) Existing use as garden land would have a value greater than agricultural but significantly less than industrial land, unless it could feasibly be developed in an industrial or commercial use
- 4.34 The VOA's typical industrial land values for the region and nearby locations for the first half of 2009 are set out in the table below.

Table 4.5 Industrial land values			
Area	Land value per acre (hectare)		
	Low	High	Typical
Central Lancs (Preston)	£400k (£988k)	£600k (£1,482k)	£500k (£1,235k)
Wigan	£250k (£618k)	£400k (£988k)	£320k (£790k)
Blackburn/Burnley	£350k (£865k)	£450k (£1,112k)	£380k (£939)
Bolton and Bury	£325 (£803k)	£550k (£1,359k)	£450k (£1,112k)
Salford/Trafford	£420k (£1,037k)	£750k (£1,853k)	£650k (£1,606k)
Warrington	£280k (£692k)	£475k (£1,173k)	£390k (£963k)

Source: VOA Property Market Report July 2009

- 4.35 Although across the region as a whole there is quite a spread of values, the figures for individual locations in the North West region are mostly in the range of £320-650k per acre (£865k-£1.6m per ha).
- 4.36 These figures most likely reflect the downturn in values from 2008 to a considerable degree. There is very little market evidence to suggest what current values might be.
- 4.37 Agricultural values rose for a time recently after a long historic period of stability. They are around £5-12k per acre (£15-30k per ha) depending upon the specific use. A benchmark of £10k per acre (£25k per ha) is assumed to apply here.

- 4.38 The industrial/warehouse values were determined by examining the size and price of industrial sites for sale within and around the Borough. Analysis suggests a benchmark of £175k for industrial/warehouse land.
- 4.39 The value for each individual site that results from the foregoing analysis is summarised in the table below.

Table 4.6 Alternative use value bases				
No	Site	Basis	£k per acre	£k per ha
1	Ormskirk Hospital	Hospital	250	618
2	Former GS	Industrial/warehouse	175	432
3	Redcliffe Convent	Industrial/warehouse	175	432
4	Former TPT site	Industrial/warehouse	175	432
5	Land at JJ Bullen	Industrial/warehouse	175	432
6	Aveling Drive	Agricultural land	75	185
7	Silcocks Site	Industrial/warehouse	175	432
8	22 Glebe Lane	Industrial/warehouse	175	432
9	The Stiles	Industrial/warehouse	175	432
10	College Farm	Agricultural land	75	185
11	Land at Moss Lane	Res dwellings	450	1,112
12	The Comrades Club	Club	740	1,829
13	Nursing Home	Nursing Home	975	2,409
14	Liverpool Road South	Agricultural land	75	185
15	Nixons Lane	Agricultural land	100	247
16	Hesketh Ln	Vacant Land	75	185
17	Tatlock Farm	Agricultural land	50	124
18	La Mancha Barns	Agricultural land	75	185
19	263-267 Mossy Lea Rd	Res dwellings	950	2,348

Source: Fordham Research 2009

- 4.40 It was noted earlier that brownfield sites may face 'abnormal costs' if they are to be redeveloped for residential use. Some of those costs, but not necessarily all, might also arise if the site were redeveloped for the alternative use. The alternative use value would need to be reduced to allow for those costs that would still arise in that situation.
- 4.41 The costs arising from development or redevelopment of the 19 sites are considered in the next chapter along with the other financial and technical assumptions required to prepare financial appraisals for each of the sites.



## 5. Assumptions for viability analysis

### Introduction

- 5.1 This chapter considers the costs and other assumptions required to produce financial appraisals for the 19 sites.

### Development costs

#### **(i) Construction costs: baseline costs**

- 5.2 Drawing upon our own experience, and taking into account published Building Cost Information Service (BCIS) data, we have developed a set of base £ per sq ft construction costs for different built forms of residential development. The costs are specific to different built forms (flats vs. houses; number of storeys). On the basis of these cost figures, it is possible to draw up appropriate cost levels for constructing newbuild market housing in West Lancashire at a base date of November 2009.
- 5.3 The question arises as to what extent the Code for Sustainable Development should impact on build costs in the study. Whilst from April 2008 the Code's Level 3 has been a requirement for all homes commissioned by RSLs that would not necessarily be the case for affordable homes built by developers for disposal to an RSL, unless grant is made available from the Homes and Communities Agency. However, the Government indicates that Level 3 will apply to all newbuild housing (i.e. will be incorporated in Building Regulations) from 2010 with higher levels (Level 4 then 6) intended to be triggered from 2013 onwards. Accordingly for the present study we have assumed that Level 3 applies to both market and affordable housing on the sites being appraised.
- 5.4 Guidance on the impact of Level 3 is available from a Report commissioned by the Housing Corporation and English Partnerships (*A Code For Sustainable Development, 2007*) in respect of the impact of Level 3 on construction costs. The guide estimates (Table S2) the increase in costs arising for different house types under various scenarios. On average, to achieve Level 3 current newbuild costs would need to increase by 4.2%, amounting to an additional £4,600 on the build cost for the average dwelling (£110,200) across the 19 sites.
- 5.5 In addition to this national requirement, RSS policy ENG 2 also seeks a proportion of 10% of energy costs of new residential building to be from renewable sources. This requirement will add to baseline building costs although it is possible that there would be some overlap with the Level 3 specification. For the purpose of the study, we assumed a 3.5% increase in costs representing an average premium of about £3,900 per dwelling.

**(ii) Construction costs: site specific adjustments**

- 5.6 It is necessary to consider whether any site specific factors would suggest adjustments to these baseline cost figures. Two factors need to be considered in particular: small sites and high specification.
- 5.7 Since the mid 1990s planning guidance on affordable housing has been based on a view that construction costs were appreciably higher for smaller sites with the consequence that, as site size declined, an unchanging affordable percentage requirement would eventually render the development uneconomic. Hence the need for a 'site size threshold', below which the requirement would not be sought.
- 5.8 It is not clear to us that this view is completely justified. Whilst, other things held equal, build costs would increase for smaller sites, other things are not normally equal and there are other factors which may offset the increase. The nature of the development will change. The nature of the developer will also change as small local firms with lower central overheads replace the regional and national house builders. Furthermore, very small sites may be able to secure a 'non-estate' price premium which we have not allowed for.
- 5.9 In the present study eight of the sites are considered to fall into the 'small site' category – those with less than 15 dwellings. It is felt necessary to make some allowance for the economics of these sites in preparing financial appraisals. A range of cost premiums has been estimated for each specific site size, ranging from 1% for the 14 dwellings at Moss Lane through to 8.5% for the smallest site Mossey Lea Rd with three dwellings. Any such premium must be based on judgement; as explained above it is difficult to see how hard data could ever be obtained to show the effect of scale alone.
- 5.10 In addition, we considered that sites 1, 2, 3, 5, 9 and 10 would be built to a slightly higher specification than the other sites. An allowance of an additional 1.5% was assumed in order to cover this.

**(iii) Construction costs: affordable dwellings and final figures**

- 5.11 The procurement route for affordable housing is assumed to be through construction by the developer and disposal to an RSL on completion. In the past, when considering the build cost of affordable housing provided through this route we took the view that it should be possible to make a small saving on the market housing cost figure on the basis that one might expect the affordable housing to be built to a slightly different specification than market housing. However, the pressures of increasingly demanding standards for RSL properties have meant that for conventional schemes of houses at least, it is no longer appropriate to use a reduced build cost; the assumption is of parity.
- 5.12 Taking all the above into account we arrived at build costs for all (market and affordable) housing which after rounding were as in the table below. To aid understanding, a worked example for site 2 is provided at Appendix 4.

Table 5.1 Construction costs adjusted and rounded: all housing					
<i>Build cost £ per sq ft/sq m</i>					
<i>Site</i>	<i>sq ft</i>	<i>(sq m)</i>	<i>Site</i>	<i>sq ft</i>	<i>(sq m)</i>
1	88.9	957	11	95.7	1,030
2	89.7	965	12	90.5	974
3	89.1	959	13	90.8	977
4	111.7	1,202	14	116.7	1,256
5	89.7	965	15	91.9	989
6	87.0	936	16	93.3	1,004
7	88.4	951	17	111.5	1,200
8	90.9	978	18	104.8	1,128
9	86.7	933	19	104.8	1,128
10	98.3	1,058			

Source: Fordham Research 2009 derived from analysis of BCIS cost data

**(iv) Other normal development costs**

- 5.13 In addition to the per sq ft/m build cost figures described above, allowance needs to be made for a range of infrastructure costs (roads, drainage and services within the site, parking, footpaths, landscaping and other external costs), off site costs for drainage and other services and so on. Many of these items will depend on individual site circumstances and can only properly be estimated following a detailed assessment of each site. This is not practical within the present study, and in any case would require at least a design or layout for every site.
- 5.14 Nevertheless it is possible to generalise. Drawing on experience it is possible to determine an allowance related to total build costs. This is normally lower for higher density than for lower density schemes since there is a smaller area of external works and services can be used more efficiently. Large greenfield sites would also be more likely to require substantial expenditure on bringing mains services to the site.
- 5.15 In the light of these considerations we have developed a scale of allowances, ranging from 13.5% of build costs for the greenfield site at Aveling Drive, down to 10% for the highest density scheme at The Comrades Club. The table below sets out the individual site assumptions.

Table 5.2 Development cost allowances		
<i>Ref</i>	<i>Site/location</i>	<i>% of build costs</i>
1	Ormskirk Hospital	11.5%
2	Former GS	11.0%
3	Redcliffe Convent	10.5%
4	Former TPT site	12.0%
5	Land at JJ Bullen	12.5%
6	Aveling Drive	13.5%
7	Silcocks Site	12.0%
8	22 Glebe Lane	12.0%
9	The Stiles	12.0%
10	College Farm	12.5%
11	Land at Moss Lane	12.0%
12	The Comrades Club	10.0%
13	Nursing Home	10.5%
14	Liverpool Road South	13.0%
15	Nixons Lane	12.0%
16	Hesketh Lane	12.0%
17	Tatlock Farm	12.0%
18	La Mancha Barns	12.0%
19	263-267 Mossy Lea Rd	12.5%

Source: Fordham Research 2009

**(v) Abnormal development costs**

- 5.16 In some cases where the site involves redevelopment of land which was previously developed there is the potential for abnormal costs to be incurred. Abnormal development costs might include demolition of substantial existing structures, piling or flood prevention measures at waterside locations, remediation of any land contamination, remodelling of land levels and so on.
- 5.17 Most of the sites are on previously developed land. On several sites, from the information made available to us and visits to the sites, it appears that exceptional or abnormal development costs would need to be taken into account in preparing appraisals. As pointed out in the previous chapter (paragraph 4.41) some abnormal costs could also arise in the event of the site's redevelopment with an alternative use.
- 5.18 The schedule below sets out the abnormal costs considered to apply in each case where they arise:

Table 5.3 Abnormal development costs					
Ref	Site	Item	Residential: cost		Industrial: cost
			Total £k	£k per acre	£k per acre
1	Ormskirk Hospital		0	0	n/a
2	Former GS		0	0	n/a
3	Redcliffe Convent		0	0	n/a
4	Former TPT site		0	0	n/a
5	Land at JJ Bullen		0	0	n/a
6	Aveling Drive		0	0	n/a
7	Silcocks Site		0	0	n/a
8	22 Glebe Lane		0	0	n/a
9	The Stiles	Site clearance	25	50	n/a
10	College Farm		0	0	n/a
11	Land at Moss Lane		0	0	n/a
12	The Comrades Club		0	0	n/a
13	Nursing Home		0	0	n/a
14	Liverpool Road South		0	0	n/a
15	Nixons Lane		0	0	n/a
16	Hesketh Lane		0	0	n/a
17	Tatlock Farm		0	0	n/a
18	La Mancha Barns		0	0	n/a
19	263-267 Mossy Lea Rd		0	0	n/a

Source: Fordham Research 2009

5.19 The table also shows the adjustment needed to ensure that an alternative land value reflects the costs incurred in developing an alternative use, where this is applicable. In fact in no case would abnormal costs arise.

**(vi) Fees**

5.20 We have assumed professional fees amount to 10% of build costs in each case.

**(vii) Contingency**

5.21 For previously undeveloped and otherwise straightforward sites we would normally allow a contingency of 2.5% with a higher figure of 5% on more risky types of development, previously developed land and central locations. The 5% figure was used on all the brownfield sites and the 2.5% rate on the six greenfield sites 6, 10, 14, 16, 17 and 18. site 19 is occupied by a single existing residential dwelling and so attracted a slightly higher contingency rate of 3.8%.

## Financial and other appraisal assumptions

### (i) VAT

- 5.22 For simplicity it has been assumed throughout, as with most financial appraisals, that either VAT does not arise, or its effect can be ignored.

### (ii) Interest rate

- 5.23 Our appraisals assume 7.5% pa for debits and credits. This may seem high given the very low base rate figure (MLR 0.5% September 09), but has to reflect banks' view of risk for housing developers in the present situation.
- 5.24 Credit arises in practice only for a short time at the end of the scheme.

### (iii) Developers profit

- 5.25 We normally assume that the developer requires a return of 20% on total costs (equivalent to 16.7% of income) to reflect the risk of undertaking the development. That assumes that the costs are estimates of costs, as they are indeed here intended to be, rather than contract prices which would include a profit element.
- 5.26 However, where a guaranteed sale applies, the developer's profit margin ought to be reduced in order to reflect the reduction in risk. The affordable units will be sold at an agreed price and programme. With a range of affordable provision being tested it was felt appropriate to reflect the resulting variations in risk with variations in the developer's profit. Consequently a sliding scale of profit margins was used, as shown below. This effectively applies a reduced rate (15%) to the affordable component.

<i>% affordable</i>	<i>Profit % on costs</i>
0%	20%
20%	19%
30%	18.5%
40%	18%
50%	17.5%

Source: Fordham Research 2009

- 5.27 It should be noted that residential developers commonly use a slightly more conservative profit margin of 15% on income, which equates to about 17.5% on costs. Bearing in mind the current financial climate, we see no justification for reducing the profit margins from the levels suggested.

**(iv) Void**

- 5.28 On a scheme comprising mainly individual houses one would normally assume only a nominal void period as the housing would not be progressed if there was no demand. In the case of apartments in blocks this flexibility is reduced. Whilst these may provide scope for early marketing, the ability to tailor construction pace to market demand is more limited.
- 5.29 For the purpose of the present study a three month void period is assumed for all sites.

**(v) Phasing and timetable**

- 5.30 The appraisals are assumed to have been prepared using prices and costs at a base date of September 2009 with an immediate start on-site.
- 5.31 A pre-construction period of at least six months is assumed for all of the sites.
- 5.32 The phasing programme for an individual site will reflect market take-up and would in practice be carefully estimated taking into account the site characteristics and, in particular, size and the expected level of market demand. We have developed a suite of modelled assumptions to reflect site size and development type, as set out in Table 5.5 below:

Table 5.5 Market pace assumptions			
Site		Dwellings	
		Total	Ceiling rate per qtr
1	Ormskirk Hospital	120	12
2	Former GS	72	11
3	Redcliffe Convent	81	11
4	Former TPT site	63	10
5	Land at JJ Bullen	29	6
6	Aveling Drive	20	5
7	Silcocks Site	28	5
8	22 Glebe Lane	19	5
9	The Stiles	37	6
10	College Farm	15	3
11	Land at Moss Lane	14	3
12	The Comrades Club	12	3
13	Nursing Home	12	3
14	Liverpool Road South	18	4
15	Nixons Lane	9	3
16	Hesketh Lane	8	3
17	Tatlock Farm	5	2
18	La Mancha Barns	3	2
19	263-267 Mossy Lea Rd	3	2

Source: Fordham Research 2009

### Site acquisition and disposal costs

#### (i) Site holding costs and receipts

- 5.33 Each site is assumed to proceed immediately and so, other than interest on the site cost during construction, there is no allowance for holding costs, or indeed income, arising from ownership of the site.

#### (ii) Acquisition costs

- 5.34 Acquisition costs include stamp duty at 4% on site values of £0.5 million and above (reduced below this level) together with an allowance of 1.5% for acquisition agents' and legal fees.

**(iii) Disposal costs**

- 5.35 For the market housing, sales and promotion and legal fees are assumed to amount to some 3.5% of receipts. For disposals of affordable housing these figures can be reduced significantly depending on the category. We have assumed total allowances of 0.5% for social rented housing and 1.5% for shared ownership.

**Alternative use value comparison**

- 5.36 In the previous chapter we identified alternative use values to be used as benchmarks in determining viability for each site. As we saw above, these values might need to be adjusted in some cases to allow for abnormal costs that would arise if the alternative use were implemented.
- 5.37 After considering each of the sites with abnormal costs we concluded that only site 9 would incur costs to realise the alternative use value. In every other case no abnormal cost would need to be incurred. The values set out in Chapter 4 will therefore apply unadjusted.



## 6. Results of viability analysis

### Introduction

- 6.1 This chapter considers the results of financial appraisals carried out for the identified sites.

### Financial appraisal approach and assumptions

- 6.2 On the basis of the assumptions set out in Chapter 5 we prepared financial appraisals for each of the identified sites using a bespoke spreadsheet-based financial analysis package.
- 6.3 The appraisals use the residual valuation approach – that is, they are designed to assess the value of the site after taking into account the costs of development, the likely income from sales and/or rents and an appropriate amount of developer's profit. The payment would represent the sum paid in a single upfront transaction. The resulting valuation is commonly expressed in £s per acre (or hectare). In order for the proposed development to be described as viable it is necessary for this value to exceed the value from a valid alternative use. We have already seen that, for a greenfield site where the only alternative use is likely to be agricultural, this figure may be very modest. However, most of the sites have been previously developed and therefore have a more substantial existing or competing alternative use value.
- 6.4 As outlined in Chapter 3, our appraisals considered three options for the amount and type of affordable housing provision plus a zero affordable option.

### Appraisal results

- 6.5 We produced financial appraisals based on the stated build, abnormal, and infrastructure costs and financial assumptions for the four options (three affordable options, plus all-market).
- 6.6 Detailed appraisal printouts for all the sites are provided as Appendix 5 of this report. To keep to a manageable sized document only one option, that of 35%, has been provided.
- 6.7 The resulting residual land values for the four options are set out in Table 6.1.

Table 6.1 Appraisal results for four affordable options					
Without grant:					
No	Site	Residual value £k per acre for affordable option:			
		No aff	25%	35%	45%
1	Ormskirk Hospital	360	63	-62	-188
2	Former GS	508	130	-26	-187
3	Redcliffe Convent	645	294	151	8
4	Former TPT site	-92	-364	-475	-587
5	Land at JJ Bullen	1,141	709	533	354
6	Aveling Drive	882	545	408	271
7	Silcocks Site	853	489	342	194
8	22 Glebe Lane	814	454	310	164
9	The Stiles	714	397	270	141
10	College Farm	365	66	-59	-186
11	Land at Moss Lane	684	325	185	35
12	The Comrades Club	-71	-588	-797	-1008
13	Nursing Home	156	-267	-440	-615
14	Liverpool Road South	343	-5	-152	-299
15	Nixons Lane	37	-183	-272	-362
16	Hesketh Lane	703	391	270	140
17	Tatlock Farm	227	-41	-151	-262
18	La Mancha Barns	837	473	327	173
19	263-267 Mossy Lea Rd	703	391	270	140

Source: Fordham Research 2009

- 6.8 Table 6.1 shows that with no requirement for affordable housing 17 sites deliver a positive land value. Four of these are in the range £150-£500k per acre (£370k-£1.25m per ha). The remainder are higher with values ranging up to £1.141m per acre (£2.8m per ha).
- 6.9 Allowing for additional development costs, our planning gain assumptions values on the remaining sites are broadly in line with, but mostly below, what the available information suggests for 'oven ready' land in West Lancashire. This confirms that our appraisal assumptions are, taken as a whole, unlikely to be unduly optimistic.
- 6.10 Table 6.1 confirms that, as increasing amounts of affordable housing are introduced, the land value reduces. In each case the impact is progressive, but at a broadly linear rate. At the maximum affordable contribution shown, 45%, only ten schemes still deliver a positive land value.
- 6.11 However, it is clear that land value falls away more quickly for some schemes than for others. It is the most densely developed sites – the land at JJ Bullen, the Nursing Home or Comrades Club Road – where affordable housing has the greatest negative impact upon land value.

- 6.12 This is because the land value is the primary source of any developer subsidy. With the high density schemes land value is a much lower proportion of the total value of the development and is therefore used up more quickly. To put it another way, broadly the same amount of land value is available to subsidise affordable units on a scheme of 120 flats on one hectare as on 35 houses occupying the same land. Clearly, that sum will 'buy' a higher percentage of the houses than of the flats. Similarly the affordable housing 'costs' more on the highest priced sites in terms of the receipts foregone.
- 6.13 In order to draw out the implications of these results for the Council's proposed affordable housing policy, as has already been suggested, it will be necessary to consider values from alternative uses for each. This step follows below.

### Alternative use benchmarks

- 6.14 The results from Table 6.1 would need to be compared with the alternative use values set out in Table 4.6 in order to form a view about the likely viability of the affordable options for each site.
- 6.15 However, it does not automatically follow that if the residual value produces a surplus over the alternative use value benchmark the site is viable. The surplus needs to be sufficiently large to provide an incentive to the landowner to release the site and any other appropriate cost required to bring the site forward for development. We therefore have to consider how large such a 'cushion' should be for our sites.
- 6.16 In practice the size of the element will vary from case to case depending on how many landowners are involved, each landowner's attitude and his degree of involvement in the current property market, the location of the site and so on. A 'cushion' equivalent to, say, £25k per acre might be perfectly sufficient in some cases, whilst in a particular case it might need to be four or five times that figure, or even more.
- 6.17 After consideration we took the view that a broad average figure of £40k per acre (£100k per ha) should be used to provide an incentive to the landowner for all of the sites in the study. This figure for the 'cushion' would represent a mark-up of 20% on the industrial benchmark land value.
- 6.18 The figures are set out below and combined with the net alternative use values from Table 4.6 to show the resulting benchmark thresholds for viability.
- 6.19 It must be emphasised that these figures are simply a view of what it is reasonable to assume as a minimum residual value for the purposes of assessing viability. The figures do not represent what a landowner or promoter might actually receive. This will quite often be rather more; at any given affordable target some sites will generate a higher value and it is not unreasonable to expect at least some of the surplus to benefit the landowner or promoter rather than passing to the developer.

Table 6.2 Viability cushion & threshold values				
Ref	Site	£ per acre		
		Alternative use value	Cushion	Viability threshold value
1	Ormskirk Hospital	£250k	£40k	£290k
2	Former GS	£175k	£40k	£215k
3	Redcliffe Convent	£175k	£40k	£215k
4	Former TPT site	£175k	£40k	£215k
5	Land at JJ Bullen	£175k	£40k	£215k
6	Aveling Drive	£75k	£40k	£115k
7	Silcocks Site	£175k	£40k	£215k
8	22 Glebe Lane	£175k	£40k	£215k
9	The Stiles	£162k	£40k	£202k
10	College Farm	£75k	£40k	£115k
11	Land at Moss Lane	£450k	£40k	£490k
12	The Comrades Club	£740k	£40k	£780k
13	Nursing Home	£975k	£40k	£1,015k
14	Liverpool Road South	£75k	£40k	£115k
15	Nixons Lane	£100k	£40k	£140k
16	Hesketh Lane	£75k	£40k	£115k
17	Tatlock Farm	£50k	£40k	£90k
18	La Mancha Barns	£75k	£40k	£115k
19	263-267 Mossy Lea Rd	£950k	£40k	£990k

Source: Affordable Housing Viability Study 2009

6.20 The viability outcomes resulting from applying these threshold values are shown in the table below.

Table 6.3 Appraisal outcomes: base appraisals, without grant						
No	Site	Alt use value	Value £k per acre			
			No affordable	25%	35%	45%
1	Ormskirk Hospital	250	360	63	-62	-188
		290	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
2	Former GS	175	508	130	-26	-187
		215	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
3	Redcliffe Convent	175	645	294	151	8
		215	VIABLE	VIABLE	NOT VIAB	NOT VIAB
4	Former TPT site	175	-92	-364	-475	-587
		215	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
5	Land at JJ Bullen	175	1,141	709	533	354
		215	VIABLE	VIABLE	VIABLE	VIABLE
6	Aveling Drive	75	882	545	408	271
		115	VIABLE	VIABLE	VIABLE	VIABLE
7	Silcocks Site	175	853	489	342	194
		215	VIABLE	VIABLE	VIABLE	MARGINAL
8	22 Glebe Lane	175	814	454	310	164
		215	VIABLE	VIABLE	VIABLE	NOT VIAB
9	The Stiles	162	714	397	270	141
		202	VIABLE	VIABLE	VIABLE	NOT VIAB
10	College Farm	75	365	66	-59	-186
		115	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
11	Land at Moss Lane	450	684	325	185	35
		490	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
12	The Comrades Club	740	-71	-588	-797	-1,008
		780	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
13	Nursing Home	975	156	-267	-440	-615
		1,015	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
14	Liverpool Road South	75	343	-5	-152	-299
		115	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
15	Nixons Lane	100	37	-183	-272	-362
		140	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
16	Hesketh Lane	75	703	391	270	140
		115	VIABLE	VIABLE	VIABLE	VIABLE
17	Tatlock Farm	50	227	-41	-151	-262
		90	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
18	La Mancha Barns	75	837	473	327	173
		115	VIABLE	VIABLE	VIABLE	VIABLE
19	263-267 Mossy Lea Rd	950	703	391	270	140
		990	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB

Source: Affordable Housing Viability Study 2009

- 6.21 With zero affordable housing 13 of the 19 sites are viable, and none are marginal. Residential development as 100% market housing is, of course, a relatively profitable development option and in stable market conditions the sites should not be proposed for development otherwise. However market conditions are not stable. House prices have fallen considerably since autumn 2007, and so there are several sites which could not proceed at present - even as 100% market housing. Even so it is difficult to see how several of the sites could be considered for development under almost any circumstances.
- 6.22 Turning to the various levels of affordable contribution; at 25% eight sites are still viable. At 35%, seven sites remain viable. At 45%, four sites remain viable whilst one becomes marginal. Appraisals for the four sites that are viable at 45% suggest that at 50% two (sites 5 and 6) remain viable whilst two (sites 16 and 18) become marginal.
- 6.23 These results are summarised in tabular form below:

<b>Table 6.4 Viability results summary – without grant</b>					
	<i>No of sites in category with affordable at:</i>				
	<i>No aff</i>	<i>25%</i>	<i>35%</i>	<i>45%</i>	<i>50%</i>
Viable	13	8	7	4	2
Marginal	0	0	0	1	2
Not viable	6	11	12	14	15
<b>Total</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>19</b>

Source: Affordable Housing Viability Study 2009

- 6.24 The receipt of grant from the HCA to assist the delivery of affordable housing is a reality of the market. We have therefore considered how this (at the rates of £12,000 per social rented bedspace and £6,000 per intermediate bedspace) would impact on viability of delivery. This is shown in the following table.

Table 6.5 Appraisal outcomes: base appraisals with grant						
No.	Site	Alt use value	Value £k per acre			
			No affordable	25%	35%	45%
1	Ormskirk Hospital	250	360	138	49	-45
		290	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
2	Former GS	175	508	221	107	-12
		215	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
3	Redcliffe Convent	175	645	373	264	152
		215	VIABLE	VIABLE	MARGINAL	NOT VIAB
4	Former TPT site	175	-91	-289	-370	-451
		215	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
5	Land at JJ Bullen	175	1,143	774	625	474
		215	VIABLE	VIABLE	VIABLE	VIABLE
6	Aveling Drive	75	884	605	491	377
		115	VIABLE	VIABLE	VIABLE	VIABLE
7	Silcocks Site	175	855	562	443	325
		215	VIABLE	VIABLE	VIABLE	VIABLE
8	22 Glebe Lane	175	814	523	408	290
		215	VIABLE	VIABLE	VIABLE	VIABLE
9	The Stiles	162	715	467	366	266
		202	VIABLE	VIABLE	VIABLE	VIABLE
10	College Farm	75	365	147	57	-34
		115	VIABLE	VIABLE	NOT VIAB	NOT VIAB
11	Land at Moss Lane	450	683	400	284	169
		490	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
12	The Comrades Club	740	-69	-440	-593	-744
		780	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
13	Nursing Home	975	156	-155	-280	-407
		1,015	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
14	Liverpool Road South	75	344	62	-55	-175
		115	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
15	Nixons Lane	100	37	-109	-167	-226
		140	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
16	Hesketh Lane	75	703	451	356	252
		115	VIABLE	VIABLE	VIABLE	VIABLE
17	Tatlock Farm	50	227	20	-65	-149
		90	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
18	La Mancha Barns	75	837	530	413	286
		115	VIABLE	VIABLE	VIABLE	VIABLE
19	263-267 Mossy Lea Rd	950	-27	-78	-123	-168
		990	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB

Source: Affordable Housing Viability Study 2009

6.25 With grant the situation is quite similar. With zero affordable housing 13 of the 19 sites are viable; at 25% nine remain viable (up one from eight), whilst at 35% seven sites are viable whilst one becomes marginal. At both 45% and 50%, seven sites remain viable.

6.26 These results are summarised in tabular form below:

Table 6.6 Viability results summary – with grant					
	No of sites in category with affordable at:				
	No aff	25%	35%	45%	50%
Viable	13	9	7	7	7
Marginal	0	0	1	0	0
Not viable	6	10	11	12	12
<b>Total</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>19</b>

Source: Affordable Housing Viability Study 2009

6.27 We will consider the implications of these results for future policy in Chapter 8. However, before we can do this we should consider how likely future movements in our appraisal assumptions might impact upon them.

### Sensitivity: price and cost levels

6.28 Whilst variations in any of the appraisal assumptions will affect the results, the key elements which most dramatically affect the outcome are the price and build cost assumptions. In the present market situation it is future movements in prices which are of greatest interest; what if prices continue to fall as they were doing until recently? What if they recover?

6.29 Over the last few months prices appear to have stabilised, and even to have risen slightly. However, there is no consensus that the decline in prices is over. The view is that a limited supply of properties onto the market, rather than an increase in demand, has been responsible for the modest upturn, and a number of commentators still expect a further period of price decline in 2010.

6.30 Given the continuing uncertainty we considered two scenarios in order to illustrate the impact of future price and cost changes. The first took a moderately pessimistic view assuming that prices would fall another 10% relative to costs, before a clear recovery begins.

6.31 As an alternative to this we assessed how viability might have looked around the market peak in autumn 2007, essentially reflecting newbuild market prices 15% higher than currently – a conservative view – and costs 5% lower. The results from this 'market peak' scenario are considered in the next section. The 'short-term fall' scenario results for the 35% affordable option are compared to the base appraisal results in Table 6.7 below:

Table 6.7 Sensitivity test: short term market fall scenario				
No	Site	Value £k per acre		
		Alt use value	Base option 35% aff	Prices down, costs up 35% aff
1	Ormskirk Hospital	250	-62	-212
		290	NOT VIAB	NOT VIAB
2	Former GS	175	-26	-219
		215	NOT VIAB	NOT VIAB
3	Redcliffe Convent	175	151	-8
		215	NOT VIAB	NOT VIAB
4	Former TPT site	175	-475	-611
		215	NOT VIAB	NOT VIAB
5	Land at JJ Bullen	175	533	359
		215	VIABLE	VIABLE
6	Aveling Drive	75	408	269
		115	VIABLE	VIABLE
7	Silcocks Site	175	342	186
		215	VIABLE	MARGINAL
8	22 Glebe Lane	175	310	159
		215	VIABLE	NOT VIAB
9	The Stiles	162	270	132
		202	VIABLE	NOT VIAB
10	College Farm	75	-59	-211
		115	NOT VIAB	NOT VIAB
11	Land at Moss Lane	450	185	26
		490	NOT VIAB	NOT VIAB
12	The Comrades Club	740	-797	-1,061
		780	NOT VIAB	NOT VIAB
13	Nursing Home	975	-440	-647
		1,015	NOT VIAB	NOT VIAB
14	Liverpool Road South	75	-152	-306
		115	NOT VIAB	NOT VIAB
15	Nixons Lane	100	-272	-395
		140	NOT VIAB	NOT VIAB
16	Hesketh Lane	75	270	136
		115	VIABLE	MARGINAL
17	Tatlock Farm	50	-151	-276
		90	NOT VIAB	NOT VIAB
18	La Mancha Barns	75	327	175
		115	VIABLE	VIABLE
19	263-267 Mossy Lea Rd	950	270	-273
			NOT VIAB	NOT VIAB

Source: Affordable Housing Viability Study 2009

- 6.32 It can be seen that with a further price fall/cost increase, only three sites are still viable, whilst two become marginal.

**Sensitivity: the market peak**

- 6.33 The above approach, varying the price level, can also be applied in order to assess retrospectively viability at the peak viability level of October/November 2007. In this case we believe that prices would have been at least 15% higher and costs 5% lower than those assumed in the base appraisals (effectively equivalent to a 20% increase in prices).
- 6.34 The approach was applied with target proportions of 25%, 35% and 45%, and the results are compared with the 35% 'base' option below.

Table 6.8 Sensitivity test: market peak						
No	Site	Alt use value	Value £k per acre			
			Base option 35% aff	Prices up, costs down		
				25% aff	35% aff	45% aff
1	Ormskirk Hospital	250	-62	138	49	-45
		290	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
2	Former GS	175	-26	221	107	-12
		215	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
3	Redcliffe Convent	175	151	373	264	152
		215	NOT VIAB	VIABLE	MARGINAL	NOT VIAB
4	Former TPT site	175	-475	-289	-370	-451
		215	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
5	Land at JJ Bullen	175	533	774	625	474
		215	VIABLE	VIABLE	VIABLE	VIABLE
6	Aveling Drive	75	408	605	491	377
		115	VIABLE	VIABLE	VIABLE	VIABLE
7	Silcocks Site	175	342	562	443	325
		215	VIABLE	VIABLE	VIABLE	VIABLE
8	22 Glebe Lane	175	310	523	408	290
		215	VIABLE	VIABLE	VIABLE	VIABLE
9	The Stiles	162	270	467	366	266
		202	VIABLE	VIABLE	VIABLE	VIABLE
10	College Farm	75	-59	147	57	-34
		115	NOT VIAB	VIABLE	NOT VIAB	NOT VIAB
11	Land at Moss Lane	450	185	400	284	169
		490	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
12	The Comrades Club	740	-797	-440	-593	-744
		780	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
13	Nursing Home	975	-440	-155	-280	-407
		1,015	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
14	Liverpool Road South	75	-152	62	-55	-175
		115	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
15	Nixons Lane	100	-272	-109	-167	-226
		140	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
16	Hesketh Lane	75	270	451	356	252
		115	VIABLE	VIABLE	VIABLE	VIABLE
17	Tatlock Farm	50	-151	20	-65	-149
		90	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
18	La Mancha Barns	75	327	530	413	286
		115	VIABLE	VIABLE	VIABLE	VIABLE
19	263-267 Mossy Lea Rd	950	270	-78	-123	-168
		75	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB

Source: Affordable Housing Viability Study 2009

- 6.35 The results confirm that at the market peak level of prices viability would be improved. However the improvement is not particularly dramatic; there are still a significant number of sites which are unviable at 35% affordable. This finding tends to support the view that some may be fundamentally unviable, and would be unlikely to proceed under any market conditions that could be envisaged in the foreseeable future.
- 6.36 On the other hand, four of the six sites which are viable at 35% remain viable at 45%, while two become marginal.

### **Sensitivity: tenure split**

- 6.37 The base appraisals were prepared using an 80% social rented to 20% intermediate housing tenure split for affordable housing. It is necessary to consider the impact of changing tenure split to the 65%/35% alternative split. This can be expected to improve viability since social rented dwellings secure a lower selling price than intermediate units (Table 3.2).
- 6.38 Table 6.9 shows the results calculated for the 35% and 45% options. The residual values (RV) are indeed higher with the alternative tenure split. However the scale of the improvement is quite modest. At 35%, typically RV increases by £8-10k per acre. At 45% the improvement is greater, around £10-15k per acre. The improvement changes site 3 whose viability changes from 'not viable' to 'marginal'. At 45% the improvement is greater, around £10-15k per acre. The improvement changes site 7 from 'marginal' to 'viable' and Sites 8 and 9 from 'not viable' to 'viable'.

Table 6.9 Sensitivity test: variant tenure split with grant						
No	Site	Alt use value	Value £k per acre			
			Base option = 80/20		Variant tenure split = 65/35	
			35% aff	45% aff	35% aff	45% aff
1	Ormskirk Hospital	250	-62	-188	58	-32
		290	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
2	Former GS	175	-26	-187	117	2
		215	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
3	Redcliffe Convent	175	151	8	271	171
		215	NOT VIAB	NOT VIAB	MARGINAL	NOT VIAB
4	Former TPT site	175	-475	-587	-360	-438
		215	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
5	Land at JJ Bullen	175	533	354	634	486
		215	VIABLE	VIABLE	VIABLE	VIABLE
6	Aveling Drive	75	408	271	498	388
		115	VIABLE	VIABLE	VIABLE	VIABLE
7	Silcocks Site	175	342	194	452	337
		215	VIABLE	MARGINAL	VIABLE	VIABLE
8	22 Glebe Lane	175	310	164	418	302
		215	VIABLE	NOT VIAB	VIABLE	VIABLE
9	The Stiles	162	270	141	375	278
		202	VIABLE	NOT VIAB	VIABLE	VIABLE
10	College Farm	75	-59	-186	68	-19
		115	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
11	Land at Moss Lane	450	185	35	294	182
		490	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
12	The Comrades Club	740	-797	-1,008	-580	-726
		780	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
13	Nursing Home	975	-440	-615	-270	-393
		1,015	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
14	Liverpool Road South	75	-152	-299	-46	-163
		115	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
15	Nixons Lane	100	-272	-362	-159	-215
		140	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
16	Hesketh Lane	75	270	140	361	263
		115	VIABLE	VIABLE	VIABLE	VIABLE
17	Tatlock Farm	50	-151	-262	-55	-138
		90	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
18	La Mancha Barns	75	327	173	421	297
		115	VIABLE	VIABLE	VIABLE	VIABLE
19	263-267 Mossy Lea Rd	950	270	140	-117	-159
		75	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB

Source: Affordable Housing Viability Study 2009

- 6.39 With the grant level and selling prices assumed, RV does not improve sufficiently to impact on the target at either 35% or 45%.

## 7. Threshold modelling: results

### Introduction

- 7.1 This chapter sets out how viability assessment of model sites were prepared to provide guidance on the threshold issue, and presents the results of the model appraisals.

### Modelling variations in scheme size

- 7.2 Sites 8 and 16 contain 19 and eight dwellings respectively. Model sites were created based on these two actual sites. In order to provide a full picture of how viability varied between five and 15 dwellings, we created a suite of model sites. It was felt that assumptions from the two actual sites could reasonably be carried over to the model sites with only a few exceptions.
- 7.3 Firstly, we recognised that as site size declines it may be increasingly difficult to achieve the same site utilisation efficiency. Therefore as site size varied we allowed the development density (sq ft floorspace per acre/sq m per ha) to vary, increasing above eight and nine dwellings though at a declining rate, and decreasing below eight and nine dwellings, at an increasing rate. Since the average floor area of the dwellings remained constant this was achieved by varying the site area (i.e. so that it did not vary pro rata with dwelling numbers).
- 7.4 Secondly, we built in loadings for the build cost in line with those explained at 6.10.
- 7.5 Thirdly, we considered whether the developer contribution assumption should vary. In fact the contributions threshold in West Lancashire appears the same as national guidance i.e. 15 dwellings. However, the Council is willing to set a lower threshold where viable and practicable. As such, the threshold modelling uses a minimum size of three dwellings.
- 7.6 Finally we considered whether values might improve to reflect a 'non-estate' type of location on the smallest sites. However, the predominant built form in West Lancashire made this less likely and no adjustments were made to values.
- 7.7 The variant floorspace densities and build costs are set out in the table below.

Table 7.1 Variant assumptions for model threshold sites					
Model sites from site 8 Glebe Lane			Model sites from site 16 Hesketh Lane		
No of dwgs	sq ft per acre	Build cost £ per sq ft	No of dwgs	sq ft per acre	Build cost £ per sq ft
15	14,650	90.9	15	12,488	87.0
14	14,630	91.8	14	12,703	87.9
13	14,607	92.7	13	12,683	88.8
12	14,580	93.7	12	12,660	89.7
11	14,550	94.6	11	12,633	90.6
10	14,517	95.5	10	12,603	91.5
9	14,478	96.4	9	12,570	92.4
8	14,435	97.5	8	12,531	93.3
7	14,255	98.7	7	12,488	94.7
6	14,175	100.0	6	12,438	96.5
5	14,075	101.8	5	12,378	98.4
4	14,175	103.7	4	12,308	100.2
3	14,075	105.5	3	12,228	102.0

Source: Fordham Research derived from analysis of BCIS cost data

### Viability results

- 7.8 Using the above assumptions, and deriving from the 'actual site' appraisals for sites 8 and 16, appraisals were prepared for the two suites of model sites. Those for site 8 Glebe Lane are of most interest in that, as shown in Table 7.2, viability is more likely to vary according to site size compared with the Hesketh Lane model site.

Table 7.2 Appraisal outcomes: with grant Glebe Lane						
No dwgs	Site	Value £k per acre				
		Alt use value	No affordable	25%	35%	45%
15	Glebe Lane	175	816	529	409	291
	model site	215	VIABLE	VIABLE	VIABLE	VIABLE
14	Glebe Lane	175	802	515	394	280
	model site	215	VIABLE	VIABLE	VIABLE	VIABLE
13	Glebe Lane	175	787	500	380	265
	model site	215	VIABLE	VIABLE	VIABLE	VIABLE
12	Glebe Lane	175	769	482	365	248
	model site	215	VIABLE	VIABLE	VIABLE	VIABLE
11	Glebe Lane	175	758	469	357	234
	model site	215	VIABLE	VIABLE	VIABLE	VIABLE
10	Glebe Lane	175	747	454	341	218
	model site	215	VIABLE	VIABLE	VIABLE	VIABLE
9	Glebe Lane	175	727	443	324	201
	model site	215	VIABLE	VIABLE	VIABLE	MARGINAL
8	Glebe Lane	175	706	422	304	183
	model site	215	VIABLE	VIABLE	VIABLE	MARGINAL
7	Glebe Lane	175	685	402	284	162
	model site	215	VIABLE	VIABLE	VIABLE	NOT VIAB
6	Glebe Lane	175	666	380	262	142
	model site	215	VIABLE	VIABLE	VIABLE	NOT VIAB
5	Glebe Lane	175	649	355	235	115
	model site	215	VIABLE	VIABLE	VIABLE	NOT VIAB
4	Glebe Lane	175	614	320	203	81
	model site	215	VIABLE	VIABLE	MARGINAL	NOT VIAB
3	Glebe Lane	175	577	289	170	49
	model site	215	VIABLE	VIABLE	NOT VIAB	NOT VIAB

Source: Affordable Housing Viability Study 2009

7.9 With 25% affordable housing the Glebe Lane based model site is viable at sizes three to 15 dwellings. At 35% the site is viable at between five and 15 dwellings, is marginal at four dwellings, but becomes unviable for three units. However, at 45% the model site is viable only at ten dwellings, marginal at nine or eight dwellings, and unviable at seven or fewer dwellings.

7.10 Whilst the land value outcomes for the 'actual' site at Hesketh Lane are broadly comparable with those for Glebe Lane, the lower AUV viability threshold at Hesketh Lane means the viability results hold up better as site size reduces. Now all the site sizes are viable at 25% and 35%. At 45% the site is viable from five dwellings upwards.

Table 7.3 Appraisal outcomes: with grant Hesketh Lane						
No dwgs	Site	Alt use value	Value £k per acre			
			No affordable	25%	35%	45%
15	Hesketh Lane	75	977	668	542	417
	model site	115	VIABLE	VIABLE	VIABLE	VIABLE
14	Hesketh Lane	75	942	639	516	393
	model site	115	VIABLE	VIABLE	VIABLE	VIABLE
13	Hesketh Lane	75	908	611	494	370
	model site	115	VIABLE	VIABLE	VIABLE	VIABLE
12	Hesketh Lane	75	872	581	467	346
	model site	115	VIABLE	VIABLE	VIABLE	VIABLE
11	Hesketh Lane	75	835	557	441	325
	model site	115	VIABLE	VIABLE	VIABLE	VIABLE
10	Hesketh Lane	75	793	525	412	306
	model site	115	VIABLE	VIABLE	VIABLE	VIABLE
9	Hesketh Lane	75	746	489	382	279
	model site	115	VIABLE	VIABLE	VIABLE	VIABLE
8	Hesketh Lane	75	703	451	356	252
	model site	115	VIABLE	VIABLE	VIABLE	VIABLE
7	Hesketh Lane	75	647	409	318	220
	model site	115	VIABLE	VIABLE	VIABLE	VIABLE
6	Hesketh Lane	75	579	365	275	182
	model site	115	VIABLE	VIABLE	VIABLE	VIABLE
5	Hesketh Lane	75	510	314	231	147
	model site	115	VIABLE	VIABLE	VIABLE	VIABLE
4	Hesketh Lane	75	438	257	184	111
	model site	115	VIABLE	VIABLE	VIABLE	MARGINAL
3	Hesketh Lane	75	349	199	138	77
	model site	115	VIABLE	VIABLE	VIABLE	NOT VIAB

Source: Affordable Housing Viability Study 2009

7.11 These results help to understand how viability might decline as the size threshold was reduced. The 'tipping point' will depend in each case on the target proportion of affordable housing in the policy. However it is clear that there is some scope for reducing the threshold from the national guidance level of 15 dwellings.

7.12 This issue is considered further in the next chapter.

## 8. Implications of results

### Our approach

- 8.1 The purpose of the Viability Study was to assess the impact of alternative affordable housing requirements upon development viability. In order to provide appropriate guidance, we have produced financial appraisals in respect of residential developments on a range of sites selected following discussion. Our approach has involved the use of the actual development proposals for the sites with recent planning permissions and 'model' developments for six sites for which applications have yet to be submitted. A bespoke financial appraisal package has been used to produce residual valuations for each site under a series of affordable housing options.
- 8.2 In order to prepare financial appraisals, whether for a general study like this or on behalf of a landowner or developer proposing a specific development, it is necessary to make a considerable number of assumptions. We believe that, in general, the assumptions we have made are fair and reasonable. They reflect considerable experience drawn from a variety of development situations and are designed to reflect the circumstances of each site which, even in a relatively compact area like West Lancashire, in practice display a certain amount of diversity. The appraisal results would produce open market land values which, compared to the limited information we have about recent values and prices currently sought for small sites in the area, are consistent and if anything somewhat lower. This suggests that the package of development assumptions is not unduly optimistic.
- 8.3 The relatively low land values emerging also reflect two other factors which we will need to take into account when reflecting on the appraisal results:
- The combined effect of a serious restriction on credit availability from the early autumn of 2007 and the consequential, more general, business downturn which became increasingly established from the last quarter of 2008
  - The impact of relatively challenging requirements in respect of sustainability
  - Level 3 of the Sustainability Code for both market and affordable homes, without any offsetting uplift in values
- 8.4 The financial appraisals produce a series of residual values showing the value generated for each site for all market housing, and further tested under a range of affordable housing scenarios. In an exercise of this nature, the figures have to be interpreted in order to draw conclusions for Plan policies. We have suggested a basis for interpretation which draws on indicative alternative use values, and sets a standard 'cushion' over alternative use value to provide an incentive for the landowner to bring the site forward. Again, as a strategic approach, we believe this to be reasonable. Producing detailed assessments and valuations for each site would involve resources well beyond the scope of the current exercise and we suspect would probably still leave room for disputation.

- 8.5 There are substantial variations in house prices between different parts of the study area. We feel those areas where prices are likely to be lowest are reasonably well represented. The sites covered the 'worst case' by fully including locations in which viability is (other things equal) likely to be worst. The range of sites includes both smaller and larger sites, straightforward and complex development situations and a range of previous uses for previously developed land.
- 8.6 The appraisals tested various proportions of affordable housing – combined with a proposed tenure split of 80:20 social rented: intermediate housing, with intermediate housing represented by shared ownership at 25% share. It was decided to assume that grant would normally be available on a substantial scale. In estimating the values which, under those terms, developers would be likely to achieve from affordable housing of the above types, we have used information on estimated purchase prices drawn from our experience elsewhere.
- 8.7 We have taken a strategic approach ensuring in particular that the sites were treated consistently. This is because the analysis is designed to test and demonstrate Borough-wide deliverability in line with the requirements in national guidance. This work is a strategic study designed to inform the development of Plan policy rather than, per se, as an exercise to predict as accurately as possible the actual financial outcomes of development on specific sites. The actual sites used in the study should be regarded as indicating more general patterns of development across the study area.

### **Basis for the affordable housing target**

- 8.8 The results from the appraisals indicate that at current market values and costs it would be possible to sustain a target of 35% affordable housing, assuming grant is not available, across the study area as a whole. There are, however, considerable variations between the urban and rural areas and Skelmersdale so we recommend that consideration is given to setting different targets in different areas.
- 8.9 With our base assumptions, under present market conditions the majority of the 19 sites could produce 100% market housing and remain viable. However, seven of those sites remain viable at 35% affordable. In our view, a 35% target is reasonable in the present (November 2009) market, whilst a 50% target would not be viable.

### **Affordable target suggestion**

- 8.10 The recent Housing Need and Demand Study concludes a need for about 35% of new housing to be affordable if the market is to be balanced over time. In the past the Borough may well have been able to negotiate more than 30% affordable housing, with grant, on privately developed sites. However, the fall in house prices, combined with the additional cost of sustainable development (Level 3), has made seeking a target higher than about 35% affordable, unrealistic given the current market circumstances.

- 8.11 Sensitivity tests show how responsive viability is to changes in present market conditions, i.e. price and cost levels. Were current price and cost levels as they were in autumn 2007, a higher target of at least 40% could have been proposed and defended (although we have to acknowledge that in practice some alternative use values might then have been rather higher).
- 8.12 The evidence suggests that Borough-wide a 35% target would be the highest that would be reasonable to put forward in present circumstances. Seven of the 13 sites which are viable with zero affordable housing, remain so at 35%. We would stress that it is difficult to justify any affordable housing target in Skelmersdale (without grant) at the moment and that the rural areas could sustain a higher target of 45%.
- 8.13 There is a long track record of affordable housing receiving subsidy in Skelmersdale so we do believe that it is appropriate to set a target in the town – the level and delivery of this target will depend very much on the availability of grant,
- 8.14 If, as is expected and some hopeful initial signs may indicate, the housing market recovers in due course, then it will in time become possible to achieve a target higher than 35%. Below we consider possible approaches to target setting in response to the likelihood of an eventual improvement in viability. Before moving on to this, however, we need to consider the size threshold issue.

### **The threshold for affordable housing**

- 8.15 Guidance requires some consideration to be given to the threshold at which the affordable housing is to be applied, if that is not at the 'national minimum' of 15 dwellings. The model appraisals set out in Chapter 7 show how viability deteriorates as site size declines.
- 8.16 There is however scope to reduce the targets in the rural areas. Whilst we recognise that developers may resist the provision of affordable housing on smaller sites we do believe that a target of 25% affordable housing can be justified on sites of four units and over (i.e. one in four) and 35 % on sites of six units and over (i.e. two in six).
- 8.17 The thresholds sites were not in Skelmersdale due to the difficulty of delivering any new housing there. We do not recommend a reduction to the thresholds in Skelmersdale.



## 9. Dynamic Viability results

9.1 This chapter takes the results of the viability analysis, the first stage, and provides a basis for policy by providing deliverable affordable housing targets through the plan period.

### What Dynamic Viability does

9.2 The Dynamic Viability model is designed to provide robust targets at all phases of the housing market during the plan period. This is taken to mean that the full range of possibilities must be set out to the Core Strategy Inquiry, so that its Inspector can consider and decide on the level of target setting for the whole plan period. The target cannot be left to supplementary guidance, and the alternative would be a costly re-opening of the Core Strategy inquiry at each change in the housing market.

9.3 The model begins with the viability assessment, based on the residual valuations carried out as part of the main viability study (covering a dozen or so sites characteristic of the area). In some cases the data may refer to notional sites, agreed to represent the viability situation of the local authority area.

9.4 The Dynamic Viability approach requires that a single benchmark site, or synthetic site, is identified that currently reflects the affordable target level that is deliverable in that area. This site should be consulted with stakeholders to ensure that so far as possible there is agreement that it is representative.

9.5 The model then takes the key factors affecting future viability and builds their future change into the model. Future change in target levels is purely dependent on published indexes. This means that the process of target setting through the plan period is entirely transparent. The model is set up prior to the Core Strategy Inquiry, is assessed and approved in whatever form during that Inquiry, and afterwards is entirely dependent on three published indexes:

- **Price change:** We use the Halifax Price Index but others are available
- **Building costs change:** The RICS building cost index based on tenders (BCIS) provides a general index of building costs
- **Alternative use value:** The appropriate measure would depend on the specific alternative use applying to the benchmark site but usually it is the Valuation Office Agency's Industrial Land index

9.6 Each of the indexes is taken as a range, to produce a reasonably limited number of tabulations. The set of indices is based on the assumption that price and cost are the key changes that affect the viability of a benchmark site, and that alternative use value must be checked in case it has risen above newbuild housing value and thus limits the target in itself.

**Details of the outputs**

- 9.7 The model generates the full plausible range of target variations based on the above three indexes. The following illustration is one of a set of eight (one for each of the values for the alternative use values). In the example below it is the ‘base’ alternative use value. The full set of Dynamic Viability tables is presented in Appendix 5.
- 9.8 As will be noticed, the table below focussed upon the 35% target discussed as being deliverable in the previous chapter: the zero/zero point when looking at the percentage version of the indexes.

**Figure 9.1 Coarse Matrix with base alternative use value**

		Price Change HPI								
		-20%	-10%	0%	10%	20%	30%	40%	50%	60%
	%	402	453	503	553	603	654	704	754	805
Cost Change BCIS Index	-20%	229	35%	45%	55%	55%	55%	55%	55%	55%
	-10%	257	15%	35%	45%	50%	55%	55%	55%	55%
	0%	286	0%	20%	35%	40%	50%	55%	55%	55%
	10%	314	0%	5%	20%	30%	40%	45%	50%	55%
	20%	343	0%	0%	10%	25%	30%	40%	45%	50%
	30%	372	0%	0%	0%	15%	25%	30%	40%	45%
	40%	400	0%	0%	0%	5%	15%	25%	30%	40%
	50%	429	0%	0%	0%	0%	10%	20%	25%	30%

Note that the figure shows proposed % target for each cost/price combination, with 0% change in alternative use value. The table also provides, inside the percentages, the actual values of the indexes, so that they can be read off in future.

Source: Fordham Research, West Lancashire Affordable Housing Viability Study 2009

- 9.9 In effect, once the Core Strategy Inquiry has approved whatever the starting target is, the rest follows automatically from the index changes. There is one further point, which is that since the array of possible index changes is extremely large, when viewed as possibilities over a decade or two, the work is done in two stages:

- *Coarse Matrix*: this is calculated in 10% intervals of the indexes (all three). The result provides broad coverage, but the change from one cell to another can produce large changes in targets: e.g. from 20% to 35%. But this stage provides wide coverage
- *Fine Matrix*: this takes the area around the chosen target and uses 4% intervals in the indexes (the intervals can be varied). This produces results for the area around the chosen target that yield much smaller target changes: mostly 5% intervals and sometimes 10%.

9.10 Figure 9.2 shows the *Fine Matrix* outputs that relate to the Figure 9.1 *Coarse Matrix*. Again the full set of tables will be found in Appendix 5. As will be seen from Figure 9.2, the intervals in the targets around the base case of 35% are smaller than in Figure 9.1. They permit more sensitive adjustments of the target as the index numbers change in future.

**Figure 9.2 Fine Matrix with base alternative use value**

		<i>Price Change HPI</i>								
%		-8%	-4%	0%	4%	8%	12%	16%	20%	24%
<i>Cost Change BCIS Index</i>		463	483	503	523	543	563	583	603	624
	-8%	263	35%	35%	40%	45%	45%	50%	55%	55%
	-4%	274	30%	35%	35%	40%	45%	45%	50%	55%
	0%	286	25%	30%	35%	35%	45%	45%	50%	50%
	4%	297	20%	25%	30%	35%	40%	40%	45%	45%
	8%	309	15%	20%	25%	30%	30%	35%	40%	45%
	12%	320	10%	15%	20%	25%	30%	30%	35%	40%
	16%	332	5%	10%	15%	20%	25%	30%	35%	40%
	20%	343	0%	5%	10%	15%	20%	25%	30%	35%

Source: Fordham Research, West Lancashire Affordable Housing Viability Study 2009

9.11 The trajectory shown in *Fine Matrix 1* (Figure 9.3 below) is from the initial deliverable target of 35%, through various changes in cost and price to a position of a 45% deliverable target in some years time. At that point the trajectory has reached the edge of *Fine Matrix 1*. It is relatively simple then to reset the index base to produce *Fine Matrix 2* which includes the 35% and allows for further movement to the right. If the trajectory were in any direction that took it outside *Fine Matrix 1*, then *Fine Matrix 2* could be adjusted to include it, and show the onward trajectory, whatever that might be.

9.12 In order to see how the *Fine Matrix* relates to the *Coarse*, it is easiest to examine the indexes as percentages: the outside rows and columns. It will be noticed that the *Fine Matrix* runs from about -8% to +20/24% of the initial value of the matrices. The *Coarse Matrix* runs from about -20% to +50/60% of the value of the indices. The *Fine Matrix* (in Figure 9.2) covers around a fifth of the total area of the *Coarse Matrix*.

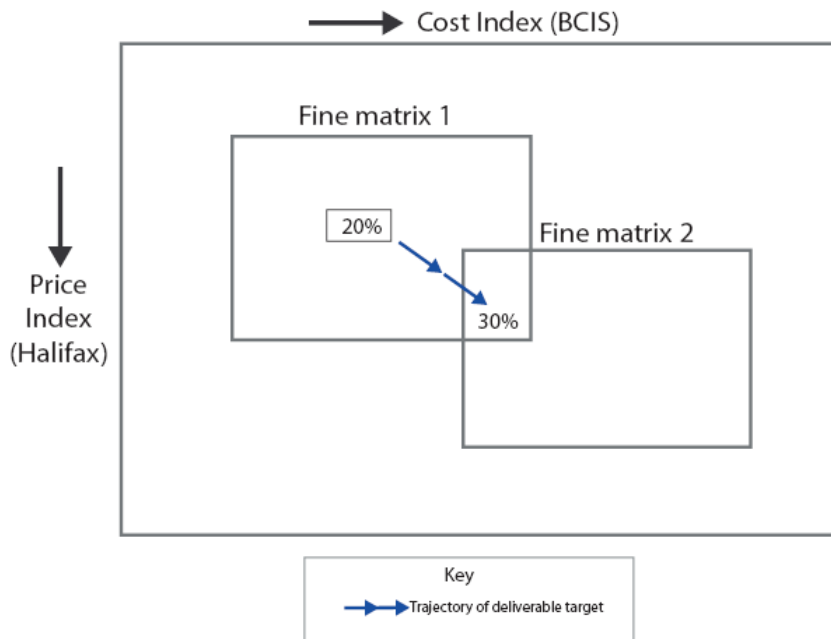
9.13 The practical point of the *Fine Matrix* can be seen in the much smaller intervals between the targets. In the *Coarse Matrix* outputs the intervals may be 10-15% between adjacent cells. But in the *Fine Matrix* the intervals are usually only 5%. Clearly the coverage and fineness of the *Fine Matrix* can be altered by varying the size of the steps, which is 4% of each index in the example. Hence the level of 'close-up' can be varied prior to the Core Strategy Inspector's decision.

9.14 It is important to emphasise that these *Fine Matrices* are like a 'close up' mechanism. The figures are all available from the initial *Coarse Matrix* and require no further policy or other judgements: they are automatically derived from the indexes. The only issue is the fineness of the intervals and the production of a manageable size of tabulation. The tabulation, of course, has to be accessible to a wide range of stakeholders and so must not be too daunting.

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**Figure 9.3 Coarse and Fine Matrices related**

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Source: Fordham Research 2009

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9.15 To provide further assistance in visualising how this system works, the following figure provides a mini-manual:

**Figure: 9.4 Updating procedure**

**Step 1**

The starting point is the alternative use value seen through the Coarse matrix. Does the current value of the alternative use index mean that another page rather than the base table should be used? If so this is the reference for the further steps.

**Step 2**

Using the appropriate alternative use value table from the Coarse matrix set, examine the HPI and BCIS to locate the approximate target. Now move to the equivalent table of the Fine matrix and identify the exact target which the two indexes imply.

**Step 3**

In looking at changes in the indexes it is important to 'average down'. If the movements of price and cost reach say 3.2% of the 5% gap to the next upward point in the matrix, the index would be raised. If the change is below 2.5% no change would arise.

**Step 4**

The target level indicated by this sequence of steps is then installed in the Annual Monitoring Report and is the target for the next year. Any related targets (e.g. for sites below 15 dwellings, or for greenfield sites) should be adjusted by the same arithmetic amount as the main target, up or down.

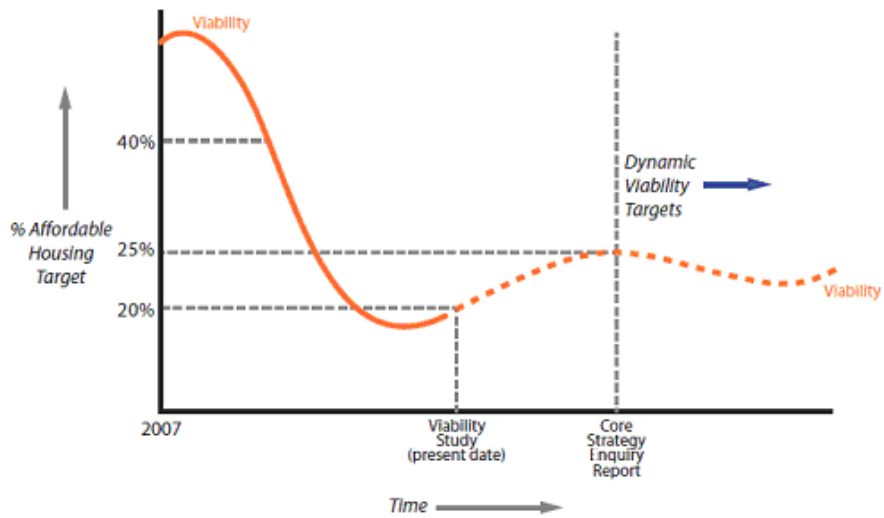
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Source: Fordham Research 2009

**Implementing Dynamic Viability**

- 9.16 The Viability study which is the input into Dynamic Viability is likely to be done as part of the preparation of the Core Strategy Affordable Housing Policy. There will then be a delay of months or years until the actual Inquiry. During that period there may well be changes in the market. Thus it is likely to be necessary to redo the base viability analysis at the time of the Core Strategy Inquiry to ensure that the Dynamic Viability process starts from the period of the Inquiry.
- 9.17 Since the automatic target varying procedure cannot begin until approved by the Inspector's Report, it is desirable to have it as up to date as possible. Figure 9.5 indicates this process schematically.

Figure 9.5 Implementing Dynamic Viability



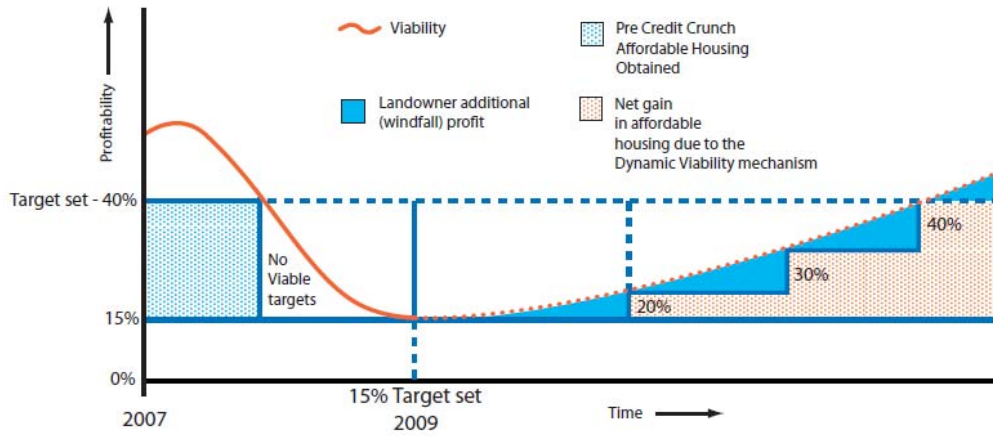
Source: Fordham Research 2009

- 9.18 The diagram illustrates the possible change in viability between study and Core Strategy Inquiry. After that, of course, the Dynamic Viability matrix will take account of future variations in viability. As the diagram suggests, these could be downward as well as upward. The future course of the market is uncertain.

### Conclusion

- 9.19 The main point is that the Dynamic Viability matrices will ensure that all future changes in the housing market are tracked by deliverable affordable housing targets.

**Figure 9.6 Gain of Affordable Housing from Dynamic Viability**



Source: Fordham Research, Affordable Housing Viability Study 2009

- 9.20 This figure also shows that the landowners/developers will gain from any uplift in the market (again, the 40% pre-credit crunch target shown is general and not specific to West Lancashire). The basic viability assessment assures the landowner and the developer of a reasonable return. When the market goes up, the private sector will gain a windfall profit (shown by the blue areas under the viability curve) and the public interest will gain affordable housing as the targets are periodically altered.
- 9.21 The Dynamic Viability procedure ensures that the maximum of deliverable affordable housing is achieved.