



Rutland County Council

Final Report August 2010



Executive summary

Introduction

- S1 Fordham Research was commissioned by Rutland County Council to carry out a study of affordable housing viability in the County. The Viability Study is intended to inform ongoing work on the preparation of the Local Development Framework (LDF).
- S2 Government Guidance in Planning Policy Statement 3: Housing (PPS3, 2006, para 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'*.

Summary findings

- S3 We have taken a strategic approach based on a consistent analysis of a representative sample of development sites. The analysis is designed to test and demonstrate County-wide deliverability in line with the requirements in national guidance.
- S4 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, in the housing market of early 2010. This conclusion depends not only upon current assumptions regarding the housing market, but also many policy issues that have cost implications.

The approach to valuation

- S5 The study involved preparing financial appraisals for a representative range of sites. These appraisals assessed the capacity of such sites throughout Rutland to support different levels of affordable housing. The approach was to 'model' viability using a range of variables and our bespoke spreadsheet software.
- S6 It was decided that for Rutland the required guidance on viability would best be achieved by looking at a range of site sizes and at sites that were notional but based largely on specific individual sites. In discussion with the Council, it was decided that a total of 18 representative sites should be examined, and this number would provide scope for exploring viability on sites below the current national guidance size threshold of 15 dwellings.



- S7 The key features were:
 - A final list of 18 sites was established in discussion with the Council. It was chosen to give a range of typical development situations, an appropriate balance between previous uses, a range of site sizes and to give coverage between Oakham, Uppingham and the rural parts of the County
 - ii) The sites ranged in size from one to 250 dwellings. They included seven greenfield sites, and eight on previously developed land; the remaining three were mixed or garden land
 - iii) The sites were at various stages in the development process.
- S8 The sites total 728 dwellings on an area of 17.5 ha, at an average density of 41.5 dwellings per ha net. There is a good range of site size, including seven sites under the national threshold guidance size of 15 dwellings. All of the sites are wholly residential. The largest site modelled a single, residential only phase of a larger mixed use urban extension.
- S9 A typical development in the Council area might generate 15,500 sq ft per acre (3,550 sq m/ha). This standard 'development density' varied upwards for sites in more 'urban' situations, and downwards for the more rural situations, so as to provide the most plausible development scenario on each site, ensuring that they were representative of development opportunities in the area.
- S10 A wide range of data was collected about housing in Rutland: this included prices (second-hand, and newbuild, availability of which is at the moment quite limited), rents and information about affordable housing costs. The map below illustrates house price variations across the Council area:





Figure S1 Postcode price indices



Base assumptions for viability assessment

- S11 In order to provide reliable evidence on deliverability, the sites were to be examined under a range of assumptions about the key factors affecting viability. The following are the base assumptions, which we then altered to examine further scenarios.
 - i) Affordable housing target levels of 0%, 20%, 30%, and 40%
 - ii) Affordable housing split: 80% social rented and 20% intermediate
 - iii) Land values for alternative uses for the sites: clearly the site viability cannot plausibly fall below the level of alternative use, and so this must be established
 - iv) Assuming that Social Housing Grant (SHG) would be available at rates equivalent to £13k-£15k per bedspace for social rented units and £8k-£9.5k per bedspace for intermediate housing



- v) The calculations consider levels of developer contributions ('planning gain') broadly consistent with emerging County policy
- vi) Level 3 of the Code for Sustainable Homes was assumed, and also the Regional Spatial Strategy (RSS) requirement for 10% renewable energy
- vii) Abnormal costs were assessed and the figures taken into account where information collected for the sites indicated they were likely
- S12 These Base assumptions were then altered to illustrate the effects on target viability as discussed below.
- S13 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. If the excess above alternative use value (the 'cushion') is sufficiently large the development is judged viable; if not, then it is marginal.
- S14 For the purpose of a strategic study like the present one it is necessary to take a less detailed approach to determining the alternative use value than would be appropriate in a study dedicated to analysing the viability of a single development site. We made a detailed set of assumptions about the alternative use of the types of site found in Rutland, but of course they are bound to be approximations of the detailed facts.
- S15 A final issue is the level of 'mark up' which should be applied to the alternative use values. This is the profit for the existing landowner. Nobody can forecast exactly what a given owner will require before being prepared to sell. It can only be an estimate based on experience. We refer to this mark-up as the 'cushion'. The level of the 'cushion' was set at £60,000 per acre around 20% of the industrial/warehousing benchmark value.

Appraisal outcomes

S16 Applying this approach, the results for the 18 sites are shown in the table below:



	Table S1	Apprais	al outcomes: b	ase appraisals	s, with grant	
				Value £k per a	acre	
No	Site	Alt use value	No Affordable	20%	30%	40%
Α	Oakham Urb Extn	75	261	183	143	103
		135	VIABLE	VIABLE	VIABLE	MARGINAL
В	Uppingham large GF	10	432	326	275	221
		70	VIABLE	VIABLE	VIABLE	VIABLE
С	Oakham large BF	257	845	330	58	-220
		317	VIABLE	VIABLE	NOT VIAB	NOT VIAB
D	Oakham medium BF	274	194	127	91	55
		334	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
E	Oak'm med GF/PDL	143	293	227	184	146
		203	VIABLE	VIABLE	MARGINAL	MARGINAL
F	Rural small BF	222	583	461	400	337
		282	VIABLE	VIABLE	VIABLE	VIABLE
G	Oakham med GF	100	382	279	230	178
		160	VIABLE	VIABLE	VIABLE	VIABLE
н	Uppingham med GF	100	550	420	350	281
		160	VIABLE	VIABLE	VIABLE	VIABLE
I	Rural medium GF	10	586	473	416	357
		70	VIABLE	VIABLE	VIABLE	VIABLE
J	Rural medium BF	100	382	279	227	174
		160	VIABLE	VIABLE	VIABLE	VIABLE
к	Uppingham med GF	10	469	371	318	265
		70	VIABLE	VIABLE	VIABLE	VIABLE
L	Oakham small BF	300	-51	-178	-243	-310
		360	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
М	Uppingham small BF	300	545	302	181	55
		360	VIABLE	MARGINAL	NOT VIAB	NOT VIAB
N	Rural small GF	50	996	805	710	613
		110	VIABLE	VIABLE	VIABLE	VIABLE
0	Oakham small Conv	1,250	620	119	-135	-391
		1,310	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
Р	Uppingham small BF	300	314	153	70	-13
		360	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB
Q	Rural small conv	540	655	530	466	410
		600	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB
R	Rural small NB	100	326	237	192	146
		160	VIABLE	VIABLE	VIABLE	MARGINAL

- S17 The results can be summarised as follows:
 - At 100% market housing, 14 sites were fully viable one was marginal and three unviable. At 20% affordable housing 12 of the 14 were still viable.
 - ii) At 30% ten were viable, with one marginal. At 40% eight were viable, with three marginal.
- S18 Based on these findings we consider that a target of 35% would be deliverable in present (early 2010) market circumstances. We examined the sensitivity of the results both for higher and lower market conditions. For instance, at the 2007 market peak, and assuming the availability of public grant, a 50% target would have been deliverable.
- S19 We also considered how the target might vary according to four broad types of site within Rutland, and the results are as follows:

Table S2 Suggested targets for base appraisal assumptions							
	Target %	Difference from County-wide %					
County-wide target	35%	n/app					
Urban extension	32.5%	-2.5%					
Other urban greenfield	45%	+10%					
Urban brownfield	0%	-35%					
Rural	45%	+10%					

S20 As can be seen, the more rural parts of the County can support much higher targets, whereas urban sites cannot support a target at all.

Size thresholds

- S21 The national minimum threshold for site sizes to which affordable targets apply is 15 dwellings (PPS3), but provision is made for lower thresholds where appropriate. We have not examined how many of these sites there are in Rutland, but simply whether lower site sizes could be viable.
- S22 Six of the sites in the study were in fact below the national threshold of 15 dwellings. These included some relatively difficult schemes, and as a result provided rather a mixed picture. Only four were viable with no affordable housing, whilst one of these remained viable at 40% with another marginal. Anticipating this outcome to some extent we developed a suite of model sites from one of the sub threshold sites to show, in a more structured way, how viability would vary as site size declined from ten dwellings down to one dwelling.



S23 This analysis suggested that there is indeed scope for reducing thresholds. The sites remained viable up to 40% affordable right down to one dwelling, where 30% was viable but 40% marginal. This evidence, based on a rural site on garden land, would support an appropriately framed policy. We would suggest that the full rural target of 45% applies to sites of three plus dwellings, and a reduced target of 35% (in the form of cash in lieu) on sites of one to two dwellings.

Targets with zero grant

S24 A first step was to remove the assumption of grant. There is no certainty as to public grant levels over the plan period, especially in the current public funding climate. If there is no grant the target position (including sub-targets for the four types of sites shown above) is approximately halved:

Table S3 Suggested targets for base assumptions/no grant							
	Target %	Difference from County-wide %					
County-wide target	17.5%	n/app					
Urban extension	15%	-2.5%					
Other urban greenfield	27.5%	+10%					
Urban brownfield	0%	-17.5%					
Rural	25%	+7.5%					

Source: Affordable Housing Viability Study 2010

S25 This is clearly a serious issue in considering the future affordable targets for the County.

Targets under more widely varied assumptions

- S26 For this analysis, and the Dynamic Viability one which follows, we focussed upon a Rutland site that was considered to be representative of future housing development in the County: a Benchmark Site. After consideration of the range of possible sites, Site E (Oakham medium GF/PDL) was chosen. It involves a combination of greenfield and previously developed land, and was built to a medium high design quality, in an urban location (i.e. Oakham), but also partly impacting on an existing rural type settlement.
- S27 A wide range of assumptions can be varied. Two main groups of key assumptions were used to produce the above tabulation:
 - *Market Assumptions*: market prices and costs as they stood at January 2010
 - **Policy Assumptions**: assumed levels of grant support, and developer contributions; and Level 3 of the Code for Sustainable Homes.

S28 The first group, the market assumptions, is dealt with by the procedure for future variation of the chosen target as market conditions vary; Dynamic Viability is discussed further below. The second set is considered through the process discussed here. The following are the key policy assumption variations considered:

Table S4 Assumption options						
Heading	Assumption					
Grant	Base grant level (£13k-15k per bedspace for social rented, £8k-9k intermediate)					
	Zero grant					
Code for	Base (Level 3)					
Sustainable Homes	Level 4					
	Base (£12k per dwelling)					
Developer	£6k per dwelling					
contributions	CIL £12k per market dwg					
	CIL £6k per market dwg					

Source: Affordable Housing Viability Study 2010

- S29 We then analysed the benchmark site accordingly. In the first place it was clear that the residual values created by the various appraisals behave in an orderly way which allows us to interpolate with relative accuracy the affordable target 'tipping points' the exact proportion at which the benchmark site is just viable.
- S30 In the table below we set out the interpolated viable target proportion for each of the scenarios.



Table S5 Scenario target %s						
Grant	CSH	Developer contribution	Target			
With grant	Level 3	Contribution £12k per dwg	35.0%			
		Contribution £6k per dwg	51.0%			
		CIL £12k per market dwg	52.0%			
		CIL £6k per market dwg	60.0%			
With grant	Level 4	Contribution £12k per dwg	23.0%			
		Contribution £6k per dwg	40.0%			
		CIL £12k per market dwg	35.0%			
		CIL £6k per market dwg	48.0%			
Zero grant	Level 3	Contribution £12k per dwg	16.0%			
		Contribution £6k per dwg	23.5%			
		CIL £12k per market dwg	19.0%			
		CIL £6k per market dwg	25.5%			
Zero grant	Level 4	Contribution £12k per dwg	10.5%			
		Contribution £6k per dwg	18.5%			
		CIL £12k per market dwg	12.5%			
		CIL £6k per market dwg	20.0%			

- S31 The Table shows that even in current market conditions a very wide range of County-wide targets is possible with the different combinations of key market and policy assumptions. The lowest target is 10.5% and the highest 60%.
- S32 The final step in considering the variation of targets as policy assumptions vary is to generalise the above results to the four types of site discussed above. The results are as follows.



Table S6 Scenario target %s									
	(Category	Affordable housing target						
			County- wide	Urban extension	Urban greenfield	Urban brownfield	Rural		
Grant	CSH	Developer contribution		Differe	ntial to Count	y target			
			Grant	-2.5%	+10%	-35%	+10%		
		Contribution £12k per dwg	35.0%	32.5%	45.0%	0.0%	45.0%		
With grapt		Contribution £6k per dwg	51.0%	48.5%	61.0%	16.0%	61.0%		
with grant	Level 3	CIL £12k per market dwg	52.0%	49.5%	62.0%	17.0%	62.0%		
		CIL £6k per market dwg	60.0%	57.5%	70.0%	25.0%	70.0%		
		Contribution £12k per dwg	23.0%	20.5%	33.0%	0.0%	33.0%		
With grapt	Loval 4	Contribution £6k per dwg	40.0%	37.5%	50.0%	5.0%	50.0%		
with grant	Level 4	CIL £12k per market dwg	35.0%	32.5%	45.0%	0.0%	45.0%		
		CIL £6k per market dwg	48.0%	45.5%	58.0%	13.0%	58.0%		
				Differe	ntial to Count	y target			
			No grant	-2.5%	+10%	-17.5%	+7.5%		
		Contribution £12k per dwg	16.0%	13.5%	26.0%	0.0%	26.0%		
Zoro grant		Contribution £6k per dwg	23.5%	21.0%	33.5%	6.0%	33.5%		
Zero grant	Level 5	CIL £12k per market dwg	19.0%	16.5%	29.0%	1.5%	29.0%		
		CIL £6k per market dwg	25.5%	23.0%	35.5%	8.0%	35.5%		
		Contribution £12k per dwg	10.5%	8.0%	20.5%	0.0%	20.5%		
Zoro grant		Contribution £6k per dwg	18.5%	16.0%	28.5%	1.0%	28.5%		
Zero grafit		CIL £12k per market dwg	12.5%	10.0%	22.5%	0.0%	22.5%		
		CIL £6k per market dwg	25.5%	17.5%	30.0%	2.5%	30.0%		

S33 Depending on which set of assumptions is chosen, four sub-targets for affordable housing in the different types of area can be set consistent with the Plan-wide target.



Commuted Sums

- S34 This refers to the Council seeking, or being offered money instead of the provision of affordable housing units onsite. Cash in lieu, as it is often called, has been frowned upon in successive Government Guidance on affordable housing. This is partly because cash in lieu is generally much less than the value of an affordable unit onsite, and also because housing mix issues generally mean that onsite provision gives a more balanced mix of tenures.
- S35 However, there are generally situations where onsite provision is not possible. On small rural sites it is not technically possible to provide a whole affordable unit when applying our recommended 35% target to a site of one or two dwellings: a commuted sum is the only feasible option.
- S36 The approach we have taken is based on calculating the value lost by the developer if an affordable dwelling replaces a market dwelling on the site concerned. We have used the Benchmark Site for this purpose. We have calculated these figures and proposed a set of commuted sums. These vary according to the level of the various other costs subtracted from the market value, for instance by the Code for Sustainable Homes level chosen. All the figures are updateable.

Dynamic Viability analysis

- S37 This is designed to overcome a dilemma created by the economic downturn. During the history of affordable housing targets since their creation in 1991 there had been a broadly rising market. This meant that targets could rise also, and reach their current level of quite commonly around 40 to 50%. The upper limit for any target in Rutland is given by the SHMA: 40%. This is the upper limit for the range of variation under Dynamic Viability.
- S38 The downturn following the Credit Crunch meant that targets had to be lowered. It was always a condition of such targets that they should not render the market housing developments to which they applied unviable.
- S39 There has been no practical suggestion for the way in which affordable housing targets should be treated given their fall in the recession. Many alternative scenarios for future price/cost movements can be generated, but that does not point to a single target. PPS3 is quite clear that there should be a Plan-wide target. Targets cannot be substantially changed through supplementary guidance after the Core Strategy Examination. If a high ('normal market') target were set it would be correctly attacked as undeliverable, and thus contradict the Blyth Valley Court of Appeal decision which requires that targets should be deliverable.



- S40 Fordham Research has therefore devised a system which permits deliverable targets to be set, regardless of future fluctuations in the market, using sets of price and cost indices. It means that the Core Strategy Examination can be presented with the full range of possible target outcomes, and once approved (in whatever form) no new policy change is required to alter the target. It is changed only by the movement of published indexes. The intervals at which it is changed must be infrequent enough to permit an orderly land market, thus perhaps annually.
- S41 In order to generate the data below it is necessary to agree a Benchmark Site. This is necessary to permit a reasonably simple outcome. In the case of Rutland we suggest Site E (Oakham medium Greenfield/Previously Developed Land). It is judged to be typical of the County, and will remain so for the Plan period. This is immaterial of whether the site itself is built. Sites of this character will remain typical: this is the assumption.
- S42 The mechanism for producing the target ranges is quite complex. It builds on the viability analysis set out in the summary above. It then examines the full range of possible cost and price changes and generates a matrix of possible affordable targets. An example of the approach, which reflects a 30% target, is explained below (we have not yet produced tables based on Rutland's proposed 35% target and benchmark site).

S43	The 35% cell (in grey) in Figure S2 is the recommended deliverable target for Rutland as a whole. The
	indexes of cost and price shown in the margins of the table allow future changes in the published
	indexes to be translated into target changes.

	Figure S2 Coarse Matrix with base Alternative Use Value											
	Price Change HPI											
	%		-20%	-10%	0%	10%	20%	30%	40%	50%	60%	
Cost Change BCIS Index			416.3	468.4	520.4	572.4	624.5	676.5	728.6	780.6	832.6	
	-20%	230.5	55%	55%	55%	55%	55%	55%	55%	55%	55%	
	-10%	259.3	0%	40%	55%	55%	55%	55%	55%	55%	55%	
	0%	288.1	0%	0%	35%	50%	55%	55%	55%	55%	55%	
	10%	316.9	0%	0%	10%	30%	45%	55%	55%	55%	55%	
	20%	345.7	0%	0%	0%	10%	30%	40%	50%	55%	55%	
	30%	374.5	0%	0%	0%	0%	15%	30%	40%	45%	50%	
	40%	403.3	0%	0%	0%	0%	0%	15%	25%	35%	45%	
	50%	432.2	0%	0%	0%	0%	0%	5%	15%	25%	35%	

S44 The Coarse Matrix shows 10% intervals in the indexes. This is useful because it allows a wide range of variation in the indexes to be shown at a convenient scale: a wider range of variation than is expected over the whole Plan period.



S45 But the target changes in the Coarse Matrix are as a result quite large: 10-15%. This seems too big a jump for what may be an annual change in the target. Hence we have produced a Fine Matrix shown below. This is based on 4% changes in the indexes rather than 10%.

	Figure S3 Fine Matrix with base alternative use value											
	Price Change HPI											
	%		-8%	-4%	0%	4%	8%	12%	16%	20%	24%	
Cost Change BCIS Index			478.8	499.6	520.4	541.2	562.0	582.8	603.7	624.5	645.3	
	-8%	265.1	35%	45%	55%	55%	55%	55%	55%	55%	55%	
	-4%	276.6	25%	35%	45%	50%	55%	55%	55%	55%	55%	
	0%	288.1	10%	25%	35%	40%	45%	50%	55%	55%	55%	
	4%	299.6	0%	10%	25%	30%	40%	45%	50%	55%	55%	
	8%	311.1	0%	0%	15%	25%	30%	35%	40%	45%	50%	
	12%	322.7	0%	0%	0%	15%	25%	30%	35%	40%	45%	
	16%	334.2	0%	0%	0%	5%	15%	25%	30%	35%	40%	
	20%	345.7	0%	0%	0%	0%	5%	15%	25%	30%	35%	

Source: Fordham Research 2010: Affordable Housing Viability Study 2010

- 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.
- S47 The full detail of this approach is set out in Chapter 9. It includes a 'fine matrix' which is in effect a close up of the one shown above, in order to allow more sensitive variations in the target. 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 S4 Gain of Affordable Housing from Dynamic Viability



- S48 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 Rutland). 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.
- S49 The Dynamic Viability procedure ensures that the maximum of deliverable affordable housing is achieved.

