



North Tyneside Council

North Tyneside Council



Affordable Housing Viability Assessment March 2010



Executive summary

Introduction

- S1 Fordham Research was commissioned by North Tyneside MBC to carry out a study of affordable housing viability in the Borough. The viability study is intended to inform ongoing work on the preparation of Local Development Frameworks (LDF).
- S2 Government Guidance in 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*'.
- S3 The HCA has issued the first official guidance to reflect the downturn (Good Practice Note on Investment and Planning Obligations: responding to the downturn). This says that affordable housing targets should not be set for the plan period based on the present poor market conditions.
- S4 As a result Fordham Research's Dynamic Viability approach is proposed, as that is designed to take account of a range of possible future housing market outcomes through the use of a matrix approach. Such an approach is already used in the London Plan for density issues.

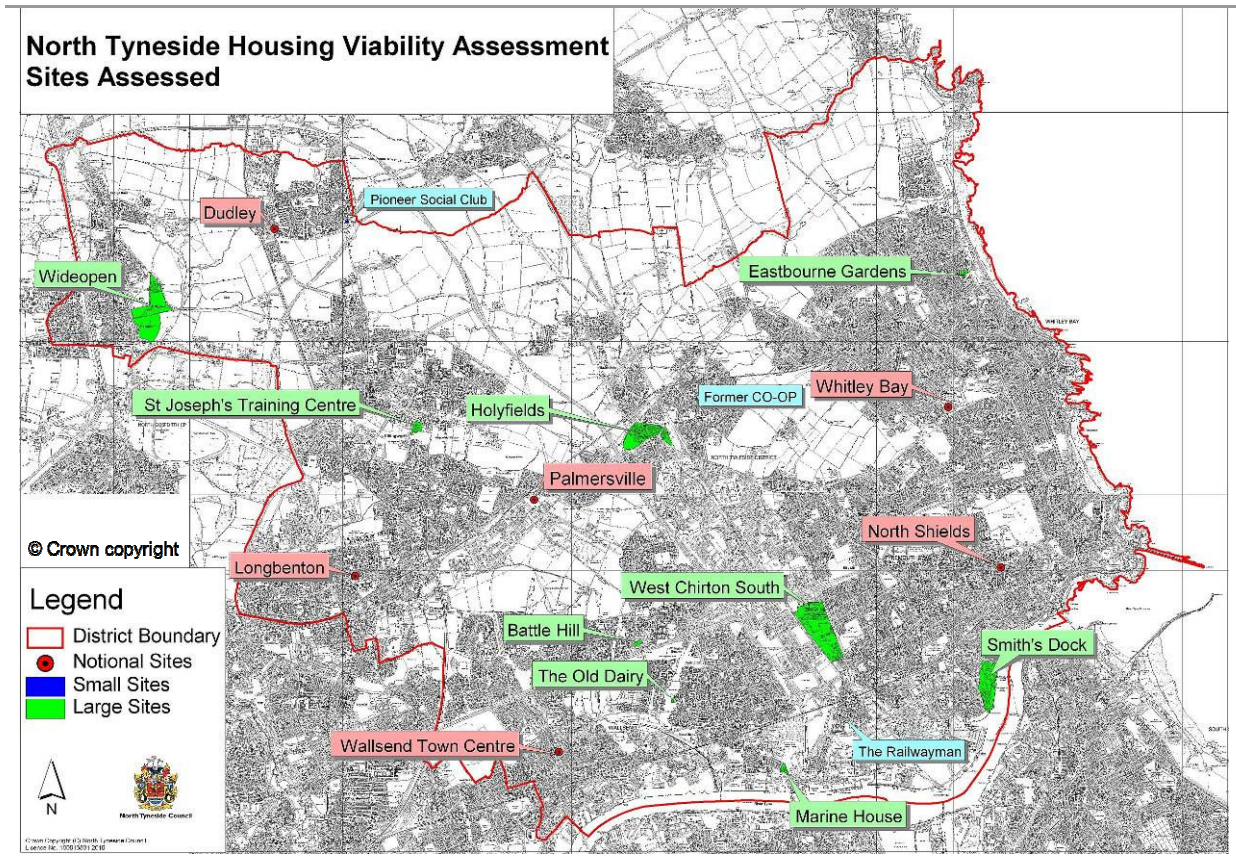
The approach to valuation

- S5 The study involved preparing financial appraisals for a representative range of sites to give a picture of the ability of such sites North Tyneside wide, to afford given targets for affordable housing. The approach was to '*model*' viability using a range of variables and our bespoke spreadsheet software.
- S6 The sites 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 four main market sub-areas of North Shields, Wallsend, Whitley Bay, and North West Tyneside.
- S7 The key features were:
- i) A set of 12 actual sites was selected after discussion with the Council, from a longer list of possible sites. All were considered to be representative when taken together. These were supplemented by the selection of six 'notional' sites – identical with an actual site, but relocated to an area with a different price level.
 - ii) The sites covered a wide range of site size (4 dwellings to 188) and development types. Ten of the 12 actual sites were brownfield and had been in a variety of previous uses.
 - iii) The sites were at various stages in the development process



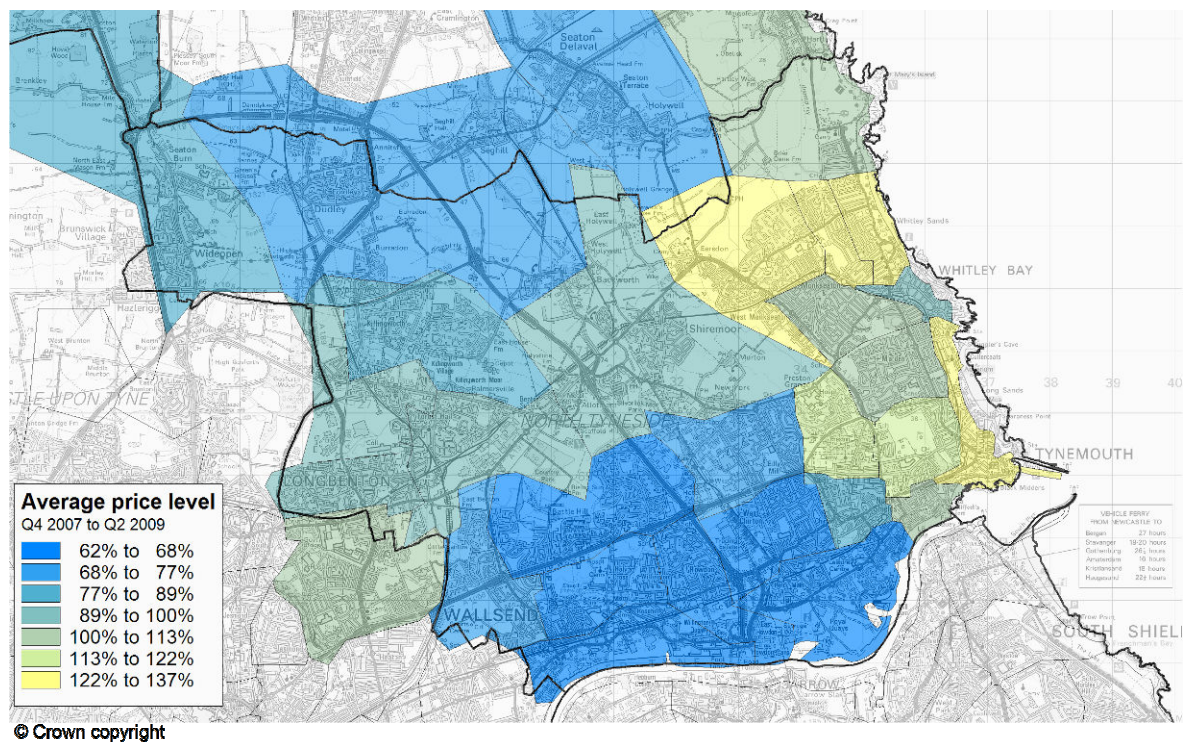
S8 The 12 actual sites' locations are shown below.

Figure S1 Site locations



Source: North Tyneside BC

- S9 The actual sites total 804 dwellings on an area of 19.10 ha, at an average density of 48.2 dwellings per ha net. There is a good range of site size, including four sites under the national threshold guidance size of 15 dwellings. All sites are wholly residential. Sites 1A, 2A & 7A were selected as models for the six notionals, each being transplanted to two new locations.
- S10 A typical development in the council area might generate 15,000 net sq ft per acre (3,450 sq m per ha). However this 'floorspace density' would vary up (for more intensively developed urban sites) and down (for a more suburban type of site) to reflect plausible development scenarios for each site.
- S11 A wide range of data was collected about housing in North Tyneside; this included prices (secondhand, and newbuild, of which a relatively limited amount of newbuild is currently being marketed), rents and RSL information about affordable housing costs. The map below illustrates house price variations across North Tyneside.

Figure S2 Postcode price indices: local prices compared to the national average level

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

Testing sites for viability assessment

- S12 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:
- i) Affordable housing target levels of 10%, 20%, 30% 40% & 50%.
 - ii) Affordable housing split: 80% social rented & 20% intermediate, and alternatively 40%:60%
 - iii) Land values for alternative uses for the sites: clearly if the site viability falls below the level of alternative use (eg industrial use), it is best used for the alternative use and cannot be considered as primarily a housing site. Hence it is important to establish the best alternative use value for each site.
 - iv) A starting point of zero Social Housing Grant (SHG)
 - v) The calculations consider levels of planning gain consistent with SPD adopted in October 2009
 - vi) Level 3 of the Code for Sustainable Homes was assumed, and also the 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.

S13 The appraisals considered viability for alternative scenarios with indicative levels of grant funding. Further, they considered viability determined by a possible short-term trend (prices falling 10% and costs rising 5%), and also alternatively reverting to the peak market of November 2007 (prices 25% higher than those assumed, costs 10% lower).

S14 Clearly this range of elements generated a large range of possible outcomes. These were assessed through our bespoke valuation methodology to indicate 'residual land values'. This is the standard approach, and assumes that all costs and returns are measured, except for the land value outcome. The latter is the key variable. It can then be compared with other scenarios, and with alternative use values. The latter are commonly agricultural in rural areas, and industrial/warehousing in urban locations.

Appraisal outcomes

S15 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 whether there is a higher yielding use than housing. If the site value does not exceed the alternative use value, then it is not judged viable as a housing site. If the excess above alternative use value (the 'margin') is sufficiently large, the development is judged viable, but if the excess is not very large it is labelled 'marginal'.

S16 For the purpose of a strategic study like the present one, 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. Our 'model' approach to alternative use value 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 locality is adopted as the alternative use value.
- iii) For an existing building in useable condition and for Council owned car park at Eastbourne Gardens we considered the current capital value.

- S17 There is a further consideration, which is the level of price above the alternative use value which is likely to be required to prompt an owner to sell. It is generally accepted that some additional payment will be required, though this is not usually identified separately. Fordham Research has defined this incentive payment as the 'cushion' and the values range from about £40k to £140k depending on the nature of each sample site.
- S18 Applying this approach, the results for the 18 sites are shown below. The viability figures exclude public sector grant, because the aim is to show the viability of affordable housing targets for landowners/developers. Grant enables more affordable housing to be built, not of itself change the ability of private sector sites to subsidise affordable housing. Grant may, in some cases, help to 'unlock' less profitable sites. But the sensible base position is the zero grant one.



Table S1: Capacity of sample sites to carry affordable housing targets (zero grant)						
No	Site	Alt use value	Value £k per acre			
			No affordable	10%	20%	30%
1A	West Chirton S	125	-22	-92	-161	-233
		164	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
1B	Palmersville	130	68	-8	-87	-167
		169	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
1C	Whitley Bay S	140	287	192	96	0
		179	VIABLE	VIABLE	NOT VIAB	NOT VIAB
2A	Holyfields	10	323	234	143	54
		89	VIABLE	VIABLE	VIABLE	MARGINAL
2B	Dudley	10	120	50	-25	-99
		89	VIABLE	MARGINAL	NOT VIAB	NOT VIAB
2C	Longbenton	10	143	67	-11	-92
		89	VIABLE	MARGINAL	NOT VIAB	NOT VIAB
3A	Smith's Dock	150	-86	-411	-934	-1,362
		194	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
4A	Wideopen UDP	35	194	113	33	-51
		104	VIABLE	VIABLE	NOT VIAB	NOT VIAB
5A	Eastbourne Gds	105	1,690	1,110	524	-71
		152	VIABLE	VIABLE	VIABLE	NOT VIAB
6A	St. Joseph's	150	366	279	192	106
		191	VIABLE	VIABLE	VIABLE	NOT VIAB
7A	Emperor Hadrian	140	22	-81	-184	-288
		187	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
7B	North Shields	175	582	431	282	129
		222	VIABLE	VIABLE	VIABLE	NOT VIAB
7C	Wallsend	150	36	-68	-173	-278
		197	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
8A	Marine House	125	132	56	-23	-103
		168	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB
9A	Pioneer	125	-51	-170	-288	-413
		197	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
10A	The Old Dairy	100	107	39	-31	-101
		157	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB
11A	Co-op, Br'y Ave	175	-764	-912	-1,060	-1,212
		285	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
12A	The Railwayman	304	-493	-591	-691	-791
		442	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB

Source: Strategic Housing Viability Study

S19 The results can be summarised as follows:

- i) With no grant, at 100% market housing 8 sites were fully viable and two were marginal. At 10% six were viable
 - ii) Modifying the tenure split to 40% social rented 60% intermediate had very little impact on these results. However with indicative levels of grant, viability does improve significantly. Seven sites are now viable at 20%, plus one which is marginally viable and two marginal. By 20% only four were viable. None was fully viable at 30%.
- S20 Sensitivity testing suggests that at the peak viability level during November 2007 (when prices were perhaps 25% higher than those assumed in our study, whilst costs may have been 10% lower), then, without grant, 16 of the 18 schemes would have been viable at the 20% level. At 30%, 14 would be viable and one marginal, whilst 9 would be viable at 40% plus one marginal.
- S21 Conversely, sensitivity testing also suggests that should prices fall by a further 10% whilst costs increase by 5%, then even with grant no scheme would be viable at the 20% level – just one being marginal.

Affordable target as at early summer 2009

- S22 National planning guidance requires a single 'plan wide' target. Reviewing the analysis just summarised and at the base date of early summer 2009, it appears that the highest reasonable plan wide target at that point is:
- 15%
- S23 The target level can be systematically altered by varying one significant cost. Social rented affordable housing costs much more to provide than intermediate affordable housing. However if the proportion of intermediate housing were greatly increased, affordable housing would be less likely to meet the overall need. This is a policy issue which can be considered in relation to particular site locations when they come forward for planning permission.
- S24 The SHMA indicated that a plan-wide target of 25% could be supported by the housing needs evidence. This provides a ceiling to the general target: in other words as and when viability improves the target could be increased from 15 to 25% at the overall plan level.
- S25 Such broad brush targets are designed to provide guidance across whole plan areas. Where the plan area contains such varied housing markets as North Tyneside it is clear that particular sties within the area may be able to support much higher or lower targets than this. This issue could, as discussed below, be built into policy.



- S26 It should also be noted that the target excludes public sector grant: that is because landowners/developers require a target that is 'zero grant' in order to calculate whether their site can provide the necessary subsidy.
- S27 In setting a plan-long target for the provision of affordable housing the Council could reasonably hope for more affordable housing than is suggested by a 15% target for two reasons:
- i) Public sector grant will be available at various levels over the plan period, and it should add to the number of new affordable dwellings provided. It is impossible to predict grant levels for any particular district over a long plan period, and so no figure is provided here. It is open to the Council to take a view on this and add to the target level suggested above
 - ii) Using the Dynamic Viability approach discussed below, the target level will rise, as and when the housing market does, and so increase the overall yield of affordable housing over the plan period
- S28 The broad brush target is distinct from the site specific viability test that has existed since affordable housing became a matter of Government policy in 1991. Each applicant for planning permission is entitled, on the basis of viability evidence for the particular site, to argue for a lower target than the broad brush one. Thus there are in practice two levels of valuation involved nowadays rather than one (the site specific level) as was the case before the Blyth Valley Court of Appeal decision of August 2008.
- S29 Given that individual sites in better market areas of the Council area may be able to bear higher targets than the general 15% it is open to the Council to require site specific viability tests of all (significant) new housing proposals, so as to set site specific targets which may be higher as well as lower than 15%. Such variations of targets could be based on the viability model used in this study.
- S30 The target discussed above applies to developments of 15 dwellings and more. We investigated the possibility of a target for smaller sites, eg between 5-14 dwellings. This analysis was not productive, as all 4 of the smaller sites in the sample were either unprofitable even without affordable housing or could not carry any significant target. However the issue of a sub-15 dwelling target should be kept under review. Our results suggest that if market conditions improve some of the smaller sties could support a target.

Dynamic Viability analysis

- S31 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 national level of around 30 to 50% depending on the housing markets in each region.

- S32 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 remove viability from the market housing developments of which they were a part (such targets only apply to market housing developments, not to ones that are fully funded by public grants).
- S33 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 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. It should be noted, however, that Planning Inspectors have permitted a number of such 'normal' market targets, set well above the level that is currently deliverable. This may reflect the limited choices faced by those Inspectors: it is the case that targets which are not broadly deliverable across the plan area are vulnerable to attack by Section 78 Inquiry. Hence such targets are not a wise basis for LDF action.
- S34 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.
- S35 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 North Tyneside that site is No 2A: Holyfields (as amended). It is judged to be typical of the Council area, 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.



S36 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.

S37 The SHMA has indicated a 25% affordable housing target excluding viability checking. However it is feasible for targets within North Tyneside to be set higher than that for parts of the district, provided that the average outturn is of the order of 15% (or as updated via the matrix).

Table S2 North Tyneside Fine Matrix with base alternative use value

		Price Change HPI										
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%	
Cost Change BCIS Index	%		460.0	480.0	500.0	520.0	540.0	560.0	580.0	600.0	620.0	
	-8%	261.6	20%	25%	30%	35%	40%	45%	45%	50%	50%	55%
	-4%	272.9	15%	20%	25%	30%	35%	40%	40%	45%	50%	
	0%	284.3	5%	15%	15%	25%	30%	35%	35%	40%	45%	
	4%	295.7	0%	5%	15%	20%	25%	30%	35%	35%	40%	50%
	8%	307.0	0%	0%	5%	15%	20%	25%	30%	30%	35%	45%
	12%	318.4	0%	0%	0%	5%	15%	20%	25%	25%	30%	40%
	16%	329.8	0%	0%	0%	0%	10%	15%	20%	25%	25%	35%
	20%	341.2	0%	0%	0%	0%	0%	10%	15%	20%	20%	30%
				0%			5%	10%	15%	20%	25%	

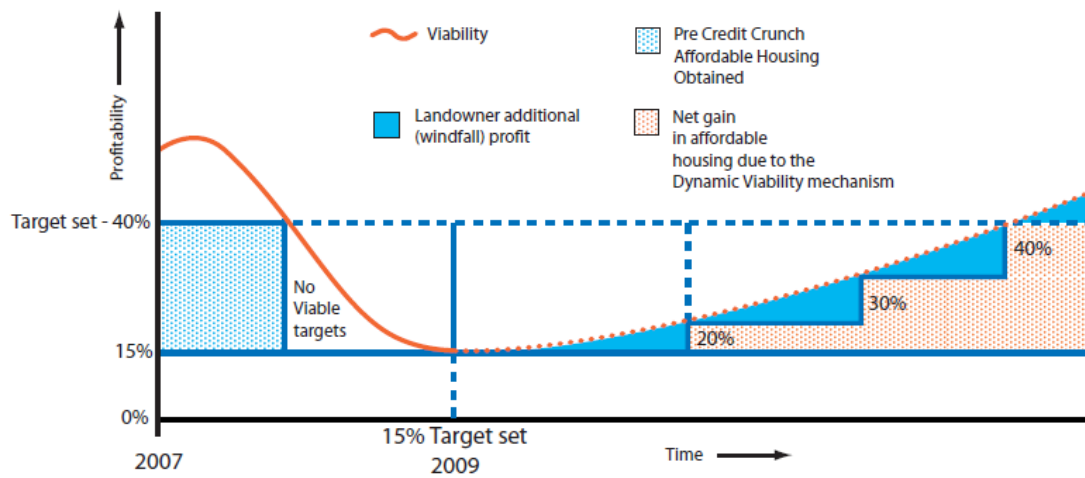
Source: Fordham Research 2009: North Tyneside Viability Study 2009

S38 Table S2 shows the 'Fine' matrix which provides fairly narrow bands of the two indexes (4% intervals). This is intended to provide practical changes of target, eg 15% to 20% or 25%, rather than bigger steps such as arise if 10% intervals are used. The wider intervals ('Coarse Matrix') are shown in the main text, in order to provide robust plan long target indications to cover any possible changes in the market.

S39 The full detail of this approach is set out in Chapter 8.

Conclusion

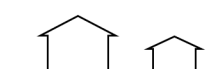
S40 The two staged process, with Dynamic Viability at the end, ensures that the council achieves a share of the land value increase when prices/viability goes up again. This is shared with the landowner/developer because the reviews (assumed to be annual) will be followed by periods when the landowner makes windfall gains in value, alternated with points where the target has risen and there is no windfall gain in value for landowners selling land at that point. The exact outcome depends on the time of planning permissions and the movements of the housing market.

Figure S3: Gain of Affordable Housing from Dynamic Viability

- S41 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 any district). 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.
- S42 The Dynamic Viability procedure ensures that the maximum of deliverable affordable housing is achieved.
- S43 The Dynamic Viability process ensures that the amount of affordable housing is maximised, without harming the landowner's basic profit and the house builder's gross return on cost

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List of abbreviations

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



1. Introduction

Introduction

- 1.1 Fordham Research was commissioned by North Tyneside MBC to produce guidance on the financial viability implications of alternative targets and size thresholds for affordable housing provision within the Borough area.
- 1.2 National guidance (PPS3: Housing 2006) requires Councils to set a target for the proportion of affordable housing to be delivered through new developments. The purpose of the present study is to address that issue of affordable housing, enabling the Council to set a robust target in the light of current commercial circumstances in North Tyneside MBC. That latter 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 particular factors of developing that site at that point of the economic cycle.
- 1.3 The actual requirement will not only take into account the normal costs of developing that site, but also the abnormal costs such as off-site highways works and the like that may be required. It will take into account the nature of development, the current use of the land and all the other factors that a developer would take into account when embarking on a development project. It will need to allow for factors which are unknowable at present, such as possible use of a community infrastructure levy, and the availability of grant aid for affordable housing.
- 1.4 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 remain below peak market values for some time to come, it may be necessary for any proposed target to be reviewed regularly, so to reflect the resulting changes in the profitability of development.
- 1.5 The availability and cost of land are matters at the core of the viability for any development of new houses. The fact that a developer may have over-paid for a site will not excuse them from providing affordable housing; correspondingly if they paid less than the market rate that would not lead to a requirement to provide more. It must be recognised that in the current development and planning regime, the cost of meeting S106 requirements and affordable housing is a factor in development appraisals and does impact on land values and this must be understood by land owners, developers and their advisors and agents.



- 1.6 The land price element of the viability appraisal can cause much debate. 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 does not attempt to predict when a landowner may sell the land, or even if he will sell, as the owners of individual land areas, whether individuals or corporate bodies, can operate in very different ways and in very different circumstances.

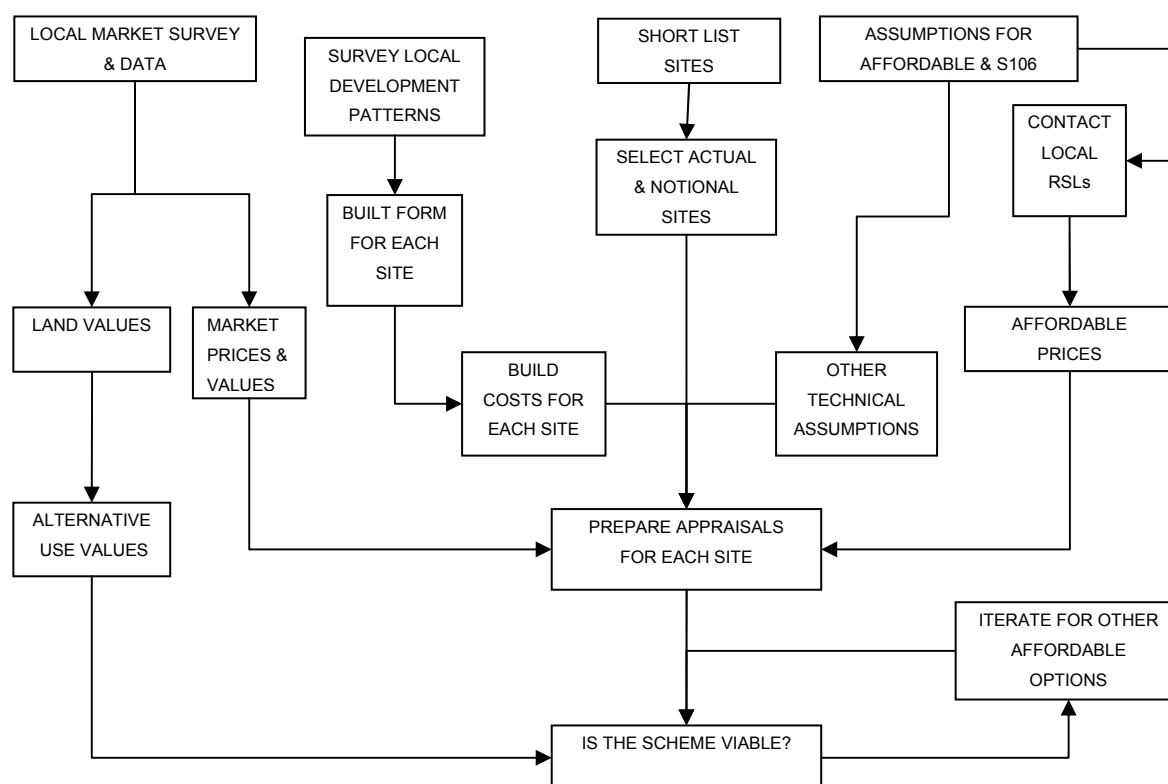
Reasons for this study

- 1.7 This means that the study is in two stages: the first being the standard viability analysis (in Chapters 2 to 7) and then the second stage containing the Dynamic Viability analysis in the latter part of Chapter 8.

Stage 1 viability methodology

- 1.8 The Stage 1 viability methodology is summarised in Figure 1.2 below. Fundamentally, 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.
- 1.9 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.
- 1.10 We surveyed the local housing market, in order to obtain a picture of sales values for the market housing. We also surveyed land values for residential development, to calibrate the appraisals and for other uses, to assess alternative use values. Alongside this 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. These in turn informed the appropriate build cost figures.

Figure 1.2 Stage 1 viability methodology



Source: Fordham Research 2009

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

Stage 2: Dynamic Viability analysis

- 1.13 Fordham Research has developed a model which enables the Council to establish through the Core Strategy Examination a matrix of possible future affordable targets. These would be automatically changed in accordance with published indexes of the performance of the housing market. In this way the target would always remain deliverable, but at the same time would ensure that windfall gains in land value are translated into increased affordable housing. This is in accordance with Government Guidance. It would also ensure that the landowner's and housebuilder's margins are not harmed.
- 1.14 The Dynamic Viability approach is set out in Chapter 8 below.



Fordham Research

- 1.15 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.
- 1.16 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.
- 1.17 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

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

Chapter 2 - The individual development sites

Chapter 3 - Affordable housing and developer contributions

Chapter 4 - Local market conditions

Chapter 5 - Assumptions for viability analysis

Chapter 6 - Results of the appraisal's analysis

Chapter 7 - Implications of viability results

Chapter 8 - 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 North Tyneside is one of five metropolitan districts within the conurbation of Tyne & Wear. The borough is an area of considerable contrasts and is without a main centre at its core. The northern fringe of the borough is open countryside, and around 20% of the borough is greenbelt. North Tyneside has the North Sea to the east, the River Tyne as its southern boundary, Newcastle City to the west and Northumberland along its northern boundary.
- 2.3 The main urban areas, including the towns of Wallsend, North Shields, and Whitley Bay, lie along the river and coastline stretches. There are three other large settlements, Longbenton, Forest Hall and Killingworth, located in the northwest of the borough, between the main towns and the rural hinterland. Along the northern edge of the borough are a number of former mining villages. A new settlement with a Metro station and a district centre is currently being developed between Shiremoor and Backworth.
- 2.4 Although the river's traditional role has declined in modern times, bringing economic problems and creating opportunities for regeneration throughout the conurbation, the Tyne remains a commercial river with shipbuilding, offshore fabrication, fishing and port related industries. It provides access to the North Sea, and with the only passenger port in the region supports regular passenger services to northern Europe. It is increasingly used for recreational purposes. The river provides opportunities for North Tyneside, but it can also act as a barrier between North Tyneside and the south of the region.
- 2.5 The borough has an attractive coastline with cliffs and beaches providing recreational facilities for the wider conurbation and beyond. The Hadrian's Wall World Heritage site and the Tynemouth village conservation area are of national and regional significance.



- 2.6 The borough has external road links via the A19 southwards via the Tyne Tunnel and has access to the A1 to the north west. It has a good system of internal roads with the A1058 linking it with Newcastle City. Newcastle Airport is to the north west. A suburban electric rail 'Metro' system loops through the borough linking the main towns and the coastal area with Newcastle and other districts of Tyne and Wear. North Tyneside has 17 Metro stations within its boundary, more than any other Tyne & Wear authority. Overall, the Borough has good transport links which contribute to it being an attractive and popular location for new housing and business development.

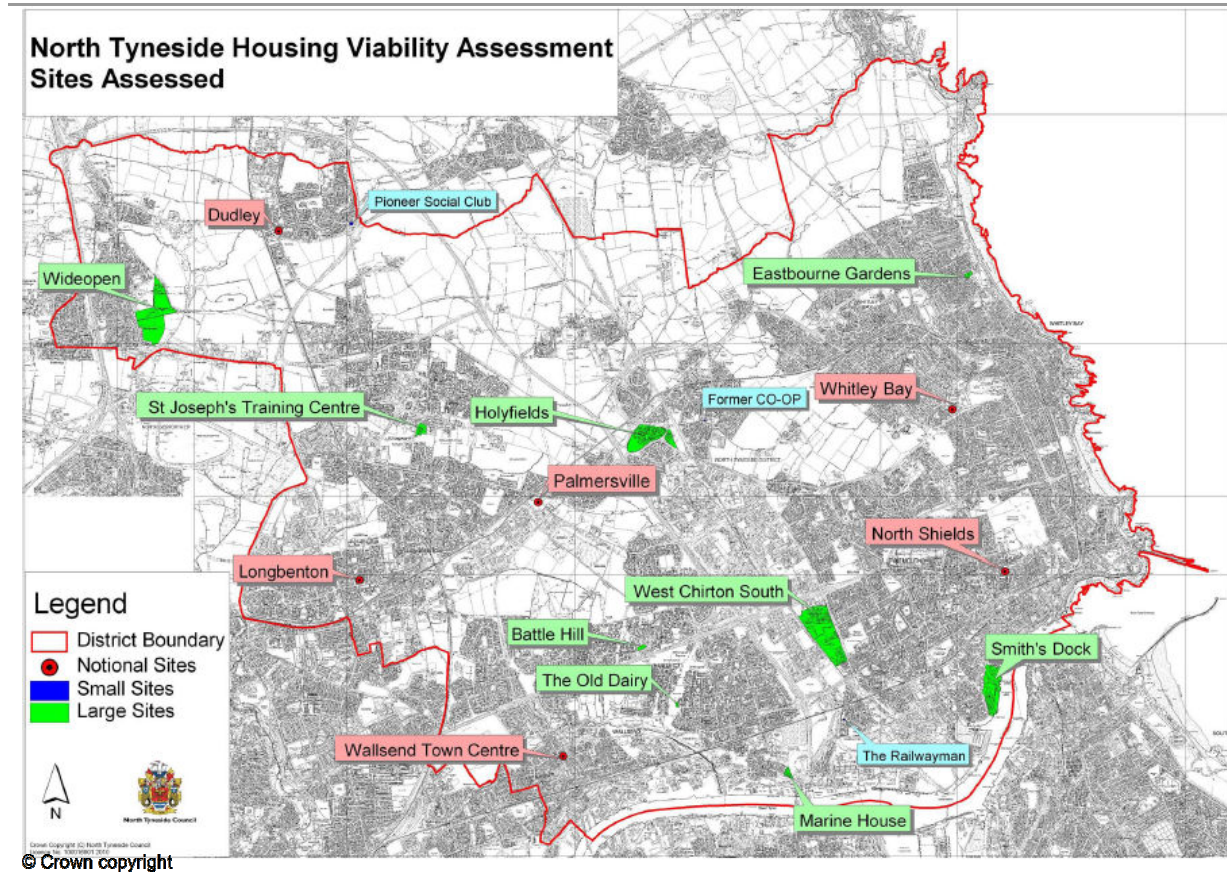
Identifying a range of sites

- 2.7 It was decided that for North Tyneside MBC the required guidance on viability would best be achieved by looking at a range of site sizes, and at both actual and notional sites. In discussion with the Council, it was decided that a total of 12 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. These twelve were supplemented by the selection of 6 additional 'notional' sites.
- 2.8 A final list of 18 (12 actual and 6 notional) sites was established by 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 four main market sub-areas of North Shields, Wallsend, Whitley Bay, and North West Tyneside.
- 2.9 The sites range in size from four to 188 dwellings. Nine of the 12 actual sites were on previously developed land, and three on undeveloped greenfield land. The brownfield sites had a range of differing previous uses including a shipyard, dairy, car park, college, shop and public house.
- 2.10 The 12 actual sites were at various stages in the planning process. Ten were subject to a planning application; eight of these had been approved with one pending and one refusal. The remaining two sites were potential allocations.
- 2.11 The six notional sites were chosen to complement the 12 actuals, being identical with an actual site but set down in areas of contrasting price levels. They reflect typical urban conditions in Palmersville, Whitley Bay, Dudley, Longbenton, North Shields and Wallsend Town Centre.
- 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 12 actual sites identified in discussion with the Council are set out in the map below.

Figure 2.1 Site locations



Source: North Tyneside BC

- 2.14 Summary details of the sites are shown in the table below. The tables show both total site area, and where a significant area of non developable land applied, the net residential area.
- 2.15 The actual sites total 804 dwellings on an area of 19.10 ha, at an average density of 48.2 dwellings per ha net. There is a good range of site size, including four sites under the national threshold guidance size of 15 dwellings. All of the ten sites are wholly residential.
- 2.16 The information described above shows the site sizes as used in appraisals. After consideration the original sizes of three sites were varied to allow appraisals to reflect more closely what we anticipated might be built on them in a commercial development situation. Densities were revised on two sites – one up, one down. Site 3 Smith's Dock was appraised as a specimen site, after it became clear that the site would not be viable without considerable grant funding for the major ground remediation works required to produce a developable site. (In any case a revised scheme providing for a more mixed range of dwelling types than the approved application - 1,220 dwellings, all apartments - was understood to be in the pipeline).
- 2.17 In order to move forward it was assumed that a specimen scheme, with development characteristics similar to the Eastbourne Gardens site, would be produced on a clean development parcel of 120 dwellings within the remediated Smith's Dock site.



Table 2.1 Site details						
Site No	Name	Area ha		No dwgs	net (dw/ha)	Planning status
		Gross	Net			
1A	West Chirton South Trading Estate	5.40	5.00	188	37.6	Pending consideration
1B	Palmersville	5.40	5.00	188	37.6	Hypothetical location
1C	Whitley Bay South	5.40	5.00	188	37.6	Hypothetical location
2A	Holyfields	(10.78)	4.00	150	37.5	Permitted
2B	Dudley	(10.78)	4.00	150	37.5	Hypothetical location
2C	Longbenton	(10.78)	4.00	150	37.5	Hypothetical location
3A	Smith's Dock	0.72	0.72	120	166	(Permitted)
4A	Wideopen UDP	(20.99)	2.75	110	40.0	Refused on appeal
5A	Eastbourne Gardens	0.51	0.51	85	166	Permitted
6A	St. Joseph's Training Centre	1.72	1.72	38	22.1	Potential site
7A	Emperor Hadrian PH	0.56	0.56	38	67.6	Permitted
7B	North Shields	0.56	0.56	38	67.6	Hypothetical location
7C	Wallsend Town Centre	0.56	0.56	38	67.6	Hypothetical location
8A	Marine House	0.88	0.88	41	46.4	Potential site
9A	Pioneer Social Club	0.15	0.15	12	82.2	Permitted
10A	The Old Dairy	0.26	0.26	10	38.3	Permitted
11A	Former Co-op, Brenkley Ave	0.07	0.07	8	114	Permitted
12A	The Railwayman	0.05	0.05	4	80.0	Permitted
<i>Total</i>		(75.58)	35.80	1,556	43.5	

Source: Fordham Research

Development assumptions

- 2.18 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. On the other hand 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 where application details were available the built form described there remains the best basis for carrying out appraisals. These provided a basis for modelling development assumptions on a majority of the sites.

- 2.19 A view had to be taken about the appropriate development form on those 'actual' sites where no application had so far been submitted. Whilst there are in fact only two of these, there has to be a clear justification for the assumptions used. This is set out below.
- 2.20 Earlier in the present decade, as development proposals have engaged with the various implications of PPG3/PPS3, but aided by rising land values, a particular development format emerged quite commonly on significant sized sites in most larger urban areas, initially in the more prosperous or pressured parts of the country, but increasingly also in smaller centres. This format provided for a majority of houses (with perhaps 15%+ flats) in a mixture of two storey and two and a half to three storey form, with some rectangular emphasis to the layout. Typically, these would generate a floorspace density of around 15,000-15,500 sq ft per acre (3,450-3,550 sq m per ha) on a substantial site, or sensibly shaped smaller site. A representative dwelling density might be 40-45 dwellings per ha.
- 2.21 Alongside this, there are of course schemes where land is used rather more intensively. Within Greater London, in other urban locations, and indeed sometimes elsewhere, there have been large numbers of higher density schemes providing largely or wholly apartments, in blocks of three storeys or higher. These provide floorspace density from around 30,000 sq ft per acre (6,900 sq m per ha) upwards, at densities of 100 dw per ha plus.
- 2.22 In contrast, there will be situations where, for planning reasons, particularly on small sites, in rural, edge of town or more sensitive locations, schemes with densities below a 15,500 sq ft per acre (3,550 sq m per ha) 'baseline' will come forward. A typical density might be around 12,500 sq ft per acre (2,850 sq m per ha).



Table 2.2 Typology of development form			
Category title	Density		Built form characteristics
	Floorspace net sq ft/acre (net sq m per 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.
Base	15,500 (3,550)	40-45	Mixture of 2 & 2.5/3 storey houses, many terraced; some (15-25%) flats, limited garaging.
Urban	19,500 (4,480)	50	30-40% flats, 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 spaces

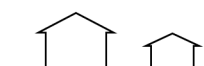
Source: Fordham Research

- 2.23 These observations suggest a built form typology as set out in the table above. It comprises five categories. There is a 'base' category to reflect the common urban form referred to above, i.e. giving around 3,550 sq m per ha, and one less dense and three more dense variations from this starting point.
- 2.24 The above typology informed model development assumptions for the two sites where actual information on planning proposals was not available. After careful thought site 8A was felt to merit the 'base' category, whilst for site 6A a lower density form was considered more appropriate.
- 2.25 The resulting assumptions for residential development for each of the 12 'actual' sites are set out in the Table below. The sites where actual data was available (shown as P in the table) conform closely with the two sites using model data informed by the typology (shown as M).

Table 2.3 Site development assumptions: actual sites						
Site ref	Category	Development form		Floorspace density (rounded)		Ave dwg net sq ft (sq m)
		Category	(M/P)	Net sq ft/acre	Net sq m/ha	
1A	West Chirton South	Base	P	15,100	3,450	991
2A	Holyfields	Base	P	14,750	3,400	972
3A	Smith's Dock	Very high	P	55,350	12,700	824
4A	Wideopen UDP	Base	P	14,950	3,450	923
5A	Eastbourne Gardens	Very high	P	55,350	12,700	824
6A	St. Joseph's Training Centre	Lower	M	12,500	2,850	1,398
7A	Emperor Hadrian PH	Urban	P	21,450	4,925	784
8A	Marine House	Base	M	15,450	3,550	822
9A	Pioneer Social Club	Urban	P	22,450	5,150	675
10A	The Old Dairy	Lower	P	12,325	2,850	795
11A	Former Co-op, Brenkley Ave	High	P	31,000	7,100	670
12A	The Railwayman	Urban	P	20,550	4,700	635

Source: Fordham Research

2.26 Among the twelve sites there is good range of density, with four sites fitting into the Base category, two with densities matching the Lower group, three broadly in the Urban category one up from Base, and three in the two highest density categories. The three sites duplicated to provide notional sites comprise two Base, and one Urban.



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 which involved 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
- 30% affordable
- 40% affordable
- 50% affordable

- 3.4 The North Tyneside Housing Strategy 2006-2010 suggests an affordable housing target of 30% on residential development sites of 15 dwellings or more. However, such targets will be informed by the ongoing SHMA, as well as by the present study.

- 3.5 Also, new targets will be proposed in emerging Local Development Framework Documents.

(ii) Tenure split

- 3.6 The Council currently seeks a mixture of social rented and intermediate housing, though with a majority (60%) provided as social rented. The emerging SHMA document may suggest changing this proportion. In the meantime we undertook to test a base split of 80/20 and consider a variant split of 40/60; intermediate positions could be inferred fairly readily from these two.



3.7 In principle, intermediate tenure could constitute a wide range of different housing propositions. After discussion with the Council it was agreed that intermediate housing should be assumed to be consistent with affordability proposals in the ongoing SHMA Study. They could be either intermediate rent, or home purchase solutions, but would need to be made available to match the income thresholds¹ set out in the Table below.

Table 3.1 North Tyneside Purchase Income Thresholds 2009			
Area	Income Thresholds (£)		
	1 Bed Flat	2 Bed Flat	2 Bed Terrace
North West	20,400	21,700	23,100
Whitley Bay	19,000	27,100	36,600
North Shields	23,100	32,600	36,600
Wallsend	12,200	16,300	15,900
Borough-Wide	18,500	19,000	25,800

Source: DCA Estate Agency Survey 2009 Table 8.9

Table 3.2 North Tyneside Rental Income Thresholds 2009			
Area	Income Thresholds (£)		
	1 Bed Flat	2 Bed Flat	2 Bed Terrace
North West	19,200	21,600	21,600
Whitley Bay	20,600	22,100	23,800
North Shields	13,200	16,300	21,600
Wallsend	15,600	15,600	21,600
Borough-Wide	14,400	16,800	21,600

Source: DCA Estate Agency Survey 2009 Table 8.13

(iii) Size profile

3.8 After discussion 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. This assumption is a convenient one, which ensures that as the affordable housing proportion varies between the options being tested, the floorspace density remains constant - a desirable aim if the appraisals are to constitute a realistic development scenario, consistently, across the options.

¹ Income thresholds are the lowest household incomes required to enter any particular housing tenure. Purchase income thresholds are based on 95% mortgage availability and a 3x gross income lending ratio. Rental income thresholds are based on rent at 25% of gross income (equivalent to 30% of net income).

3.9 In assembling development assumptions for the sites, we collected, or in a few cases made broad 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 3.3 Aggregate size mix profile		
	<i>No of dwgs</i>	<i>%</i>
1 bed flat	10	1.2%
2 bed flat	317	39.4%
2 bed house	66	8.2%
3 bed house	221	27.5%
4 + bed house	190	23.7%
Total	804	100

Source: Fordham Research 2009

3.10 Inevitably, the profile reflects the particular characteristics of the sites chosen for assessment. Nonetheless there is felt to be a reasonable spread of dwelling size and type.

(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.

3.12 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. The uncertainty reflects both the longer term trend, as the available funding has been directed to achieving specific regional or strategic priorities, and the recent past, as funding has been extended, in a short term ad hoc response to the national economic situation.

3.13 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.

3.14 After consideration it was decided that appraisals should be produced with an assumption of zero Social Housing Grant, showing its impact on the base appraisal results.

- 3.15 It was necessary to seek advice from the Councils' partner RSLs about the financial terms on which properties of various sizes would be purchased from the developer in order to achieve the 'zero grant' scenario. We received only a partial response to our request, partly reflecting the uncertain market conditions. However the RSL responses we did receive, in conjunction with our own experience from other Viability Assessments, provided a basis for arriving at appropriate figures for the four 'market areas'.
- 3.16 The figures are set out below. The intermediate housing figures vary across the four market areas, with market prices whilst the social rented figures are unchanged.

Table 3.4 Purchase prices for affordable dwellings: zero grant basis						
	£ per sq ft (sq m)					
	Social rented		Intermediate rent		Shared o'ship	
	Flat	House	Flat	House	Flat	House
North West	74 (796)	70 (753)	95 (1,022)	90 (968)	103 (1,108)	98 (1,049)
Whitley Bay	74 (796)	70 (753)	105 (1,130)	100 (1,076)	114 (1,229)	110 (1,184)
North Shields	74 (796)	70 (753)	95 (1,022)	90 (968)	103 (1,108)	98 (1,049)
Wallsend	74 (796)	70 (753)	90 (968)	85 (915)	94 (1,014)	90 (968)

Source: Fordham Research 2009

Other developer contributions

- 3.17 Aside from affordable housing, developer contributions could potentially be sought by North Tyneside Council under a number of headings. 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.
- 3.18 The Council has prepared a Supplementary Planning Document (SPD) dealing with Planning Obligations (published in October 2009). The report assumptions on this topic were made before the SPD was finalised, the Council having provided appropriate guidance.

- 3.19 In providing that guidance the Council has considered the likely level of contributions that would arise under the emerging SPD, and also the level of contributions that were typically paid in the previous five year period. Where there was little or no existing provision and full contributions arose, the total cost of contributions might be quite significantly greater than the level of cost implied by contributions made in the past, which would of course reflect previous/existing policies, the degree of spare capacity in existing social and physical infrastructure, the economic viability of the development proposal and Council priorities.
- 3.20 After careful analysis and consideration the Council formed a view about an appropriate average proportion of the theoretical maximum contribution that should be assumed to apply to the sites examined in our appraisal. This suggested a figure of £2,070 per dwelling. Accordingly we have applied this figure to each site.
- 3.21 It must be emphasised that this approach is simply intended to treat the study 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.
- 3.22 Many Councils are currently considering the introduction of a Community Infrastructure Levy (CIL) providing a standard charge based on an assessment of aggregated infrastructure costs. It is likely that such a charge would lead to higher costs than those assumed here.



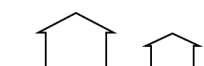
4. Local market conditions

Introduction

- 4.1 This chapter sets out an assessment of the local housing market in North Tyneside MBC, providing a basis for the assumptions on house prices and costs to be used in financial appraisals for the 18 sites tested in the study.
- 4.2 As well as house prices, however, 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:
- Attractive, rugged and unspoilt landscape within easy reach of the area, to the north and west, as well as an attractive coastline, each providing both recreation opportunities for residents of the area, and tourism potential
 - a variety of situations, including those arising from the river frontage and coastline, many providing striking residential locations
 - close proximity to a vibrant regional and riverside centre in Newcastle with many employment opportunities
 - a range of other employment opportunities within North Tyneside
 - good transportation links via the Tyne Tunnel and A1(M)
 - a degree of self containment, imposed by the coastline and limited Tyne crossing points
 - several older areas undergoing regeneration and providing cheaper housing stock.
- 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 some relevant new developments in the area, as at May 2009, is provided in Appendix 2. The Appendix also has details of recently developed and completed schemes directly relevant to the sample sites. Any historic prices have been adjusted to current date levels by reference to the Halifax House Price Index.
- 4.10 Analysis of these, and other schemes in the study area, shows that prices for newbuild homes vary quite widely across the area, ranging between approximately £150 and £260 per square foot (£1,600 - £2,800 per square metre). Indeed prices for individual properties within a scheme might vary more widely than this.
- 4.11 Table 4.1 shows average prices for North Tyneside MBC for the latest quarter available from Land Registry, Q2 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 & Wales figure and expressed as indices.
- 4.12 The average price of detached and semi-detached properties, and flats, in the North Tyneside MBC area are somewhat below the national average, whilst the average price of terraced properties is much closer to the national average.

Table 4.1 Average house prices Q2 2009: comparison with England & Wales average

Area	Ave price (£k & % index)				
	Detached	Semi	Terrace	Flat	
Q2 09	ave £k	£234.4	£145.6	£143.1	£94.9
	no of sales	71	160	179	102
	index	88%	88%	99%	74%

Source: Land Registry data.

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

- 4.13 Generally, as throughout the country, prices in the borough have fallen over the last 18 months. 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

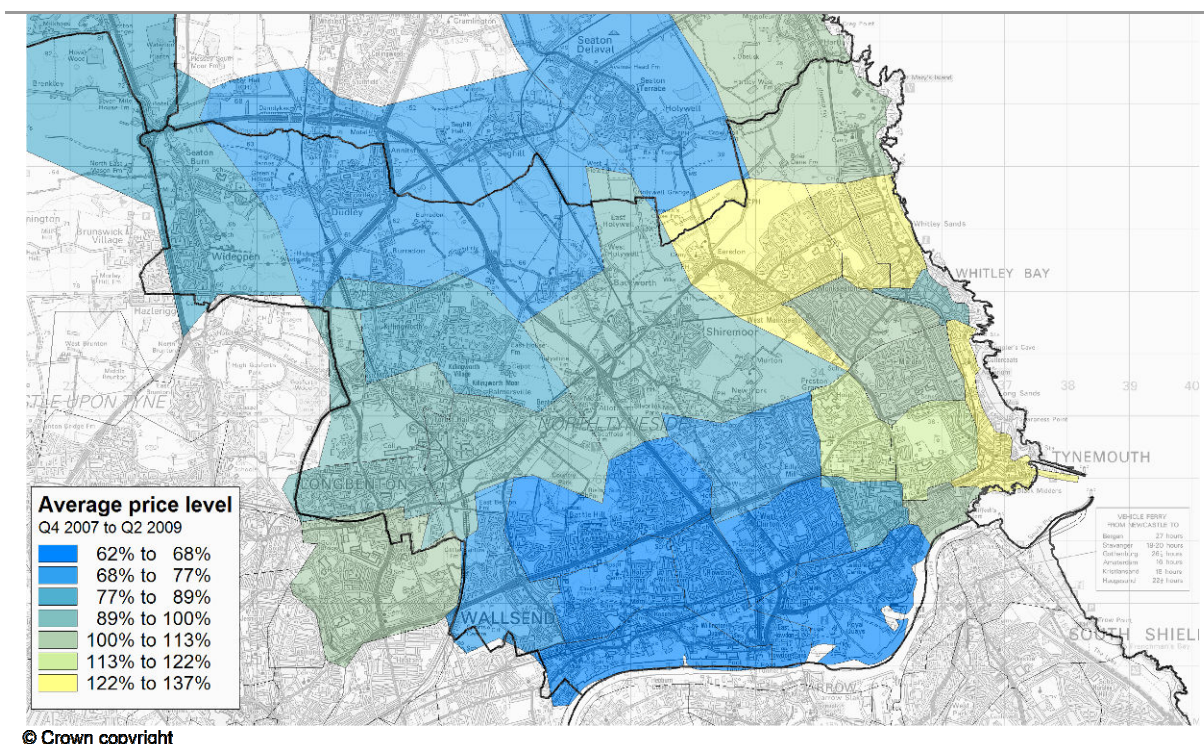
Area	Ave price (£k & % index)				
	Detached	Semi	Terrace	Flat	
Q4 07	ave £k	£241.1	£172.1	£149.7	£100.0
	no of sales	120	301	374	375
Q1 08	ave £k	£259.0	£158.2	£152.2	£100.0
	no of sales	86	182	247	175
Q2 08	ave £k	£259.0	£158.1	£152.5	£102.1
	no of sales	38	120	119	220
Q3 08	ave £k	£226.7	£151.3	£145.6	£101.7
	no of sales	76	150	187	157
Q4 08	ave £k	£204.7	£138.2	£144.5	£96.6
	no of sales	38	87	100	109
Q1 09	ave £k	£211.4	£157.5	£140.1	£103.5
	no of sales	31	94	115	63

Source: Land Registry data.



- 4.14 Within a Council area there can be considerable variations in price, and Land Registry house price data at postcode sector level helps to show 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 (Q4 2007, Qs 2 & 4 2008, Q2 2009). The data has been expressed as an index – as a percentage of the nationwide average price level – and standardised, to allow for variations in type mix. (Appendix 3 provides a worked example of the index calculation, for one postcode area at Q4 2008, and sets out the resulting price index figures for the three quarters examined).
- 4.15 It can be seen from the indices in Appendix 3 that variations between the individual quarters' indices are, in most cases, relatively slight. Variations tend to be greater for rural and town centre areas, which are mostly numerically smaller and/or more diverse, than for urban areas generally, where postcode sectors are larger numerically and can often be more uniform.
- 4.16 The average figures for the three quarters are mapped in Figure 4.1 below.

Figure 4.1 Postcode price indices: local prices compared to the national average level



Source: Land Registry

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

- 4.17 This shows that prices in many postcode sectors are well below, under 80% of, the national average level. In contrast a band of areas towards the coast, northwards from Tynemouth through Whitley Bay, are at or in some cases well above the national average. There is also a central belt of prices above 80% running through to the northwest at Wideopen. These variations will need to be reflected in setting figures for new build prices, which follows below.

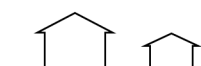
Price assumptions for financial appraisals

- 4.18 It is necessary to form a view about the appropriate prices for the 18 individual schemes to be appraised in the study. The preceding analysis suggests that although prices in some locations will be quite similar, there will be some locations where prices are appreciably lower or higher.
- 4.19 It is also clear that we should allow for differences between apartments and 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.
- 4.20 Taking these points into consideration we considered what sale prices should be for flats, for detached or semi-detached houses and for terraced or town houses on each of the eighteen 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.
- 4.21 The evidence of sales prices across the area is summarised in Appendix 2.
- 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
1A	West Chirton South	156	1,683	6A	St. Joseph's	194.5	2,093
1B	Palmersville	165	1,775	7A	Emperor Hadrian	155	1,669
1C	Whitley Bay South	189	2,031	7B	North Shields	196	2,113
2A	Holyfields	183	1,971	7C	Wallsend Town Centre	156	1,677
2B	Dudley	161	1,728	8A	Marine House	165	1,775
2C	Longbenton	167	1,794	9A	Pioneer Social Club	165	1,775
3A	Smith's Dock	205	2,206	10A	The Old Dairy	170	1,829
4A	Wideopen	170	1,833	11A	Co-op, Brenkley Ave	160	1,722
5A	Eastbourne Gardens	260	2,798	12A	The Railwayman	150	1,614

Source: Fordham Research

- 4.23 The figures cover a range from the cheapest £150 per sq ft (£1,614 per sq m) at The Railwayman to £260 per sq ft (£2,798 per sq m) at Eastbourne Gardens. This is not quite as great as the spread of prices we saw in the Land Registry data for second-hand prices.



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 some 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 consider below what the available information suggests land values for residential housing land might be in North Tyneside. General figures are available 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 locally we have figures for the North East as a whole, and major towns and cities within the region.

4.27 These values can, in any case, 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. As such, they can only be 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 yr to Jan 2009

Area	Land Value £m per acre (hectare)		
	Small sites (< 5 dwgs)	Bulk sites (> 2 ha)	Land for apartments
North East	1.82m (4.50m)	1.65m (4.08m)	2.00m (4.95m)
Newcastle (Heaton)	2.32m (5.74m)	2.00m (4.95m)	2.64m (6.53m)
Alnwick	1.84m (4.55m)	1.60m (3.96m)	1.84m (4.55m)
Sunderland	1.52m (3.76m)	1.40m (3.47m)	1.60m (3.96m)
Middlesbrough	1.20m (2.97m)	1.20m (2.97m)	1.20m (2.97m)
Durham	2.24m (5.54m)	2.05m (5.07m)	2.70m (6.68m)

Source: VOA Property Market Report Jan 2009

- 4.28 With the decline in the market and general economic conditions these values are now in any case going to be rather historic – values will be falling faster than prices. As such, we 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 we found varied in (grossed up) value from around £1.0m per acre (Whitley Bay, up to £2.5m per acre for a site at North Shields. These are only small sites, and limited generalisation is possible from them. A detailed schedule of the 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 locality is adopted as the alternative use value.
 - iii) For an existing building capable of beneficial use we would attempt to estimate the building's capital value.
 - iv) For the Council owned car park at Eastbourne Gardens, we took Council advice.
- 4.34 The VOA's typical industrial land values for the region and subregions for the second 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
North East	90k (223k)	252k (624k)	178k (441k)
North Tyneside (Newcastle)	180k (446k)	247k (611k)	216k (535k)
Northumberland (Cramlington)	90k (223k)	180k (446k)	135k (334k)
Sunderland	157k (389k)	252k (624k)	200k (495k)
Middlesbrough	135k (334k)	247k (611k)	170k (421k)
Durham	157k (389)	225k (557k)	170k (421k)

Source: VOA Property Market Report July 2009

- 4.35 Across the region as a whole there is a spread of values, although really only in the broad range £100k-£250k per acre (£250k-£620k per ha). North Tyneside appears to sit higher rather than lower in this range, with a 'typical' value just over £200k per acre (£495k per ha).
- 4.36 One would expect these figures to be now somewhat out of date, as values have dropped with the general downturn, since mid-2008. Information about the local market is hard to come by with comparatively few transactions to provide evidence in the current market situation, but it does seem likely that values are now in the range of £125k-£150k per acre, or £310k-£370k per ha. We developed figures for sites 1A/B/C, 3A, 6A, 8A, 9A & 10A accordingly (note that for the purpose of the study 3A Smith's Dock is assumed to be a fully remediated and cleared site ready for development). Site 7A (former PH, now cleared) was given a value at the top of this range, and values for 7B & 7C just slightly increased from this base figure. Site 11A (also cleared Co-op site) was given a similar slight premium. The Railwayman PH, still in place but in moderate physical condition, was assumed to have a nominal value as an existing building but requiring extensive work, giving a site value equivalent to £300k per acre (£740k per ha).
- 4.37 The agricultural land at sites 2A/B/C and 4 was assumed to have a value as agricultural land of £10k per acre (£25k per ha). Part of the Wideopen site has been used as a scrapyard. This would have an enhanced use value though possibly a little short of industrial value; the area of the scrapyard use is a relatively small proportion however and we have set the overall value at £35k per acre (£75k per ha).
- 4.38 Finally the Council's Valuation Dept suggested a use value of £105k per acre (£260k per ha) for the Eastbourne Gardens car park.

Table 4.6 Alternative Use Value bases				
	Site	Basis	£k per acre	£k per ha
1A	West Chirton South	Employment land	125	310
1B	Palmersville	Employment land	130	320
1C	Whitley Bay S	Employment land	140	345
2A	Holyfields	Agricultural	10	25
2B	Dudley	Agricultural	10	25
2C	Longbenton	Agricultural	10	25
3A	Smith's Dock	Employment land	150	370
4A	Wideopen	Agricultural/scrapyard	35	85
5A	Eastbourne Gardens	Car park	105	260
6A	St. Joseph's	Employment land	150	370
7A	Emperor Hadrian	Public house	140	345
7B	North Shields	Public house	175	430
7C	Wallsend Town Centre	Public house	150	370
8A	Marine House	Employment land	125	310
9A	Pioneer Social Club	Employment land	125	310
10A	The Old Dairy	Employment land	100	250
11A	Co-op, Brenkley Ave	Retail building	175	430
12A	The Railwayman	Public house	300	740

Source: Fordham Research 2009

- 4.39 It was noted earlier that brownfield sites could 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.
- 4.40 The costs arising from development or redevelopment of the 18 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

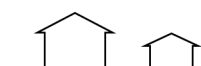
Introduction

- 5.1 This chapter considers the costs and other assumptions required to produce financial appraisals for the 12 actual + 6 notional 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 v 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 North Tyneside MBC at a base date of June/July 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 has indicated that Level 3 will apply to all newbuild housing (i.e. will be incorporated in Building Regulations) from 2010, with higher levels (4 then 6) intended to be triggered from 2013 onwards. Accordingly for the present study we have therefore 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 & English Partnerships (*A Code For Sustainable Development, 2007*) in respect of the impact of Level 3 on construction costs. This guide estimates (Table S2, *A Code For Sustainable Development, 2007*) the increase in costs arising for different house types under various scenarios. On average, current newbuild costs would need to increase by 4.2% to achieve Level 3.
- 5.5 In addition to this national requirement, Regional Spatial Strategy (RSS) policy 39 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 a premium of about £3,100 on the build cost for the average dwelling (£88,500) across the eighteen sites.



- 5.6 After allowing for the above ‘Level 3’ and ‘10% renewable’ premiums, we drew up appropriate cost levels for constructing market housing for the various built forms in the study, taking into account the mix of house types on each. These are set out in the table below. Site 12A involves conversion rather than new build and to take account of this we have reduced the new build price overall by 20%.

Table 5.1 Construction costs: market housing (actual sites only)					
<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>
1A. West Chirton South	87.75	(944)	7A. Emperor Hadrian PH	88.92	(957)
2A. Holyfields	85.88	(924)	8A. Marine House	85.33	(918)
3A. Smith's Dock	103.17	(1,110)	9A. Pioneer Social Club	87.14	(938)
4A. Wideopen UDP	85.49	(920)	10A. The Old Dairy	82.20	(885)
5A. Eastbourne Gardens	103.17	(1,110)	11A. Former CO-OP, Brenkley Ave	92.48	(995)
6A. St. Joseph's Training Centre	82.99	(893)	12A. The Railwayman	80.56	(867)

Source: Fordham Research derived from analysis of BCIS cost data

(ii) Construction costs: site specific adjustments

- 5.7 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 specifications.
- 5.8 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.
- 5.9 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.

- 5.10 In the present study, four of the sites are considered to fall into the 'small site' category –those with less than 15 dwellings, i.e. Sites 9A onwards. 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 3% for the 12 dwellings at Pioneer Social Club through to 14% for the smallest site the Railwayman with four 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.
- 5.11 In addition, we considered that several sites would be built to a higher specification – external or internal - than the other sites. Allowances of an additional 4% and 6% were assumed for sites 3 & 6, and site 5 respectively, in order to cover this.

(iii) Construction costs: affordable dwellings and final figures

- 5.12 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 assume a reduced build cost.
- 5.13 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.

Table 5.2 Construction costs adjusted and rounded: all housing (actual sites only)					
<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>
1A. West Chirton South	88	(945)	7A. Emperor Hadrian PH	89	(955)
2A. Holyfields	86	(925)	8A. Marine House	85.50	(920)
3A. Smith's Dock	107.50	(1,155)	9A. Pioneer Social Club	90	(965)
4A. Wideopen UDP	88.50	(920)	10A. The Old Dairy	86.50	(930)
5A. Eastbourne Gardens	109.50	(1,175)	11A. Former CO-OP, Brenkley Ave	99	(1,065)
6A. St. Joseph's Training Centre	86.50	(930)	12A. The Railwayman	92	(990)

Source: Fordham Research derived from analysis of BCIS cost data



(iv) Other normal development costs

- 5.14 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 would require at least a design or layout for each site.
- 5.15 Nevertheless, it is possible to generalise. Drawing on experience from examining financial assessments for individual schemes, it is possible to determine a percentage allowance in relation to total build costs. Any such allowance would (other things equal) normally be lower for higher density than for lower density schemes; the former have a smaller area of external works, and also 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.
- 5.16 In the light of these considerations we determined a scale of appropriate allowances for each site. The allowances ranged from 14.5% of build costs for the West Chirton site, down to 8% for the highest density schemes at Eastbourne Gardens and Smith’s Dock. The Table below sets out the individual site assumptions.

Table 5.3 Development cost allowances (actual sites only)

<i>Ref</i>	<i>Site/location</i>	<i>% of build costs</i>
1A	West Chirton South	14.5%
2A	Holyfields	13.5%
3A	Smith's Dock	8.0%
4A	Wideopen UDP	13.5%
5A	Eastbourne Gardens	8.0%
6A	St. Joseph's Training Centre	12.5%
7A	Emperor Hadrian PH	10.0%
8A	Marine House	11.5%
9A	Pioneer Social Club	10.0%
10A	The Old Dairy	12.0%
11A	Former Coop Brenkley Ave	9.0%
12A	The Railwayman	10.0%

Source: Fordham Research 2009. This table shows an A after each sites since it comes from the database in which these sites are identified as Actual. They are the same sites as listed elsewhere in this chapter and in the report generally.

(v) Abnormal development costs

- 5.17 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.
- 5.18 The majority 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 for some of the sites. As pointed out in the previous chapter (4.40) some abnormal costs could also arise in the event of the site's redevelopment with an alternative use.
- 5.19 The schedule below sets out the abnormal costs considered to apply in each case where they arise.

Table 5.4 Abnormal development costs (actual sites only)					
Ref	Site	Item	Residential:		Alt use:
			Cost		cost
			Total £k	£k per acre	£k per acre
1A	West Chirton South	none	-	-	-
2A	Holyfields	none	-	-	-
3A	Smith's Dock	none	-	-	-
4A	Wideopen UDP	none	-	-	-
5A	Eastbourne Gardens	site clearance	£20k	£31k	-
6A	St. Joseph's Training Centre	Demolition	£10k	£45k	-
7A	Emperor Hadrian PH	Demolition	£15k	£85k	-
8A	Marine House	Demolition/clearance	£75k	£98k	-
9A	Pioneer Social Club	Demolition	£15k	£135k	-
10A	The Old Dairy	site clearance	£15k		
11A	Former Coop Brenkley Ave	none	-	-	-
12A	The Railwayman	none	-	-	-

Source: Fordham Research 2009 This table shows an A after each sites since it comes from the database in which these sites are identified as Actual. They are the same sites as listed elsewhere in this chapter and in the report generally.

- 5.20 The table also shows that in no case is any adjustment needed to ensure that an alternative land value reflects the costs incurred in developing an alternative use. Therefore the alternative use values set out in Table 4.6 can be used unchanged.

(vi) Fees

- 5.21 We have assumed professional fees amount to 10% of build costs and 8% of infrastructure costs, in each case.



(vii) Contingency

- 5.22 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 lower figure was used for the fully greenfield site 2A, and an intermediate figure of 3.75% for the mixed greenfield/scrapyard situation at site 4A Wideopen. Otherwise 5% was applied on the other, previously developed sites.

Financial and other appraisal assumptions

(i) VAT

- 5.23 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

- 5.24 Our appraisals assume 7.5% pa for both debits and credits. This may seem high given the very low current base rate figure (MLR 0.5% mid July 2009) but has to reflect banks' view of risk for housing developers in the present housing market situation. Credit would in practice only arise for a short period 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 (or 16.7% of the Net Development Value) 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. It should be noted that residential developers commonly use a 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.

Table 5.5 Profit margins	
<i>% affordable</i>	<i>Profit % on costs</i>
0%	20%
20%	19%
30%	18.5%
40%	18%
50%	17.5

Source: Fordham Research 2009

(iv) Void

- 5.27 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.
- 5.28 For the purpose of the present study a three month void period is assumed for all sites.

(v) Phasing & timetable

- 5.29 The appraisals are assumed to have been prepared using prices and costs at a base date of June 2009, with an immediate start on site.
- 5.30 A pre-construction period of six months is assumed for all of the sites. Each dwelling is assumed to be built over a nine month period.
- 5.31 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 5.6 below.

Site acquisition and disposal costs

(i) Site holding costs and receipts

- 5.32 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.

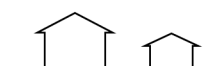


Table 5.6 Market takeup assumptions

	<i>Site</i>	<i>No of dwgs</i>	<i>Ceiling level of completions per qtr</i>
1Aa	West Chirton South	188	16
2A	Holyfields	150	14
3A	Smith's Dock	120	14
4A	Wideopen UDP	110	12
5A	Eastbourne Gardens	85	9
6A	St. Joseph's Training Centre	38	4
7A	Emperor Hadrian PH	38	5
8A	Marine House	41	5
9A	Pioneer Social Club	12	3
10A	The Old Dairy	10	3
11A	Former Coop Brenkley Ave	8	3
12A	The Railwayman	4	2

Source: Fordham Research 2009

(ii) Acquisition costs

5.33 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

5.34 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.

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 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 may 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 a range of affordable options, plus all-market.
- 6.6 Detailed appraisal printouts for all the sites are provided at Appendix 6 to this report. To keep to a manageable sized document, only one option, that of 20%, 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 five affordable options

		<i>Zero grant:</i>			
No	Site	<i>Residual value £k per acre for affordable option:</i>			
		<i>No aff</i>	<i>10%</i>	<i>20%</i>	<i>30%</i>
1A	West Chirton South	-22	-92	-161	-233
1B	Palmersville	68	-8	-87	-167
1C	Whitley Bay S	287	192	96	0
2A	Holyfields	323	234	143	54
2B	Dudley	120	50	-25	-99
2C	Longbenton	143	67	-11	-92
3A	Smith's Dock	-86	-411	-934	-1,362
4A	Wideopen UDP	194	113	33	-51
5A	Eastbourne Gardens	1,690	1,110	524	-71
6A	St. Joseph's Training Centre	366	279	192	106
7A	Emperor Hadrian PH	22	-81	-184	-288
7B	North Shields	582	431	282	129
7C	Wallsend Town Centre	36	-68	-173	-278
8A	Marine House	132	56	-23	-103
9A	Pioneer Social Club	-51	-170	-288	-413
10A	The Old Dairy	107	39	-31	-101
11A	Former Co-op, Brenkley Ave	-764	-912	-1,060	-1,212
12A	The Railwayman	-493	-591	-691	-791

Source: Fordham Research. As in Chapter 5 the A after site names means its 'Actual'; the B and C suffixes refer to notional sites derived from them

- 6.8 Table 6.1 shows that with no requirement for affordable housing, thirteen of the 18 sites deliver a positive land value. Those values vary widely, ranging from around £40k per acre (£100k per ha) to almost £1,700k per acre (£3.46m per ha). Most of them however are between about £150k-£350k per acre (£370k-£865k per ha).
- 6.9 Allowing for additional development costs and our planning gain assumptions, values on the remaining sites are broadly in line with but mostly below what the first half 2008 VOA figures indicate for 'oven ready' land in North Tyneside MBC, or what was suggested by small sites actually on the market. 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, 30%, only three 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 highest priced and most densely developed sites – Smith’s Dock and Eastbourne Gardens – where affordable housing has the greatest negative impact upon land value.
- 6.12 The reason for this is difficult to explain concisely. With the high density schemes, land value is a much lower proportion of the total value of the development, and will not subsidise the same proportion of units as on a lower density scheme.
- 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. 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 cover any other appropriate cost required to bring the site forward for development. We therefore have to consider how large this ‘margin’ or ‘cushion’ should be for our sites.
- 6.15 In practice the size of the margin 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 margin/cushion equivalent to £25k per acre might be sufficient in some cases, whilst in particular cases it could be below or above that figure.
- 6.16 We formed the view that an average figure of £40k per acre (£100k per ha) would serve as a broad indicator of the amount needed to provide an incentive to the landowner for all of the sites in the study. There is no one ‘right’ figure. However the £40k figure would represent a mark-up of some 25% or so of the highest industrial benchmark land value of £150k per acre, and is therefore felt to constitute a significant incentive on a typical brownfield site.



- 6.17 However after reflection it was decided to adjust this broad figure, in two respects. For greenfield sites in agricultural use the margin was doubled. This was done to allow an added incentive to the landowner - whose awareness and involvement in the property market may be much less than for a typical brownfield site owner – but also to make some allowance for site promotion costs. Secondly for very small sites the per acre/ha figure might not amount to a particularly large sum in absolute terms, by way of providing for the trouble and inconvenience of negotiating and agreeing a sale. Again there is no scientific basis for arriving at the ‘right’ figure, but something of the order of £10-15k was felt to represent a necessary minimum. Accordingly the basic £40k per acre formula was modified to give a fixed sum of £12,500, plus a £37,500 per acre allowance. On a site of 5 acres/2 ha the two formulae would each give £40k per acre. On larger sites the figure would come down very marginally, and on smaller sites the figure would rise steadily; by 0.2 acres/0.08 ha the allowance would equate to £100k per acre/£250k per ha.
- 6.18 Whether or not this is the right formula, the need for some such allowance seems incontestable. It would not be reasonable to assert that if residential development delivered, in absolute terms, just £1 more than the alternative use value, the scheme was sufficiently viable for the due target to be supported.
- 6.19 The figures resulting from these two changes to the £40k ‘base’ are set out below and combined with the alternative use values from Table 4.6 to show the resulting benchmark thresholds for viability.

Table 6.2 Viability margin & threshold values				
Ref	Site	£ per acre		
		GROSS alt use value	Margin	Viability threshold value
1A	West Chirton South	£125k	£39k	£164k
1B	Palmer'sville	£130k	£39k	£169k
1C	Whitley Bay S	£140k	£39k	£179k
2A	Holyfields	£10k	£79k	£89k
2B	Dudley	£10k	£79k	£89k
2C	Longbenton	£10k	£79k	£89k
3A	Smith's Dock	£150k	£44k	£194k
4A	Wideopen UDP	£35k	£69k	£104k
5A	Eastbourne Gardens	£105k	£47k	£152k
6A	St. Joseph's	£150k	£41k	£191k
7A	Emperor Hadrian PH	£140k	£47k	£187k
7B	North Shields	£175k	£47k	£222k
7C	Wallsend Town Centre	£150k	£47k	£197k
8A	Marine House	£125k	£43k	£168k
9A	Pioneer Social Club	£125k	£72k	£197k
10A	The Old Dairy	£100k	£57k	£157k
11A	Co-op Brenkley Ave	£175k	£110k	£285k
12A	The Railwayman	£300k	£139k	£439k

Source: Strategic Housing Viability Study As in Chapter 5 the A after site names means its 'Actual'; the B and C suffixes refer to notional sites derived from them

6.20 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.

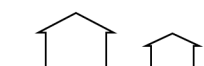


Table 6.3 Capacity of sample sites to carry affordable housing targets (zero grant)

No	Site	Alt use value	Value £k per acre			
			No affordable	10%	20%	30%
1A	West Chirton S	125	-22	-92	-161	-233
		164	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
1B	Palmersville	130	68	-8	-87	-167
		169	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
1C	Whitley Bay S	140	287	192	96	0
		179	VIABLE	VIABLE	NOT VIAB	NOT VIAB
2A	Holyfields	10	323	234	143	54
		89	VIABLE	VIABLE	VIABLE	MARGINAL
2B	Dudley	10	120	50	-25	-99
		89	VIABLE	MARGINAL	NOT VIAB	NOT VIAB
2C	Longbenton	10	143	67	-11	-92
		89	VIABLE	MARGINAL	NOT VIAB	NOT VIAB
3A	Smith's Dock	150	-86	-411	-934	-1,362
		194	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
4A	Wideopen UDP	35	194	113	33	-51
		104	VIABLE	VIABLE	NOT VIAB	NOT VIAB
5A	Eastbourne Gds	105	1,690	1,110	524	-71
		152	VIABLE	VIABLE	VIABLE	NOT VIAB
6A	St. Joseph's	150	366	279	192	106
		191	VIABLE	VIABLE	VIABLE	NOT VIAB
7A	Emperor Hadrian	140	22	-81	-184	-288
		187	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
7B	North Shields	175	582	431	282	129
		222	VIABLE	VIABLE	VIABLE	NOT VIAB
7C	Wallsend	150	36	-68	-173	-278
		197	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
8A	Marine House	125	132	56	-23	-103
		168	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB
9A	Pioneer	125	-51	-170	-288	-413
		197	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
10A	The Old Dairy	100	107	39	-31	-101
		157	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB
11A	Co-op, Br'y Ave	175	-764	-912	-1,060	-1,212
		285	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
12A	The Railwayman	304	-493	-591	-691	-791
		442	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB

Source: Strategic Housing Viability Study

Comments on the results

- 6.21 These figures should be seen as minima, which is sensible in terms of the purpose of this study. The actual outturn values are likely to be higher, but unpredictably so because for some sites there will be more bidders, and prices may go above the expected level, and again on a site specific basis, a given bidder may offer more due to landownership where the site in question will add a considerable 'marriage' value to sites he already owns. Thus the values should be conservative, and it would not be wise to add any blanket uplift to them. As and when sold for development site specific factors will come into play.
- 6.22 Residential development as 100% market housing is of course a relatively profitable development option, and in stable market conditions the sites would not be proposed for development otherwise. However market conditions are not stable; house prices have fallen considerably since the autumn of 2007, and so there were a number of sites which could not proceed at April 2009 price levels, even as 100% market housing.
- 6.23 In terms of site performance of the 18 actual and notional sites only eight sites are viable (and two are marginal) with no affordable housing at all. Eight sites are not viable even with no affordable housing. At 10% of affordable housing six sites are viable and two marginal. At 20% these two marginal sites become unviable, and a further two become unviable. By 30%, only one site is left, and even then is marginal. Beyond 30% all the sites are unviable.
- 6.24 These results are summarised in tabular form, and broken down for the four administrative sub-areas, below.

Table 6.4 Base appraisals: results by area					
	No of sites in category with affordable at:				
	No aff	10%	20%	30%	40%
Viable	4	2	1	0	0
Marginal	0	2	0	0	0
Not viable	2	2	5	6	6
Total North West	6	6	6	6	6
Viable	3	3	2	0	0
Marginal	0	0	0	1	0
Not viable	1	1	2	3	4
Total Whitley Bay	4	4	4	4	4
Viable	0	0	0	0	0
Marginal	2	0	0	0	0
Not viable	2	4	4	4	4
Total Wallsend	4	4	4	4	4
Viable	1	1	1	0	0
Marginal	0	0	0	0	0
Not viable	3	3	3	4	4
Total North Shields	4	4	4	4	4
Viable	8	6	4	0	0
Marginal	2	2	0	1	0
Not viable	8	10	14	17	18
Total	18	18	18	18	18

Source: Strategic Housing Viability Study

- 6.25 The results do suggest that on the basis of current market conditions it does appear that viability would permit a higher target, 20%, in the Whitley Bay sub area.
- 6.26 We will consider the implications of these results for future policy in the next chapter of this document. However before we can do this we should consider how likely changes in our appraisal assumptions might impact upon them.
- 6.27 A key factor to look at will be future movements in prices. The results represent a 'snapshot' of viability as at April 2009. The housing market began to decline very significantly from the beginning of 2008, and whilst it is clear that for the time being that decline has halted; there remains a possibility that viability will continue to deteriorate in the coming months. On the other hand, there is a reasonable expectation that at some point within the Plan period to 2026, viability will recover to something like the levels of October/November 2007.

6.28 In addition we will look at the impact of a revised tenure split, access to grant, and the built form assumption..

Sensitivity: price and cost levels

6.29 From about the time of our market survey in April/May 2009 prices appear to have stabilised, and indeed to have risen to some extent. However there is not a consensus amongst the property industry 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 relatively gloomy view, assuming that prices would fall another 10% from the April 2009 level and costs rise 5%, before a clear recovery gets under way. This combination therefore remains a possible, perhaps 'worst case', scenario for the situation in say late 2010/early 2011.

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 at April 2009 – 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 10% and 20% affordable options are compared to the base appraisal results in Table 6.5 below:



Table 6.5 Sensitivity tests for short term price fall							
No	Site	Alt use value	Value £k per acre				
			Base appraisal		Short term prices		
			10%	20%	10%	20%	
1A	West Chirton S	125	-92	-161	-290	-346	
		164	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	
1B	Palmersville	130	-8	-87	-216	-279	
		169	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	
1C	Whitley Bay S	140	192	96	-34	-115	
		179	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	
2A	Holyfields	10	234	143	24	-54	
		89	VIABLE	VIABLE	MARGINAL	NOT VIAB	
2B	Dudley	10	50	-25	-150	-210	
		89	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB	
2C	Longbenton	10	67	-11	-143	-207	
		89	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB	
3A	Smith's Dock	150	-411	-934	-1,437	-1,895	
		194	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	
4A	Wideopen UDP	35	113	33	-104	-173	
		104	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	
5A	Eastbourne Gds	105	1,110	524	-66	-583	
		152	VIABLE	VIABLE	NOT VIAB	NOT VIAB	
6A	St. Joseph's	150	279	192	84	11	
		191	VIABLE	VIABLE	NOT VIAB	NOT VIAB	
7A	Emperor Hadrian	140	-81	-184	-431	-514	
		187	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	
7B	North Shields	175	431	282	46	-87	
		222	VIABLE	VIABLE	NOT VIAB	NOT VIAB	
7C	Wallsend	150	-68	-173	-289	-387	
		197	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	
8A	Marine House	125	56	-23	-153	-217	
		168	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	
9A	Pioneer	125	-170	-288	-519	-615	
		197	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	
10A	The Old Dairy	100	39	-31	-116	-176	
		157	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	
11A	Co-op, Br'y Ave	175	-912	-1,060	-1,419	-1,537	
		285	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	
12A	The Railwayman	304	-591	-691	-922	-999	
		442	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	

Source: Strategic Housing Viability Study

6.32 It can be seen that with a further price fall and cost increase, none of the sites is viable, at either 20% or 10%. At 10% one site is marginal.

Sensitivity: the market peak

6.33 The above approach, varying the price level, could also be applied retrospectively to assess viability at the peak viability level of November 2007. At this time prices are believed to have been perhaps 25% higher than those assumed in our study. Costs would have been appreciably lower then, and furthermore Level 3 might not have been assumed to apply throughout. To take account of the lower cost level we reduced costs by 10% (which would take into account a partial relaxation of Level 3). The results are set out below.



Table 6.6 Sensitivity tests for market peak							
No	Site	Alt use value	Value £k per acre				
			Base appraisal		Market peak		
			20%		20%	30%	40%
1A	West Chirton S	125	-161		259	154	49
		164	NOT VIAB		VIABLE	MARGINAL	NOT VIAB
1B	Palmersville	130	-87		338	224	110
		169	NOT VIAB		VIABLE	VIABLE	NOT VIAB
1C	Whitley Bay S	140	96		566	424	284
		179	NOT VIAB		VIABLE	VIABLE	VIABLE
2A	Holyfields	10	143		577	445	313
		89	VIABLE		VIABLE	VIABLE	VIABLE
2B	Dudley	10	-25		365	257	148
		89	NOT VIAB		VIABLE	VIABLE	VIABLE
2C	Longbenton	10	-11		387	272	157
		89	NOT VIAB		VIABLE	VIABLE	VIABLE
3A	Smith's Dock	150	-934		1,963	515	-801
		194	NOT VIAB		VIABLE	VIABLE	NOT VIAB
4A	Wideopen UDP	35	33		457	336	214
		104	NOT VIAB		VIABLE	VIABLE	VIABLE
5A	Eastbourne Gds	105	524		2,903	2,091	1,278
		152	VIABLE		VIABLE	VIABLE	VIABLE
6A	St. Joseph's	150	192		582	459	333
		191	VIABLE		VIABLE	VIABLE	VIABLE
7A	Emperor Hadrian	140	-184		361	207	70
		187	NOT VIAB		VIABLE	VIABLE	NOT VIAB
7B	North Shields	175	282		925	704	508
		222	VIABLE		VIABLE	VIABLE	VIABLE
7C	Wallsend	150	-173		288	146	12
		197	NOT VIAB		VIABLE	NOT VIAB	NOT VIAB
8A	Marine House	125	-23		381	267	166
		168	NOT VIAB		VIABLE	VIABLE	MARGINAL
9A	Pioneer	125	-288		388	207	48
		197	NOT VIAB		VIABLE	VIABLE	NOT VIAB
10A	The Old Dairy	100	-31		383	274	176
		157	NOT VIAB		VIABLE	VIABLE	VIABLE
11A	Co-op, Br'y Ave	175	-1,060		-92	-325	-466
		285	NOT VIAB		NOT VIAB	NOT VIAB	NOT VIAB
12A	The Railwayman	304	-691		-62	-215	-370
		442	NOT VIAB		NOT VIAB	NOT VIAB	NOT VIAB

Source: Strategic Housing Viability Study

- 6.34 The results show that at prices and costs equivalent to the late 2007 market peak, viability is greatly improved. A 20% affordable requirement would be viable on all but two sites. At 30% fourteen sites are viable, and one marginal. At 40% nine sites are still viable, and one marginal.

Sensitivity: tenure split

- 6.35 Sensitivity testing was also undertaken to assess the impact of varying the tenure split from the assumed 80/20 to 40/60. Figures for the 20% target proportion are set out in Table 6.7.



Table 6.7 Sensitivity tests for 40/60 social rent: intermediate					
No	Site	Alt use value	Value £k per acre		
			Base = 80/20	Tenure split 40/60	
			20%	20%	
1A	West Chirton S	125	-161	-144	
		164	NOT VIAB	NOT VIAB	
1B	Palmerstonville	130	-87	-69	
		169	NOT VIAB	NOT VIAB	
1C	Whitely Bay S	140	96	122	
		179	NOT VIAB	NOT VIAB	
2A	Holyfields	10	143	170	
		89	VIABLE	VIABLE	
2B	Dudley	10	-25	-5	
		89	NOT VIAB	NOT VIAB	
2C	Longbenton	10	-11	8	
		89	NOT VIAB	NOT VIAB	
3A	Smith's Dock	150	-934	-864	
		194	NOT VIAB	NOT VIAB	
4A	Wideopen UDP	35	33	50	
		104	NOT VIAB	MARGINAL	
5A	Eastbourne Gds	105	524	623	
		152	VIABLE	VIABLE	
6A	St. Joseph's	150	192	207	
		191	VIABLE	VIABLE	
7A	Emperor Hadrian	140	-184	-165	
		187	NOT VIAB	NOT VIAB	
7B	North Shields	175	282	307	
		222	VIABLE	VIABLE	
7C	Wallsend	150	-173	-154	
		197	NOT VIAB	NOT VIAB	
8A	Marine House	125	-23	-9	
		168	NOT VIAB	NOT VIAB	
9A	Pioneer	125	-288	-261	
		197	NOT VIAB	NOT VIAB	
10A	The Old Dairy	100	-31	-19	
		157	NOT VIAB	NOT VIAB	
11A	Co-op, Br'y Ave	175	-1,060	-1,002	
		285	NOT VIAB	NOT VIAB	
12A	The	304	-691	-751	
		442	NOT VIAB	NOT VIAB	

Source: Strategic Housing Viability Study

- 6.36 In fact the change has only a modest impact on residual land values, improving them typically by £20-30k per acre (£50-75k per ha) and markedly more for sites with high density schemes. In this particular case the impact is very slight. Only one site changes its viability status – 4A moves up to marginal.

Sensitivity: availability of grant

- 6.37 In addition to future movements in prices and costs it is worth considering the impact of access to grant in the form of Social Housing Grant (SHG) through the HCA's National Affordable Housing Programme. Sensitivity testing was undertaken allowing for grant to be available at £40k per dwelling for social rented homes, and £15k per dwelling for intermediate housing (intermediate rent and shared ownership).
- 6.38 A simple calculation was made to adjust the zero grant appraisal outcomes assuming the whole of the grant sum impacted directly on the upfront residual land value. Whilst crude this is felt to give a reasonable idea of the scale of the impact on viability of grant support at this broad level.
- 6.39 The resulting figures for the 20% target level are compared with the base 20% appraisal results in the Table below.



Table 6.8 Sensitivity test for grant (SHG) availability					
No	Site	Alt use value	Value £k per acre		
			Base appraisal		SHG available
			20%		20%
1A	West Chirton S	125	-161		-55
		164	NOT VIAB		NOT VIAB
1B	Palmersville	130	-87		20
		169	NOT VIAB		NOT VIAB
1C	Whitley Bay S	140	96		202
		179	NOT VIAB		VIABLE
2A	Holyfields	10	143		250
		89	VIABLE		VIABLE
2B	Dudley	10	-25		81
		89	NOT VIAB		MARGINAL
2C	Longbenton	10	-11		95
		89	NOT VIAB		VIABLE
3A	Smith's Dock	150	-934		-460
		194	NOT VIAB		NOT VIAB
4A	Wideopen UDP	35	33		146
		104	NOT VIAB		VIABLE
5A	Eastbourne Gds	105	524		994
		152	VIABLE		VIABLE
6A	St. Joseph's	150	192		255
		191	VIABLE		VIABLE
7A	Emperor Hadrian	140	-184		7
		187	NOT VIAB		NOT VIAB
7B	North Shields	175	282		474
		222	VIABLE		VIABLE
7C	Wallsend	150	-173		20
		197	NOT VIAB		NOT VIAB
8A	Marine House	125	-23		108
		168	NOT VIAB		NOT VIAB
9A	Pioneer	125	-288		-55
		197	NOT VIAB		NOT VIAB
10A	The Old Dairy	100	-31		77
		157	NOT VIAB		NOT VIAB
11A	Co-op, Bry Ave	175	-1,060		-735
		285	NOT VIAB		NOT VIAB
12A	The Railwayman	304	-691		-465
		442	NOT VIAB		NOT VIAB

Source: Strategic Housing Viability Study

6.40 In fact the change does have an appreciable impact on residual land values, improving them typically by around £125k per acre (£310k per ha) for the less dense sites, and by upwards of £200k plus per acre (£500k per ha) on the higher density sites. At 20% with grant seven sites are viable, and one marginal. That makes 20% more tenable than it would be with zero grant.

Sensitivity: built form

6.41 Subsequent to our work on producing the draft version of this report, North Tyneside marketed a number of Council owned housing sites. The results, whilst varied, suggested that on some of the better sites at least, developers were taking an appreciably more optimistic forward view than that in our own study. Alongside this it appeared that applications for some other sites were being progressed, despite our limited assessment of their prospects. The Council asked us to consider these points.

6.42 It is the case that landowners may sometimes progress planning applications for other reasons than to enable a workable scheme to move ahead – e.g. land and asset management. However clearly there is a need to focus on whether landowners or developers might arrive at a different assessment on a scheme and its prospects, than our own assessments.

6.43 In the period from our assessment of market prices, there had been a period of several months where prices and market expectations had staged some degree of recovery. It would not be unreasonable to assume that this, and more particularly a view of future price improvement, explained the more bullish prices offered. However we undertook further analysis to try to account for the differences.

6.44 Examination of several of the sites involved led to a tentative hypothesis that in the better areas a slightly more suburban built form, with greater emphasis on two storey houses and a corresponding switch away from flats and three storey town house types, was a contributory factor in generating a more favourable financial outcome.

6.45 Consequently we decided to test the impact of an alternative built form on our appraisal outcomes by applying it to site 2C, Longbenton. The effect of the change to built form was to reduce development density from 14,750 to 14,500 sq ft per acre.

6.46 The resulting figures for the full range of affordable options are compared with the base appraisal results in the Table below.



Table 6.9 Sensitivity: alternate built form						
No	Site	Alt use value	Value £k per acre			
			No affordable	10%	20%	30%
2C	Longbenton (Base built form)	10	143	67	-11	-92
		89	VIABLE	MARGINAL	NOT VIAB	NOT VIAB
2C	Longbenton (Alternative built form)	10	434	339	243	146
		89	VIABLE	VIABLE	VIABLE	VIABLE

Source: Strategic Housing Viability Study

- 6.47 The amended built form has a significant impact as the site, previously marginal at 10% affordable, can now carry a 30% affordable requirement.
- 6.48 This result probably overstates the position somewhat. It results from the 'snapshot' situation at April 2009, when sales values for flats and three storey homes would have been depressed relative to those for two storey houses – a situation that would resolve itself over a period of time as a more normal market returned .
- 6.49 The figures do however add confirmation that the eventual permanent upturn will improve viability significantly, and suggest that a small degree of bullishness in deriving a target from the current price level appraisals would not be unreasonable.

Sensitivity: margin

- 6.50 The Council has also asked about the impact of the margin ('cushion') on viability outcomes. It is not necessary to carry out separate sensitivity tests to demonstrate this, however. Removing the margin (replacing it with a nominal £1 surplus) would mean simply that all sites shown in our base appraisals as Marginal, would become Viable. Those that were Not Viable would remain so.
- 6.51 The practical effect of the change would therefore be quite slight. At 10% affordable, eight of the 18 sites would now be viable, rather than six plus two marginals. At 20% affordable there would be no change. At 30% the one marginal site would now become Viable.
- 6.52 The final chapter spells out the implications of the results from the base appraisals and the sensitivity tests above.

7. Stage 1 Conclusions: Implications of the appraisal results

Our approach

- 7.1 The purpose of the Viability Study is 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 two sites for which applications have yet to be submitted. In addition to the dozen actual sites we added 8 notional sites, where actual data was adapted to provide indications of developments in parts of the housing market not represented by the dozen actual sites.
- 7.2 Fordham Research's bespoke financial appraisal package has been used to produce residual valuations for each site under a series of affordable housing options and with various other factors used for sensitivity testing.
- 7.3 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 North Tyneside, in practice display a considerable degree 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.
- 7.4 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:
- i) the combined effect of a serious restriction on credit availability since the early autumn of 2007 and the consequential, more general, business downturn which became increasingly established from the last quarter of 2008.
 - ii) 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



- a 'Merton rule' requirement as proposed in Regional Spatial Strategy

- 7.5 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 LDF policies. We have suggested a basis for interpretation which draws on indicative alternative use values, and sets a standard 'margin' over alternative use value to provide a meaningful 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.
- 7.6 There are substantial variations in house prices between different parts of the study area. Most of the chosen sites are in the main settlements and 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, previously developed land and sites not previously developed.
- 7.7 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 both intermediate rent and shared ownership at 25% share. We assumed that grant would not regularly be available and therefore tested a situation in which zero grant support was provided. In estimating the values which under those terms developers would be likely to achieve from affordable housing of the above types, we have used some information provided by locally active RSLs combined with estimated purchase prices drawn from our experience elsewhere.
- 7.8 We have taken a necessarily strategic approach. This is because the analysis is designed to test and demonstrate Borough-wide deliverability, in line with the requirements in para 29 of PPS3. Thus we used assumptions for developer contributions which we believe reflect the Council's published requirements and broad needs.
- 7.9 We would emphasise that this work has to be seen as 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

- 7.10 The results from the appraisals indicate that at the base date market values and costs, it would be difficult to sustain a target significantly greater than 15% affordable housing, without grant, across the study area as a whole.

- 7.11 In present market conditions only around half of the sites could produce 100% market housing, and remain demonstrably viable.
- 7.12 Two of the sites which are fully viable at zero become marginal at 10% whilst the others remain viable. At 20% the two marginal sites, and two other viable sites, become unviable, leaving only four sites viable.
- 7.13 This suggests that based on April 2009 prices, a target of the order of 15% or so, would be appropriate. As we have seen, subsequent information indicates that the appraisal results may paint a slightly gloomy picture. Prices appear to have risen a little in the ensuing months, and, for the time being at least, a different built form would, in some areas at any rate, improve the outcome.
- 7.14 In setting a target the latter factor suggests that the viability results should be regarded as slightly conservative. However if the target is to be based on an April 2009 base date, as the discussion on the next Chapter goes on to argue, then we cannot really take much account of the price improvements that took place in the period of six months or so from that base date.

Affordable target suggestion

- 7.15 In the past North Tyneside MBC has negotiated significantly more than 15% affordable housing, without grant, on privately developed sites. Table 6.6 shows, using the same valuations but at 2007 market peak prices, targets of 40% would have been viable on half of the sample sites used. The fall in house prices, combined with the additional cost of sustainable development (Level 3 plus 10% renewable), has made things much less favourable nationally as well as locally.
- 7.16 In the present market circumstances, with the 20% target, relaxing the tenure split to 40% social rented: 60% intermediate improves the residual values, though only slightly. Allowing for grant with the 20% target makes a more material improvement in the viability situation; seven sites are viable and one marginal. If that level of grant availability could be supported then it might be possible to consider setting a Borough wide requirement of 20%.
- 7.17 Sensitivity tests show just how responsive viability is to changes in present market conditions, i.e. price and cost levels. Were we facing price and cost levels at the peak, September 2007, a target of 40% would probably have been deliverable.
- 7.18 Taking all the evidence into account we would suggest that 15% would be the highest plan wide target that would be reasonable in present circumstances. This ignores public subsidy, since this is the sensible starting point. Where grant is likely to be available, it clearly adds to the amount of affordable housing that can be produced, and may help to unlock or kick start developments which the market alone could not mobilise. Where grant is expected, it is reasonable to set a higher target. There are two dimensions involved:



- (i) The zero grant level target is useful for negotiations with the private sector over affordable housing subsidised by the land value
- (ii) In LDF and Housing Strategy documents a view may be taken as to the provision of grant, which may mean that an outcome target of 20% or more can be envisaged for the plan period. The SHMA suggests a needs-based target of 25%. This would imply a high level of grant unless the housing market improves. In relation to the latter, please see the next chapter, which allows for targets to move with the future market.

7.19 It may be decided to set a higher target in parts of North Tyneside with more prosperous housing markets. A figure of 20% appears to be tenable for Whitley Bay.

The threshold for affordable housing

7.20 The four smallest sites in the study (sizes 4-12 dwellings) were included to provide guidance on the scope for reducing the size threshold below the default position set out in national guidance. The four sites do relatively badly overall in viability terms; three are unviable at no affordable and the fourth is marginal.

7.21 Under more favourable terms the two larger sites do better. At the market peak both are viable at 30% and one viable at 40%. Neither of the two smaller sites can manage 20% at the peak, although then both are probably barely viable with no affordable. The reality is that neither of these sites appears to be a particularly profitable development, and both have comparatively high alternative use values.

7.22 Our view is that the appraisal results provide quite limited evidence for lowering the threshold, and accordingly we suggest that the present (national) threshold of 15 dwellings is left unchanged

8. Stage 2: Dynamic Viability

- 8.1 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

- 8.2 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 Examination, 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 Examination at each change in the housing market.
- 8.3 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.
- 8.4 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.
- 8.5 The approach 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 Examination, is assessed and approved in whatever form during that Examination, and afterwards is entirely dependent on three published indexes:
- **Price change:** We use the Halifax Price Index (HPI) 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 most commonly it is the Valuation Office Agency's Industrial Land index



8.6 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. The indexes used for updating are listed in Table 8.1 below:

Table 8.1 Indices for automatic updating of Dynamic Viability		
Variable	Proposed index	Starting Value
House Price	Halifax House Price Index	April 2009 = 500.0
	Halifax House Price Index (free, monthly) http://www.lloydsbankinggroup.com/media1/research/halifax_api.asp	
Build cost	BCIS General Building Cost Index	July 2009 = 284.3 (as at early July 2009)
	BCIS Review Online (subscription only, monthly) Produced by the Royal Institute of Chartered Surveyors http://www.bcis.co.uk/online	
Alternative use value	Property Market Report (VOA) Average Value of Mixed Agricultural Land (Equipped, with Vacant Possession) for North East Region	July 2009 = figure is £11,115 per ha
	Valuation Office Agency: Property Market Reports (free, six monthly) http://www.voa.gov.uk/publications/index.htm	

Sources: As shown in the boxes of the table

8.7 There might be some argument for using regional versions of the Halifax price index, but in practice all regional index numbers have moved in a similar pattern in the period since the market peak, and so it is better to use the national version, which appears monthly rather than quarterly as the regional indices do.

Details of the outputs

8.8 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.

8.9 As will be noticed, the table below focussed upon the 15% target discussed as being deliverable in the previous chapter: the zero/zero point when looking at the percentage version of the indexes.

Table 8.2 North Tyneside Coarse Matrix with base Alternative Use Value

		Price Change HPI										
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%	
Cost Change BCIS Index	%		400.0	450.0	500.0	550.0	600.0	650.0	700.0	750.0	800.0	
	-20%	227.4	25%	40%	50%	55%	55%	55%	55%	55%	55%	
	-10%	255.9	0%	20%	35%	45%	50%	55%	55%	55%	55%	55%
	0%	284.3	0%	0%	15%	30%	40%	45%	50%	55%	55%	
	10%	312.7	0%	0%	5%	20%	30%	35%	45%	50%	55%	50%
	20%	341.2	0%	0%	0%	5%	20%	25%	35%	40%	45%	45%
	30%	369.6	0%	0%	0%	0%	5%	15%	25%	35%	40%	40%
	40%	398.0	0%	0%	0%	0%	0%	5%	15%	25%	30%	35%
	50%	426.5	0%	0%	0%	0%	0%	0%	10%	15%	25%	30%
				0%			5%	10%	15%	20%	25%	

Source: Fordham Research 2009:

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

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

- *Coarse Matrix*: This is calculated in 10% intervals of the cost & price indexes. 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 normally uses 4% intervals in the indexes (the intervals could be varied). This produces results for the area around the chosen target that yield much smaller target changes: mostly 5% intervals and sometimes 10%.

8.11 Table 8.3 shows the *Fine Matrix* outputs that relate to the Table 8.2 *Coarse Matrix*. Again the full set of tables will be found in Appendix 5. As will be seen from Table 8.3, the intervals in the targets around the base case of 15% are smaller than in Table 8.2. They permit more sensitive adjustments of the target as the index numbers change in future.



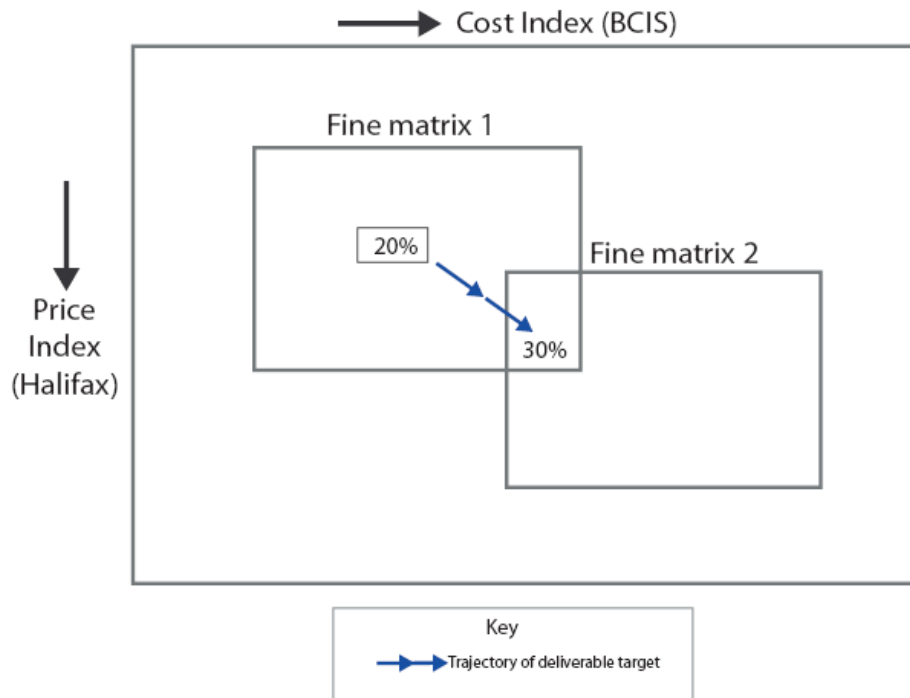
Table 8.3 North Tyneside Fine Matrix with base alternative use value

		Price Change HPI										
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%	
		%	460.0	480.0	500.0	520.0	540.0	560.0	580.0	600.0	620.0	
Cost Change BCIS Index	-8%	261.6	20%	25%	30%	35%	40%	45%	45%	50%	50%	
	-4%	272.9	15%	20%	25%	30%	35%	40%	40%	45%	50%	55%
	0%	284.3	5%	15%	15%	25%	30%	35%	35%	40%	45%	
	4%	295.7	0%	5%	15%	20%	25%	30%	35%	35%	40%	50%
	8%	307.0	0%	0%	5%	15%	20%	25%	30%	30%	35%	45%
	12%	318.4	0%	0%	0%	5%	15%	20%	25%	25%	30%	40%
	16%	329.8	0%	0%	0%	0%	10%	15%	20%	25%	25%	35%
	20%	341.2	0%	0%	0%	0%	0%	10%	15%	20%	20%	30%
				0%			5%	10%	15%	20%	25%	

Source: Fordham Research 2009: Affordable Housing Viability Study 2009

- 8.12 The trajectory shown in *Fine Matrix 1* is from the initial deliverable target of 15%, through various changes in cost and price to a position of a 30% 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 30% 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.
- 8.13 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 5-10%. 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.

Figure 8.1 Coarse and Fine Matrices related



Source: Fordham Research 2009:

- 8.14 To provide further assistance in visualising how this system works, the following figure provides a step by step guide:

Figure 8.2 How it works in practice

Step 1

The starting point is the 15% in Figure 9.1. For the purpose of the example assume that this is what the Core Strategy Inspector's report has endorsed.

Step 2

In a year, or whatever interval has been set by the Core Strategy Inquiry, check the values of the three indexes. The first one to check is the Alternative Use Value. This will determine which of the 8 pages of Coarse Matrix is to be used.

Step 3

If the Alternative Use Value has changed by enough to move to one of the other seven pages, that may itself result in a target change, up or down. As an example, assume it now goes to 20%

Step 4

Then look at the BCIS and Halifax indexes for this Alternative Use value level and check whether there has been a move from the 0/0 position at which the process started. This may result in another change: say to 25%

Step 5

Then switch from the Coarse Matrix to the Fine one. This will allow a more precise fix on the new target. For example it may be 20%. This is the final step in checking the three indexes.

Step 6

The final target, 35%, would then be published in the Annual Monitoring report. Any interested party could, however, use the tables already published in the Plan to work out the values. This illustration shows a change, in order to show the procedure. It is equally possible that the process may lead to no change at all in the target!

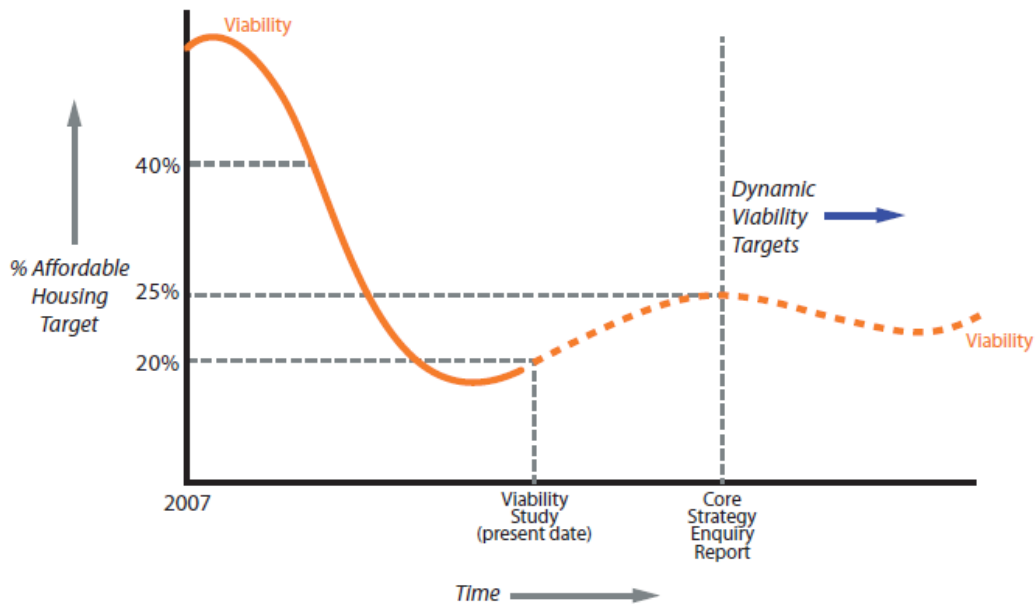
Source: Fordham Research 2009:

Implementing Dynamic Viability

- 8.15 The 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 some months until the actual Examination. 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 Examination to ensure that the Dynamic Viability process starts from the period of the Examination.

- 8.16 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 8.3 indicates this process schematically.

Figure 8.3 Implementing Dynamic Viability



Source: Fordham Research 2009

- 8.17 The diagram illustrates the possible change in viability between study and Core Strategy Examination. 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.

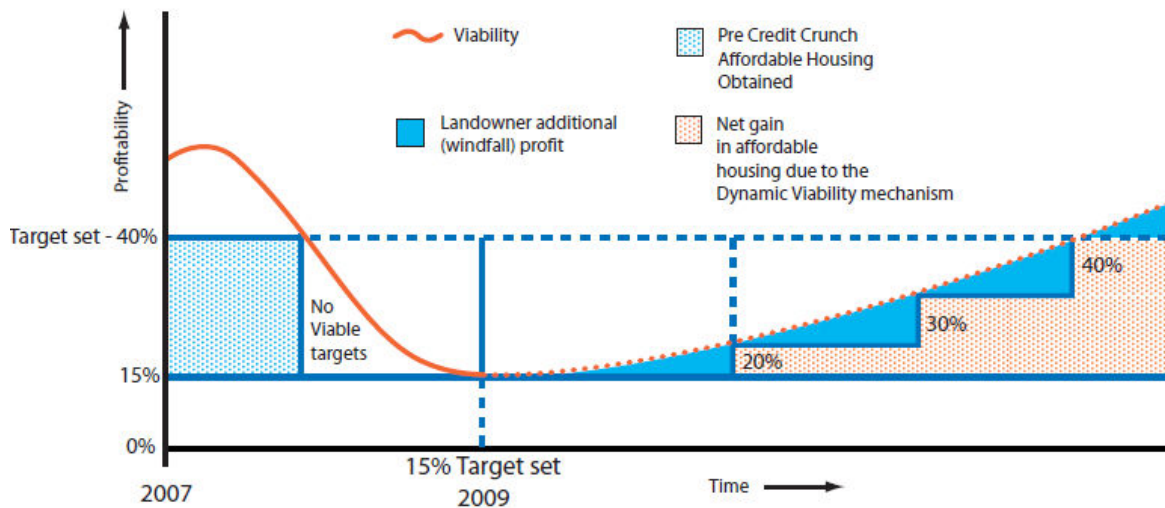
Conclusion

- 8.18 The printouts in Appendix 5 provide the detailed background to the two figures (8.1 and 8.2) presented above. Together they allow for the Core Strategy Examination to set the basis for deliverable affordable housing targets over the plan period. They should achieve the practical maximum of affordable housing without prejudicing the delivery of market housing.
- 8.19 The following diagram shows that when the market eventually recovers (the dotted brown 'viability' line curves up) the gain will be shared between windfall land value gains to the landowner (shown in blue) and gains in affordable housing (shown in stippled red). A key factor is the interval between reviews of the target. We suggest annually, to fit in with the Annual Monitoring process. At all times the landowner receives the basic initial land value and profit, and the housebuilder gets 20% gross profit on cost. In the periods between review both landowner, and if involved in the land value also the



developer, will share increases in land value if planning permission is obtained then. But the target will rise to give additional affordable housing in between periods when windfall land value accrues.

Figure 8.4 Gain of Affordable housing through Dynamic Viability



Source: Fordham Research 2009

8.20 The 'broad brush' viability process which leads to the establishment of deliverable targets is, of course, distinct from the site specific issues that may arise at the point of a planning permission. If there are exceptional costs to a particular site, then the policy level of affordable housing may justifiably be reduced. That is the way in which affordable targets have worked since 1991. But the Dynamic Viability results permit the overarching affordable target to be sensitive to market fluctuations while not requiring expensive new Core Strategy consideration.

Appendices



Appendix 1 Site built form data

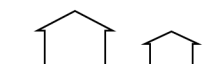
Site 1				Location				
Site	West Chirton			Chirton				
Area	ha	5	nett					
	acres	12.4						
No of dwellings	count	0		Floorspace density	0	net sq ft/acre		
					0	net sq m/ha		
Floorspace								
		net	gross	net	gross			
Total floor area		sq ft	sq ft	%	%			
Flats		33,060	38,894	17.7%	20.2%			
Houses		153,325	153,325	82.3%	79.8%			
All		186,385	192,219	100.0%	100.0%			
		net	gross					
Average area		sq ft	sq ft					
Flats		689	810					
Houses		1,095	1,095					
All		991	1,022					
Accommodation								
		Ave sq ft	No of bedrooms					
		net	1 bed	2 bed	3 bed	4 bed	5+ bed	
Flats/apartments								
		660	0	25	0	0	0	
		720	0	23	0	0	0	
Houses 3 storey/2.5 storey								
		1080	0	0	30	0	0	
		1160	0	0	0	30	0	
		1290	0	0	0	15	0	
Houses 2 storey								
		650	0	10	0	0	0	
		975	0	0	15	0	0	
		1100	0	0	19	0	0	
		1150	0	0	18	0	0	
		1350	0	0	0	3	0	
Total dwellings			0	58	82	48	0	
						TOTAL	188	



Site	Site 2		Location																																																																																																																																												
Area	Holyfields																																																																																																																																														
	ha	4	nett																																																																																																																																												
	acres	9.9																																																																																																																																													
No of dwellings	count	150	Floorspace density	14,752 net sq ft/acre																																																																																																																																											
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Floorspace	<table border="1"> <thead> <tr> <th></th> <th>net</th> <th>gross</th> <th>net</th> <th>gross</th> </tr> <tr> <th></th> <th>sq ft</th> <th>sq ft</th> <th>%</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Total floor area</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Flats</td> <td>16,311</td> <td>19,189</td> <td>11.2%</td> <td>12.9%</td> </tr> <tr> <td>Houses</td> <td>129,500</td> <td>129,500</td> <td>88.8%</td> <td>87.1%</td> </tr> <tr> <td>All</td> <td>145,811</td> <td>148,689</td> <td>100.0%</td> <td>100.0%</td> </tr> <tr> <td>Average area</td> <td>net</td> <td>gross</td> <td colspan="2"></td> </tr> <tr> <td></td> <td>sq ft</td> <td>sq ft</td> <td colspan="2"></td> </tr> <tr> <td>Flats</td> <td>604</td> <td>711</td> <td colspan="2"></td> </tr> <tr> <td>Houses</td> <td>1,053</td> <td>1,053</td> <td colspan="2"></td> </tr> <tr> <td>All</td> <td>972</td> <td>991</td> <td colspan="2"></td> </tr> </tbody> </table>					net	gross	net	gross		sq ft	sq ft	%	%	Total floor area					Flats	16,311	19,189	11.2%	12.9%	Houses	129,500	129,500	88.8%	87.1%	All	145,811	148,689	100.0%	100.0%	Average area	net	gross				sq ft	sq ft			Flats	604	711			Houses	1,053	1,053			All	972	991																																																																																						
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Site 3		Smith's Dock		Location		Whitley Bay	
Area	ha	0.723	nett				
	acres	1.8					
No of dwellings	count	120		Floorspace density	55,415	net sq ft/acre	
					12,726	net sq m/ha	
Floorspace							
		net	gross	net	gross		
Total floor area		sq ft	sq ft	%	%		
Flats		99,000	116,471	100.0%	100.0%		
Houses		0	0	0.0%	0.0%		
All		99,000	116,471	100.0%	100.0%		
		net	gross				
Average area		sq ft	sq ft				
Flats		825	971				
Houses		#DIV/0!	#DIV/0!				
All		825	971				
Accommodation							
		Ave sq ft	No of bedrooms				
		net	1 bed	2 bed	3 bed	4 bed	5+ bed
Flats/apartments							
		700	0	35	0	0	0
		800	0	35	0	0	0
		900	0	35	0	0	0
		1000	0	15	0	0	0
Total dwellings		0	120	0	0	0	0
						TOTAL	120

Site 4		Wideopen		Location		Wideopen	
Area	ha	2.75	nett				
	acres	6.8					
No of dwellings	count	110		Floorspace density	14,943	net sq ft/acre	
					3,432	net sq m/ha	
Floorspace							
		net	gross	net	gross		
Total floor area		sq ft	sq ft	%	%		
Flats		10,149	11,940	10.0%	11.6%		
Houses		91,390	91,390	90.0%	88.4%		
All		101,539	103,330	100.0%	100.0%		
		net	gross				
Average area		sq ft	sq ft				
Flats		597	702				
Houses		983	983				
All		923	939				
Accommodation							
		Ave sq ft	No of bedrooms				
		net	1 bed	2 bed	3 bed	4 bed	5+ bed
Flats/apartments							
		481	4	0	0	0	0
		605	0	7	0	0	0
		665	0	6	0	0	0
Houses 3 storey/2.5 storey							
		1080	0	0	0	8	0
		1150	0	0	0	8	0
		1250	0	0	0	6	0
		1400	0	0	0	4	0
Houses 2 storey							
		790	0	0	15	0	0
		925	0	0	16	0	0
		1000	0	0	10	0	0
		1250	0	0	0	4	0
		1350	0	0	0	4	0
		1500	0	0	0	2	0
		650	0	16	0	0	0
Total dwellings		4	29	41	36	0	0
						TOTAL	110

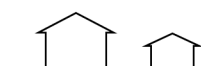


Site 5		Eastbourne Gardens		Location		Whitley Bay	
Site Area	ha	0.51	nett				
	acres	1.3					
No of dwellings	count	85		Floorspace density	55,546	net sq ft/acre	
					12,756	net sq m/ha	
Floorspace							
		net	gross	net	gross		
Total floor area		sq ft	sq ft	%	%		
Flats		70,000	82,353	100.0%	100.0%		
Houses		0	0	0.0%	0.0%		
All		70,000	82,353	100.0%	100.0%		
Average area		net	gross				
		sq ft	sq ft				
Flats		824	969				
Houses		#DIV/0!	#DIV/0!				
All		824	969				
Accommodation							
		Ave sq ft	No of bedrooms				
		net	1 bed	2 bed	3 bed	4 bed	5+ bed
Flats/apartments							
700		0	25	0	0	0	0
800		0	25	0	0	0	0
900		0	25	0	0	0	0
1000		0	10	0	0	0	0
Total dwellings		0	85	0	0	0	0
						TOTAL	85

Site 6		St Joseph's Training Centre		Location		Howdon	
Site Area	ha	1.72	nett				
	acres	4.3					
No of dwellings	count	38		Floorspace density	12,501	net sq ft/acre	
					2,871	net sq m/ha	
Floorspace							
		net	gross	net	gross		
Total floor area		sq ft	sq ft	%	%		
Flats		0	0	0.0%	0.0%		
Houses		53,131	53,131	100.0%	100.0%		
All		53,131	53,131	100.0%	100.0%		
Average area		net	gross				
		sq ft	sq ft				
Flats		#DIV/0!	#DIV/0!				
Houses		1,398	1,398				
All		1,398	1,398				
Accommodation							
		Ave sq ft	No of bedrooms				
		net	1 bed	2 bed	3 bed	4 bed	5+ bed
Houses 3 storey/2.5 storey							
1677		0	0	0	6	0	0
Houses 2 storey							
1340		0	0	0	20	0	0
1500		0	0	0	0	7	0
Bungalows							
1065		0	0	3	0	0	0
1287		0	0	0	2	0	0
Total dwellings		0	0	3	28	7	0
						TOTAL	38

Site 7		Emp. Hadrian Pub Site		Location		Battle Hill	
Site Area	ha	0.56	nett				
	acres	1.4					
No of dwellings	count	38		Floorspace density	21,534	net sq ft/acre	
					4,945	net sq m/ha	
Floorspace							
		net	gross	net	gross		
Total floor area		sq ft	sq ft	%	%		
Flats		7,128	8,386	23.9%	27.0%		
Houses		22,670	22,670	76.1%	73.0%		
All		29,798	31,056	100.0%	100.0%		
		net	gross				
Average area		sq ft	sq ft				
Flats		594	699				
Houses		872	872				
All		784	817				
Accommodation							
		Ave sq ft		No of bedrooms			
		net	1 bed	2 bed	3 bed	4 bed	5+ bed
Flats/apartments		594	0	12	0	0	0
Houses 3 storey/2.5 storey		1011	0	0	0	13	0
Houses 2 storey		665	0	4	0	0	0
		763	0	0	9	0	0
Total dwellings		0	0	16	9	13	0
						TOTAL	38

Site 8		Marine House		Location		Howdon	
Site Area	ha	0.88	nett				
	acres	2.2					
No of dwellings	count	41		Floorspace density	15,502	net sq ft/acre	
					3,560	net sq m/ha	
Floorspace							
		net	gross	net	gross		
Total floor area		sq ft	sq ft	%	%		
Flats		0	0	0.0%	0.0%		
Houses		33,708	33,708	100.0%	100.0%		
All		33,708	33,708	100.0%	100.0%		
		net	gross				
Average area		sq ft	sq ft				
Flats		#DIV/0!	#DIV/0!				
Houses		822	822				
All		822	822				
Accommodation							
		Ave sq ft		No of bedrooms			
		net	1 bed	2 bed	3 bed	4 bed	5+ bed
Flats/apartments		995	0	0	8	0	0
Houses 3 storey/2.5 storey		675	0	8	0	0	0
Houses 2 storey		750	0	14	0	0	0
		850	0	5	0	0	0
		933	0	0	6	0	0
Total dwellings		0	0	27	14	0	0
						TOTAL	41



Site 9							
Site	Pioneer Social Club			Location	Dudley		
Area	ha	0.15	nett				
	acres	0.4					
No of dwellings	count	12					
				Floorspace density	21,854 net sq ft/acre 5,019 net sq m/ha		
Floorspace	Total floor area	net	gross	net	gross		
		sq ft	sq ft	%	%		
	Flats	3,630	4,271	44.8%	48.9%		
	Houses	4,470	4,470	55.2%	51.1%		
	All	8,100	8,741	100.0%	100.0%		
	Average area	net	gross				
		sq ft	sq ft				
	Flats	605	712				
	Houses	745	745				
	All	675	728				
Accommodation		Ave sq ft	No of bedrooms				
		net	1 bed	2 bed	3 bed	4 bed	5+ bed
	Flats/apartments	605	0	6	0	0	0
	Houses 2 storey	650	0	3	0	0	0
		840	0	0	3	0	0
	Total dwellings	0	9	3	0	0	
						TOTAL	12

Site 10							
Site	The Old Dairy			Location	Wallsend		
Area	ha	0.26	nett				
	acres	0.6					
No of dwellings	count	10					
				Floorspace density	12,371 net sq ft/acre 2,841 net sq m/ha		
Floorspace	Total floor area	net	gross	net	gross		
		sq ft	sq ft	%	%		
	Flats	0	0	0.0%	0.0%		
	Houses	7,948	7,948	100.0%	100.0%		
	All	7,948	7,948	100.0%	100.0%		
	Average area	net	gross				
		sq ft	sq ft				
	Flats	#DIV/0!	#DIV/0!				
	Houses	795	795				
	All	795	795				
Accommodation		Ave sq ft	No of bedrooms				
		net	1 bed	2 bed	3 bed	4 bed	5+ bed
	Houses 2 storey	885	0	0	4	0	0
		736	0	4	0	0	0
		732	0	2	0	0	0
	Total dwellings	0	6	4	0	0	
						TOTAL	10

Site 11		Former Coop Brenkley Ave		Location		Shiremoor	
Site Area	ha	0.07	nett				
	acres	0.2					
No of dwellings	count	8		Floorspace density	30,988	net sq ft/acre	
					7,116	net sq m/ha	
Floorspace							
		net	gross	net	gross		
Total floor area		sq ft	sq ft	%	%		
Flats		5,360	6,306	100.0%	100.0%		
Houses		0	0	0.0%	0.0%		
All		5,360	6,306	100.0%	100.0%		
		net	gross				
Average area		sq ft	sq ft				
Flats		670	788				
Houses		#DIV/0!	#DIV/0!				
All		670	788				
Accommodation							
		Ave sq ft	No of bedrooms				
		net	1 bed	2 bed	3 bed	4 bed	5+ bed
Flats/apartments							
		670	0	8	0	0	0
		605	0	0	0	0	0
		665	0	0	0	0	0
Houses 3 storey/2.5 storey							
		1090	0	0	0	0	0
		1145	0	0	0	0	0
		1230	0	0	0	0	0
		1335	0	0	0	0	0
Houses 2 storey							
		750	0	0	0	0	0
		817	0	0	0	0	0
		1165	0	0	0	0	0
		1265	0	0	0	0	0
		1525	0	0	0	0	0
		0	0	0	0	0	0
Total dwellings		0	0	8	0	0	0
						TOTAL	8

Site 12		The Railwayman		Location		Percy Main	
Site Area	ha	0.05	nett				
	acres	0.1					
No of dwellings	count	4		Floorspace density	20,558	net sq ft/acre	
					4,721	net sq m/ha	
Floorspace							
		net	gross	net	gross		
Total floor area		sq ft	sq ft	%	%		
Flats		2,540	2,988	100.0%	100.0%		
Houses		0	0	0.0%	0.0%		
All		2,540	2,988	100.0%	100.0%		
		net	gross				
Average area		sq ft	sq ft				
Flats		635	747				
Houses		#DIV/0!	#DIV/0!				
All		635	747				
Accommodation							
		Ave sq ft	No of bedrooms				
		net	1 bed	2 bed	3 bed	4 bed	5+ bed
Flats/apartments							
		605	0	2	0	0	0
		665	0	2	0	0	0
Total dwellings		0	0	4	0	0	0
						TOTAL	4



Appendix 2 Newbuild schemes

A2.1 The schedules below provide details of a number of current newbuild developments and other comparable housing in North Tyneside area and immediate surrounds.

Table A2.1 Newbuild schemes				
SITE / LOCATION	BUILDER	No. of Dwgs	RANGE OF AVAILABLE Dwgs	PRICES
East Farm Mews, Backworth	Charles Church		2, 3 & 4 bed houses	£199k- £399k
Rosehill, Wallsend	Persimmon		3 & 4 bed houses	£132k- £220k
Earsdon View, Shiremoor	Miller Homes		3 bed town houses	£199k- £214k
Greenside, Kenton Bank Foot	Persimmon		4 & 5 bed houses	£315k- £495k
Melbury, Netherwitton Way, Gosforth	Persimmon		4 bed houses	£409k- £439k
Wrendale Court Gosforth	Persimmon		1 bed apartment	£119k
Hadrian Mews, Wallsend	Bellway		3 & 4 bed houses	£165k- £185k
Hadrian Village, Wallsend	Bellway		3 & 4 bed houses	£165k- £245k
Hibernia Village, Walker	Bellway		3 bed houses	£145k- £152k
Wyedale, Walker	McInerney		3 & 4 bed houses	£139k- £177k
Northumberland Park, Shiremoor	Bellway		3 & 4 bed houses	£172k- £317k
Earsdon View, Shiremoor	Bellway		3, 4 & 5 bed houses	£176k- £337k

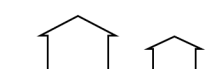


Table A2.2 Other comparable secondhand properties

<i>SITE / LOCATION</i>	<i>BUILDER</i>	<i>No. of Dwgs</i>	<i>RANGE OF Dwgs</i>	<i>PRICES</i>
***Shiremoor Area			<i>apartments</i>	£80k
*** Dolphin Quay area			<i>apartments</i>	£140k
***Whitley Bay coastal			<i>apartments</i>	£175k- £250K
***Denewood area			<i>4 bed</i>	£340k- £390k
***Alexandria Way, Wallsend area			<i>apartments</i>	£90k
***Forest Gate area, Palmersville			<i>3 bed/ 4 bed</i>	£210k/ £140k £110k/
***Dudley area			<i>2 bed/ 3 bed/ 4 bed</i>	£150k/ £200k £110k/
***Longbenton area			<i>2 bed apart/ 3 bed</i>	£145k
***North Shields (general)	<i>Walton Park</i>		<i>2 bed</i>	£145k
	<i>The Wynd</i>		<i>4 bed</i>	£260k- £350k
	<i>Renaissance Point</i>		<i>2 bed</i>	£150k
***Whitley Bay (general)	<i>Hillheads Court</i>		<i>2 bed house/ 2 bed apart</i>	£125k/ £110k

Appendix 3 House price variations

- A3.1 The indices in the table which follows compare prices in each postcode sector in the study area with an England and Wales 'average' figure – actually the median postcode value.
- A3.2 The indices are standardised, to eliminate the effect of variations in type mix; separate indices for each house type are combined with weightings based on the mix of overall sales.



Table A3.1 Price variations by postcode sector

Postcode sector	Areas covered in sector	Q4 07	Q2 08	Q4 08	Q2 09	AVG
NE29 7	West Chirton	65.6%	63.5%	66.2%	49.4%	61.2%
NE28 7	Willingdon	65.6%	71.7%	58.1%	61.5%	64.2%
NE28 0	Howdon	61.3%	62.1%	60.1%	74.9%	64.6%
NE28 9	Battle Hill	69.1%	68.0%	61.1%	66.1%	66.1%
NE29 6	Royal Quays	67.9%	72.8%	69.3%	54.5%	66.1%
NE28 6	Rosehill	60.8%	60.5%	66.9%	77.3%	66.4%
NE25 0	New Hartley		66.8%		68.5%	67.7%
NE23 7	Dudley(+Annitsford + Seghill)	64.7%	66.1%	68.6%	74.7%	68.5%
NE28 8	Little Benton	76.8%	62.7%	78.6%	62.3%	70.1%
NE29 8	Billy Mill Lane	69.6%	74.1%	78.7%	61.3%	70.9%
NE12 6	Killingworth	76.5%	68.5%	81.6%	80.7%	76.8%
NE13 6	Wideopen	74.6%	80.8%		79.5%	78.3%
NE12 5	Camperdown	68.8%	98.8%		68.9%	78.8%
NE29 0	North Shields	81.2%	79.7%	77.2%	94.2%	83.1%
NE27 0	Shiremoor	85.5%	88.2%	85.0%	98.3%	89.3%
NE12 7	Palmersville	95.4%	88.6%	83.3%	90.2%	89.4%
NE12 9	Forest Hall	86.3%	96.3%	95.1%	82.7%	90.1%
NE26 2	Whitley Bay	111.2%	105.2%	52.4%	100.6%	92.3%
NE12 8	Longbenton	77.3%	85.1%	127.1%	87.0%	94.1%
NE30 1	Union Quay	82.7%	93.8%	109.2%	115.5%	100.3%
NE7 7	High Heaton	96.8%	109.0%	119.6%	91.6%	104.2%
NE26 4	New Hartley	106.3%	114.6%	98.7%	113.2%	108.2%
NE30 3	Marden	99.3%	113.3%	95.3%	125.7%	108.4%
NE25 8	Monkseaton	118.2%	109.1%	87.7%	123.6%	109.7%
NE29 9	Preston Grange	92.0%	98.7%	168.9%	94.0%	113.4%
NE30 2	Northumberland Park	117.3%	106.2%	112.9%	125.0%	115.3%
NE25 9	Earsdon	103.0%	108.7%	173.8%	101.6%	121.8%
NE26 1	Whitley Sands	130.1%	116.3%	101.1%	145.4%	123.2%
NE26 3	Monkseaton Drive	128.1%	156.3%	96.9%	129.7%	127.8%
NE30 4	Tynemouth	134.7%	183.1%	103.8%	125.9%	136.9%

Notes 1. Where a postcode sector includes areas inside and outside the Borough, the areas outside are shown in brackets e.g. Dudley (+Annitsford + Seghill)

2. Data has been mix adjusted to remove differences in house type mix between postcode sectors; individual indices have been calculated for each house type, and combined using weights reflecting the nation-wide type mix. A worked example is provided below.

Table A3.2 Worked example for NE28 8 at Q4 2008					
	Land Registry data Q4 2008				
	<i>Detached</i>	<i>Semi</i>	<i>Terraced</i>	<i>Flat</i>	<i>Total</i>
England & Wales - median price	£271,583	£161,250	£135,995	£142,688	
England & Wales - no of sales	22,381	28,916	31,005	19,775	202,268
NE28 8 – avg price	£159,166	£132,890	£140,000	£82,312	
NE28 8 price as % E & W median value	58.61%	82.41%	102.95%	57.69%	
Weighted average index for NE28 8 =	$[(22,381 \times 58.61\%) + (28,916 \times 82.41\%) + (31,005 \times 102.95\%) + (19,775 \times 57.69\%)] / 202,268$ <p style="text-align: center;">= 78.9%</p>				

Source: Analysis of Land Registry data



Appendix 4 Small plots for sale

Table A4.1 Asking prices for building sites/plots: values					
Location	No dwgs	site area acres (ha)	Asking price	Land value	
				per acre	per ha
Whitley Bay	1	0.08 (0.03)	£120k	£1,500k	£3,713k
Whitley Bay	1	0.07 (0.03)	£70k	£1,049k	£2,592k
North Shields	4	0.04 (0.16)	£100k	£2,500k	£6,178k
North Shields	20	0.38 (0.15)	£550k	£1,455k	£3,595k

Source: Internet listings March 2009



Appendix 5 Dynamic Viability Analysis printouts

Benchmark Site

- A5.1 It is proposed that the benchmark site appraisal should be based upon an amended version of Site 2A Holyfields. The amendment is necessary to ensure it is just viable at the proposed target level of 15%.
- A5.2 The alternative use value for Site 2A is agricultural.

Index Numbers for automatic updating

- A5.3 The periodic review would be initiated by a specifically constituted forum including stakeholders. It would involve establishing current values of the indices in the Table below. For information the table shows the 'starting' values for each index.

Table A5.1 Indices for automatic updating of Dynamic Viability		
Variable	Proposed index	Starting Value
House Price	Halifax House Price Index	April 2009 = 500.0
	Halifax House Price Index (free, monthly) http://www.lloydsbankinggroup.com/media1/research/halifax_api.asp	
Build cost	BCIS General Building Cost Index	July 2009 = 284.3 (as at early July 2009)
	BCIS Review Online (subscription only, monthly) Produced by the Royal Institute of Chartered Surveyors http://www.bcis.co.uk/online	
Alternative use value	Property Market Report (VOA) Various uses, but typically industrial use value: Average Value of Mixed Agricultural Land (Equipped, with Vacant Possession) for North East Region	July 2009 = figure is £11,115 per ha
	Valuation Office Agency: Property Market Reports (free, six monthly) http://www.voa.gov.uk/publications/index.htm	

Sources: As shown in the boxes of the table

*Reproduction of Table 8.1



Tabulated results for all index outcomes

- A5.4 The results from the sequence of appraisals are set out in the following table(s).
- A5.5 After values of indices for price/cost/alternative use value have been determined, these would be rounded to 2% intervals (price/cost) and 10% intervals (alternative use value). The tables show what revised percentage target would apply to the particular price/cost/alternative use value combination.
- A5.6 The following are two sets of 8 tabulations of the Coarse and Fine Matrices described in Chapter 8. They provide for the full range of possible targets and also the Alternative Use value check in 8 bands of alternative use value indexes.

North Tyneside Benchmark Site Appraisal

Coarse Matrix

Table C1 Base Alternative Use Value: 0% Change - £10,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%		400.0	450.0	500.0	550.0	600.0	650.0	700.0	750.0	800.0
	-20%	227.4	25%	40%	50%	55%	55%	55%	55%	55%	55%
	-10%	255.9	0%	20%	35%	45%	50%	55%	55%	55%	55%
	0%	284.3	0%	0%	15%	30%	40%	45%	50%	55%	55%
	10%	312.7	0%	0%	5%	20%	30%	35%	45%	50%	55%
	20%	341.2	0%	0%	0%	5%	20%	25%	35%	40%	45%
	30%	369.6	0%	0%	0%	0%	5%	15%	25%	35%	40%
	40%	398.0	0%	0%	0%	0%	0%	5%	15%	25%	30%
	50%	426.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C2 Alternative Use Value: -60% Change - £4,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%		400.0	450.0	500.0	550.0	600.0	650.0	700.0	750.0	800.0
	-20%	227.4	25%	40%	50%	55%	55%	55%	55%	55%	55%
	-10%	255.9	0%	20%	35%	45%	50%	55%	55%	55%	55%
	0%	284.3	0%	0%	20%	30%	40%	45%	55%	55%	55%
	10%	312.7	0%	0%	5%	20%	30%	40%	45%	50%	55%
	20%	341.2	0%	0%	0%	5%	20%	30%	35%	40%	45%
	30%	369.6	0%	0%	0%	0%	5%	20%	25%	35%	40%
	40%	398.0	0%	0%	0%	0%	0%	10%	15%	25%	30%
	50%	426.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C3 Alternative Use Value: - 40% Change - £6,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%	400.0	450.0	500.0	550.0	600.0	650.0	700.0	750.0	800.0	
	-20%	227.4	25%	40%	50%	55%	55%	55%	55%	55%	55%
	-10%	255.9	0%	20%	35%	45%	50%	55%	55%	55%	55%
	0%	284.3	0%	0%	20%	30%	40%	45%	55%	55%	55%
	10%	312.7	0%	0%	5%	20%	30%	40%	45%	50%	55%
	20%	341.2	0%	0%	0%	5%	20%	30%	35%	40%	45%
	30%	369.6	0%	0%	0%	0%	5%	20%	25%	35%	40%
	40%	398.0	0%	0%	0%	0%	0%	10%	15%	25%	30%
	50%	426.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C4 Alternative Use Value: - 20% Change - £8,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%	400.0	450.0	500.0	550.0	600.0	650.0	700.0	750.0	800.0	
	-20%	227.4	25%	40%	50%	55%	55%	55%	55%	55%	55%
	-10%	255.9	0%	20%	35%	45%	50%	55%	55%	55%	55%
	0%	284.3	0%	0%	20%	30%	40%	45%	55%	55%	55%
	10%	312.7	0%	0%	5%	20%	30%	35%	45%	50%	55%
	20%	341.2	0%	0%	0%	5%	20%	25%	35%	40%	45%
	30%	369.6	0%	0%	0%	0%	5%	20%	25%	35%	40%
	40%	398.0	0%	0%	0%	0%	0%	5%	15%	25%	30%
	50%	426.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C5 Alternative Use Value: + 20% Change - £12,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%	400.0	450.0	500.0	550.0	600.0	650.0	700.0	750.0	800.0	
	-20%	227.4	25%	40%	50%	55%	55%	55%	55%	55%	55%
	-10%	255.9	0%	20%	35%	45%	50%	55%	55%	55%	55%
	0%	284.3	0%	0%	20%	30%	40%	45%	50%	55%	55%
	10%	312.7	0%	0%	5%	20%	30%	35%	45%	50%	55%
	20%	341.2	0%	0%	0%	5%	20%	25%	35%	40%	45%
	30%	369.6	0%	0%	0%	0%	5%	15%	25%	35%	40%
	40%	398.0	0%	0%	0%	0%	0%	5%	15%	25%	30%
	50%	426.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C6 Alternative Use Value: + 40% Change - £14,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%		400.0	450.0	500.0	550.0	600.0	650.0	700.0	750.0	800.0
	-20%	227.4	25%	40%	50%	55%	55%	55%	55%	55%	55%
	-10%	255.9	0%	20%	35%	45%	50%	55%	55%	55%	55%
	0%	284.3	0%	0%	20%	30%	40%	45%	50%	55%	55%
	10%	312.7	0%	0%	5%	20%	30%	35%	45%	50%	55%
	20%	341.2	0%	0%	0%	5%	20%	25%	35%	40%	45%
	30%	369.6	0%	0%	0%	0%	5%	15%	25%	30%	40%
	40%	398.0	0%	0%	0%	0%	0%	5%	15%	25%	30%
	50%	426.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C7 Alternative Use Value: + 60% Change - £16,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%		400.0	450.0	500.0	550.0	600.0	650.0	700.0	750.0	800.0
	-20%	227.4	20%	40%	50%	55%	55%	55%	55%	55%	55%
	-10%	255.9	0%	20%	35%	45%	50%	55%	55%	55%	55%
	0%	284.3	0%	0%	20%	30%	40%	45%	50%	55%	55%
	10%	312.7	0%	0%	5%	20%	30%	35%	45%	50%	55%
	20%	341.2	0%	0%	0%	5%	15%	25%	35%	40%	45%
	30%	369.6	0%	0%	0%	0%	5%	15%	25%	30%	40%
	40%	398.0	0%	0%	0%	0%	0%	5%	15%	25%	30%
	50%	426.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C8 Alternative Use Value: + 80% Change - £18,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%		400.0	450.0	500.0	550.0	600.0	650.0	700.0	750.0	800.0
	-20%	227.4	20%	40%	50%	55%	55%	55%	55%	55%	55%
	-10%	255.9	0%	20%	35%	45%	50%	55%	55%	55%	55%
	0%	284.3	0%	0%	20%	30%	40%	45%	50%	55%	55%
	10%	312.7	0%	0%	5%	20%	30%	35%	45%	50%	50%
	20%	341.2	0%	0%	0%	5%	15%	25%	35%	40%	45%
	30%	369.6	0%	0%	0%	0%	5%	15%	25%	30%	40%
	40%	398.0	0%	0%	0%	0%	0%	5%	15%	25%	30%
	50%	426.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

North Tyneside Benchmark Site Appraisal

Fine Matrix

Table F1 Base Alternative Use Value: 0% Change - £10,000 Per Acre

		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%	460.0	480.0	500.0	520.0	540.0	560.0	580.0	600.0	620.0	
	-8%	261.6	20%	25%	30%	35%	40%	45%	45%	50%	50%
	-4%	272.9	15%	20%	25%	30%	35%	40%	40%	45%	50%
	0%	284.3	5%	15%	15%	25%	30%	35%	35%	40%	45%
	4%	295.7	0%	5%	15%	20%	25%	30%	35%	35%	40%
	8%	307.0	0%	0%	5%	15%	20%	25%	30%	30%	35%
	12%	318.4	0%	0%	0%	5%	15%	20%	25%	25%	30%
	16%	329.8	0%	0%	0%	0%	10%	15%	20%	25%	25%
	20%	341.2	0%	0%	0%	0%	0%	10%	15%	20%	20%

Table F2 Alternative Use Value: - 30% Change - £7,000 Per Acre

		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%	460.0	480.0	500.0	520.0	540.0	560.0	580.0	600.0	620.0	
	-8%	261.6	20%	25%	30%	35%	40%	45%	45%	50%	50%
	-4%	272.9	15%	20%	25%	30%	35%	40%	40%	45%	50%
	0%	284.3	5%	15%	20%	25%	30%	35%	40%	40%	45%
	4%	295.7	0%	5%	15%	20%	25%	30%	35%	35%	40%
	8%	307.0	0%	0%	5%	15%	20%	25%	30%	30%	35%
	12%	318.4	0%	0%	0%	10%	15%	20%	25%	25%	30%
	16%	329.8	0%	0%	0%	0%	10%	15%	20%	25%	25%
	20%	341.2	0%	0%	0%	0%	5%	10%	15%	20%	20%

Table F3 Alternative Use Value: - 20% Change - £8,000 Per Acre

		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%		460.0	480.0	500.0	520.0	540.0	560.0	580.0	600.0	620.0
	-8%	261.6	20%	25%	30%	35%	40%	45%	45%	50%	50%
	-4%	272.9	15%	20%	25%	30%	35%	40%	40%	45%	50%
	0%	284.3	5%	15%	20%	25%	30%	35%	40%	40%	45%
	4%	295.7	0%	5%	15%	20%	25%	30%	35%	35%	40%
	8%	307.0	0%	0%	5%	15%	20%	25%	30%	30%	35%
	12%	318.4	0%	0%	0%	10%	15%	20%	25%	25%	30%
	16%	329.8	0%	0%	0%	0%	10%	15%	20%	25%	25%
	20%	341.2	0%	0%	0%	0%	5%	10%	15%	20%	20%

Table F4 Alternative Use Value: - 10% Change - £9,000 Per Acre

		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%		460.0	480.0	500.0	520.0	540.0	560.0	580.0	600.0	620.0
	-8%	261.6	20%	25%	30%	35%	40%	45%	45%	50%	50%
	-4%	272.9	15%	20%	25%	30%	35%	40%	40%	45%	50%
	0%	284.3	5%	15%	20%	25%	30%	35%	35%	40%	45%
	4%	295.7	0%	5%	15%	20%	25%	30%	35%	35%	40%
	8%	307.0	0%	0%	5%	15%	20%	25%	30%	30%	35%
	12%	318.4	0%	0%	0%	10%	15%	20%	25%	25%	30%
	16%	329.8	0%	0%	0%	0%	10%	15%	20%	25%	25%
	20%	341.2	0%	0%	0%	0%	0%	10%	15%	20%	20%

Table F5 Alternative Use Value: +10% Change - £11,000 Per Acre

		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%		460.0	480.0	500.0	520.0	540.0	560.0	580.0	600.0	620.0
	-8%	261.6	20%	25%	30%	35%	40%	45%	45%	50%	50%
	-4%	272.9	15%	20%	25%	30%	35%	40%	40%	45%	50%
	0%	284.3	5%	15%	20%	25%	30%	35%	35%	40%	45%
	4%	295.7	0%	5%	15%	20%	25%	30%	35%	35%	40%
	8%	307.0	0%	0%	5%	15%	20%	25%	30%	30%	35%
	12%	318.4	0%	0%	0%	5%	15%	20%	25%	25%	30%
	16%	329.8	0%	0%	0%	0%	10%	15%	20%	20%	25%
	20%	341.2	0%	0%	0%	0%	0%	10%	15%	20%	20%

Table F6 Alternative Use Value: + 20% Change - £12,000 Per Acre

		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%	460.0	480.0	500.0	520.0	540.0	560.0	580.0	600.0	620.0	
	-8%	261.6	20%	25%	30%	35%	40%	45%	45%	50%	50%
	-4%	272.9	15%	20%	25%	30%	35%	40%	40%	45%	45%
	0%	284.3	5%	15%	20%	25%	30%	35%	35%	40%	45%
	4%	295.7	0%	5%	15%	20%	25%	30%	30%	35%	40%
	8%	307.0	0%	0%	5%	15%	20%	25%	30%	30%	35%
	12%	318.4	0%	0%	0%	5%	15%	20%	25%	25%	30%
	16%	329.8	0%	0%	0%	0%	10%	15%	20%	20%	25%
	20%	341.2	0%	0%	0%	0%	0%	10%	15%	20%	20%

Table F7 Alternative Use Value: + 30% Change - £13,000 Per Acre

		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%	460.0	480.0	500.0	520.0	540.0	560.0	580.0	600.0	620.0	
	-8%	261.6	20%	25%	30%	35%	40%	45%	45%	50%	50%
	-4%	272.9	15%	20%	25%	30%	35%	40%	40%	45%	45%
	0%	284.3	5%	15%	20%	25%	30%	35%	35%	40%	45%
	4%	295.7	0%	5%	15%	20%	25%	30%	30%	35%	40%
	8%	307.0	0%	0%	5%	15%	20%	25%	30%	30%	35%
	12%	318.4	0%	0%	0%	5%	15%	20%	25%	25%	30%
	16%	329.8	0%	0%	0%	0%	10%	15%	20%	20%	25%
	20%	341.2	0%	0%	0%	0%	0%	10%	15%	20%	20%

Table F8 Alternative Use Value: + 40% Change - £14,000 Per Acre

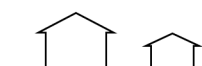
		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%	460.0	480.0	500.0	520.0	540.0	560.0	580.0	600.0	620.0	
	-8%	261.6	20%	25%	30%	35%	40%	45%	45%	50%	50%
	-4%	272.9	15%	20%	25%	30%	35%	40%	40%	45%	45%
	0%	284.3	5%	15%	20%	25%	30%	35%	35%	40%	45%
	4%	295.7	0%	5%	15%	20%	25%	30%	30%	35%	40%
	8%	307.0	0%	0%	5%	15%	20%	25%	25%	30%	35%
	12%	318.4	0%	0%	0%	5%	15%	20%	25%	25%	30%
	16%	329.8	0%	0%	0%	0%	10%	15%	20%	20%	25%
	20%	341.2	0%	0%	0%	0%	0%	10%	15%	20%	20%

Appendix 6 Financial appraisal summaries

- A6.1 The development viability **summaries** contained in the following pages set out the assumptions and outputs of the viability appraisals for a 20% affordable 'zero grant' scenario.



SITE 1A: West Chirton South Trading Estate



Input assumptions		Scenario & option		Affordable 20% = 80% social rented 20% intermediate			
North Tyneside site viability study							
Site details							
Site	1A West Chirton South						
Location	Chirton						
Area	5.00	ha					
	12.36	acres					
No dwgs	188						
Density dw/ha	37.6						
Contingency							
allowance	5.00%	£k	845				
Development costs							
standard % build	14.50%	£k	2,574				
plus abnormal	0.0%	£k	0				
Total	15%						
Design fees							
on build costs	10.0%	£k	1,775				
on dev costs	8%	£k	206				
Planning gain		£ per dwelling	2,070				
Dwellings							
		ave floor space	gross sq ft	net sq ft	build cost per sq ft	build INDEX =	sales value per sq ft
Market housing	150.4	1,022	991	88.00	1,000	156.00	
Affordable soc rent	30.1	1,022	991	88.00	88.00	71.00	
Aff intermediate rent	3.8	1,022	991	88.00	88.00	91.00	
Aff shared oship	3.8	1,022	991	88.00	88.00	99.00	
Aff other	0.0	0	0	88.00	88.00	0.00	
Total	188.0	192,136	186,308	£16,907,968	£26,075,668		
Floorspace density = 15,080 net sq ft per acre							
Other costs							
Planning	503.2	£ per dwelling					
Survey	500	£ per dwelling					
Marketing	0	£ per dwelling					
Interest	7.50%	% per annum					
Notes							

SITE 1B: Notional site Palmersville

Input assumptions Scenario & option Affordable 20% = 80% social rented 20% intermediate

North Tyneside site viability study

Site details	1B notional	Palmerstonville	ave floor space gross sq ft	net sq ft	build cost per sq ft	INDEX = 1.000	sales value per sq ft
Site Location Area	5.00	5.00	1,022	991	88.00	88.00	165.00
ha	12.36	12.36					
acres	188	188					
No dwgs	37.6	37.6					
Density dw/ha			150.4				
			80.00%				
			30.1				
			16.00%				
			3.8				
			2.00%				
			3.8				
			2.00%				
			0.0				
			0.00%				
			188.0				
			100.00%				

Dwellings	ave floor space gross sq ft	net sq ft	build cost per sq ft	INDEX =	sales value per sq ft
Market housing	1,022	991	88.00	88.00	165.00
Affordable soc rent	1,022	991	88.00	88.00	71.00
Aff intermediate rent	1,022	991	88.00	88.00	91.00
Aff shared oship	1,022	991	88.00	88.00	99.00
Aff other	0	0	88.00	88.00	0.00
Total	192,136	186,308		£16,907,968	£27,417,085

Floorspace density = 15,080 net sq ft per acre

Other costs Planning £ 503.2 per dwelling

Survey £ 200 per dwelling

Marketing £ 0 per dwelling

Interest % per annum 7.50%

Contingency	allowance	£k
	5.00%	845
Development costs	standard % build	2,574
	14.50%	
	plus abnormals	0
	0.0%	
Total		15%
Design fees	on build costs	1,775
	10.0%	
	on dev costs	206
	8%	
Planning gain		389
	£ per dwelling	2,070

Notes

SITE 1C: Notional site Whitley Bay South



Input assumptions		Scenario & option	
North Tyneside site viability study		Affordable 20% = 80% social rented 20% intermediate	
Site details			
Site	1C notional		
Location	Whitley Bay		
Area	5.00 ha		
	12.36 acres		
No dwgs	188		
Density dw/ha	37.6		
Contingency			
allowance	5.00%	£k	845
Development costs			
standard % build	14.50%		2,574
plus abnormal	0.0%		0
Total	15%		
Design fees			
on build costs	10.0%		1,775
on dev costs	8%		206
Planning gain			
£ per dwelling	2,070		389
Dwellings			
		ave floor space	build
		gross sq ft	net sq ft
Market housing	150.4	1,022	991
Affordable soc rent	30.1	1,022	991
Aff intermediate rent	3.8	1,022	991
Aff shared oship	3.8	1,022	991
Aff other	0.0	0	0
Total	188.0	192,136	186,308
		build cost	sales value
		per sq ft	per sq ft
		INDEX =	
		1.000	
		88.00	189.00
		88.00	71.00
		88.00	101.00
		88.00	111.00
		88.00	0.00
		£16,907,968	£31,076,174
Floorspace density			
		= 15,080	net sq ft per acre
Other costs			
Planning	503.2	£ per dwelling	
Survey	500	£ per dwelling	
Marketing	0	£ per dwelling	
Interest			
% per annum	7.50%		
Notes			

SITE 2A Holyfields



Scenario & option: Affordable 20% = 80% social rented 20% intermediate

Input assumptions

North Tyneside site viability study

Site details

Site	2A Holyfields
Location	Holyfields
Area	4.00 ha
No dwgs	9.88 acres
Density dw/ha	150
	37.5

Contingency allowance 2.50% £k 320

Development costs standard % build 13.50% 1,769 plus abnormalities 0.0% 0 Total 14%

Design fees on build costs 10.0% 1,310 on dev costs 8% 142

Planning gain £ per dwelling 2,070 311

Dwellings

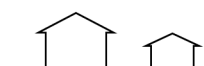
Dwellings	Market housing	Affordable soc rent	Aff intermediate rent	Aff shared oship	Aff other	Total	ave floor space gross sq ft	net sq ft	build cost per sq ft	build INDEX = 1,000	sales value per sq ft
	120.0	24.0	3.0	3.0	0.0	150.0	991	972	86.00	86.00	183.00
	80.00%	16.00%	2.00%	2.00%	0.00%	100.00%	991	972	86.00	86.00	70.00
							991	972	86.00	86.00	101.00
							991	972	86.00	86.00	110.00
							0	0	86.00	86.00	0.00
							148,650	145,800		£12,783,900	£23,593,356

Floorspace density = 14,751 net sq ft per acre

Other costs Planning 480.0 £ per dwelling Survey 200 £ per dwelling Marketing 0 £ per dwelling Interest % per annum 7.50%

Notes

SITE 2B: Notional site Dudley



Input assumptions		Scenario & option		Affordable 20% = 80% social rented 20% intermediate									
North Tyneside site viability study				Dwellings									
Site details													
Site	2B notional Dudley												
Location	Dudley												
Area	4.00	ha	120.0	80.00%	991	gross sq ft	972	net sq ft	86.00	build cost per sq ft	86.00	build INDEX = 1,000	161.00
	9.88	acres								0.0%			
No dwgs	150		24.0	16.00%	991		972		86.00		86.00		70.00
Density dw/ha	37.5									0.0%			
			3.0	2.00%	991		972		86.00		86.00		91.00
			3.0	2.00%	991		972		86.00		86.00		99.00
			0.0	0.00%	0		0		86.00		86.00		0.00
Contingency		£k	150.0	100.00%	148,650		145,800		£12,783,900		£20,966,040		
allowance	2.50%	320											
Development costs													
standard % build	13.50%	1,769											
plus abnormal	0.0%	0											
Total	14%												
Design fees													
on build costs	10.0%	1,310											
on dev costs	8%	142											
Planning gain													
£ per dwelling	2,070	311											
Other costs													
Planning	480.0	£ per dwelling											
Survey	200	£ per dwelling											
Marketing	0	£ per dwelling											
Interest													
% per annum	7.50%												
Notes													

SITE 2C: Notional site Longbenton



SITE 3A: Smith's Dock



Input assumptions		Scenario & option									
North Tyneside site viability study		Affordable 20% = 80% social rented 20% intermediate									
Site details		Dwellings									
Site	3A Smith Dock North Shields	Market housing	96.0	80.00%	ave floor space gross sq ft	969	824	107.50	1,000	107.50	205.00
Location	ha	Affordable soc rent	19.2	16.00%	net sq ft	969	824	107.50	107.50	107.50	74.00
Area	0.72 1.78 acres	Aff intermediate rent	2.4	2.00%	per sq ft	969	824	107.50	107.50	107.50	95.00
No dwgs	120	Aff shared oship	2.4	2.00%	build cost per sq ft	969	824	107.50	107.50	107.50	103.00
Density dw/ha	166.7	Aff other	0.0	0.00%	per sq ft	0	0	107.50	107.50	107.50	0.00
Total		Total		120.0	100.00%	Total		116,280	98,880	£12,500,100	£17,778,624
Contingency allowance		Floorspace density		5.00%	120.0	= 55,578 net sq ft per acre					
£k				625							
Development costs standard % build		Other costs		8.00%	1,050						
plus abnormal		Planning		0.0%	451.3	£ per dwelling					
Total		Survey		8%	500	£ per dwelling					
Design fees on build costs		Marketing		10.0%	0	£ per dwelling					
on dev costs		Interest % per annum		8%	7.50%						
Planning gain £ per dwelling		Notes		2.070							

SITE 3A LAND COST & PHASING

Land	Iterate to achieve 20.0% profit				Hectare											
Land purchase price	Affordable				No affordable				Affordable				No affordable			
RV per acre	£ -1,662,005				£ -285,666				£ -£2,308,340				£ -£396,759			
Dev profit	£ 2,840,386				£ 3,345,565				£ 3,345,565				£ 3,345,565			
Total costs	£ 14,939,363				£ 16,724,245				£ 16,724,245				£ 16,724,245			
profit as % of costs	19.01%				20.00%				20.00%				20.00%			

Programme	Year 1				Year 2				Year 3				Year 4				TOTALS			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Units started																				
Market housing			6.4	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	0.0	0.0	0.0	0.0	0.0	96.0
Affordable soc rent			1.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	19.2
Affordable sh oship			0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	2.4
Aff shared oship			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
Aff other			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	8	14	14	14	14	14	14	14	14	14	14	14	0	0	0	0	0	120.0
Units 'built' +2Q																				
Market housing			0	0	6	11	11	11	11	11	11	11	11	11	11	0	0	0	0	96
Affordable soc rent			0	0	1	2	2	2	2	2	2	2	2	2	2	0	0	0	0	19
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Aff shared oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Aff other			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed +3Q																				
Market housing			0	0	6	11	11	11	11	11	11	11	11	11	11	0	0	0	0	96
Affordable soc rent			0	0	1	2	2	2	2	2	2	2	2	2	2	0	0	0	0	19
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Aff shared oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Aff other			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased +4Q																				
Market housing			0	0	0	6	11	11	11	11	11	11	11	11	11	0	0	0	0	96
Affordable soc rent			0	0	0	1	2	2	2	2	2	2	2	2	2	0	0	0	0	19
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Aff shared oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Aff other			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 4A: Wideopen UDP



Input assumptions		Scenario & option	
North Tyneside site viability study		Affordable 20% = 80% social rented 20% intermediate	
Site details		Dwellings	
Site	4A Wideopen UDP	Dwellings	
Location	Wideopen	Market housing	88.0
Area	2.75 6.80 110 40.0	Affordable soc rent	17.6
No dwgs		Aff intermediate rent	2.2
Density dw/ha		Aff shared oship	2.2
		Aff other	0.0
		Total	110.0
			100.00%
Contingency allowance	3.75%		
	331		
Development costs standard % build	13.50%		
	1,237		
plus abnormals	0.0%		
	0		
Total	14%		
Design fees on build costs	10.0%		
	916		
on dev costs	8%		
	99		
Planning gain £ per dwelling	2.070		
	228		
		ave floor space gross sq ft	939
		net sq ft	923
		build cost per sq ft	85.50
		INDEX = 1,000	85.50
		sales value per sq ft	170.00
			0.0%
			85.50
			0.0%
			85.50
			0.0%
			85.50
			0.0%
			85.50
			0.0%
		Total	103,290
			101,530
			£8,831,295
			£15,331,030
		Floorspace density	net sq ft per acre = 14,941
		Other costs	
		Planning	438.2 £ per dwelling
		Survey	350 £ per dwelling
		Marketing	0 £ per dwelling
		Interest % per annum	7.50%
		Notes	

SITE 4A CASH FLOW AFFORDABLE

	rate	Year 1		Year 2		Year 3		Year 4		TOTALS
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
INCOME										
Housing sales		0	0	0	0	1,506	1,506	1,506	1,506	13,808
Market housing		0	0	0	0	1,506	1,506	1,506	1,506	1,137
Affordable soc rent		0	0	0	0	124	124	124	124	185
Affordable sh oship		0	0	0	0	20	20	20	20	201
Aff shared oship		0	0	0	0	22	22	22	22	0
Aff other		0	0	0	0	0	0	0	0	0
Sales fees		0	0	0	0	-54	-54	-54	-54	-497
Total income										
0										
COSTS										
Land		223								223
Land acquisition		2								2
Stamp duty		6								6
Purchase fees										231
Total										7,065
Build costs		0	0	0	0	771	771	771	771	1,413
Market housing		0	0	0	0	154	154	154	154	177
Affordable soc rent		0	0	0	0	19	19	19	19	0
Affordable sh oship		0	0	0	0	19	19	19	19	0
Aff shared oship		0	0	0	0	0	0	0	0	177
Aff other		0	0	0	0	0	0	0	0	0
Build contingency	3.8%	0	0	0	0	36	36	36	36	331
Total										9,162
Dev costs		155	155	155	155					618
Upfront	6.8%	0	0	11	67	67	67	67	67	618
Build related	0%	0	0							0
Abnormals										1,237
Total										916
Fees		0	0	0	0	100	100	100	100	99
Fees on build costs	10.0%	12	12	13	18	5	5	5	5	1,015
Fees on dev costs	8.0%									228
Total										48
PG		16	16	16	16					39
Planning	£438									0
Survey	£350									87
Marketing	£0									497
Total										12,457
Sales fees		0	0	0	0	54	54	54	54	54
Total costs		453	183	199	265	1,251	1,251	1,251	1,251	12,457
Net profit/loss from quarter										
-453										
Profit/loss bf from last quarter		0	-461	-656	-872	-281	-1,197	-927	421	2,874
Cumulative profit/loss		-453	-644	-856	-1,136	-1,158	-1,465	-2,712	-3,708	788
Interest	7.50%	-8	-12	-16	-21	-27	-50	-68	-84	844
Charged at Total		-461	-656	-872	-1,158	-1,465	-2,712	-3,708	-1,842	788
Cumulative developer profit carried forward to RV calc										788
										2,451
										45
										45

SITE 5A: Eastbourne Gardens



Input assumptions		Scenario & option	
North Tyneside site viability study		Affordable 20% = 80% social rented 20% intermediate	
Site details			
Site	5A Eastbourne Gardens		
Location	Whitley Bay		
Area	0.51 ha		
	1.26 acres		
No dwgs	85		
Density dw/ha	166.7		
Contingency			
allowance	5.00%	£k	451
Development costs			
standard % build	8.00%		758
plus abnormal	0.3%		24
Total	8%		
Design fees			
on build costs	10.0%		947
on dev costs	8%		63
Planning gain			
£ per dwelling	2,070		176
Dwellings			
Market housing	68.0	80.00%	
Affordable soc rent	13.6	16.00%	
Aff intermediate rent	1.7	2.00%	
Aff shared oship	1.7	2.00%	
Aff other	0.0	0.00%	
Total	85.0	100.00%	
Floorspace density			
			= 55.578 net sq ft per acre
Other costs			
Planning	392.1	£ per dwelling	
Survey	500	£ per dwelling	
Marketing	0	£ per dwelling	
Interest			
% per annum	7.50%		
ave floor space			
gross sq ft	969	824	
net sq ft			
build cost per sq ft	109.50	0.0%	
build INDEX =	1.000	109.50	
sales value per sq ft	260.00	74.00	
		105.00	
		114.00	
		0.00	
Total	82,365	70,040	£9,018,968
			£15,704,369
Notes			

SITE 6A: St Joseph's Training Centre



Input assumptions		Scenario & option				Affordable 20% = 80% social rented 20% intermediate					
North Tyneside site viability study						Dwellings					
Site details					Dwellings						
Site					6A St Joseph's Training Centre						sales value
Location					Killingworth						per sq ft
Area					1.72 ha		30.4		1,398		gross sq ft
No dwgs					4.25 acres		6.1		1,398		net sq ft
Density dw/ha					38		16.00%		1,398		per sq ft
					22.1		2.00%		0		build cost
							0.8		1,398		INDEX =
							0.8		1,398		1.000
							0.8		1,398		86.50
							0.0		1,398		86.50
							0.0		0		86.50
							38.0		53,124		£4,595,226
					£k		100.00%		£9,060,829		Total
Contingency allowance		5.00%		230		Floorspace density = 12,499 net sq ft per acre					
Development costs standard % build		12.50%		603		Other costs					
						Planning		515.0 £ per dwelling			
						Survey		500 £ per dwelling			
plus abnormals		0.2%		10		Marketing		0 £ per dwelling			
Total		13%				Interest % per annum					
Design fees on build costs		10.0%		482		7.50%					
on dev costs		8%		49		Notes					
Planning gain £ per dwelling		2.070		79							

SITE 7A: Emperor Hadrian PH



SITE 7A LAND COST & PHASING

Land	Iterate to achieve 20.0% profit		Hectare	
	Affordable	No affordable	Affordable	No affordable
Land purchase price	£ -254,648	£ 4,180		
RV per acre	£ -184,026	£ 3,020	-£454,729	£7,463
Dev profit	£ 660,980	£ 765,350		
Total costs	£ 3,478,179	£ 3,815,326		
profit as % of costs	19.00%	20.06%		

Programme	Year 1				Year 2				Year 3				Year 4				TOTALS	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
	Units started																	
Market housing		2.4	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	30.4
Affordable soc rent		0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	6.1
Affordable sh oship		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.8
Aff shared oship		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.8
Aff other		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	38.0
Units "built" +2Q																		
Market housing		0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	30
Affordable soc rent		0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6
Affordable sh oship		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Aff shared oship		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Aff other		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed +3Q																		
Market housing		0	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	30
Affordable soc rent		0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6
Affordable sh oship		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Aff shared oship		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Aff other		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased +4Q																		
Market housing		0	0	2	4	4	4	4	4	4	4	4	4	4	4	4	4	30
Affordable soc rent		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Affordable sh oship		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Aff shared oship		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Aff other		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 7B Notional site North Shields

Input assumptions		Scenario & option	
North Tyneside site viability study		Affordable 20% = 80% social rented 20% intermediate	
Site details			
Site	7B notional North Shields		
Location	North Shields		
Area	0.56 ha		
	1.38 acres		
No dwgs	38		
Density dw/ha	67.9		
Contingency			
allowance	5.00%	£k	134
Development costs			
standard % build	10.00%		282
plus abnormals	0.5%		15
Design fees			
on build costs	10.0%		282
on dev costs	8%		24
Planning gain			
£ per dwelling	2,070		79
Dwellings			
		ave floor space gross sq ft	net sq ft
Market housing	30.4	817	784
Affordable soc rent	6.1	817	784
Aff intermediate rent	0.8	817	784
Aff shared oship	0.8	817	784
Aff other	0.0	0	0
Total	38.0	31,046	29,792
Other costs			
Planning	515.0	£ per dwelling	
Survey	500	£ per dwelling	
Marketing	0	£ per dwelling	
Interest			
% per annum	7.50%		
Notes			
		build gross sq ft	build cost per sq ft
		817	86.50
		net sq ft	0.0%
		784	0.0%
		gross sq ft	86.50
		784	86.50
		net sq ft	0.0%
		817	86.50
		gross sq ft	86.50
		784	86.50
		net sq ft	0.0%
		0	86.50
		gross sq ft	86.50
		31,046	£2,685,479
		29,792	£5,123,032
		Floorspace density = 21,530 net sq ft per acre	

SITE 7B LAND COST & PHASING

Land	Year 1		Year 2		Year 3		Year 4		TOTALS				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TOTALS
Units started	0	0	3	5	5	5	5	5	0	0	0	0	38.0
Market housing			2.4	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	30.4
Affordable soc rent			0.5	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	6.1
Affordable sh oship			0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.8
Aff shared oship			0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.8
Aff other			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL			3	5	5	5	5	5	0	0	0	0	38.0
Units 'built' +2Q			0	0	0	0	0	0	0	0	0	0	30
Market housing			0	0	0	0	0	0	0	0	0	0	30
Affordable soc rent			0	0	0	0	0	0	0	0	0	0	6
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	1
Aff shared oship			0	0	0	0	0	0	0	0	0	0	1
Aff other			0	0	0	0	0	0	0	0	0	0	0
Units completed +3Q			0	0	0	0	0	0	0	0	0	0	30
Market housing			0	0	0	0	0	0	0	0	0	0	30
Affordable soc rent			0	0	0	0	0	0	0	0	0	0	6
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	1
Aff shared oship			0	0	0	0	0	0	0	0	0	0	1
Aff other			0	0	0	0	0	0	0	0	0	0	0
Units purchased +4Q			0	0	0	0	0	0	0	0	0	0	30
Market housing			0	0	0	0	0	0	0	0	0	0	30
Affordable soc rent			0	0	0	0	0	0	0	0	0	0	6
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	1
Aff shared oship			0	0	0	0	0	0	0	0	0	0	1
Aff other			0	0	0	0	0	0	0	0	0	0	0

Iterate to achieve 20.0% profit

Hectare

	Affordable	No affordable	Affordable	No affordable
Land purchase price	£ 389,614	£ 776,375	£ 695,739	£ 1,386,384
RV per acre	£ 281,562	£ 561,062	£ 695,739	£ 1,386,384
Dev profit	£ 817,986	£ 963,651	£ 817,986	£ 963,651
Total costs	£ 4,306,096	£ 4,818,835	£ 4,306,096	£ 4,818,835
profit as % of costs	19.00%	20.00%	19.00%	20.00%

SITE 7C: Notional site Wallsend Town Centre

Input assumptions		Scenario & option		Affordable 20% = 80% social rented 20% intermediate											
North Tyneside site viability study															
Site details		7C notional Wallsend Town Wallsend		Dwellings		Dwellings		ave floor space		build cost		build INDEX =		sales value	
Site Location	Area	ha	acres	Market housing	30.4	80.00%	817	784	86.50	86.50	86.50	86.50	86.50	156.00	
No dwgs	Density dw/ha	0.56	1.38	Affordable soc rent	6.1	16.00%	817	784	86.50	0.0%	86.50	86.50	86.50	71.00	
		38	67.9	Aff intermediate rent	0.8	2.00%	817	784	86.50	0.0%	86.50	86.50	86.50	86.00	
				Aff shared oship	0.8	2.00%	817	784	86.50	0.0%	86.50	86.50	86.50	91.00	
				Aff other	0.0	0.00%	0	0	86.50	0.0%	86.50	86.50	86.50	0.00	
				Total	38.0	100.00%	31,046	29,792						£2,685,479	£4,161,942
Contingency allowance		£k		Floorspace density = 21,530 net sq ft per acre											
		134	5.00%												
Development costs standard % build		282	10.00%												
plus abnormals		15	0.5%												
Total			11%												
Design fees on build costs		282	10.0%												
on dev costs		24	8%												
Planning gain £ per dwelling		79	2,070												
Other costs															
Planning			515.0	£ per dwelling											
Survey			500	£ per dwelling											
Marketing			0	£ per dwelling											
Interest % per annum			7.50%												
Notes															

SITE 7C LAND COST & PHASING

Land		Iterate to achieve 20.0% profit		Hectare	
Land purchase price	Affordable	No affordable	Affordable	No affordable	No affordable
RV per acre	£ -239,161	£ 24,828	£ -£427,073	£ 44,336	
Dev profit	£ 665,280	£ 768,383			
Total costs	£ 3,497,712	£ 3,841,489			
profit as % of costs	19.02%	20.00%			

Programme	Year 1				Year 2				Year 3				Year 4			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Units started																
Market housing			2.4	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Affordable soc rent			0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Affordable sh oship			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Aff shared oship			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Aff other			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	3	5	5	5	5	5	5	5	5	5	5	5	5	5
Units 'built' +2Q																
Market housing			0	0	2	4	4	4	4	4	4	4	4	4	4	4
Affordable soc rent			0	0	0	1	1	1	1	1	1	1	1	1	1	1
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff shared oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed +3Q																
Market housing			0	0	0	2	4	4	4	4	4	4	4	4	4	4
Affordable soc rent			0	0	0	0	1	1	1	1	1	1	1	1	1	1
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff shared oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased +4Q																
Market housing			0	0	0	0	2	4	4	4	4	4	4	4	4	4
Affordable soc rent			0	0	0	0	0	1	1	1	1	1	1	1	1	1
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff shared oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other			0	0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 8A: Marine House Howden

Input assumptions		Scenario & option		Affordable 20% = 80% social rented 20% intermediate					
North Tyneside site viability study				Dwellings					
Site details									
Site	6A Marine House								
Location	Howden								
Area	0.88	ha							
	2.17	acres							
No dwgs	41								
Density dw/ha	46.6								
				32.8	80.00%	822	822	85.50	165.00
				6.6	16.00%	822	822	85.50	70.00
				0.8	2.00%	822	822	85.50	85.00
				0.8	2.00%	822	822	85.50	90.00
				0.0	0.00%	0	0	85.50	0.00
Contingency		£k		41.0	100.00%	33,702	33,702	£2,881,521	£4,944,083
allowance	5.00%	134		Floorspace density = 15,499 net sq ft per acre					
Development costs									
standard % build	11.50%	322							
plus abnormalities	2.7%	74							
Total	14%								
Design fees									
on build costs	10.0%	280							
on dev costs	8%	32							
Planning gain									
£ per dwelling	2,070	79							
Other costs									
Planning				515.0				£ per dwelling	
Survey				500				£ per dwelling	
Marketing				0				£ per dwelling	
Interest									
% per annum	7.50%								
Notes									

SITE 9A: Pioneer Social Club

Input assumptions		Scenario & option		Affordable 20% = 80% social rented 20% intermediate							
North Tyneside site viability study											
Site details		9A Pioneer Social Club									
Site		Dudley									
Location		0.15									
Area	ha	0.37									
No dwgs		12									
Density dw/ha		80.0									
Contingency	allowance	5.00%	39								
Development costs	standard % build	10.00%	83								
	plus abnormals	1.9%	16								
	Total	12%									
Design fees	on build costs	10.0%	83								
	on dev costs	8%	8								
Planning gain	£ per dwelling	2,070	25								
				Dwellings							
				ave floor space		build		build		sales	
				gross sq ft		cost per sq ft		INDEX =		value per sq ft	
				net sq ft		per sq ft		1.000		per sq ft	
				728		90.00		90.00		165.00	
				675		0.0%		90.00		72.00	
				728		90.00		90.00		92.00	
				675		0.0%		90.00		100.00	
				728		90.00		90.00		100.00	
				675		0.0%		90.00		0.00	
				0		90.00		90.00		0.00	
				8,736		8,100		£786,240		£1,193,616	
				Floorspace density = 21,854 net sq ft per acre							
				Other costs							
				Planning		£ per dwelling		515.0			
				Survey		£ per dwelling		500			
				Marketing		£ per dwelling		0			
				Interest		% per annum		7.50%			
				Notes							

SITE 9A LAND COST & PHASING

Land		Iterate to achieve 20.0% profit		Hectare	
Land purchase price	Affordable	No affordable	Affordable	Affordable	No affordable
RV per acre	£ -107,032	£ -26,475	£ -288,769	£ -713,548	£ -176,499
Dev profit	£ 190,712	£ 221,450			
Total costs	£ 1,003,654	£ 1,105,270			
profit as % of costs	19.00%	20.04%			

Programme	Year 1 Q1	Year 2 Q1	Year 2 Q2	Year 2 Q3	Year 2 Q4	Year 3				Year 4				TOTALS					
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4						
Units started																			
Market housing	0	2.4	2.4	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6
Affordable soc rent		0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
Affordable sh oship		0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Aff shared oship		0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Aff other		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	12.0
Units 'built' +2Q																			
Market housing		2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Affordable soc rent		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Affordable sh oship		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff shared oship		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed +3Q																			
Market housing		0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	10
Affordable soc rent		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Affordable sh oship		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff shared oship		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased +4Q																			
Market housing		0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	10
Affordable soc rent		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Affordable sh oship		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff shared oship		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 10A: The Old Dairy Wallsend

Input assumptions		Scenario & option																																																																													
North Tyneside site viability study		Affordable 20% = 80% social rented 20% intermediate																																																																													
Site details		10A The Old Dairy																																																																													
Site	Location	Wallsend																																																																													
Area	ha	0.26																																																																													
	acres	0.64																																																																													
No dwgs		10																																																																													
Density	dw/ha	38.5																																																																													
Contingency		£k																																																																													
allowance	5.00%	34																																																																													
Development costs		87																																																																													
standard % build	12.00%																																																																														
plus abnormals	1.4%	10																																																																													
Total	13%																																																																														
Design fees		72																																																																													
on build costs	10.0%																																																																														
on dev costs	8%	8																																																																													
Planning gain		21																																																																													
£ per dwelling	2,070																																																																														
<table border="0"> <tr> <td>Dwellings</td> <td></td> <td>ave floor space gross sq ft</td> <td>net sq ft</td> <td>build cost per sq ft</td> <td>build INDEX =</td> <td>sales value per sq ft</td> </tr> <tr> <td>Market housing</td> <td>8.0</td> <td>795</td> <td>795</td> <td>86.50</td> <td>86.50</td> <td>165.00</td> </tr> <tr> <td>Affordable soc rent</td> <td>1.6</td> <td>795</td> <td>795</td> <td>86.50</td> <td>86.50</td> <td>70.00</td> </tr> <tr> <td>Aff intermediate rent</td> <td>0.2</td> <td>795</td> <td>795</td> <td>86.50</td> <td>86.50</td> <td>85.00</td> </tr> <tr> <td>Aff shared oship</td> <td>0.2</td> <td>795</td> <td>795</td> <td>86.50</td> <td>86.50</td> <td>90.00</td> </tr> <tr> <td>Aff other</td> <td>0.0</td> <td>0</td> <td>0</td> <td>86.50</td> <td>86.50</td> <td>0.00</td> </tr> <tr> <td>Total</td> <td>10.0</td> <td>7,950</td> <td>7,950</td> <td></td> <td>£687,675</td> <td>£1,166,265</td> </tr> </table> <p>Floorspace density = 12,374 net sq ft per acre</p> <table border="0"> <tr> <td>Other costs</td> <td></td> <td></td> </tr> <tr> <td>Planning</td> <td>515.0</td> <td>£ per dwelling</td> </tr> <tr> <td>Survey</td> <td>500</td> <td>£ per dwelling</td> </tr> <tr> <td>Marketing</td> <td>0</td> <td>£ per dwelling</td> </tr> <tr> <td>Interest</td> <td></td> <td></td> </tr> <tr> <td>% per annum</td> <td>7.50%</td> <td></td> </tr> </table>													Dwellings		ave floor space gross sq ft	net sq ft	build cost per sq ft	build INDEX =	sales value per sq ft	Market housing	8.0	795	795	86.50	86.50	165.00	Affordable soc rent	1.6	795	795	86.50	86.50	70.00	Aff intermediate rent	0.2	795	795	86.50	86.50	85.00	Aff shared oship	0.2	795	795	86.50	86.50	90.00	Aff other	0.0	0	0	86.50	86.50	0.00	Total	10.0	7,950	7,950		£687,675	£1,166,265	Other costs			Planning	515.0	£ per dwelling	Survey	500	£ per dwelling	Marketing	0	£ per dwelling	Interest			% per annum	7.50%	
Dwellings		ave floor space gross sq ft	net sq ft	build cost per sq ft	build INDEX =	sales value per sq ft																																																																									
Market housing	8.0	795	795	86.50	86.50	165.00																																																																									
Affordable soc rent	1.6	795	795	86.50	86.50	70.00																																																																									
Aff intermediate rent	0.2	795	795	86.50	86.50	85.00																																																																									
Aff shared oship	0.2	795	795	86.50	86.50	90.00																																																																									
Aff other	0.0	0	0	86.50	86.50	0.00																																																																									
Total	10.0	7,950	7,950		£687,675	£1,166,265																																																																									
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Interest																																																																															
% per annum	7.50%																																																																														
Notes																																																																															

SITE 10A LAND COST & PHASING

Land																				
Programme	Year 1				Year 2				Year 3				Year 4				TOTALS			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Units started	Iterate to achieve 20.0% profit																			
Market housing	0	0	0.8	2.4	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	
Affordable soc rent			0.2	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	
Affordable sh oship			0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
Aff shared oship			0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
Aff other			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0	0	1	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	10.0	
Units 'built' +2Q																				
Market housing	0	0	0	0	1	2	2	2	0	0	0	0	0	0	0	0	0	0	8	
Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff shared oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff other			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Units completed +3Q																				
Market housing	0	0	0	0	0	1	2	2	2	0	0	0	0	0	0	0	0	0	8	
Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff shared oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff other			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Units purchased +4Q																				
Market housing	0	0	0	0	0	0	1	2	2	2	0	0	0	0	0	0	0	0	8	
Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff shared oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff other			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Land												Affordable	No affordable	Hectare		Affordable	No affordable			
Land purchase price												£	£			£	£			
RV per acre												-19,610	61,592			-£75,421	£236,891			
Dev profit												£	£			216,948				
Total costs												£	£			1,083,627				
profit as % of costs																19.00%				

SITE 11A: Former Co op Store
Brenkly Ave Shiremoor

Input assumptions		Scenario & option		Affordable 20% = 80% social rented 20% intermediate						
North Tyneside site viability study										
Site details										
Site Location	11A The Former Coop Shiremoor	ha	0.07							
Area		acres	0.17							
No dwgs	8									
Density dw/ha	114.3									
Contingency allowance										
	5.00%	£k	31							
Development costs standard % build										
	9.00%	£k	59							
plus abnormal										
	0.0%	£k	0							
Total										
	9%									
Design fees on build costs										
	10.0%	£k	66							
on dev costs										
	8%	£k	5							
Planning gain £ per dwelling										
	2,070									
Dwellings										
				ave floor space gross sq ft	net sq ft	build cost per sq ft	build INDEX = 1,000	sales value per sq ft		
Market housing	6.4	80.00%	788	670	99.00	99.00	160.00			
Affordable soc rent	1.3	16.00%	788	670	99.00	99.00	74.00			
Aff intermediate rent	0.2	2.00%	788	670	99.00	99.00	105.00			
Aff shared oship	0.2	2.00%	788	670	99.00	99.00	114.00			
Aff other	0.0	0.00%	0	0	99.00	99.00	0.00			
Total	8.0	100.00%	6,304	5,360	£624,096	£773,019				
Floorspace density				= 30,988 net sq ft per acre						
Other costs										
Planning	515.0							£ per dwelling		
Survey	500							£ per dwelling		
Marketing	0							£ per dwelling		
Interest % per annum				7.50%						
Notes										

SITE 11A LAND COST & PHASING

Land		Iterate to achieve 20.0% profit		Hectare	
		Affordable	No affordable	Affordable	No affordable
Land purchase price		£ -183,402	£ -135,131		
RV per acre		£ -1,060,309	£ -781,242	£ -2,620,023	£ -1,930,449
Dev profit		£ 123,448	£ 142,088		
Total costs		£ 650,246	£ 711,256		
profit as % of costs		18.98%	19.98%		

Programme	Year 1		Year 2		Year 3		Year 4		TOTALS
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started									
Market housing			1.6	2.4	0.0	0.0	0.0	0.0	6.4
Affordable soc rent			0.3	0.5	0.0	0.0	0.0	0.0	1.3
Affordable sh oship			0.0	0.1	0.0	0.0	0.0	0.0	0.2
Aff shared oship			0.0	0.1	0.0	0.0	0.0	0.0	0.2
Aff other			0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	2	3	0	0	0	0	8.0
Units 'built' +2Q									
Market housing			0	2	2	2	0	0	6
Affordable soc rent			0	0	0	0	0	0	1
Affordable sh oship			0	0	0	0	0	0	0
Aff shared oship			0	0	0	0	0	0	0
Aff other			0	0	0	0	0	0	0
Units completed +3Q									
Market housing			0	2	2	2	0	0	6
Affordable soc rent			0	0	0	0	0	0	1
Affordable sh oship			0	0	0	0	0	0	0
Aff shared oship			0	0	0	0	0	0	0
Aff other			0	0	0	0	0	0	0
Units purchased +4Q									
Market housing			0	0	2	2	0	0	6
Affordable soc rent			0	0	0	0	0	0	1
Affordable sh oship			0	0	0	0	0	0	0
Aff shared oship			0	0	0	0	0	0	0
Aff other			0	0	0	0	0	0	0

SITE 12A: The Railwayman

Input assumptions		Scenario & option		Affordable 20% = 80% social rented 20% intermediate											
North Tyneside site viability study															
Site details		12A The Railwayman													
Site Location	Percy Main	Area	0.05 ha												
No dwgs	4	Density dw/ha	80.0												
Contingency allowance		5.00%													
Development costs standard % build		10.00%													
plus abnormal		0.0%													
Total		10%													
Design fees on build costs		10.0%													
on dev costs		8%													
Planning gain £ per dwelling		2,070													
Dwellings															
Market housing		3.2		80.00%											
Affordable soc rent		0.6		16.00%											
Aff intermediate rent		0.1		2.00%											
Aff shared oship		0.1		2.00%											
Aff other		0.0		0.00%											
Total		4.0		100.00%											
Floorspace density				= 20,558		net sq ft per acre									
Other costs Planning		515.0				£ per dwelling									
Survey		500				£ per dwelling									
Marketing		0				£ per dwelling									
Interest % per annum		7.50%													
Notes															

SITE 12A LAND COST & PHASING

Land		Year 1		Year 2				Year 3				Year 4				TOTALS		
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Programme																		
Units started	Market housing	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	3.2
	Affordable soc rent			1.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
	Affordable sh oship			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	Aff shared oship			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	Aff other			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL			2	2	2	2	0	0	0	0	0	0	0	0	0	0	4.0
Units 'built' +2Q	Market housing			0	0	2	2	0	0	0	0	0	0	0	0	0	0	3
	Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Aff shared oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Aff other			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed +3Q	Market housing			0	0	2	2	0	0	0	0	0	0	0	0	0	0	3
	Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Aff shared oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Aff other			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased +4Q	Market housing			0	0	2	2	0	0	0	0	0	0	0	0	0	0	3
	Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Aff shared oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Aff other			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Land		Iterate to achieve 20.0% profit		Hectare	
		Affordable	No affordable	Affordable	No affordable
Land purchase price	£	-85,408	-66,197		
RV per acre	£	-691,280	-535,791	-£1,708,154	-£1,323,941
Dev profit	£	54,741	62,524		
Total costs	£	287,235	311,456		
profit as % of costs		19.06%	20.07%		

Appendix 7 Site Location Plan

Figure S1 Site locations

