

Bradford District Local Plan Core Strategy Publication Draft – Viability Assessment

Prepared on behalf of

City of Bradford Metropolitan District Council

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Contents

1	Inti	oduction	4
	1.1	Purpose	4
	1.2	Local Plan Viability Context	4
	1.3	Background to Viability Assessment of Bradford Local Plan	5
	1.4	Structure of Report	6
2	Me	thodology	7
	2.1	Viability testing methodology	7
	2.2	Consultation	9
	2.3	Caveats	9
3	Rev	riew of Core Strategy and evidence	. 11
	3.1	The Local Plan Core Strategy	. 11
	3.2	Housing policies	. 11
	3.3	Other uses	.14
	3.4	Screening of policies for Viability Testing	.14
4	Ecc	nomic viability testing	21
	4.1	Policies Tested	21
	4.2	Approach to testing viability over time	21
	4.3	Appraisal assumptions	23
	4.4	Site value thresholds	. 25
	4.5	Appraisal Results	26
	4.6	Baseline – no policy requirements	. 27
	4.7	HO5 Housing densities	29
	4.8	HO6 Previously Developed Land	. 29
	4.9	HO9B Sustainable Construction Standards	31
	4.10	HO9C Lifetime Homes	.33
	4.11	H09 Buildings for Life	.33
	4.12	Affordable Housing H011	.35
	4.13	Protecting the South Pennine Moors and their Zone of Influence SC8	. 35
	4.14	HO9 Space Standards	.38
	4.15	Cumulative impacts	.38
	4.16	Policy choices	41
	4.17	Commercial Development Viability	42
	4.18	Summary	43
5	Cor	nclusions	.44

_		40
h	Ratarancas	716
	DETETIOES	

1 Introduction

1.1 PURPOSE

1.1.1 DTZ has been appointed by City of Bradford Metropolitan District Council (the Council) to prepare viability evidence to support the emerging Local Plan Core Strategy. This document provides an update on the findings of the preliminary viability modelling work produced in support of the previous version of the draft Core Strategy (the Further Engagement Draft Core Strategy). The purpose of the report is to support the Core Strategy Publication Draft Development Plan Document.

1.2 LOCAL PLAN VIABILITY CONTEXT

1.2.1 The need for viability testing of the Local Plan has arisen as a result of the requirements of the National Planning Policy Framework (NPPF) published in March 2012. The NPPF has strengthened the importance of viability in the planning process and particularly in respect of development plan preparation. In order to ensure viability and deliverability of Local Plans, the NPPF states:

"Plans should be deliverable. Therefore, the sites and the scale of development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened. To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable." Para 173

1.2.2 It has reinforced the requirements for the provision of a deliverable supply of housing land, stipulating the need for a rolling five year supply of deliverable sites with a buffer of 20% for authorities where there has been 'persistent under delivery'. It also requires local authorities to identify sites for years 6-10 and 11-15 which should be realistically deliverable over the development plan period. In respect of the five year supply, it clarifies the definition of 'deliverable' stating:

"To be considered deliverable, sites should be available now, offer a suitable location for development now, and be achievable with a realistic prospect that housing will be delivered on the site within five years and in particular that development of the site is viable. Sites with planning permission should be considered deliverable until permission expires, unless there is clear evidence that schemes will not be implemented within five years, for example they will not be viable, there is no longer a demand for the type of units or sites have long term phasing plans." Footnote 11

- 1.2.3 The publication of the online *National Planning Policy Guidance* in early 2014 provides the following guidance regarding the production of viability assessments in support of plan making:
 - Local authorities should ensure that the Local Plan vision and policies are realistic and provide high level assurance that plan policies are viable

- Development of plan policies should be iterative with draft policies tested against evidence of the likely ability of the market to deliver the plan's policies, and revised as part of a dynamic process
- Assessing the viability of plans does not require individual testing of every site or assurance that individual sites are viable; site typologies may be used to determine viability at policy level
- The cumulative cost of planning standards and obligations should be tested to ensure viability
- Plan makers should not plan to the margin of viability but should allow for a buffer to respond to changing markets and to avoid the need for frequent plan updating
- Policies should be deliverable and should not be based on an expectation of future rises in values <u>at least</u> for the first five years of the plan period
- Local Plan policies should reflect the desirability of re-using brownfield land, and the fact that brownfield land is often more expensive to develop
- 1.2.4 The publication of *Viability Testing Local Plans* by the Local Housing Delivery Group, May 2012, offers guidance for local authorities in assessing local plan viability in accordance with the NPPF. It suggests the need for a distinct Local Plan Viability Assessment to demonstrate that the policies put forward in a Local Plan are viable and accord with the requirements of the NPPF, and therefore the plan meets the tests of soundness.
- 1.2.5 The guidance underlines the importance of assessing the cumulative impact of policies on development viability and suggests a structured and transparent means of assessing viability. It recommends an economic viability testing model that can be applied area-wide and over the short (0 to 5 years), medium (6-10 years) and long (11-15 years) term. It also suggests close collaboration with the development industry throughout the process.

1.3 BACKGROUND TO VIABILITY ASSESSMENT OF BRADFORD LOCAL PLAN

- 1.3.1 DTZ was originally instructed to assess the previous version of the Draft Local Plan Core Strategy the Further Engagement Draft (FEDCS), published in October 2011. A viability report was produced by DTZ dated September 2013 in relation to this document. The purpose was to test the policies of the FEDCS and to provide advice to Bradford Council regarding any adjustments / refinements that were considered to be necessary to 'viability proof' the document. The recommendations of this earlier report were fed into the process of developing the subsequent iteration of the draft plan the Core Strategy Publication Draft (CSPD), published in February 2014.
- 1.3.2 DTZ has now been reappointed to produce an updated version of the Local Plan viability report, taking account of the amended policies set out in the CSPD, and the representations made through the consultation in early 2014. This work has involved:
 - An updated market assessment
 - Further consultation with developers and land owners
 - Revision to site sampling methodology to enhance mix of site types to ensure alignment with the revised Core Strategy document

- Updated viability assumptions including taking account of updated literature produced regarding the effects of certain policy requirements such as zero carbon
- Re modelling of financial appraisals.

1.4 STRUCTURE OF REPORT

- 1.4.1 The structure of this report broadly follows that of the earlier version with an explanation of the viability methodology followed by:
 - A summary of the CSPD key policies
 - A screening view of the policies of the CSPD to determine those requiring economic viability testing
 - Outline of the viability assumptions used in the model
 - Viability testing results
 - Conclusions and recommendations.

2 Methodology

2.1 VIABILITY TESTING METHODOLOGY

2.1.1 The publication of Viability Testing Local Plans by the Local Housing Delivery Group, May 2012, offers guidance for local authorities in assessing local plan viability in accordance with the NPPF. It underlines the importance of assessing the cumulative impact of policies on development viability and suggests a structured and transparent means of assessing viability. It recommends the use of an economic viability model based on a residual development appraisal whereby the impact of various policy standards can be quantified and assessed against the value of a development scheme. If the cumulative impact of all policy standards result in development costs exceeding Gross Development Value, then development is not viable.

Value of Development Costs

Value Development Development Development Land

Development 1

Development 2

Planning obligations

Return

Development Costs

Return

Development Development Development Development Development Costs

Figure 2.1: Viability testing - principles

Source: RICS Financial Viability in Planning Guidance Note (1st Edition, 2012)

- 2.1.2 DTZ's approach involves the analysis of a selection of hypothetical development schemes to reflect the wide range of circumstances in which development is anticipated to come forward in Bradford District. DTZ has developed a spreadsheet economic viability model that allows a large number of development scenarios to be tested in this way, including sensitivity testing of key variables. The appraisals are carried out on a residual site value basis, whereby the impact of various policy standards is taken into consideration alongside other costs, including profit which are discounted from Gross Development Value to produce a residual site value. The site value is then tested against a benchmark to determine whether or not development is viable.
- 2.1.3 RICS guidance note *Financial Viability in Planning* 2012 defines site value as follows:

"Site Value should equate to the market value subject to the following assumption: that the value has regard to development plan policies and all other material planning considerations and disregards that which is contrary to the development plan."

2.1.4 When undertaking Local Plan or CIL (area-wide) viability testing, a second assumption needs to be applied to the above:

"Site Value (as defined above) may need to be further adjusted to reflect the emerging policy / CIL charging level. The level of the adjustment assumes that site delivery would not be prejudiced. Where an adjustment is made, the practitioner should set out their professional opinion underlying the assumptions adopted. These include, as a minimum, comments on the state of the market and delivery targets as at the date of assessment."

2.1.5 Viability is tested by the relationship of residual site values of hypothetical schemes against a benchmark. The site value threshold is deducted from the residual site value of the tested scheme to determine the 'headroom' that exists for policy standards and obligations:

Valuation Viability test Inputs Value areas **Gross Development** Value Archetypes **Appraisal** Less all costs assumptions including profit and site specific S106 Equals residual site Benchmark site value (RSV) value = Maximum sum available for Policy Standards

Figure 2.2 Approach to viability testing

2.1.6 Where:

- Gross Development Value (GDV) represents the cumulative capital sales value of the development.
- Development costs represent all the costs incurred by a developer in delivering the completed development scheme site costs, build costs, contingencies, developer's profit, finance and all relevant professional, legal, sales/marketing fees, stamp duty, policy costs and planning obligations.
- Residual land value represents the difference between Gross Development Value and Development costs.

2.2 CONSULTATION

- 2.2.1 We have consulted with a range of stakeholders to inform this work including developers, house-builders, retail operators and property and planning agents as well as Council officers. A developer workshop was held in 2012 to inform the previous DTZ viability report. A follow up questionnaire consultation was undertaken in July 2014 to test the updated viability assumptions. Stakeholders involved in this process have included:
 - Bellway Homes
 - Ben Bailey Homes
 - Taylor Wimpey
 - Skipton Properties
 - Mark Brearley and Company
 - Persimmon Homes
 - Bradford NHS Trust
 - GMI Property Company Ltd
 - Steel Consulting
 - Jones Homes
 - Dacre Son and Hartley
 - Keyland Developments
 - Yorkshire Building Society
 - David Wilson Homes
 - Savills
 - ID Planning
 - Jones Homes
 - Accent Homes
 - Bradford Chamber Property Forum
 - Johnson Brook Planning and Development Consultants

2.3 CAVEATS

- 2.3.1 This report deals specifically with economic viability of selected hypothetical development schemes. It does not address the matter of either:
 - Area wide development quantum / forecast; or
 - Deliverability of land supply
- 2.3.2 These matters sit outside of the scope of this instruction and are being addressed by the Council as part of the wider evidence base supporting the Local Plan preparation.
- 2.3.3 It is also emphasised that the viability assessments undertaken as part of this instruction are indicative development appraisals only and are highly sensitive to the assumptions made. We have considered sensitivities in attempt to cover the potential range of variations but we would underline

that there remains a significant degree of uncertainty around many of these variables and that on a generic area wide level, viability appraisals are an approximate indicator only.

3 Review of Core Strategy and evidence

3.1 THE LOCAL PLAN CORE STRATEGY

3.1.1 The Bradford District Core Strategy DPD Publication Draft (CSPD) was published for public consultation in February 2014.

The NPPF sets out the following key tests for "soundness":

- Positively prepared the plan should be prepared based on a strategy which seeks to meet
 objectively assessed development and infrastructure requirements, including unmet
 requirements from neighbouring authorities where it is reasonable to do so and consistent with
 achieving sustainable development;
- **Justified** the plan should be the most appropriate strategy, when considered against the reasonable alternatives, based on proportionate evidence;
- **Effective** the plan should be deliverable over its period and based on effective joint working on cross-boundary strategic priorities; and
- **Consistent with national policy** the plan should enable the delivery of sustainable development in accordance with the policies in the NPPF.

The Council has considered the representations on the Publication Draft and these will inform the submission to Government which takes account consultation responses, the National Planning Policy Framework and the evidence base.

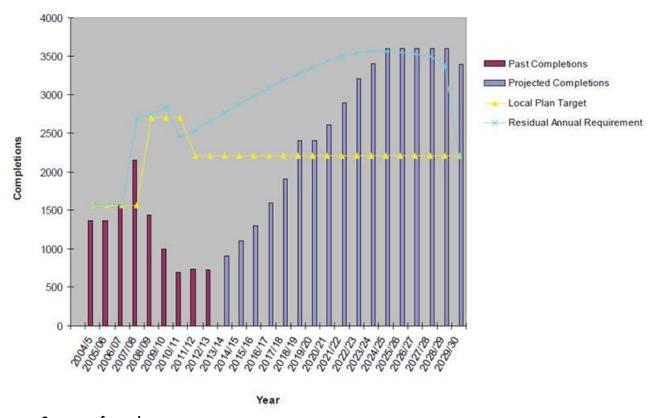
- 3.1.2 The CSPD seeks to address the key challenges facing Bradford's communities, in particular, meeting the needs of a growing population in terms of homes and jobs in a sustainable way. The spatial approach of the CSPD outlines the quantum of development planned for each of the four locations: City of Bradford (including Shipley and Lower Baildon), Airedale, Wharfedale and South Pennine Towns and Villages.
- 3.1.3 The housing growth level is set at 42,100 by 2030. The CSPD suggests that the majority of these houses will be focused in and around the City of Bradford with the emphasis on regeneration and Previously Developed Land (PDL) as far as is possible given the deliverability of land supply determined through the Strategic Housing Land Availability Assessment (SHLAA). Areas prioritised for growth include Shipley and Canal Road Corridor, the Leeds-Bradford Corridor and South East Bradford (including Holme Wood) and the City Centre. The principal towns of Keighley, Bingley and Ilkley will also support housing and economic growth.

3.2 HOUSING POLICIES

3.2.1 The CSPD sets out housing targets of a minimum of 42,100 homes delivered by 2030.

- 3.2.2 Bradford Council has developed a housing trajectory based on recent performance of housing completions and anticipated future delivery rates in view of market conditions and supply factors. The trajectory, as illustrated by Figure 3.1 below, is heavily back-loaded, not only to allow for weak market conditions over the short to medium term, but also because the Council anticipate that much of the land releases required to deliver the larger quantities of housing will be brought forward only in the medium to long term because of the need for new allocations and in some cases complex masterplans to unlock sites.
- 3.2.3 The housing trajectory demonstrates that the rates of delivery throughout the development period are considerable and well in excess of historic rates of completion. Whilst the first five years allow for a lower rate of delivery, this is stepped up year on year and by the final phase of delivery from 2021 onwards, the rate of annual completions is increased substantially to 3,800 per annum, near double the level of completions achieved at the peak of the market in 2007/08 (2156). It is anticipated that this step change in housing delivery performance will be facilitated by a less restrictive planning regime that has hitherto been in place in which large scale land releases are brought forward to meet requirements.

Figure 3.1: Housing trajectory 2004/5-2027/28



Sources of supply

3.2.4 Under Policy HO2, the CSPD sets out that the sources of housing supply will be as follows:

Around 19,500 from sites considered by the SHLAA as 'suitable now'

- Around 3,200 from the Canal Road Corridor AAP area
- Around 3,500 from the Bradford City Centre AAP area
- Around 4,600 from areas of RUDP designated safeguarded land
- Around 6,000 houses in the Bradford SE growth area including an urban extension at Holme Wood
- Up to 11,000 from green belt (this includes local green belt releases together with the urban extension at Holme Wood), the majority of which will be in the higher order settlements and which will be focused particularly on the Regional City of Bradford.
- 3.2.5 In addition, the Core Strategy Publication Draft states that the following growth areas/sites will be prioritised for growth through the allocations process:
 - The development of an Urban Eco Settlement in the Shipley and Canal Road Corridor
 - Bradford City Centre
 - SE Bradford
 - Queensbury, Thornton, Silsden and Steeton With Eastburn
 - An urban extension at Holme Wood
 - Local green belt releases where consistent with the Plan's sustainability principles and where other sources of supply have proved insufficient within the relevant settlement or strategic planning sub area.

Spatial distribution

3.2.6 The CSPD apportions the housing targets geographically in accordance with the spatial strategy set out in the document. This is as follows:

Table 3.1: Housing apportionment

The Regional City of Bradford			
Bradford City Centre	293	Bradford North East	7436
Canal Road	115	Bradford South West	7894
Shipley	1485	Bradford North West	6222
Bradford South East	4878		
Subtotal	28323		
The Principal Towns			
Ilkley	1194	Bingley	1470
Keighley	4066		
Subtotal	6730		
Local Growth Centres			
Queensbury	734	Thornton	633
Steeton with Eastburn	483	Silsden	346
Subtotal	2196		
Local Service Centres			
Addingham	263	East Morton	109

Burley in Wharfedale	518	Harden	133
Baildon	1351	Haworth	483
Cottingley	395	Menston	362
Cullingworth	215	Oakworth	315
Denholme	225	Oxenthorpe	155
Wilsden	325		
Subtotal	4849		

- 3.2.7 The CSPD also sets out a spatial vision for each of the four key 'Sub Area Policies' for City of Bradford, Airedale, Wharfedale and Pennine Towns and Villages. These spatial visions envisage potential greenbelt releases. The key elements of residential development proposed in each of these visions, all of which include the likelihood of greenbelt releases, are as follows:
 - City of Bradford urban regeneration and renewal priorities including City Centre, Canal Road Corridor, Shipley town centre, Leeds Bradford Corridor, Manningham, Little Horton and Allerton;
 - Airedale urban regeneration and renewal priority areas in Keighley and Bingley
 - Wharfedale potential localised greenbelt releases
 - Pennine Towns and Villages potential localised green belt releases at Thornton and Queensbury.
- 3.2.8 The sub areas outline the need for green belt releases in most parts of the district. The only more specific and definite urban extension being proposed at this stage being that east of the Holme Wood estate as part of the Bradford SE growth area.

3.3 OTHER USES

- 3.3.1 The CSPD sets out an overall target of 135 ha of employment land to be delivered over the 15 year plan period equating to 9 ha per annum. This target, based on the Council's Employment Land Review update 2011, incorporates 22 ha earmarked for B1 use, equating to 1.46 ha per annum. The overall employment land supply is to be distributed as follows:
 - 100 ha in City of Bradford
 - 30 ha in Airedale
 - 5 ha in Wharfedale
- 3.3.2 Policy EC4 Sustainable Economic Growth stipulates the requirement for all commercial schemes over 1000 sq m of floor area to secure at least 10% of their energy from decentralised and renewable or low carbon sources and meet BREEAM Very Good standards.

3.4 SCREENING OF POLICIES FOR VIABILITY TESTING

3.4.1 In the previous viability report we ascribed traffic light indicators to each policy to denote the likelihood of a direct impact on viability. Since the earlier report, a number of changes have been made to the policies reflected in the new CSPD, taking into consideration the analysis. The changes include:

- Reinforcing 'subject to viability' clause in policies
- Policy HO4 (phasing of delivery of housing) increases the first phase of delivery to 8 years to allow a larger range of sites to be brought forward to support deliverability
- Former Policy HO9, removal of the requirement for 10% of energy from renewable sources and tempering the requirement for Lifetime Homes standards, and replacing the requirement for Code for Sustainable Homes Level 6 from 2016 with the Zero Carbon Housing Standard
- Former Policy HO11 Affordable Housing, requirements changed from 40% to 30% in Wharfedale and 30% to 20% in Canal Road Corridor and the rest of the District
- The introduction of a dedicated viability Policy ID2 in the CSPD to confirm the Council's approach to testing viability
- Commissioning of delivery strategies for each of the AAP areas (City Centre and Canal Road Corridor) to identify means for assisting the delivery process (currently underway).
- 3.4.2 A revised 'screening' table is provided below of the amended policies in the CSPD. Each policy has been reviewed to assess its potential impact on viability and to determine whether it requires economic viability modelling. The test for whether or not the policy requires modelling is whether it carries a direct and readily measurable cost impact on development. Policies that do not stipulate a standard to be required and where they are expressed as an aspiration as opposed to a *requirement*, have been excluded from the subsequent viability modelling. Also, policies that require the availability of deliverable land supply have also been excluded, although comments have been provided in the final column titled 'comments on general deliverability'.
- 3.4.3 The outcome of this screening exercise is to shortlist the following policies for economic viability testing in the following section.
 - SC8 Protecting the South Pennine Moors and their Zone of Influence. This policy states that
 in Zones Bi and Bii, residential developments that result in a net increase in one or more
 dwellings will be required to contribute to the re-provision of natural green space,
 implementation and management arrangements
 - HO5 Housing Densities requires a minimum of 30 dwellings per ha to be achieved
 - HO6 Maximising the Use of Previously Developed Land seeks to deliver 50% of all housing on previously developed land
 - HO9 Housing Quality
 - Code for Sustainable Homes Level 4 from the date of adoption and Zero Carbon from 1st April 2016
 - Lifetime Home whilst no longer stipulated as a standard, the remains a requirement to
 ensure that homes should be 'adaptable to support the changing needs of families'. The
 supporting text clarifies that sites of 10 dwellings or more will be expected to include a
 proportion of accessible homes as part of the overall housing mix
 - Space standards there is a requirement that development should set out 'suitable space standards appropriate to the type of home' but no specific standard. The space standards in the supporting text were tested as part of the CSFED Viability Testing. The council are undertaking further work resulting from the Government's Housing Standards Review in regards to the proposed National Space Standard.
 - Design standards there is a requirement that housing development should be 'high quality and achieve good design' but no specific standards. The supporting text sets out major developments will be expected to undertake a Building for Life 12 Assessment

- Large sites of 10 or more dwellings will be expected to include a proportion of accessible homes
- HO11 Affordable Housing, the requirement for 30% in wharfedale, 15% in Inner Bradford and Keighley and 20% elsewhere
- EC4i BREEAM ensuring that developments of more than 1000 sq m meet BREEAM Very Good standard and BREEAM Excellent by 2019 subject to viability.

Table 3.2: Health check of Local Plan policies

	.2: Health check of Loca	Direct impact on economic viability of development?	Impact	Comments on general deliverability
		Y/N		
	sion, Objectives and Core Policies		,	
P1	Presumption in favour of sustainable development	N	n/a	
SC1	Overall approach and key spatial priorities	N	n/a	
SC2	Climate change and resource use	N	n/a	
SC3	Working together to make Great Places	N	n/a	
SC4	Hierarchy of settlements	N	n/a	
SC5	Location of development	N	n/a	
SC6	Green infrastructructure	N	n/a	
SC7	Green Belt	N	n/a	
SC8	Protecting the South Pennine Moors and their zone of influence	Y	Relocation of wildlife habitat	
SC9	Making Great Places	N	n/a	
BD1	The Regional City of Bradford including Shipley and Lower Baildon	N	n/a	Subject to housing land supply and market demand ensure adequate up to date and relevant evidence on housing, employment and retail
BD2	Investment priorities for the Regional City of Bradford including Shipley and Lower Baildon	N	n/a	
AD1	Airedale	N	n/a	Subject to housing land supply and market demand ensure adequate up to date and relevant evidence on housing, employment and retail
AD2	Investment priorities for Airedale	N	n/a	
WD1	Wharfedale	N	n/a	Subject to housing land supply and market demand review SHLAA, employment land and retail evidence
WD2	Investment priorities for Wharfedale	N	n/a	
PN1	South Pennine Towns and Villages	N	n/a	Subject to housing land supply and market demand ensure adequate up to date and relevant evidence on housing, employment and retail
PN2	Investment Priorities for the Pennine Towns and Villages	N	n/a	

Table 3.2: Health check of Local Plan policies (continued)

Policy re	f Policy description	Direct impact on economic viability of development? Y/N	Impact	Comments on general deliverability
EC1	Creating a successful and competitive Bradford District Economy within the Leeds City Region	N	n/a	
EC2	Supporting business and job creation	N	n/a	
EC3	Employment land requirement	N	n/a	Commercial market update will enhance employment land evidence
EC4	Sustainable economic growth	Υ	Cost uplift on commercial	Although policy states renewable requirement on a subject to viability basis
EC5	City, town, district and local centres	N	n/a	Ensure adequate , up to date and relevant evidence on retail
TR1	Travel reduction and modal shift	N	n/a	
TR2	Parking policy	N	n/a	Assessment of parking standards recommended to ensure competitiveness with market expectations
TR3	Public transport, cycling and walking	N	n/a	
TR4	Transport and tourism	N	n/a	
TR5	Improving connectivity and accessibility	N	n/a	
TR6	Freight	N	n/a	
TR7	Transport investment and management priorities	N	n/a	
TR8	Aircraft safety	N	n/a	
Thematic	Policies - Planning for people			
HO1	The District's housing requirement	N	n/a	Subject to housing land supply and market demand
HO2	Strategic sources of housing supply	N	n/a	Subject to housing land supply and market demand
НО3	Distribution of housing development	N	n/a	
HO4	Phasing and release of housing sites	N	n/a	Deliverability is dependent on site viability which has not been examined as part of this commission
HO5	Density of housing schemes	Y	Minimum of 30 DPH	Housebuilders preference is currently for low density family housing schemes
НО6	Maximising the use of previously developed land	N	Potential for increased abnormal costs	Need to test the delivery of brownfield site against greenfield site
HO7	Housing site allocation principles	N	n/a	Subject to site allocations process

Table 3.2: Health check of Local Plan policies (continued)

Policy ref	Policy description	Direct impact on economic viability of development? Y/N	Impact	Comments on general deliverability
HO8	Housing mix	N	n/a	Precise mix will be determined according to need and demand on case by case basis - therefore no standards to test in Local Plan.
НО9	Housing quality	Y	Impact of code for sustainable homes level 4 and zero carbon from 1st April 2016, to be tested through this assessment. A percentage of homes to achive higher accessibility standards on larger sites of 10 or more dwellings. Also aspirations for design and space standards although no specific measurable targets set.	To be tested through this assessment.
HO10	Overcrowding and empty homes	N	n/a	
HO11	Affordable housing	Y	up to 30% in Wharfedale, up to 20% in towns, suburbs and villages & up to 15% in inner Bradford and Keighley. Required on sites of 15 dwellings or more and on sites over 0.4 ha in size. NB the threshold is lowered to 5 dwellings in Wharfedale and the villages of Haworth, Oakworth, Oxenhope, Denholme, Cullingworth, Harden, Wilsden and Cottingley.	Affordable housing standards to be tested through this assessment
HO12	Sites for travellers and travelling showpeople	N	n/a	

Table 3.2: Health check of Local Plan policies (continued)

Policy re	ef Policy description	Direct impact on economic viability of development? Y/N	Impact	Comments on general deliverability
Themat	ic Policies - Planning for places			
EN1	Protection and improvements	N	n/a	
	in provision of open space and			
	recreation facilities			
EN2	Biodiversity and Geodiversity	N	n/a	
EN3	Historic environment	N	n/a	
EN4	Landscape	N	n/a	
EN5	Trees and woodland	N	n/a	
EN6	Energy	N	n/a	Subject to standards set out in DPDs
EN7	Flood risk	N	n/a	Subject to land supply
EN8	Environmental protection	N	n/a	
EN9	New and extended minerals extraction sites	N	n/a	
EN10	Sandstone supply	N	n/a	
EN11	Sand, gravel, fireclay and hydrocarbons	N	n/a	
EN12	Minerals safeguarding	N	n/a	
WM1	Waste management	N	n/a	
WM2	Waste management	N	n/a	
DS1	Achieving good design	N	n/a	
DS2	Working with the landscape	N	n/a	No explicit
				requirement/subjective
DS3	Urban character	N	n/a	No explicit
				requirement/subjective
DS4	Streets and movement	N	n/a	No explicit
				requirement/subjective
DS5	Safe and inclusive places	N	n/a	No explicit requirement/subjective

Impler	Implementation and delivery								
ID1	Development Plan Documents	N	N/a						
	and Annual Monitoring Report								
ID2	Viability	N	N/a						
ID3	Developer contributions	N	N/a						
ID4	Working with partners	N	N/a						
ID5	Facilitating delivery	N	N/a						
ID6	Simplification of planning	N	N/a						
	guidance to encourage								
	sustainable development								
ID7	Community involvement	N	N/a						
ID8	Regeneration funding and	N	N/a						
	delivery								

4 Economic viability testing

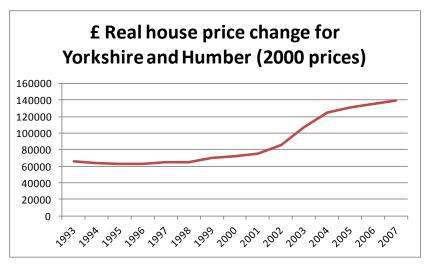
4.1 POLICIES TESTED

- 4.1.1 The following policies have been tested in accordance with the above screening analysis:
 - HO5 Housing Densities
 - HO6 Maximising the use of previously developed land
 - HO9 Housing Quality
 - Sustainable construction standards
 - Lifetime Home standards
 - Space standards
 - Design standards
 - HO11 Affordable Housing
 - SC8 Protecting the South Pennine Moors and their zone of influence
 - EC4 i BREEAM / carbon reduction target
- 4.1.2 The approach we have taken is to assess the impact of each of these standards against a base appraisal (with no planning standards at all), and then to show the cumulative impact of all the policies together against this baseline.

4.2 APPROACH TO TESTING VIABILITY OVER TIME

- 4.2.1 In accordance with the guidance set out in the Local Housing Delivery Group's advice on Local Plan Viability Testing, we have examined viability of the Local Plan policies over the 15 year period in which the plan will be in place. This analysis is intended to demonstrate how variation in market conditions over the plan period may affect viability levels. We acknowledge the reference in the Government's more recent National Planning Policy Guidance that viability should be based on current market conditions, however this statement refers only to the first five years of the plan and it is our interpretation that it is reasonable to test the potential for variation in the long term.
- 4.2.2 To do this, we have examined long term cyclical patterns in house prices which have informed the development of a number of value scenarios. DTZ have maintained a long running index of UK average house prices and have examined the range of real price variance over the last property cycle 1988 to 2007 to provide the basis for looking at sensitivities over the future Local Plan period. The data is sourced directly from the DCLG, linked to RPI, to ensure nominal values are converted to real ones. This index is then regionally adjusted using the Nationwide House Price Index to get to our base position up to present day for the region.
- 4.2.3 Figure 4.1 below illustrates the real change in average house prices for Yorkshire and Humber over the course of the 15 year period prior to 2007. This illustrates that in real terms average house prices more than doubled from the bottom to the top of the cycle. Whilst the next fifteen year cycle will not necessarily replicate the change observed between 1992 and 2007, the potential for significant growth in real terms is clear, particularly if it assumed that the housing market is currently somewhere near the bottom of the cycle in Bradford District.

Figure 4.1: Real house price change 1993-2007



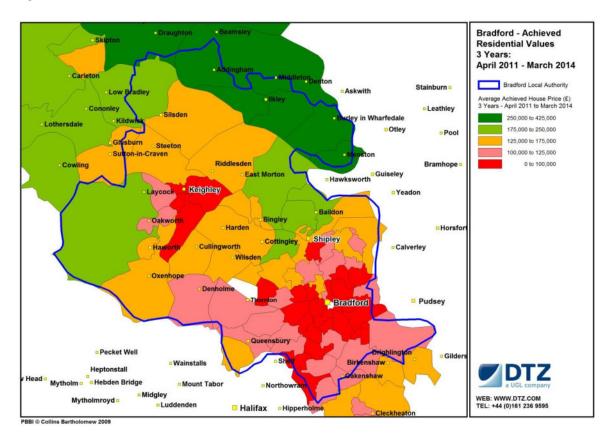
Source: DCLG

- 4.2.4 In considering the potential variance over the next 15 year cycle, DTZ has projected forward this index over the life of the plan period, reflecting official RPI forecasts, using a weighted average of the following four sources:
 - The actual recorded changes in the previous property cycle
 - DTZ Residential Research
 - Savills Residential Research
 - Knight Frank Residential Research.
- 4.2.5 Three value sensitivities have been drawn from this projection to provide parameters for the possible level of variance in values over the plan period:
 - Base = 100% of current sales values
 - Mid = 130% of current sales values
 - High = 160% of current sales values
- 4.2.6 These scenarios are intended to represent possible changes in market conditions over the plan period, although we would emphasise that they are not predictions of how market values will change, but merely sensitivities to test potential levels of variation. As such we would urge caution in how the results are interpreted and in particular we would not recommend that the viability of Bradford District's Core Strategy rely on the achievement of these scenarios in view of the inherent uncertainty, and particularly in the first five years in accordance with the guidance recently published in the Government's online National Planning Guidance.

4.3 APPRAISAL ASSUMPTIONS

- 4.3.1 The baseline appraisal assumptions are predicated on those tested through consultation with the development community.
- 4.3.2 Five market areas have been selected to examine residential viability based on differences in average house prices drawn from Land Registry data:
 - Value area 1 £250,000 to £425,000 average house price band
 - Value area 2 £175,000 to £250,000 average house price band
 - Value area 3 £125,000 to £175,000 average house price band
 - Value area 4 £100,000 to £125,000 average house price band
 - Value area 5 sub £100,000 average house price band
- 4.3.3 Whilst there may be small variations in values concealed within each of the geographical boundaries presented, these value areas are considered to provide an adequate range and representation of the areas in which development is anticipated to come forward through the CSPD.

Figure 4.2: Residential market areas



4.3.4 The following sites have been tested as part of the viability analysis based on our research of schemes in the Council's SHLAA and five year supply. The built floor area (sq ft per acre) aligns broadly with the density levels observed in the market, with the exception of the flatted schemes

(Scheme 4 and Scheme 5) which are included as examples of higher density scheme that could come forward within the plan period when market conditions improve.

Table 4.1: Site selection and housing mix

Developable area				Housing mix %				Built floor area						
			Development		1 bed	2 bed	2 bed	3 bed	4 bed	5 bed			Sq m per	Sq ft per
	ha	acres	density (DPH)	No units	flat	flat	house	house	house	house	Sq m	Sq ft	ha	acre
Scheme 1	0.50	1.24	36	18	0%	0%	20%	50%	25%	5%	1,706	18,366	3,413	14,865
Scheme 2	1.00	2.47	35	35	0%	0%	20%	50%	25%	5%	3,413	36,732	3,413	14,865
Scheme 3	1.00	2.47	60	60	50%	50%	0%	0%	0%	0%	3,480	37,458	3,480	15,159
Scheme 4	1.00	2.47	200	200	50%	50%	0%	0%	0%	0%	10,200	109,792	10,200	44,432
Scheme 5	2.00	4.94	35	70	0%	0%	20%	50%	25%	5%	6,825	73,464	3,413	14,865
Scheme 6	5.00	12.36	35	175	5%	5%	20%	40%	25%	5%	16,450	177,066	3,290	14,332
Scheme 7	10	24.71	35	350	5%	5%	20%	40%	25%	5%	32,900	354,133	3,290	14,332

4.3.5 Housing sizes have been assumed as follows:

Table 4.2: Base house sizes

House type	Size (sq m)	(Sq ft)
1 bed flat	51	549
2 bed flat	65	700
2 bed house	77	829
3 bed house	93	1001
4 bed house	115	1238
5 bed house	137	1475

4.3.6 Sales value assumptions are based on our research of new build values achieved across the District as at mid 2014. The following blended capital values have been assumed, including 'current' alongside longer term sensitivities based on the analysis above:

Table 4.3: Property values

	Long term potential (for sensitivity testing Local Plan policies only)						
	Current sale	es values					
	assumpt	tions	Mid (130%)	High (160%)		
	£psm	£psf	£psm	£psf	£psm	£psf	
Value band 1	£3,100	£288	£4,030	£374	£4,960	£461	
Value band 2	£2,300	£214	£2,990	£278	£3,680	£342	
Value band 3	£2,000	£186	£2,600	£242	£3,200	£297	
Value band 4	£1,750	£163	£2,275	£211	£2,800	£260	
Value band 5	£1,500	£139	£1,950	£181	£2,400	£223	

4.3.7 Baseline build costs are based on BCIS with an allowance for an uplift for external works. These costs are considered to be conservative and not representative of the generally lower build costs which national house builders are understood to be able to deliver to. They therefore provide an in-built viability buffer.

Table 4.4: Build cost assumptions

	Build cost	(BCIS)	Plus 15% uplift for external works		
	£psm	£psf	£psm	£psf	
Houses	£844	£78	£971	£90	
Flats	£1,008	£94	£1,159	£108	
Source BCIS Mand Humber,	1edian, rebased July 2014	for Yorks			

4.3.8 Other appraisal assumptions are considered to be typical of the market and are as follows:

Table 4.5: Other development cost assumptions

Other development costs	
Allowance for abnormals	10% uplift on build costs
Site specific section 106	£1000 per unit
Professional fees (inc planning)	6% of construction costs
Contingencies	5% of construction costs
Marketing, sales agent and legal fees	3.5% of revenue
Purchaser's costs	5.8% on purchase price
Finance	6.75% on negative balance
	20% of revenue for market units, 6% of
Developer's profit	revenue for affordable

4.3.9 Delivery rates are based on 30 units per annum, per outlet, allowing for the 10 ha larger site to be delivered via 2 delivery outlets therefore doubling the delivery rate to 60 units per annum.

4.4 SITE VALUE THRESHOLDS

- 4.4.1 The Local Housing Delivery Group: Viability Testing Local Plans advice for planning practitioners (July 2012), states that viability studies should incorporate a threshold land value based on 'a premium over current use values and credible alternative use values'. It also highlights the limitations of using market values for policy-making viability evidence recognising that historic market values do not take into account the impact of future policy on land prices.
- 4.4.2 The RICS guidance note Financial Viability in Planning 2012 defines site value as follows:

"Site Value should equate to the market value subject to the following assumption: that the value has regard to development plan policies and all other material planning considerations and disregards that which is contrary to the development plan."

4.4.3 It also states that when undertaking Local Plan or CIL (area-wide) viability testing, a second assumption needs to be applied to the above:

"Site Value (as defined above) may need to be further adjusted to reflect the emerging policy / CIL charging level. The level of the adjustment assumes that site delivery would not be prejudiced.

Where an adjustment is made, the practitioner should set out their professional opinion underlying the assumptions adopted. These include, as a minimum, comments on the state of the market and delivery targets as at the date of assessment."

- 4.4.4 The site value thresholds that have been applied are based on DTZ's understanding of typical prices for residential land across the District which have then been discounted by 20% in accordance with the approach recommended in the RICS guidance. The resultant site value thresholds are considered to provide land owners with a 'competitive return' and as such are considered reasonable benchmarks for viability testing purposes. For the long term mid and high value sensitivities it would not be appropriate to use the same fixed site value thresholds given the impact of improved viability, so the internal measure of 20% of GDV has been used which has also been adjusted by 20% (to 16%) to provide a consistent approach with the adjustment to the fixed site values.
- 4.4.5 The following site value thresholds have been assumed:

Table 4.6: Site value thresholds

	Market site	e values	viability an	resholds for alysis (20% ount)
Land value thresholds	£ per ha	£ per acre	£ per ha	£ per acre
Value band 1	£1,606,150	£650,000	£1,284,920	£520,000
Value band 2	£926,625	£375,000	£741,300	£300,000
Value band 3	£741,300	£300,000	£593,040	£240,000
Value band 4	£555,975	£225,000	£444,780	£180,000
Value band 5	£370,650	£150,000	£296,520	£120,000
Area wide assumption for mid and				
high value scenarios	20% of 0	GDV	16% o	f GDV

4.5 APPRAISAL RESULTS

- 4.5.1 The various policy standards listed above are examined below on the basis of the appraisal assumptions set out. As explained in Section 2, viability is tested via a residual development appraisal where the residual site value is benchmarked against a site value threshold. The threshold site value is subtracted from the residual site value of each scheme to establish a 'headroom' figure which effectively represents the amount available for planning standards.
- 4.5.2 Each policy standard is tested separately after which the cumulative impact of the combined standards is considered. We also include reference to the two improved market scenarios (mid and high) to reflect the possibility of improved market conditions throughout the life of the plan, as explained above.
- 4.5.3 Following the preliminary modelling, results from the high density flatted scheme (Scheme 4) were adversely impacting on the average values. These have been removed from the results presented below.

4.6 BASELINE – NO POLICY REQUIREMENTS

- 4.6.1 Table 4.7 outlines the results of the baseline appraisal which includes none of the policy standards listed above. This effectively represents the viability of development if no Local Plan policies were required. The table outlines the results for six of the sites tested in each of the five value areas. It illustrates the 'headroom' in the final column, which is the sum available for policy standards on a 'per ha' basis.
- 4.6.1 As indicated by the table below, the baseline appraisals show a wide range of residual site values reflecting the diversity of market characteristics across the District, with value area 1 (Wharfedale) generating gross site values of over £3m per ha (£1.25m per acre), and at the other end of the spectrum, value area 5 (inner Bradford and Keighley), producing negative land values. It therefore indicates that the headroom for policy standards ranges from as much as £2million + in Wharfedale, to zero in the weaker market areas of the District. In the mid value area 3, there is approximately £0.5million per ha available for policy standards.

Table 4.7: Base appraisal results (No policy standards)

	Vallue area 1		240	eline - Policy Off			
	Value alea I	Density per hectare	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards)
1	Scheme 1	36	0.5	£1,994,772	£3,989,544	£1,284,920	£2,704,624
_	Scheme 2	35	1	£3,835,343	£3,835,343	£1,284,920	
	Scheme 3 - Flatted	60	1	£2,621,379	£2,621,379	£1,284,920	
	Scheme 5	35	2	£7,505,936	£3,752,968		
	Scheme 6	35	5	£16,500,867	£3,300,173	£1,284,920	
	Scheme 7	35	10	£33,001,734	£3,300,173	£1,284,920	
					==,==,===	Average	£2,181,677
	Value area 2						
		Density per hectare	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards)
2	Scheme 1	36	0.5	£1,032,011	£2,064,023	£741,300	£1,322,723
	Scheme 2	35	1	£1,993,943	£1,993,943	£741,300	
	Scheme 3 - Flatted	60	1	£771,733	£771,733		
	Scheme 5	35	2	£3,915,142	£1,957,571	£741,300	
	Scheme 6	35	5	£8,527,267	£1,705,453	£741,300	£964,153
	Scheme 7	35	10	£17,054,533	£1,705,453	£741,300	£964,153
						Average	£958,396
		Density per hectare	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards)
3	Scheme 1	36	0.5	£670,976	£1,341,952	£593,040	£748,912
	Scheme 2	35	1	£1,300,965	£1,300,965	£593,040	£707,925
	Scheme 3 - Flatted	60	1	£71,952	£71,952	£593,040	-£521,088
	Scheme 5	35	2	£2,568,322	£1,284,161	£593,040	£691,121
	Scheme 6	35	5	£5,520,975	£1,104,195	£593,040	£511,155
	Scheme 7	35	10	£11,041,950	£1,104,195	£593,040	
						Average	£441,530
	Value area 4	Density per hectare	Site Size (ha)	Site value	Site value per ha	Site value	Headroom (sum
						threshold per ha	standards)
4	Scheme 1	36	0.5	£370,113	£740,227	£444,780	standards)
4	Scheme 2	36 35	0.5 1	£370,113 £730,571	£740,227 £730,571	·	standards) £295,447
4						£444,780 £444,780	standards) £295,447 £285,791
4	Scheme 2	35	1	£730,571	£730,571	£444,780 £444,780	standards) £295,447 £285,791 -£444,78(
4	Scheme 2 Scheme 3 - Flatted	35 60 35 35	1 1 2 5	£730,571 £0	£730,571 £0	£444,780 £444,780 £444,780 £444,780	£295,447 £285,791 -£444,780 £277,313 £156,098
4	Scheme 2 Scheme 3 - Flatted Scheme 5	35 60 35	1 1 2	£730,571 £0 £1,444,187	£730,571 £0 £722,093	£444,780 £444,780 £444,780 £444,780 £444,780	£295,447 £285,791 -£444,78(£277,313 £156,098
	Scheme 2 Scheme 3 - Flatted Scheme 5 Scheme 6 Scheme 7	35 60 35 35	1 1 2 5	£730,571 £0 £1,444,187 £3,004,389	£730,571 £0 £722,093 £600,878	£444,780 £444,780 £444,780 £444,780	£295,44: £285,79: -£444,78(£277,31: £156,09(
	Scheme 2 Scheme 3 - Flatted Scheme 5 Scheme 6	35 60 35 35 35 35	1 1 2 5 10	£730,571 £0 £1,444,187 £3,004,389 £6,008,779	£730,571 £0 £722,093 £600,878 £600,878	£444,780 £444,780 £444,780 £444,780 £444,780 £444,780 Average	£295,44: £285,79: -£444,78(£277,31: £156,09(£150,994)
	Scheme 2 Scheme 3 - Flatted Scheme 5 Scheme 6 Scheme 7 Value area 5	35 60 35 35 35 35	1 1 2 5 10 Site Size (ha)	£730,571 £0 £1,444,187 £3,004,389 £6,008,779	£730,571 £0 £722,093 £600,878 £600,878	£444,780 £444,780 £444,780 £444,780 £444,780 £444,780 Average Site value threshold per ha	£295,44: £285,79: -£444,78: £277,31: £156,09: £120,99: Headroom (sum available for policy standards)
	Scheme 2 Scheme 3 - Flatted Scheme 5 Scheme 6 Scheme 7 Value area 5	35 60 35 35 35 35 Density per hectare	1 1 2 5 10	£730,571 £0 £1,444,187 £3,004,389 £6,008,779 Site value	£730,571 £0 £722,093 £600,878 £600,878 Site value per ha	£444,780 £444,780 £444,780 £444,780 £444,780 £444,780 Average Site value threshold per ha	£295,44: £285,79: -£444,78(£277,31: £156,09(£120,994) Headroom (sum available for policy standards)
	Scheme 2 Scheme 3 - Flatted Scheme 5 Scheme 6 Scheme 7 Value area 5 Scheme 1 Scheme 2	35 60 35 35 35 35 Density per hectare	1 1 2 5 10 Site Size (ha)	£730,571 £0 £1,444,187 £3,004,389 £6,008,779 Site value	£730,571 £0 £722,093 £600,878 £600,878 Site value per ha	£444,780 £444,780 £444,780 £444,780 £444,780 £444,780 Average Site value threshold per ha	\$tandards) £295,44: £285,79: -£444,78: £277,31: £156,09: £120,99: Headroom (sum available for policy standards) -£158,018: -£158,018: -£145,326:
	Scheme 2 Scheme 3 - Flatted Scheme 5 Scheme 6 Scheme 7 Value area 5 Scheme 1 Scheme 2 Scheme 3 - Flatted	35 60 35 35 35 35 Density per hectare	1 1 2 5 10 Site Size (ha)	£730,571 £0 £1,444,187 £3,004,389 £6,008,779 Site value £69,251 £151,196	£730,571 £0 £722,093 £600,878 £600,878 Site value per ha £138,502 £151,196	£444,780 £444,780 £444,780 £444,780 £444,780 £444,780 Average Site value threshold per ha	\$\text{standards}\) \(\(\) \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\
	Scheme 2 Scheme 3 - Flatted Scheme 5 Scheme 6 Scheme 7 Value area 5 Scheme 1 Scheme 2 Scheme 3 - Flatted Scheme 5	35 60 35 35 35 35 Density per hectare	1 1 2 5 10 Site Size (ha)	£730,571 £0 £1,444,187 £3,004,389 £6,008,779 Site value £69,251 £151,196 £0 £319,188	£730,571 £0 £722,093 £600,878 £600,878 Site value per ha £138,502 £151,196 £0 £159,594	£444,780 £444,780 £444,780 £444,780 £444,780 Average Site value threshold per ha £296,520 £296,520 £296,520	\$tandards) £295,44' £285,79: -£444,78! £277,31: £156,09! £120,99: Headroom (sum available for policy standards) -£158,01! -£158,01! -£145,32: -£296,52! -£136,92!
	Scheme 2 Scheme 3 - Flatted Scheme 5 Scheme 6 Scheme 7 Value area 5 Scheme 1 Scheme 2 Scheme 3 - Flatted	35 60 35 35 35 35 Density per hectare	1 1 2 5 10 Site Size (ha)	£730,571 £0 £1,444,187 £3,004,389 £6,008,779 Site value £69,251 £151,196	£730,571 £0 £722,093 £600,878 £600,878 Site value per ha £138,502 £151,196	£444,780 £444,780 £444,780 £444,780 £444,780 Average Site value threshold per ha £296,520 £296,520 £296,520	\$\text{standards}\) \(\(\) \\ \ \ \) \\ \\ \ \\ \ \ \\ \ \ \

4.7 HO5 HOUSING DENSITIES

- 4.7.1 The CSPD requires a minimum of 30 dwellings per ha to be achieved. The viability analysis is based on minimum development densities of 35 units per ha which generate an average site coverage of 14,000-15,000 sq ft per acre which is considered reasonable in light of the standards sought by most house builders at the current time. The requirement is therefore not considered onerous and its impact on economic viability is negligible.
- 4.7.2 It is notable that many house-builders are concentrating on low density family units at the current time and that therefore requiring a density of development any higher than that stated in the CSPD may be regarded less favourably and have a negative impact on the deliverability of development in the short term. The reason why there is a weak market appetite for flatted development is attributable to the dramatic reduction in purchaser demand for flats (linked partly to mortgage lending restrictions), and also because such schemes require a large capital outlay and cannot be phased against sales in the way that individual houses can, thus increasing financing cost and risk in a difficult market. However, this is a reaction to currently challenging market conditions and over the course of the plan period we would expect this trend to change.

4.8 HO6 PREVIOUSLY DEVELOPED LAND

- 4.8.1 The CSPD requires that the at least 50% of housing delivery will be on previously developed land (PDL), with 50% in the regional City of Bradford, 50% in the Principal Towns, 15% in Local Growth Centres and 35% in Local Service Centres.
- 4.8.2 This viability assessment has not examined the deliverability or viability of land supply per se. However, through making assumptions about the potential cost uplift associated with bringing forward constrained brownfield sites it is feasible to model the potential impacts on viability of sites that experience a greater level of abnormals.
- 4.8.3 It must be noted that Previously Developed Land is not always more expensive to develop than Greenfield land. Brownfield sites, if cleared and free from contamination can actually be cheaper to develop due to the pre existence of servicing and infrastructure (in comparison to occasionally high Greenfield enabling costs such as flood alleviation, levelling, services etc). Therefore the cost uplifts we have applied should be interpreted with a degree of caution as regards their interpretation for PDL viability and more indicative of sites in general that may suffer from high abnormal issues.
- 4.8.4 The results show that two scenarios have been devised, with the first applying a 10% uplift on build costs and the second a 20% uplift on build costs. These cost uplifts equate to approximately £330,000 per ha (£130,000 per acre) and £660,000 per ha (£270,000 per acre) respectively. The results are illustrated in Table 4.8 on the following page.
- 4.8.5 The results illustrate the impact of additional costs with value areas 4 and 5 most adversely affected as indicated by the negative headroom figures in the final columns. The impact on value areas 1 to 3 is more limited, although it should be noted that there are no other policy standards included in this analysis.

Table 4.8: HO6 Previously Developed Land

	Policy F	106 (10% uplift on	build costs)			Policy H	O6 (20% uplift o	n build costs)	
Value area 1					Value area 1				
Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for polic standards after policy applied)
0.5	£1,823,058	£3,646,115	£1,284,920	£2,361,195	0.5	£1,651,344	£3,302,687	£1,284,920	£2,017,76
1	£3,505,451	£3,505,451	£1,284,920	£2,220,531	1	£3,177,973	£3,177,973	£1,284,920	£1,893,05
1	£2,180,035	£2,180,035	£1,284,920	£895,115	1	£1,720,408	£1,720,408	£1,284,920	£435,48
2	£6,876,393	£3,438,196	£1,284,920	£2,153,276	2	£6,236,868	£3,118,434	£1,284,920	£1,833,51
5	£15,086,109	£3,017,222	£1,284,920	£1,732,302	5	£13,682,454	£2,736,491	£1,284,920	£1,451,57
10	£30,172,219	£3,017,222	£1,284,920	£1,732,302	10	£27,364,908	£2,736,491	£1,284,920	£1,451,57
			Average	£1,849,120				Average	£1,513,827
Value area 2					Value area 2				
Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)
0.5	£860,297	£1,720,594	£741,300	£979,294	0.5	£688,583	£1,377,166	£741,300	£635,866
1	£1,664,606	£1,664,606	£741,300	£923,306	1	£1,338,493	£1,338,493	£741,300	£597,193
1	£317,342	£317,342	£741,300	-£423,958	1	£0	£0	£741,300	
2	£3,280,581	£1,640,291	£741,300	£898,991	2	£2,647,395	£1,323,698	£741,300	£582,398
5	£7,122,058		£741,300		5	£5,657,923	£1,131,585	£741,300	
10	£14,244,115	£1,424,412	£741,300	£683,112	10	£11,315,846	£1,131,585	£741,300	£390,285
			Average	£623,976				Average	£309,121
Value area 3					Value area 3				
Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)
0.5	£499,262	£998,524	£593,040	£405,484	0.5	£327,548	£655,096	£593,040	£62,056
1	£975,611	£975,611	£593,040	£382,571	1	£650,460	£650,460	£593,040	£57,420
1	£0	£0	£593,040	-£593,040	1	£0	£0	£593,040	-£593,040
2	£1,938,275		£593,040		2	£1,305,730	£652,865	£593,040	
5	£4,084,089	£816,818	£593,040		5	£2,625,744	£525,149	£593,040	
10	£8,168,179	£816,818	£593,040	£223,778	10	£5,251,488	£525,149	£593,040	-£67,89
			Average	£169,778				Average	-£91,58
Value area 4					Value area 4				
Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)	Site Size (ha)	Site value	Site value per ha	20% GDV per ha	Sum available for policy standards
0.5	£198,399		£444,780		0.5	£26,215	£52,431	£555,975	
1	£400,929		£444,780		1	£73,748	£73,748	£555,975	
1	£0		£444,780		1	£0	£0	£555,975	
2	£814,766		£444,780		2	£171,045	£85,522	£555,975	
5	£1,537,170		£444,780		5	£820	£164	£555,975	-£555,811
10	£3,074,340	£307,434	£444,780		10	£1,639	£164	£555,975	-£555,81
Value area F			Average	-£141,450	Value area E			Average	-£520,637
Value area 5 Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards)	Value area 5 Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for polic standards after policy applied)
0.5	£0	£0	£296,520	-£296,520	0.5	£0	£0	£296,520	-£296,520
1	£0		£296,520		1	£0	£0	£296,520	
1	£0				1	£0		£296,520	
2	£0	£0	£296,520	-£296,520	2	£0	£0	£296,520	-£296,520
5	£0	£0	£296,520	-£296,520	5	£0	£0	£296,520	-£296,520
10	£0	£0	£296,520	-£296,520	10	£0	£0	£296,520	-£296,52
10									

4.8.6 The effects of market improvement through the Local Plan period will undoubtedly enhance the prospects of delivering sites that experience a significant level of abnormal costs. Evidence of historic housing completions shows that Bradford District has been able to deliver significant housing numbers on previously developed land, through peak and weak market conditions, as illustrated below:

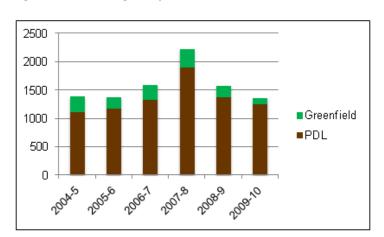


Figure 4.3: Housing completions 2004-2010 - Greenfield/PDL

4.9 HO9B SUSTAINABLE CONSTRUCTION STANDARDS

- 4.9.1 The base build costs £ per sq m have been uplifted to reflect the impact of CSPD Policy HO9B which requires Code For Sustainable Homes Level 4 to be achieved from the date of adoption, and Zero Carbon from 1 April 2016.
- 4.9.2 There is much uncertainty regarding the cost impact of future changes in construction standards. The CLG report *Cost of Building to the Code for Sustainable* Homes 2011 indicated an extra over cost of 5% for Level 4, and 40% for Code 6. However, this document is now dated and not reflective of the efficiencies that have been achieved in the delivery of sustainable construction. Further, since the publication there has been a modification to the approach required and 'Zero Carbon' is a less onerous obligation than Level 6 of the Code for Sustainable Homes.
- 4.9.3 The Zero Carbon Hub has recently produced an analysis of the potential cost uplift of achieving *Zero Carbon Cost analysis: meeting the zero carbon standard* (February 2014). This report estimates a cost uplift of £3,700 to £4,700 for a typical semi detached house or £43-£60 per sq m. The Parliamentary Report on Zero Carbon Homes dated 18 November 2013 (Ref. SN/SC/06678) refers to a range of £3,000 to £8,000 per house, indicating a consensual view in this area. Therefore we have utilised this evidence and applied a cost uplift of 5% to test the impact of achieving Zero Carbon.
- 4.9.4 Table 4.9 below illustrates the results. The appraisal of Zero Carbon on the base appraisal indicates that the imposition of the cost uplift reduces the headroom for other policy standards which in the case of Value Area 5 simply renders development even more unviable. All other value areas and sites are generally able to withstand the effect of this policy with the exception of the flatted scheme which is indicated to be unviable. However no other policy standards apply. The combination of

improved market conditions and technological advancements are thought likely to improve the viability of imposing such standards over the medium to long term.

Table 4.9: HO9B Meeting Sustainable Construction Standards

	Zero Carl	bon from 2016 (5% u	plift on build costs)
Value area	1			
Site Size	Site value	Site value per ha	Site value	Headroom (sum
(ha)			threshold per ha	available for policy
				standards after
				policy applied)
0.5	£1,908,030	£3,816,059	£1,284,920	£2,531,139
1	£3,668,493	£3,668,493	£1,284,920	£2,383,573
1	£2,396,301	£2,396,301	£1,284,920	£1,111,381
2	£7,199,065	£3,599,533	£1,284,920	£2,314,613
5	£15,788,362	£3,157,672	£1,284,920	£1,872,752
10	£31,576,725	£3,157,672	£1,284,920	£1,872,752
			Average	£2,014,369
Value area	2			
Site Size	Site value	Site value per ha	Site value	Headroom (sum
(ha)			threshold per ha	available for policy
				standards after
				policy applied)
0.5	£945,269	£1,890,538	£741,300	£1,149,238
1	£1,827,165	£1,827,165	£741,300	£1,085,865
1	£543,586	£543,586	£741,300	-£197,714
2	£3,601,040	£1,800,520	£741,300	£1,059,220
5	£7,808,149	£1,561,630	£741,300	£820,330
10	£15,616,299	£1,561,630	£741,300	£820,330
			Average	£789,545
Value area				
Site Size	Site value	Site value per ha	Site value	Headroom (sum
(ha)			threshold per ha	available for policy
				standards after
				policy applied)
0.5	£584,234	£1,168,468	£593,040	£575,428
1	£1,139,443	£1,139,443	£593,040	£546,403
1	£0	£0	£593,040	-£593,040
2	£2,247,960	£1,123,980	£593,040	£530,940
5	£4,797,871	£959,574	£593,040	£366,534
10	£9,595,742	£959,574	£593,040	£366,534
			Average	£298,800
Value area	. 4			
Value area		Cita calca a a a b a	Cita valva	Handran / a.m.
Site Size	Site value	Site value per ha	Site value	Headroom (sum
(ha)			threshold per ha	available for policy
				standards after
				policy applied)
0.5	£202 274	CECC 742	C444 700	£121,963
0.5	£283,371	£566,743 £561,963	£444,780 £444,780	
1	£561,963 £0		£444,780	£117,183 -£444,780
2	£1,127,606	£0 £563,803	£444,780	£119,023
5	£2,268,786	£453,757	£444,780	£8,977
10				
10	£4,537,573	£453,757	£444,780 Average	£8,977 - £11,443
Value area	5		Aveiage	-111,443
Site Size	Site value	Site value per ha	Site value	Headroom (sum
(ha)	Site value	Site value per ila	threshold per ha	available for policy
()			coo.u per ila	standards after
				policy applied)
				pone, applica)
0.5	£0	£0	£296,520	-£296,520
1	£0	£0	£296,520	
1	£0	£0	£296,520	
2	£0	£0	£296,520	
5	£1	£0	£296,520	
10	£0	£0	£296,520	
10	10	10	Average	-£296,520
			Aveiage	

4.10 HO9C LIFETIME HOMES

- 4.10.1 There have been a number of studies into the costs and benefits of building to the Lifetime Homes standard. These have concluded that the costs range from £545 to £1615 per dwelling, depending on:
 - The experience of the home designer and builder
 - The size of the dwelling (it is easier to design larger dwellings that incorporate Lifetime Homes standards cost effectively than smaller ones)
 - Whether Lifetime Homes design criteria were designed into developments from the outset or whether a standard house type is modified (it is more cost effective to incorporate the standards at the design stage rather than modify standard designs)
 - Any analysis of costs is a 'snapshot' in time. The net cost of implementing Lifetime Homes will
 diminish as the concept is more widely adopted and as design standards, and market
 expectations, rise.

(Source: http://www.lifetimehomes.org.uk/pages/costs.html)

- 4.10.2 Taking the mid-point of the above range and applying this to the average size of the housing range (3 bed 79 per sq m) indicates a cost of £13.50 per sq m which has been applied as an uplift on build costs to test this. The results are illustrated in Table 4.10 below. As might be expected, the impact of this policy is modest given the relatively small cost increase in percentage terms (less than 2%). However, it should again be noted that the appraisal below assesses the cost impact against the base appraisal and includes no other policy standards.
- 4.10.3 Further detailed work is being undertaken by the Council in regards to the new accessibility standards proposed in the Government's Housing Standards Review. Any detailed impacts identified through this work will need to be understood in regards to the overall plan.

4.11 H09 BUILDINGS FOR LIFE

- 4.11.1 Buildings for Life 12 guide is regarded by the Design Council as the industry standard for the design of new housing developments. The guide was published by the Building for Life Partnership of Cabe at the Design Council, the Home Builders Federation and Design for Homes with assistance from Nottingham Trent University. The guide includes 12 design principles that it recommends should be used to inform the design of housing schemes and encourages planning authorities to score housing proposals using the guide.
- 4.11.2 Whilst Buildings for Life is not a mandatory policy requirement of the CSPD it is stated as a target in the supporting narrative to the policy and therefore an assessment of its viability has been included. It is not realistically feasible to accurately assess the cost impact of the 12 design principles and therefore a 10% uplift in build cost has been included as a proxy.

4.11.3 The results are illustrated in Table 4.10 below. The results show the impact is to reduce the headroom for other planning standards in value areas 1, 2 and 3, and in value areas 4 and 5, the cost uplift further suppresses viability.

Table 4.10 H09C Lifetime Homes and Buildings for Life 12

		Requirement (£	13.50 psm uplift	on build costs)			12 Assessment	10% uplift on bu	ild costs)
/alue area Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)	Value area Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for polic standards after policy applied)
0.5	£1,970,873	£3,941,747	£1,284,920	£2,656,827	0.5	1,823,057.68	3,646,115.35	1,284,920.00	2,361,195.3
1	£3,789,332	£3,789,332		£2,504,412	1	3,505,451.17	3,505,451.17	1,284,920.00	2,220,531.3
1	£2,568,992	£2,568,992		£1,284,072	1	2,180,035.27	2,180,035.27	1,284,920.00	
2	£7,417,776	£3,708,888	£1,284,920	£2,423,968	2	6,876,392.59	3,438,196.29	1,284,920.00	2,153,276.
5	£16,307,136	£3,261,427		£1,976,507	5	15,086,109.35	3,017,221.87	1,284,920.00	1,732,301.
10	£32,614,272	£3,261,427		£1,976,507	10	30,172,218.69	3,017,221.87	1,284,920.00	1,732,301.
	_		Average	£2,137,049		_		Average	£1,849,1
/alue area	Site value	Cita valva ana	Cita value	Handan en faven	Value area		City colors	Cita value	
Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for poli- standards after policy applied)
0.5	£1,008,113	£2,016,226	£741,300	£1,274,926	0.5	£860,297	£1,720,594	£741,300	£979,2
1	£1,947,911	£1,947,911		£1,206,611	1	£1,664,606	£1,664,606	£741,300	£923,30
1	£718,132	£718,132		-£23,168	1	£317,342	£317,342	£741,300	-£423,9
2	£3,838,152	£1,919,076		£1,177,776	2	£3,280,581	£1,640,291	£741,300	
5	£8,331,711	£1,666,342		£925,042	5	£7,122,058	£1,424,412	£741,300	
10	£16,663,421	£1,666,342		£925,042	10	£14,244,115	£1,424,412	£741,300	£683,1
/alue area	2		Average	£914,372	Value area	2		Average	£623,9
Site Size	Site value	Site value per	Site value	Headroom (sum	Site Size	Site value	Site value per	Site value	Headroom (sun
(ha)	Site value	ha	threshold per	available for policy	(ha)	Site value	ha	threshold per	available for poli
()			ha	standards after policy applied)	(1.0)			ha	standards after policy applied)
0.5	£647,078	£1,294,156	£593,040	£701,116	0.5	£499,262	£998,524	£593,040	£405,4
1	£1,255,571	£1,255,571	£593,040	£662,531	1	£975,611	£975,611	£593,040	£382,5
1	£19,191	£19,191	£593,040	-£573,849	1	£0	£0	£593,040	-£593,0
2	£2,480,223	£1,240,111		£647,071	2	£1,938,275	£969,137	£593,040	£376,0
5	£5,324,711	£1,064,942		£471,902	5	£4,084,089	£816,818	£593,040	
10	£10,649,423	£1,064,942		£471,902	10	£8,168,179	£816,818	£593,040	
			Average	£396,779				Average	£169,7
/alue area	А				Value area	Δ			
Site Size	Site value	Site value per	Site value	Headroom (sum	Site Size	Site value	Site value per	Site value	Headroom (sum
(ha)		ha	threshold per ha	available for policy standards after policy applied)	(ha)		ha	threshold per ha	available for poli standards after policy applied)
0.5	£346,215	£692,430		£247,650	0.5	£198,399	£396,799	£444,780	-£47,98
1	£683,781	£683,781		£239,001	1	£400,929	£400,929	£444,780	-£43,8
1	£0	£0		-£444,780	1	£0	£0	£444,780	-£444,7
2	£1,355,748	£677,874		£233,094	2	£814,766	£407,383	£444,780	-£37,3
-1	£2,805,506	£561,101	£444,780	£116,321	5	£1,537,170	£307,434 £307,434	£444,780	-£137,3
5		CEC1 101	£444 700	C11C 221	10			£444,780	-£137,3
5 10	£5,611,013	£561,101		£116,321	10	£3,074,340	2507,151	Averses	_£1/1 //
10	£5,611,013	£561,101	£444,780 Average	£116,321 £84,601			2507,151	Average	-£141,4
	£5,611,013	£561,101 Site value per ha			Value area Site Size (ha)		Site value per ha	Average Site value threshold per ha	-£141,4! Headroom (sum available for polic standards after policy applied)
10 /alue area Site Size (ha)	£5,611,013 5 Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)	Value area Site Size (ha)	5 Site value	Site value per ha	Site value threshold per ha	Headroom (sun available for poli standards after policy applied)
/alue area Site Size	£5,611,013 5	Site value per ha £90,705	Site value threshold per ha	£84,601 Headroom (sum available for policy standards after policy	Value area Site Size	5	Site value per ha	Site value threshold per ha	Headroom (sun available for poli standards after policy applied) -£296,5
10 /alue area Site Size (ha)	£5,611,013 5 Site value £45,352	Site value per ha	Site value threshold per ha £296,520 £296,520	Headroom (sum available for policy standards after policy applied) -£205,815	Value area Site Size (ha)	5 Site value £0	Site value per ha	Site value threshold per ha	Headroom (sun available for poli standards after policy applied) -£296,5
/alue area Site Size (ha)	£5,611,013 5 Site value £45,352 £104,859	Site value per ha £90,705 £104,859	Site value threshold per ha £296,520 £296,520	Headroom (sum available for policy standards after policy applied) -£205,815 -£191,661	Value area Site Size (ha) 0.5	5 Site value £0 £0	Site value per ha £0 £0	Site value threshold per ha £296,520 £296,520	Headroom (sun available for poli standards after policy applied -f296,5 -f296,5
/alue area Site Size (ha)	£5,611,013 5 Site value £45,352 £104,859	Site value per ha £90,705 £104,859	Site value threshold per ha £296,520 £296,520 £296,520	Headroom (sum available for policy standards after policy applied) -£205,815 -£191,661 -£296,520	Value area Site Size (ha) 0.5 1	5 Site value £0 £0 £0	Site value per ha f0 f0 f0 f0	Site value threshold per ha £296,520 £296,520 £296,520	Headroom (sun available for poll standards after policy applied -£296,5 -£296,5 -£296,5

4.12 AFFORDABLE HOUSING H011

- 4.12.1 Affordable housing has been tested in accordance with Policy HO11 of the CSPD, with three rates of affordable housing across the District: 30% (Wharfedale), 15% (Inner Bradford and Keighley) and 20% (elsewhere). The policy states that affordable housing will be required on sites of 15 dwellings or more and on sites over 0.4 hectares in size. The site size threshold is lowered to 5 dwellings in Wharfedale, and the villages of Haworth, Oakworth, Oxenhope, Denholme, Cullingworth, Harden, Wilsden, and Cottingley.
- 4.12.2 The following adjustments to market value have been assumed, based on consultation with Bradford Council's Affordable Housing Officer regarding typical transfer values observed. The assumptions are based on a transfer value of £65,000 for a 3 bed house, assuming an affordable rent, which is calculated into a percentage to enable consistent application for different unit sizes in different value areas of the District. It should be noted that where a mix of intermediate tenure can be negotiated alongside social or affordable rent, then this could increase the transfer value improving viability of the scheme; it therefore represents a further area of conservatism in the model and an in-built viability buffer.

Table 4.11: Affordable housing assumptions

Area	Percentage	Value assumption
Wharfedale	30%	22.55% of market value
Towns, suburbs and villages	20%	34.95% of market value
Inner Bradford and Inner Keighley	15%	46.58% of market value

- 4.12.3 The results, illustrated in Table 4.12 below, show that there is a reasonable level of viability across value areas 1-3 but that in value area 4 and 5 viability is compromised. There is a single 1 ha site across all value areas that displays negative viability although this is the flatted scheme which is considered should be given limited weight due to the fact that policy standards do not require flatted development and that in the main the major house-builders are not active in the apartment market at the current time.
- 4.12.4 It should be noted that the council recognise viability issues in these areas and have identified in the supporting text to policy HO11 that to meet the overall affordable housing target, grant funding and any other forms of subsidy and funding for affordable housing should be directed towards development in the areas of highest need. This includes the inner areas of Bradford and Keighley. Where available this funding could be used to help bridge the viability gap for affordable housing in these areas.

4.13 PROTECTING THE SOUTH PENNINE MOORS AND THEIR ZONE OF INFLUENCE SC8

4.13.1 The wording of Policy SC8 states:

Within Zones Bi (taking into account the need to avoid loss or degradation of areas outside European Sites that are important to the integrity of the sites) and Zone Bii, residential developments that result in a net increase of one or more dwellings will be required to contribute to:

- 1. The provision of additional natural greenspace and appropriate facilities to deflect pressure from moorland habitats and the long-term maintenance and management of that greenspace.
- 2. The implementation of access management measures, which may include further provision of wardens, in order to reduce the impact of visitors
- 3. A programme of habitat management and manipulation and subsequent monitoring and review of measures
- 4.13.2 A contribution of £50,000 per ha has been allowed for to test the effects of this policy. This allowance could enable the acquisition of alternative land (i.e. at agricultural use value, typically £15,000-£30,000 per ha) and contribute to management costs. The results, illustrated in Table 4.12 below, display similar effects to other policies with value areas 1 to 3 being capable of supporting the costs on the majority of sites but value areas 4 and 5 being indicated as unviable.

Table 4.12: Affordable housing assumptions and habitat replacement

			Affordable Housing				Policy SC8 - £5	0,000 per hectare fi	nancial contribution	1
	Value area 1					Vallue area 1				
	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)
30%	0.5	£1,277,412	£2,554,824	£1,284,920	£1,269,904	0.5	£1,994,772	£3,989,544	£1,284,920	£2,679,624
	1	£2,160,736	£2,160,736	£1,284,920	£875,816	1	£3,835,343	£3,835,343	£1,284,920	£2,500,423
	1	£1,065,976	£1,065,976	£1,284,920	-£218,944	1	£2,621,379	£2,621,379	£1,284,920	£1,286,459
	2	£4,490,928	£2,245,464	£1,284,920	£960,544	2	£7,505,936	£3,752,968	£1,284,920	£2,368,048
	5	£9,596,307	£1,919,261	£1,284,920	£634,341	5	£16,500,867	£3,300,173	£1,284,920	£1,765,253
	10	£19,664,692	£1,966,469	£1,284,920	£681,549	10	£33,001,734	£3,300,173	£1,284,920	£1,515,253
				Average	£700,535				Average	£2,019,177
	Value area 2					Value area 2				
	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)
20%	0.5	£688,833	£1,377,666	£741,300	£636,366	0.5	£1,032,011.3	£2,064,022.7	£741,300.0	£1,297,722.7
	1	£1,387,849	£1,387,849	£741,300		1	£1,993,943.0	£1,993,943.0	£741,300.0	
	1	£155,163	£155,163	£741,300		1	£771,733.5	£771,733.5	£741,300.0	
	2	£2,618,197	£1,309,098	£741,300	£567,798	2	£3,915,142.1	£1,957,571.0	£741,300.0	£1,116,271.0
	5	£5,780,628	£1,156,126		,	5	£8,527,266.6	£1,705,453.3	£741,300.0	
	10	£11,561,256	£1,156,126		£414,826	10	£17,054,533.1	£1,705,453.3	£741,300.0	£464,153.3
				Average	£349,038				Average	£795,896
	Value area 3					Value area 3				
	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)
20%	0.5	£372,560	£745,121	£593,040		0.5	£670,976	£1,341,952	£593,040	£723,912
	1	£781,307	£781,307	£593,040		1	£1,300,965	£1,300,965	£593,040	£657,925
	1	£0				1	£71,952	£71,952	£593,040	-£571,088
	2	£1,438,666		£593,040	£126,293	2	£2,568,322	£1,284,161	£593,040	£591,121
	5	£3,125,267	£625,053	£593,040		5	£5,520,975	£1,104,195	£593,040	£261,155
	10	£6,250,533	£625,053	£593,040 Average	£32,013 - £10,395	10	£11,041,950	£1,104,195	£593,040 Average	£11,155 £279,030
				Aveluge	210,333				Aveluge	1275,030
	Value area 4					Value area 4				
	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)
20%	0.5	£109,000	£217,999	£444,780	-£226,781	0.5	£370,113	£740,227	£444,780	£270,447
	1	£267,312	£267,312	£444,780	-£177,468	1	£730,571	£730,571	£444,780	£235,791
	1	£0	£0	£444,780	-£444,780	1	£0	£0	£444,780	-£494,780
	2	£454,348	£227,174	£444,780	-£217,606	2	£1,444,187	£722,093	£444,780	£177,313
	5	£874,630	£174,926	£444,780	-£269,854	5	£3,004,389	£600,878	£444,780	-£93,902
	10	£1,749,260	£174,926	£444,780	-£269,854	10	£6,008,779	£600,878	£444,780	-£343,902
				Average	-£267,724				Average	-£41,506
	Value area 5					Value area 5				
	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)	Site Size (ha)	Site value	Site value per ha	Site value threshold per ha	Headroom (sum available for policy standards after policy applied)
15%	0.5	£0	£0			0.5	£69,251	£138,502	£296,520	-£183,018
	1	£0	£0	£296,520	-£296,520	1	£151,196	£151,196	£296,520	-£195,324
	1	£0	£0	£296,520	-£296,520	1	£0	£0	£296,520	-£346,520
	2	£0	£0	£296,520	-£296,520	2	£319,188	£159,594	£296,520	-£236,926
	5	£0				5	£419,431	£83,886		-£462,634
	10	£0	£0	C20C F20		1	5000.050	500.005	5205 520	C712 C2/
	10	LU	10	£296,520 Average	-£296,520 - £296,520	10	£838,862	£83,886	£296,520	-£712,634 - £356,17 6

4.14 **HO9 SPACE STANDARDS**

- 4.14.1 The CSPD does not impose any space standards, only the requirement that space standards should be 'appropriate to the type of home'. With the possibility of a national space standard being imposed in the future it is appropriate to recognise the potential impact on deliverability given house-builders preferred models. However, in view of other assumptions such as dwellings per ha and housing mix, increasing unit sizes in our area wide model would simply increase the density of the scheme and generate a picture of improved viability which we believe would produce an unreliable result. In practice, increasing space standards could necessitate a reduced number of dwellings achieved per ha which could impact negatively on viability. In view of the limitations of the model in this regard we have not modelled the effect of increased space standards but would underline the possible impact that any such standards, if imposed, could have on viability and deliverability.
- 4.14.2 Further detailed work is being undertaken by the Council in regards to the new national standard proposed in the Government's Housing Standards Review. This standard is similar to the space standard set out in the Core Strategy supporting text to HO9. Any detailed impacts identified through this work will need to be understood in regards to overall plan viability.

4.15 **CUMULATIVE IMPACTS**

- 4.15.1 The tables above consider the individual impacts of each policy standard/obligation separately. We now consider the cumulative impact of all the standards together. Figure 4.2 below illustrates the average sums available for policy standards against the average cumulative impact of all policy standards across all value areas (listed 1-5 on the x axis), where:
 - The 'sum available for policy standards' is calculated by deducting the site value benchmark per ha from the residual site value per ha from the baseline appraisal (i.e. where there are no planning obligations/policy standards assumed), and;
 - The 'cumulative impact of policy standards' is a measure of the impact on residual site value of each the policy standards combined. Each financial impact is calculated by deducting the residual site value of the appraisal with the specific policy standard tested (on a per ha basis), from the residual site value per ha of the baseline appraisal (with no policy standards/obligations).
- 4.15.2 The chart therefore illustrates the cumulative financial impact of policy standards exceeding the sum available for policy standards in each value area with the exception of Value Area 1 (Wharfedale) which is broadly comparable. It should be noted that whilst the charts below provide a reasonable indicator of the cumulative impact of policies, in practice, there may be some variation in financing costs arising from the aggregation of different policy standards which are not fully reflected. The sums available for policy standards range from approximately £2.2million per ha in Value Area 1 to zero in value area 5. The cumulative financial impact peaks for value area 1 at £2.2m and descends progressively for the other areas. 1

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38

 $^{^{1}}$ Where negative land values are created by a policy standard, these figures have been excluded from the aggregate/cumulative impact calculations to avoid the results being distorted.

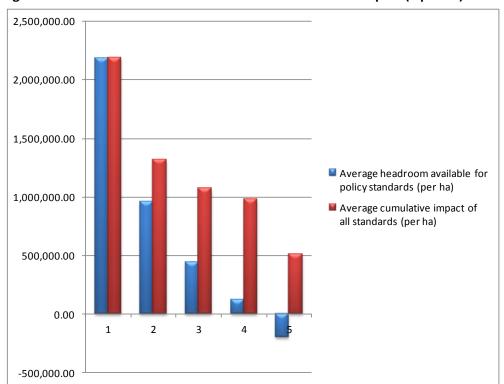


Figure 4.4: Total sum available versus cumulative financial impact (£ per ha) - Greenfield

4.15.3 Figure 4.4 above excludes the additional uplift for abnormal costs thus representing a serviced or Greenfield site, free from abnormals. The same figure has been reproduced including a 10% increase in cost for abnormals, which shows the cumulative impact of policy standards further exceeding the average headroom across the various sites.

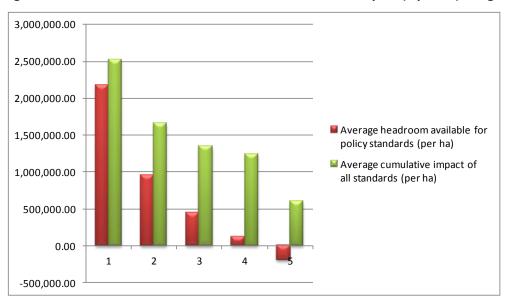


Figure 4.5 Total sum available versus cumulative financial impact (£ per ha) - High abnormal costs

- 4.15.4Figure 4.5 demonstrates that development is unlikely to be able to withstand the aggregate cumulative impact of the various policy standards and obligations in the current market in most areas. However, it should be noted that not all areas will be required to meet all the policy standards (for example, the habitat displacement costs will only relate to locations within the mid and upper value areas), and the imposition of Zero Carbon homes is still some time away and a combination of improved market conditions and cost efficiencies could enhance viability of meeting this standard.
- 4.15.5In respect of the mid value sensitivities where sales values are inflated to 130% of the base current values scenario, the results indicate (shown in Figure 4.6 below) that value area 1 is likely to be able to withstand the cumulative impact of policies, value area 2 is marginal, but value areas 3-5 cannot withstand the cumulative impact of policy standards. Increasing the sales value assumption to 160% (Figure 4.7) indicates that the cumulative impact of policies is viable in value areas 1, 2 and 3, but remains unviable in value area 4 and 5.

Figure 4.6: Total sum available versus cumulative financial impact (£ per ha) – mid value sensitivity 130%

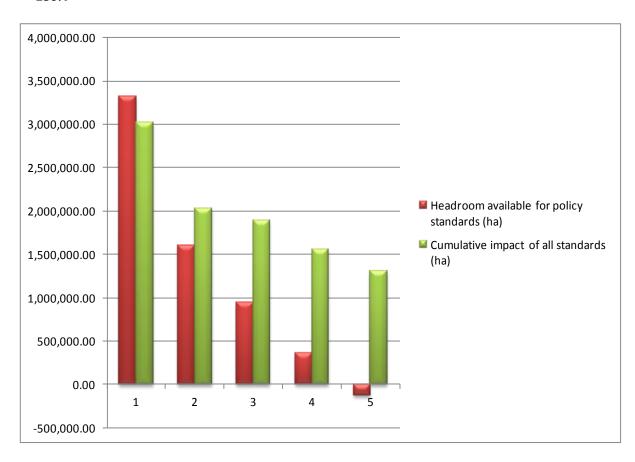
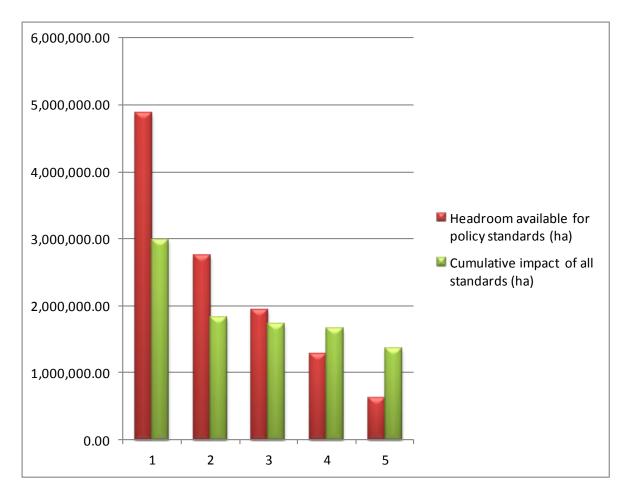


Figure 4.7: Total sum available versus cumulative financial impact (£ per ha) – high value sensitivity 160%



4.15.6In summary therefore, even allowing for a significant improvement in market conditions, there remain some locations in Bradford where development is unlikely to be able to withstand the cumulative impact of all the policy standards and obligations proposed; although in the case of Zero Carbon in particular, there is a degree of uncertainty as to whether this actual cost impact will need to be borne by development given the likelihood of technological advancement. Nonetheless, it will be necessary to ensure that they are introduced on a 'subject to viability' basis.

4.16 POLICY CHOICES

4.16.1Figure 4.8 below illustrates the split of the various planning policy standards in respect of the impact on site values using averages from the model. The split varies across value areas and shows that the largest financial impact in most of the value areas is affordable housing, accounting for approximately two thirds of all obligations in the higher value areas, a half in the mid value areas and much less in the low value areas.

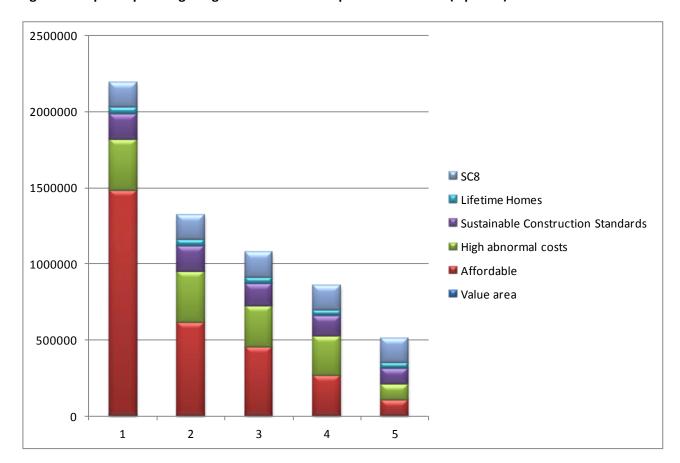


Figure 4.8: Split of planning obligations – share of impact on site value (£ per ha)

4.16.2In respect of affordable housing policy, our analysis indicates that with the benefit of a return to peak market conditions, the proposed standards are viable if considered independently of other standards and obligations. However, as illustrated above, when combined with other policy standards and in circumstances where high abnormal costs exist, there is likely to be insufficient headroom to meet all requirements. The locations in which the effects are most pronounced are value areas 4 and 5 (i.e. the urban areas of Bradford and Keighley) where a requirement for 15% is imposed, and to a lesser degree in the mid value areas (i.e. value areas 2 and 3) where 20% is applied.

4.17 COMMERCIAL DEVELOPMENT VIABILITY

- 4.17.1The only commercial policy that requires testing in viability terms is EC4 i which stipulates that non residential buildings of more than 1000 sq m will require at least 10% of energy to be generated from decentralised or non renewable sources.
- 4.17.2The viability evidence being prepared as part of concurrent CIL viability has demonstrated that office and industrial development are unlikely to be viable on a commercial speculative basis at the current time. Therefore it is considered unlikely that this policy requirement will be viable except on large

logistics distribution warehousing following an improvement in market conditions, and on large retail schemes.

4.18 SUMMARY

4.18.1 Market conditions across the Bradford District are such that development viability varies hugely with some areas able to withstand many of the policies/standards and others struggling to make development viable even with no additional policy costs. The cumulative impact of all the policy standards tested shows that even in the more viable parts of the District, the impact could be to compromise / undermine the delivery of development apart from in peak market conditions, thus underlining the importance of a flexible approach to the way that policies are implemented with a 'subject to viability' review mechanism.

5 Conclusions

- 5.1.1 The flexibility built into the wording of policies in the Core Strategy Development Plan Document is such that they are not considered likely to put development viability at any serious risk across the District.
- 5.1.2 The policies of the plan have been devised through an iterative process with concurrent viability work helping to shape and temper policies to ensure that the desirability of achieving quality in development standards has been balanced against the imperative of safeguarding deliverability. The following measures have been embedded into the Core Strategy Development Plan Document since the earlier version of the plan (Further Engagement Draft) which demonstrate this balance:
 - Reinforcing 'subject to viability' clause in policies
 - Former Policy HO9, removal of the requirement for 10% of energy from renewable sources and tempering the requirement for Lifetime Homes standards and removal of requirement for Code for Sustainable Homes Level 6
 - Former Policy HO11 Affordable Housing, requirements changed from 40% to 30% in Wharfedale and 30% to 20% in Canal Road Corridor and the rest of the District
 - The introduction of a dedicated viability Policy ID2 in the CSPD to confirm the Council's approach to testing viability
 - The introduction of a dedicated policy relating to delivery and funding (Policy ID8) outlining ways the Council will intervene to assist delivery
 - Commissioning of delivery strategies for each of the AAP areas (City Centre and Canal Road Corridor) to identify means for assisting the delivery process (currently underway).
- 5.1.3 The modelling contained in this report shows some improvement in viability as a result of the amendments made to the policies in the CSPD. However, the conclusions are that there remain stark differences in viability across the District with some of the lower value areas unlikely to be able to meet all the policy standards sought. Our analysis indicates that a return to peak market conditions will dramatically improve viability, however the inherent uncertainty of predicting future market conditions underlines the importance of the pragmatic and flexible approach reflected in the wording of the policies.
- 5.1.4 The combination of site constraints and market frailties mean that plans for growth and regeneration will require intervention to facilitate delivery in the short term, particularly in respect of priority sites in inner Bradford. Further work to augment Policy ID8 is recommended to pinpoint how these sites can be brought forward for development through other Development Plan Documents is recommended. This should include consideration to matters such as:
 - Planning incentives on an area basis and the designation and design of housing growth zones
 - Creation of a local housing / brownfield investment fund utilising receipts from new homes bonus, council tax and external sources of funding such as HCAi recoverable investment and Local Growth Fund
 - Use of Council interests, including proceeds from assets
 - Innovative approaches to delivery including JVs, lease/income strip financing models.

6 References

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Local Housing Delivery Group May, 2012. Viability Testing Local Plans

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