Executive Summary

The Brief

Levvel has been appointed by South Kesteven District Council to undertake an Affordable Housing Viability Study to inform the development of affordable housing policy through the Local Development Framework. The Council’s brief, issued in October 2009, was thus to:

- undertake research to establish whether the thresholds and proportions of affordable housing contained in Policy H3 of the Submission Core Strategy DPD are economically viable. If this is not the case the research should establish the minimum viable and deliverable affordable housing thresholds and proportions.

The Brief requires an assessment of the relevant costs and financial implications relating to house building in the District, including consideration of the Council’s requirements for infrastructure and S106 contributions.

Policy Background

The requirement to undertake viability assessments is derived from national policy guidance set out in PPS3 Housing\(^1\) and the Government’s housing policy statement ‘Delivering Affordable Housing\(^2\).

Paragraph 29 of PPS3 sets out the requirements for the development of affordable housing policy. It requires that affordable housing targets should reflect an assessment of the likely economic viability of land within an area, taking account of risks to delivery and drawing upon informed assessments of the likely levels of finance available for affordable housing and the level of developer contributions that can reasonably be secured.

\(^1\) Planning Policy Statement 3: Housing, DCLG, November 2006
\(^2\) Delivering Affordable Housing, DCLG, November 2006
Regionally, the East Midlands Regional Plan (Regional Spatial Strategy 2006-2026) sets an annual net dwelling requirement of 680 units per annum for South Kesteven which amounts to 13,600 dwellings for the Plan period\(^3\).

Policy 14, Regional Priorities for Affordable Housing, sets out indicative affordable housing targets for each Housing Market Area (HMA) for the period 2006-2026. 8,400 affordable dwellings is the target for the Partial Peterborough HMA, of which South Kesteven forms part.

Policy H14\(^4\) identifies Grantham as a Growth Point and requires the overall numbers of dwellings and phasing identified within the Growth Point Programme of Delivery to be achieved.

South Kesteven emerging policy is contained within the Submission Core Strategy issued for consultation in January 2009. Policy H1 provides the framework for the amount and distribution of new homes across the District, whilst policy H3 relates to the provision of affordable housing.

Methodology

In undertaking this affordable housing viability assessment, we have assessed the viability of a range of housing developments across the District using a residual valuation appraisal tool of the kind recommended in the Government’s Delivering Affordable Housing statement. This is then used as the base for testing future cost and value scenarios using upside, middle and downside housing market growth scenarios during the Local Development Framework period. These future assessments take account of changes to property values, inflation, construction, rent and land values over the same timescale.

Our assessment is based on the viability of delivering affordable housing across a range of notional sites. These notional sites were selected in consultation with the Council and with reference to the Strategic Housing Land Availability Assessment (SHLAA) 2008, and work undertaken to inform the 2009 update.

\(^3\) East Midlands Regional Plan March 2009 page 42  
\(^4\) East Midlands Regional Plan March 2009 page 27
An assessment of the nature and extent of Value Areas within the District was undertaken. This involved desk top research using Land Registry and other data on achieved sales values in South Kesteven for Q4 2008 and Quarters 1, 2 and 3 2009. This was then indexed according to the Land Registry index for Lincolnshire. In addition, numerous interviews, discussions and meetings with local estate agents were undertaken to thoroughly check and confirm the values between areas and dwelling type. Four Value Areas were identified, these are as follows:

- Grantham;
- Stamford;
- Bourne and The Deepings, and;
- Local Service Centres.

The following notional sites were assessed in all Value Areas:

- 80 unit 40 dph scheme;
- 20 unit 30 dph scheme;
- 10 unit 30 dph scheme.

The following notional sites were assumed to be within the specific areas as shown:

**Grantham**

- 4000 unit 40 dph scheme;
- 1500 unit 40 dph scheme;
- 400 unit 40 dph and 50 dph scheme;
- 20 unit 50 dph and 70 dph scheme.
Stamford

- 1500 unit 40 dph scheme;
- 400 unit 40 dph and 50 dph scheme;
- 20 unit 50 dph scheme.

Bourne and The Deepings

- 400 unit 40 dph and 50 dph scheme;
- 20 unit 50 dph scheme.

Local Service Centres

- 5 unit 30 dph scheme.

The Brief required us to undertake viability assessments to test the ability of these notional sites to deliver 40% affordable housing, and where this was not achievable, to test affordable housing policy percentages below this. The affordable housing policy percentage tested was in the majority of tests, 65:35 social rented: shared ownership, although in some instances shared equity housing was assessed as the sole affordable housing tenure.

The study considered affordable housing thresholds of 15, 10 and 5 units.

Average build costs have been derived from the Build Cost Information Service for South Kesteven at November 2009. Section 106 costs have been assumed to range between £2,207 to £6,290 per unit dependent upon the number of bed spaces. Testing of S106 contributions at 50% and 200% of these levels was also undertaken.

For the 4000 unit development, infrastructure costs have been assumed to be significantly higher than those for development elsewhere and per unit contributions of £10,000, £14,000 and £23,000 have been tested.

Actual S106 and infrastructure costs will obviously vary from site to site depending upon location, proximity to existing services and the capacity of existing provision. Without
modelling specific schemes, our policy based approach can therefore only provide guidance on the impact of higher levels of infrastructure costs should these prove to be necessary.

The impact upon viability of all new housing achieving the relevant Code for Sustainable Homes at the target date has been assessed at the costs detailed in Section 3 of this report. A further cost per unit of £1,200 has also been assumed in addition to these figures to meet the Council’s on site renewable energy requirements as outlined in Submission Core Strategy policy EN4.

Schemes have been assessed using nil Social Housing Grant (SHG) as the default. We have then made further assessments assuming SHG is available at ‘lower’, ‘normal’ and ‘higher’ levels in some circumstances. The grant per unit that these assumptions relate to is set out in section 3 of the main report.

Land Value Assumptions

It is essential to establish a baseline to determine at which point land will come forward for development. In order for this to happen residual land values must exceed existing or alternative uses of the site.

All schemes have been tested against two key assessments of viability. The first is Valuation Office Agency (VOA) data regarding land values in the areas as at July 2009, and takes into account an uplift of 20%. We are aware however that VOA data does have a number of limitations. Therefore, in order to ‘future proof’ this assessment, and to reflect land owners differing expectations we have instead looked at the relationship between existing or alternative use values and gross development value. This is our second assessment of viability.

Dependent on location within the District, on sites of 20 units and over an existing or alternative use amounting to 16%-19% of GDV has been used.

Dependent on location within the District, on smaller sites an existing or alternative use amounting to 25%-26% of GDV has been used.

Full details on land value assumptions can be found in section 3 of the main report.
Key Findings

Comprehensive analysis of the results of all notional schemes assessed can be found in section 5 of the main report.

**Sustainable Urban Extensions**

Two notional Sustainable Urban Extension (SUE) schemes have been assessed in two value areas. We have assumed appropriate phasing for each scheme.

In respect of the 4000 unit notional SUE in Grantham, the requirement for infrastructure contributions in excess of £10,000 per unit reduces the overall viability of development (infrastructure contributions of £10,000, £14,000 and £23,000 were assessed), and the greater the contribution per unit, the more adverse the viability position.

Furthermore, should middle market conditions only be achieved, it is likely that public subsidy would be required to achieve circa 20% affordable housing assuming infrastructure requirements are not in excess of those tested. Should upside market conditions prevail, the viability position is improved and affordable housing percentages in excess of this are likely to be achievable.

A 1500 unit notional SUE site was assessed in Grantham and Stamford, with reduced levels of infrastructure requirements to the 4000 unit SUE. In respect of Stamford, up to 35% affordable housing was likely to be achievable without grant assuming the market achieved middle conditions. In the lower value area of Grantham, achieving a viable position assuming an affordable housing contribution at this level was more challenging, and delivery of up to 30% affordable housing in the early years would likely require grant funding. Viability pressures do however ease in the later years of the Plan and, given the scale and phased nature of developments of this type, the Council may wish to negotiate affordable housing on a phased basis to take advantage of improvements to the viability position which may occur over time.

**General development sites in excess of 15 units**

A variety of notional development sites were assessed. The ability to deliver affordable housing varies dependent upon a number of factors including value area, level of S106...
contribution, existing or alternative land values of the site, scheme density and the availability of public subsidy.

In the value areas of Stamford and Local Service Centres it is less challenging to achieve higher levels of affordable housing and 30% to 40% affordable housing is likely to be achievable over the life of the Plan without recourse to public subsidy in most market conditions with the exception of the downside.

In Grantham, the viability position of higher density schemes (70 dph) is particularly challenging and even at 50dph, 10% affordable housing may only be achievable with grant even if the market achieves the middle scenario. In the later years of the Plan this position improves.

On lower density schemes in Grantham, the viability of schemes is improved and should the market achieve the upside, 21% to 30% affordable housing is likely to be deliverable without grant. Should middle market conditions prevail, public subsidy may be required (albeit in some cases at ‘lower’ levels) to achieve circa 21% affordable housing until around 2021 when the viability position improves and from then on higher levels (30%) of affordable housing are more likely to be viable.

In Bourne and the Deepings, despite the location, development economics reflect more the situation in Grantham than in Stamford and the Local Service Centres. That is that development viability is challenging to achieve higher levels of affordable housing albeit the viability pressures are relatively less acute than in Grantham. As with Grantham, density issues apply and lower density schemes can generally achieve greater levels of affordable housing than higher density schemes.

We do however recognise that within this value area there are likely to be particular ‘pockets’ where residential sales values are in excess of those assumed within this study and development coming forward in these locations are likely to be able to make a greater contribution to affordable housing provision than the levels assumed within section 5 of this study.

**Sites below 15 dwellings**

We considered the ability of schemes of 5-14 dwellings to deliver a commuted sum in lieu of on site affordable housing. Our analysis found that it was possible to deliver affordable housing below the current PPS3 threshold, but that the proportion of affordable housing that
could be viable differed dependent upon the location of development, it’s current or existing 
use and the gross development value of the scheme.

The higher value areas of Stamford and the Local Service Centres could generate a 
commuted sum equivalent to a maximum of 20% affordable housing on sites of between 5 
and 14 dwellings.

The lower value areas of Grantham and Bourne and The Deepings could generate a 
commuted sum equivalent to a maximum of 10% affordable housing on sites of between 5 
and 14 dwellings.

It should be considered that schemes of this size are much more sensitive to assumptions 
about overall values and tenure mixes, thus relatively small scale increases/decreases from 
the S106 assumptions used (and other cost and value assumptions) will have an impact 
upon sites of this size delivering affordable housing by commutation.

Finally, it should be noted that if the market does not perform to at least the middle 
scenario, it is unlikely schemes of this nature will be able to provide affordable housing 
contributions.

**Commuted sum Methodology**

Any methodology for assessing commuted sum payments should be based on the 
equivalence principle supported by Circular 05/05, PPS3 and Delivering Affordable Housing. 
The commuted sum should be equivalent to the contribution that would have been provided 
if the affordable housing had been provided on site and the scale of the developer subsidy 
should equate to the difference in residual value between a scheme unencumbered by 
affordable housing and a scheme with affordable housing, having regard to the established 
existing or alternative use value.
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1.0 Introduction

1.1 Levvel Ltd has been appointed to complete an Affordable Housing Viability Assessment (AHVA) on behalf of South Kesteven District Council. The aim of this study is to test the target requirements for affordable housing delivered through the planning system against a measure of viability. That is to say, to ensure that the Council’s policy approach to affordable housing is deliverable in the context of economic viability and thus in accordance with PPS35.

1.2 South Kesteven District Council submitted its Core Strategy Development Plan Document (DPD) to the Secretary of State on 21 August 2009. Policy H3 of the Submission Core Strategy DPD sets out the Council’s approach to the provision of affordable housing and is outlined below:

‘...All new development comprising:

• 15 or more dwellings or sites of 0.5ha or larger in the towns and identified local Service Centres and/or

• 2 or more dwellings in tall other parts of the district should provide an appropriate number of affordable housing units within the development site...

Where affordable housing units are provided, a target of 40% affordable and 60% market housing will be required. Of the affordable housing provided on each site it is expected that at least 65% will be socially rented housing and 35% will be intermediate housing...In negotiating the level of affordable housing on sites, the Council will have regard to the overall viability of the development.’6

1.3 The Inspector appointed to examine the Submission Core Strategy DPD raised concern that ‘a viability assessment of the targets and thresholds in Policy H3 does

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5 Planning Policy Statement 3 (PPS3): Housing, Communities and Local Government November 2006
6 Policy H3, Submission Core Strategy Development Plan Document, Regulation 28 amendments 2009, South Kesteven District Council
not appear to have been provided to inform the examination into the soundness of this aspect of the Core Strategy\(^7\). In response to this, the Council commissioned work to undertake an assessment of the economic viability of the thresholds and proportions of affordable housing as set out in Policy H3.

1.4 The Council invited qualified companies to submit tenders in October 2009. The invitation to tender and tender brief is included as Appendix 1 of this study. A key extract of the tender brief can be found in Section 2 and is outlined below;

*Specification*

_The Council wishes to appoint consultants to undertake research to establish whether the thresholds and proportions of affordable housing contained in Policy H3 of the Submission Core Strategy DPD are economically viable. If this is not the case the research should establish the minimum viable and deliverable affordable housing thresholds and proportions._

South Kesteven District Council – AHVA tender brief 2009

1.5 This study will form part of the evidence base for the affordable housing planning policy covering the South Kesteven District Council area. In this regard, Levvel has approached the project in accordance with the requirements in PPS12\(^8\).

1.6 Given the scope of the tender brief and the variations across the District in respect of land values and property values, it has been essential to develop a methodology that measures viability on a consistent basis, but that is flexible enough to allow for these variables.

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\(^7\) REFERENCE

\(^8\) Planning Policy Statement 12: creating strong safe and prosperous communities through Local Spatial Planning, Communities and Local Government 2008
1.7 Furthermore, given that the South Kesteven Core Strategy when adopted will prevail until 2026, we have also ensured that our methodology includes an element of “future proofing” to give the Council the confidence that the policy can be applied now and in years to come.

1.8 The study has been carried out against a backdrop of a global recession and generally unfavourable and uncertain conditions in the housing market. In a rising land and property market where values are increasing and where costs do not rise to the same extent, it can be assumed that if a development scheme is appraised and a viable position achieved, then viability will be achieved in the future, (all other variables remaining the same). Recently, the property market has not behaved in this manner and therefore the future is uncertain. Given this uncertainty in the market, it has been necessary to provide a “future proofed” methodology that makes a range of predictions about where the housing market may go in the future, ranging from pessimistic to optimistic scenarios, but based on past market trends. With this range set, the results of the development appraisals can be properly contextualised and the Council can set their policy accordingly.

1.9 This paper sets out the policy background of the study to place it in its proper context. A commentary on the past and present national, regional and local housing market experience and wider economic factors is given to inform the future proofing scenarios. Our methodology and assumptions are then explained, and a description of the nature and extent of local stakeholder engagement is undertaken. This includes detail on how the stakeholder engagement has shaped the assumptions used within this study. This is followed by an analysis of the results. A policy compliant commuted sum methodology and the principles behind it are then set out. Finally, conclusions and recommendations for policy are outlined.
2.0 Wider Context of the Study

National Policy and Guidance

2.1 Affordable housing policy is set out at national level in PPS3. The PPS identifies a number of specific requirements, but emphasises that policy should be applied flexibly⁹.

2.2 Paragraph 29 of PPS3 also refers to viability being important for the setting of overall affordable housing targets. This involves looking at the risks to delivery and the likely level of finance available including public funding and developer subsidy.

2.3 A companion document to PPS3, Delivering Affordable Housing, expands upon these principles of flexibility and details the arrangements necessary in policy to enable this¹⁰, whilst also requiring that the viability of development is assessed.

2.4 The approach is therefore to identify the level of need and its nature, to consider the types of affordable housing that might best meet this need and then to consider the economics of delivery and how sources of uncertainty (such as the availability of public funds and economic changes over the lifetime of the development) can best be managed.

2.5 The Blyth Valley appeal decision outlines the need for affordable housing policy to be supported by an up to date affordable housing viability study, in line with the requirements of PPS3. The ruling indicates that such a study, “is not peripheral, optional or cosmetic. It is patently a crucial requirement of the policy¹¹”.

2.6 PPS12 considers deliverability and flexibility of core strategies in paragraphs 4-44 to 4-46. This is within the context of overall infrastructure requirements but it is clear that if the infrastructure is to be delivered then the viability of policies,

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⁹ Planning Policy Statement 3 (PPS3): Housing, Communities and Local Government November 2006 paragraph 29

¹⁰ Ibid

including affordable housing policies, should be tested and maintained. **PPS12** goes on (paragraph 4-46) to suggest a minimum 15 year consideration of the impact of policy and to consider how contingencies should be dealt with so that constraints and challenges to policy can be considered over the longer time frame.

2.7 A recent (July 2009) Good Practice Note has been produced by the Homes and Communities Agency entitled, "Investment and Planning Obligations, Responding to the Downturn". Regard has also been had to the guidance contained therein as it relates to the preparation of affordable housing evidence base documents to inform the Local Development Framework.

**Regional Policy and Guidance**

2.8 The East Midlands Regional Plan (Regional Spatial Strategy 2006-2026 - RSS8) was adopted in March 2009. South Kesteven forms part of the Peterborough Partial HMA. Policy 13 sets out housing provision for each Local Authority in the region. Total provision for South Kesteven is set at 13,600 or 680 units per annum for 2006-2026.

2.9 Policy 14, Regional Priorities for Affordable Housing, sets out for monitoring purposes indicative affordable housing targets, representing the total amount of affordable housing for each HMA for the period 2006-26. 8,400 affordable housing dwellings are required for the Partial Peterborough HMA of which South Kesteven forms part.

2.10 Policy H4 identifies Grantham as a Growth Point and requires the overall numbers of dwellings and phasing identified within the Growth Point Programme of Delivery to be achieved. Grantham has a sub-regional role within the Eastern Sub-Region.

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12 Investment and Planning Obligations, Responding to the Downturn, Homes and Community Agency, July 2009
13 East Midlands Regional Plan, March 2009, P.42
14 Ibid, p.45
15 Ibid, p.27
2.11 The East Midlands Regional Housing Strategy 2004-2010 puts forward policies to deliver balance and inclusion to the housing market. The objective for housing, outlined in section 3.2 is to “ensure that the existing and future housing stock is appropriate to meet the housing needs of the entire community”\(^{16}\). The Regional Housing board also recognises the role of intermediate housing in improving affordability in the region.

2.12 The need for affordable housing stands at 6,400 homes per year and the region is failing to deliver its target of 3,400 affordable houses per annum. The amount of grant funded social housing delivered between 1998-2003 was 11,799 dwellings. The Strategy recognises that a wider range of housing to meet people’s needs is required.

2.13 Regional Policy 1 seeks to increase the quantity and improve the delivery of affordable housing. Where developments are the subject of a Section 106 planning obligation land should be provided at nil cost, fully serviced and free of contamination. The Housing Corporation will assist in ensuring early clarity of grant availability.

2.14 Regional Policy 12 requires that in rural areas and market towns there is both an appropriate provision of quality housing to meet a range of housing needs, and access to related services for vulnerable people of all ages. Resources will be targeted to meet the identified needs of people living in villages and market towns. Local Development Documents should promote the adoption of positive planning policies that improve the supply and quality of affordable housing in villages and market towns, in response to identified housing need.

Local Policy

2.15 South Kesteven emerging policy is contained within the Submission Core Strategy, published for consultation in January 2009. Policy H1 provides the framework for the amount and distribution of new homes across the District. As a minimum the Council will seek to ensure that the requirements of the Regional Plan are met. As a

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\(^{16}\) East Midlands Regional Housing Strategy 2004 - 2010, p.4
result of Grantham’s designation as a New Growth Point, at least 50% of the District housing total has been allocated in the town in order to address growth aspirations.

2.16 Monitoring at the time of publication of the Core Strategy DPD indicated that 4,986 dwellings had already been built in South Kesteven in the period 1st April 2001 to 31st March 2008, and a further 4,335 dwellings have been approved. The Core Strategy indicates that there is considerable potential capacity for growth in the four towns and Local Service Centres. It is also accepted that Grantham will need urban extension sites in order to meet the strategic housing requirement for the town.

2.17 Policy H1 sets development targets for each town, the Local Service Centres and the rural areas as six sub-areas. It recognises that new development should be focused on Grantham. A gradual increase in development rates is required in Stamford and the Deepings to meet the needs of these market towns and there is a need to restrict development in Bourne. There are also plans for a modest level of development within the more sustainable villages identified as Local Service Centres.

2.18 It is important to note that District requirements (16,800 dwellings) were based on the Regional Spatial Strategy which at the time was not adopted. The adopted RSS makes provision for 13,600 dwellings. In September 2009 the Council published amended changes to the Core Strategy which included these updated figures.

2.19 Policy H3 of the Submission Core Strategy relates to the provision of affordable housing. This is discussed in Section 1 of this report.

2.20 The South Kesteven Annual Monitoring Report 2008 indicates that

- 886 dwellings were built during the monitoring period exceeding the requirement set out in the Structure Plan and (then) Draft Regional Spatial Strategy;

- 155 affordable dwellings were delivered during the year, an increase of 16%, 77 social rented and 78 intermediate dwellings were delivered;
• 62% of dwellings were built on previously developed land and 74% were built at densities of more than 30 dwellings per hectare;

• 6.3 and 8.92 hectares of employment land were lost to residential use in 2006/07 and 2007/08 respectively.

Housing Need

2.21 The Peterborough Sub-Regional Strategic Housing Market Assessment was published by Fordham Research in March 2008. The HMA has been largely defined in previous work by DTZ Pieda on behalf of the East Midlands Regional Assembly and contains the local authorities of Peterborough, South Kesteven, Rutland and South Holland but also parts of East Northamptonshire, Huntingdonshire and Fenland.

2.22 Updated Housing Needs Assessments (HNA) were carried out for Peterborough, Rutland and South Holland. For the other whole district (South Kesteven) and the three partial districts in the Southern Fringe, existing HNAs were sufficiently up to date to be used.

2.23 According to the 2001 census 42.5% of dwellings in South Kesteven are detached, 31.9% are semi-detached, 17.8% are terraced and 7.8% are flats/ maisonettes. Entry level prices within South Kesteven were established as £125,500 for a two bed, 150,000 for a three bed and £199,500 for a four bed (based on 2007 data). There was no data available for one beds. Private rents for a one bed home typically start at £87 per week.

2.24 28% of all households in the Strategic Housing Market Assessment are in South Kesteven. At the time of the assessment average house prices in South Kesteven (£185,000) were above the regional average of £165,00017. The SHMA calculated a net annual affordable housing need of 646 units within the District.

17 South Kesteven Housing Needs Study, 2006, P.13
2.25 The SHMA recommended a policy target of 40% affordable housing (this target covers the entire SHMA area), subject to deliverability. Of the total amount of affordable housing, a 35% intermediate target was recommended based on the needs of each local authority.

The Wider Economic Picture – Informing the Scenarios

2.26 For our analysis of viability to be dynamic it is important to understand past trends in order to assess how the housing market may perform in the future. While recent history shows specific characteristics which may be peculiar to the period in question, there are still fundamental principles that suggest medium and long term cyclical trends. This will not inform a single assessment of how the market will perform but will give us the main parameters within which we can test possible scenarios.

2.27 Included at Appendix 2 is a consideration of the housing market over the past 25 years, including the wider economic context. This report outlines the evidence which has informed our dynamic assessment of the three potential future market scenarios against which all viability assessments have been undertaken.

2.28 Our analysis would suggest that there is a strong causal link between affordability and housing market prices. Other market conditions and particularly the cost and availability of finance are also an important factor in driving house price inflation. This range of factors have affected the housing market and the affordability of housing. These have included macro-economic influences and the worldwide recession. However, this analysis is useful in setting the context for our housing market scenarios. It is important to realise that we are assuming a structurally recurring cycle, intrinsic to the UK housing market. Responses to this structural cycle were aimed at controlling it. However, our housing market scenarios are founded on the basis that the patterns of the past will likely be repeated in the future. Our various scenarios attempt to ensure we cover all possible magnitudes of this cycle.

2.29 In our analysis of market trends we have highlighted some of the general characteristics of the housing market in the East Midlands with regard to affordability especially of first-time buyers. Additionally, we have undertaken analysis of incomes, house prices and affordability in respect of South Kesteven.
3.0 Methodology and Assumptions

Levvel Development Viability Model

3.1 Delivering Affordable Housing supports the use of a viability tool such as that advocated by the Greater London Authority (GLA), or that used by the Homes and Communities Agency for the assessment of whether schemes should be supported by Social Housing Grant. This tool is a residual land value assessment model which suggests that a site will only come forward with an affordable housing contribution where the resulting overall site value exceeds the existing or alternative use of that site. Residual land value assessment is a recognised practice within the development industry for evaluating costs and incomes associated with the development. In essence, such appraisals consider the income from a development in terms of sales or rental returns and compare this with the costs associated with developing that scheme. The amount left over, or residual, is what is left for land acquisition, i.e. the residual land value.

3.2 This residual value is then compared to a number of baseline values to gauge the likelihood that the imposition of affordable housing might prevent the scheme from coming forward on a given parcel of land.

3.3 Levvel has developed a dynamic model to determine the residual land value that has been used in negotiation with over 100 local authorities and used at appeal on numerous occasions. From this, a toolkit to assess viability on a district wide level has been developed, this is known as the Levvel Development Viability Model (DVM).

3.4 Robust assumptions are then required to be inputted into this model. Costs to development such as build costs, planning gain requirements, profit and development finance are arrived at through our experience and through consultation with the development industry and Council Officers. Sensitivity testing of variables such as affordable housing percentage, tenure requirements, increased/decreased levels of planning obligations and the availability of public subsidy will ensure the validity of the study outputs and demonstrate the impact upon viability across the range of study scenarios.
3.5 For a policy to be robust and reliable throughout the plan period, we believe it is necessary to assess with a methodology that is “future proofed” as far as possible. As viability is reliant on the interaction between changing costs and revenues of housing over time, it follows that this relationship must be accounted for by future proof testing. It is simply not good enough to assess current costs against a range of property values as this provides only a “snapshot” view. The relationship between values and costs over time is not taken into account.

3.6 Levvel has therefore addressed this issue by applying inflation rates for cost inputs throughout the study period. For values, it is difficult to predict where the housing market may be in even 1 year’s time, so long range predictions based on popular commentary are of little use. However, we have assessed value changes based on the historic performance of the housing market as described previously. This gives us a view of where values may be in the future if the past housing market cycle was typical. However, this does not give us the necessary comfort or margin for error should the cycle vary. We have therefore reasoned that by choosing scenarios, based on an upside, middle and downside view of the housing market, we will have covered the range of positions to which the housing market may go. A detailed analysis of these scenarios is included at Appendix 2, to this document.

3.7 By then reporting on the viability of schemes were they delivered at different points within this range, we have come to a view of how this will affect the deliverability and effectiveness of proposed policy. For instance, should the housing market perform below past trends for the next five years before picking up again, we can assess whether the proposed policy might adversely affect the viability of schemes and therefore their delivery. Similar principles apply to a more optimistic view of where values may end up.

3.8 Levvel’s methodology enables the effect of a range of delivery timescales, thus all development scenarios selected are tested assuming development start dates of the date of modelling, date of modelling plus 1 year, plus 2 years, plus 3 years, and so on until 2026.

3.9 The use of the Levvel methodology allows for variations in land value over time to be accounted for, again ensuring ‘future proofing’ of the viability study. Any affordable housing policy seeks to capture an element of the land value for the community benefit. We know that there is a minimum land value which schemes
need to achieve in order to be brought forward, otherwise it becomes more economic for the site to continue in its existing (or alternative) use.

3.10 Within the district of South Kesteven circa 60% of development has in recent years, been on previously developed land with the remainder on greenfield sites. Looking forward however, the South Kesteven Strategic Housing Land Availability Assessment (SHLAA) 2008 identified a total of 112 sites within South Kesteven on which approximately 1500 dwellings could be accommodated on previously developed land, and approximately 15,000 dwellings on greenfield sites. Thus in the future circa 90% of future development is likely to occur on greenfield sites.

3.11 Given the previous and future profile of the existing land use of sites within the district it is not sufficient to assess the existing or alternative use of a site against one indicator.

3.12 The Valuation Office Agency (VOA) provide data on agricultural land and property values. It is unrealistic however to assume that Greenfield development land would be traded for residential use at these rates. For example the average value of unequipped arable land with vacant possession in the East Midlands as at July 2009 was £12,506. Stakeholder engagement (see Appendix 5) has confirmed this view.

3.13 Thus in respect of development occurring on Greenfield or industrial sites, VOA data on industrial land values in the district, inflated by 20% to account for some further element of ‘hope’ value will be used as a check.

3.14 In respect of development occurring on previously developed residential land, (VOA) data on residential land prices in the district will be used as a check.

3.15 Both of these values will be linked to the future growth assessments as outlined in Appendix 2 to this report to reflect the relationship between land and property values and ensure effective ‘future proofing’ of the assessment.

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18 Rutland County Council, South Holland District Council, South Kesteven District Council, Strategic Housing Land Availability Assessment November 2008, paragraph 5.12
3.16 Whilst we will use VOA data as outlined above as one test of viability, we recognise that VOA data can be as much as six months out of date and not available at a sufficiently local level to enable local variations in land values to be assessed. Furthermore, the imposition of affordable housing planning policy will necessarily reduce land values in certain schemes. Therefore it is not enough to assess the viability of a particular scheme purely against VOA data. We have therefore developed a methodology that assesses how much landowners have been willing to accept for their land in the past, and expressed it in terms of the ratio between Gross Development Value and Residual Land Value (GDV:RLV). That is to say how much of the revenue from a scheme can be used to pay for the land. This allows for variations due to locality to be accounted for. It is our belief that this more readily accounts for local variations in land values and represents a more robust and credible evidence base.

3.17 The ratio between RLV and GDV has thus been assessed over the period 2001 to 2009 using VOA data for Lincolnshire and Peterborough. The effect can be seen that in a rising and somewhat overheated market, landowner expectations rise and the price that developers are willing to pay also increases (often based on future expectations of property values). However, in a falling and “normal” market landowner expectations fall to more “reasonable” levels. Thus the relationship between GDV and RLV as a check provides a further degree of future proofing as if housing market values increase, the land value will also increase. Conversely, if values fall, then land value can also be expected to fall.

3.18 Based on our assessments, we have taken a figure of between 16% and 19% of Gross Development Value for sites of 20 units and over as a test for the level at which the Residual Land Value may need to reach in order to incentivise the landowner sufficiently to bring forward his parcel of land.

3.19 In respect of sites of 10 units and less, a figure of 25-26% of Gross Development Value has been used as a test for the level at which the Residual Land Value may need to reach in order to incentivise the landowner sufficiently to bring forward his parcel of land. This reflects our assessment of the relative value of small sites.

3.20 Using these two tests of viability, it is possible to inform a policy position that has flexibility and is relevant the life of the plan to ensure deliverability.
Site Identification Methodology

3.21 Using the Strategic Housing Land Availability Assessment 2008 (and information collated to inform the 2009 update) as a basis, and in conjunction with the Council, a range of notional development sites likely to represent development over the life of the Plan (in respect of site size, unit numbers and location) were identified. Site typologies (greenfield or previously developed land) were also assessed in respect of each notional site.

3.22 Stakeholder consultation was also undertaken on the initial range of site typologies and densities and the feedback from stakeholders informed the selection of the notional sites.

3.23 Table 1 below outlines the final notional sites and site typologies identified, a detailed breakdown of unit composition for each notional development site can be found in Appendix 3.
<table>
<thead>
<tr>
<th>Notional site type</th>
<th>Density (dwellings per hectare dph)</th>
<th>Typology (greenfield &amp; industrial / previously developed residential land PDL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4000 unit Sustainable Urban Extension</td>
<td>40 dph</td>
<td>Greenfield/industrial</td>
</tr>
<tr>
<td>1500 unit Sustainable Urban Extension</td>
<td>40 dph</td>
<td>Greenfield/industrial</td>
</tr>
<tr>
<td>400 unit development</td>
<td>40 dph</td>
<td>Greenfield/industrial</td>
</tr>
<tr>
<td>400 unit development</td>
<td>50 dph</td>
<td>Greenfield/industrial</td>
</tr>
<tr>
<td>80 unit development</td>
<td>40 dph</td>
<td>Greenfield/industrial</td>
</tr>
<tr>
<td>20 unit development</td>
<td>70 dph</td>
<td>PDL residential</td>
</tr>
<tr>
<td>20 unit development</td>
<td>70 dph</td>
<td>Greenfield/industrial</td>
</tr>
<tr>
<td>20 unit development</td>
<td>50 dph</td>
<td>PDL residential</td>
</tr>
<tr>
<td>20 unit development</td>
<td>50 dph</td>
<td>Greenfield/industrial</td>
</tr>
<tr>
<td>20 unit development</td>
<td>30 dph</td>
<td>PDL residential</td>
</tr>
<tr>
<td>20 unit development</td>
<td>30 dph</td>
<td>Greenfield/industrial</td>
</tr>
<tr>
<td>10 unit development</td>
<td>30 dph</td>
<td>PDL residential</td>
</tr>
<tr>
<td>10 unit development</td>
<td>30 dph</td>
<td>Greenfield/industrial</td>
</tr>
<tr>
<td>5 unit development</td>
<td>30 dph</td>
<td>Greenfield/industrial</td>
</tr>
<tr>
<td>5 unit development</td>
<td>30 dph</td>
<td>PDL residential</td>
</tr>
</tbody>
</table>

Table 1
Anecdotal evidence suggested a wide discrepancy in residential sales values across the District dependent upon location. In order to accurately reflect and understand the range and nature of these value areas, Land Registry data was obtained for quarter 4 2008, and quarters 1, 2 and 3 2009 showing achieved property values and the number of sales, for each property type (detached, semi detached, terraced and flats and maisonettes) at a Postcode District level in South Kesteven.

This data was then analysed against a Postcode District map of South Kesteven in order to fully understand the value areas that existed within the District. The Postcode District map and full details of the Value Area Methodology can be found in Appendix 4 this report.

Analysis of this data, revealed four discrete Value Areas, these are;

- Grantham;
- Stamford;
- Bourne and The Deepings;
- Local Service Centres/Rural areas.

In order to establish current values on a per metre square basis for each of these value areas the following was undertaken:

- The Land Registry data on achieved sales, and number of sales for the periods as outlined above was analysed and then rebased to September 2009 using the Land Registry index for Lincolnshire, this ensured that higher values that may have been achieved in the previous 12 months did not inflate the values used for the purpose of this study;

- Numerous telephone conversations with local estate agents were undertaken to establish the typology of dwellings within each value area and establish current average achieved sales prices for new build dwellings;
• Face to face discussions with local estate agents on achieved new build sales values across the value areas were undertaken, along with visits to new housing developments to establish the size and type of units currently being brought to market;

• Rightmove and Find a Property websites were interrogated to establish current asking prices in the four Value Areas.

3.28 Full details of the sales value methodology, the boundaries of each Value Area and the values per metre assumed for each can be found in Appendix 4.

Notional Sites Tested In Each Value Area

3.29 It is clear, through reference to the SHLAA 2008 and following discussion with the Council, that the notional development sites established (as outlined previously) would not come forward within the Plan period in every Value Area. Therefore a matrix was developed to ensure that all notional development sites were tested in the relevant Value Areas to ensure robustness and relevance of the testing to the profile of sites coming forward within the Plan period. This matrix is shown below.
<table>
<thead>
<tr>
<th>Notional site type</th>
<th>1 Grantham</th>
<th>2 Stamford</th>
<th>3 Bourne &amp; Deepings</th>
<th>4 Local Service Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>4000 unit Sustainable Urban Extension</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1500 unit Sustainable Urban Extension</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>400 unit developments (40 &amp; 50 dph)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>80 unit development (40 dph)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>20 unit development (70 dph)</td>
<td>X</td>
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<td></td>
<td></td>
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<td>20 unit development (50 dph)</td>
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<tr>
<td>20 unit development (30 dph)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>10 unit development (30 dph)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5 unit development (30 dph)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Table 2

Study Variables

3.30 The affordable housing policy requirements as outlined within the Submission Core Strategy were tested initially. These are summarised below:

- 40% affordable housing;
3.31 Following consultation with the Council, intermediate housing was assumed to be shared ownership accommodation. However on some notional sites 100% intermediate housing was assessed based upon an 80% equity purchase model.

3.32 In cases where it was found that the policy requirements as outlined above adversely affected the viability of the development to a position where the scheme was unviable and would not come forward for development, the following iterations of the affordable housing policy percentages were tested where appropriate:

- 30% affordable housing;
- 21% affordable housing;
- 20% affordable housing;
- 10% affordable housing.

3.33 It was agreed with the Council to test notional 10 unit developments in order to assess if a site threshold below 15 units was ‘viable and practicable’ as required by PPS3.

Section 106 / Strategic Infrastructure Contributions

3.34 Through discussion with the Council, a well reasoned per unit contribution in respect of Section 106 and Strategic Infrastructure has been established. These differ dependent upon the type of notional development site and the per unit contributions that have been assumed for the purposes of this study are outlined below.

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19 Planning Policy Statement 3 (PPS3): Housing, Communities and Local Government November 2006 paragraph 29
4000 unit Sustainable Urban Extension

3.35 Given the large infrastructure requirements associated with developments of this nature, and based on previous experience within the District, a contribution of £14,000 per unit was assumed. Given the range and scale of infrastructure requirements schemes of this nature are required to deliver, testing was also undertaken assuming a per unit contribution of £23,000 and a per unit contribution of £10,000.

All other notional development sites

3.36 The Council provided details on the per unit S106 contributions that could be assumed for all notional development sites with the exception of those listed above. These are summarised as follows:

- Primary Care Trust contribution of £995 per unit;
- Transport contribution of £1000 per unit;
- Education contribution of £0 for a 1 bed unit, £1,458 for a 2 bed unit, £3,499 for a 3 bed unit and £4,083 for a 4 bed unit;
- Open Space Contributions totalling a cash contribution of £212 per unit plus on notional sites in excess of 100 units, the land value of 38m2 per unit informal open space was added to the existing or alternative land value.

3.37 In order to reflect the potential for the level of S106 contributions to alter over the life of the Plan, testing was also undertaken assuming contributions at 50% and 200% of the figures outlined above.

Specific Costs of Development – Model Inputs

Build Costs

3.38 These were derived from the Build Cost Information Service figures for South Kesteven as at 21 November 2009 and are as follows (£ per sq metre);
To these figures a further uplift was applied to account for the relevant Code for Sustainable Homes Standards (£ per sq metre)\(^{20}\);

<table>
<thead>
<tr>
<th>Estate Housing</th>
<th>672</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estate Housing Detached</td>
<td>717</td>
</tr>
<tr>
<td>Estate Housing Semi-detached</td>
<td>671</td>
</tr>
<tr>
<td>Estate Housing Terraced</td>
<td>700</td>
</tr>
<tr>
<td>Flats (apartments)</td>
<td>842</td>
</tr>
<tr>
<td>Housing Mixed Developments</td>
<td>714</td>
</tr>
<tr>
<td>Sheltered Housing</td>
<td>792</td>
</tr>
<tr>
<td>One off housing</td>
<td>1188</td>
</tr>
</tbody>
</table>

Build costs were then further uplifted by 15% to account for external works. Finally build cost contingency of 5% of total build costs was added.

Policy EN4 of the South Kesteven Core Strategy Submission DPD relates to Sustainable Construction and Design and requires 'development proposals... for more than 10 dwellings ...will be required to provide at least 10% of the

\(^{20}\) Figures based upon findings of ‘Cost Analysis of the Code for Sustainable Homes: Final Report’ July 2008 Communities and Local Government

\(^{21}\) Greener Homes for the Future 2008, Communities and Local Government
development’s total predicted energy requirements on site, from renewable energy sources and energy efficient design measures\textsuperscript{22}. Although the policy notes these requirements may be relaxed if it can be clearly demonstrated full compliance would not be economically viable we have assumed in all cases an additional build cost of £1,200 per unit towards meeting the requirements of Policy EN4. This figure of £1,200 per unit is based upon circa 1.5m\textsuperscript{2} of photovoltaic panels per unit and whilst we recognise the cost per unit of achieving the requirements of Policy EN4 is likely to differ on a site by site basis we feel it prudent to allow some additional development cost in respect of this policy.

**Other costs of development**

- **Charged Interest Rate - 6.50%**

  This is the long term cost of development finance. Whilst the Bank of England Base Rate is currently at 0.5%, developers are not able to access finance at this level. Therefore a 6.5\% figure has been used.

- **Earned Interest Rate – 3.5\%**

  Again, whilst the Bank of England Base Rate is currently at 0.5\% a long term view of the earned interest rate has been taken.

- **Professional Fees – 8\% of Build Costs**

  Covering architects, consultants engineers fees etc. This is assessed as being 8\% of the total build costs. This has been used for all development scenarios with the exception of 10 unit notional developments where professional fees have been assumed at 12\% of build costs to reflect the baseline fee level which professional consultants attract.

- **Site Investigation - £5000 per hectare**

\textsuperscript{22} Policy EN4, Submission Core Strategy Development Plan Document, 2009, South Kesteven District Council
• Agents Acquisition Fees – 1.0% of Residual Land Value
• Marketing and Sales Fees – 3.0% of Gross Development Value
• Legal Fees on sales - £350 per unit
• Finance Arrangement Fee – 1.0% of build cost
• Internal Overheads – 1.0% of build plus on-costs
• Planning Fees – as South Kesteven District Council defined rates
• Developer Profit – 17% of Gross Development Value

In line with other appraisals of this nature we have taken a long term assumption as to the necessary profit to encourage development. We have however, also assessed developer profit at 20% of Gross Development Value on a wide range of the notional sites and all 10 unit notional development sites assume developer profit at this rate.

For affordable housing, developer profit is 6% to reflect the contractor’s return.

• Stamp Duty Land Tax – ranges between 0% and 4.0% depending on residual land value

**Affordable housing assumptions**

3.42 Social rents used assumed are as follows, based upon target rents for South Kesteven:

• 1 bed - £61.72;
• 2 bed - £69.84;
• 3 bed - £72.99;
• 4 bed - £74.42.
A yield of 6% is assumed on social rents. A management cost of £300 per annum, a maintenance cost of £475 per annum, a void allowance of 4% and a major repairs allowance of 0.08% is also assumed.

Shared ownership is assumed as a 50% initial equity purchase with rent of 2% charged on unsold equity. A management cost of £100 per annum was also assumed.

Grant/public subsidy assumptions

Baseline assessments assumed nil public subsidy however in a number of circumstances sensitivity testing assuming grant availability was undertaken. With reference to the East Midlands Investment Statements available from the Homes and Communities Agency, and following detailed discussion with the relevant Council Officers three sensitivities in respect of grant availability have been assumed. These are as follows:

- Grant at £25,000 per unit for social rented units, nil grant per unit in respect of shared ownership units. Public subsidy at this level is referred to as ‘Lower Grant’ within this report;

- Grant at £50,000 per unit for social rented units and grant at £23,000 per unit in respect of shared ownership units. Public subsidy at this level is referred to as ‘Normal Grant’ within this report and reflects the most recent levels of public subsidy within South Kesteven;

- Grant at £60,000 per unit for social rented units and grant at £30,000 per unit in respect of shared ownership units. Public subsidy at this level is referred to as ‘Higher Grant’ within this report.

Development timetable assumptions

Due to the scale and range of developments the timetable of development is different for each notional development type. Our development experience enables us to allow relevant and realistic timescales within the development period in respect of:

- enabling phases (for large scale developments);
• planning application;
• site acquisition;
• construction period;
• sales period.

3.48 In all instances the receipt from the affordable housing is timetabled to occur at the end of the construction period.
4.0 Stakeholder Engagement

4.1 Prior to commencement of the Study, we sought confirmation of the proposed methodology and key inputs from stakeholders, through a questionnaire circulated to a comprehensive contact list of over 60 stakeholders provided by the Council. These included, not exclusively, Registered Social Landlords (RSLs), private developers, house builders, planning and other development consultants and land owners.

4.2 Stakeholder feedback helped to identify data used to inform the study. For example, land values, construction costs, profit levels, and other elements.

4.3 A copy of the questionnaire along with a covering letter or email was sent to all stakeholders in the week commencing 9 November 2009, with a requested response date of 25th November 2009. As at 1 December 2009, nine completed questionnaires had been received, two of these were from land owners, three from RSLs, one from a house builder, one from a planning consultant, one from an architectural practice and one from the East Midlands Regional Assembly. As would be expected a range of responses were received. All of these responses have been considered and our report has attempted to test variables taking the views of respondents into account.

4.4 Appendix 5 to this report includes a copy of the questionnaire sent to stakeholder and summarises responses received.
5.0 Results Analysis

5.1 This section sets out the results from each notional development scheme assessed in accordance with the testing matrix shown as Table 2 and the assumptions outlined within this report. Full details of the unit composition for each notional development type can be found in Appendix 3. Results and conclusions drawn in respect of each notional scheme are reported.

5.2 The results tables set out the three market scenarios, downside, middle and upside and then record whether the notional schemes assessed are likely to be viable, marginal or not viable. The dates in the left hand column refer to the start dates for development.

5.3 As a further test of viability we have undertaken an assessment of the impact of affordable housing on overall value. That is to say the difference between the residual value without any affordable housing (the "unencumbered value") and the residual value with affordable housing (the "encumbered value"). The results can be seen in the three right hand columns relating to each assessment in figures 1 to 66. It can be seen that in most cases the reduction in value due to affordable housing is more significant in the downside situation than in the middle or upside scenarios. It can also be noted that the reduction due to affordable housing affects value by a larger proportion than the actual amount of affordable housing being sought. However, this is mitigated on the schemes with grant where the opposite is the case. In other words, the more grant that is input into schemes, the less effect this has in reducing overall residual value.

5.4 Where the reduction in affordable housing is more than 50% of the value this is shown to be not viable (in red) on the results page. Caution must be taken when assessing the reduction due to affordable housing where viability using our other tests is particularly challenging. Where overall unencumbered values are very low, then the report on the reduction may not produce a meaningful result, for instance where the reduction is either more than 100% or where the “reduction” is actually positive (shown “n/a” on the results page).

5.5 It is for this reason that this test is not used as the primary assessment of viability. It is, however, a useful secondary “check” to see if the effect of affordable housing is likely to be too onerous. The results especially support our concern about the higher percentage targets in the low value areas of the District.
5.6 Following commentary on the results, the next section then sets out the principles of a commuted sum methodology. This is followed by conclusions that can be drawn from the assessments, including recommendations for policy.

Notional site – 4000 unit Sustainable Urban Extension (SUE)
40 dph – Grantham

5.7 It has been assumed that this development will progress in four main phases, thus 1000 units will be developed per phase. The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 16% was used and an alternative use value of £420,000 per hectare. The latter based upon VOA average industrial land values for Lincoln and Nottingham as at July 2009, taking into account an uplift of 20%.

5.8 40% affordable housing was found not to be viable against any scenario for the duration of the Plan period. 30% affordable housing was tested and assuming nil grant and nil S106/infrastructure contributions, as Figure 1 highlights below, a viable position on the middle scenario is not reached until 2024. Should upside market conditions prevail the position improves and viability is marginal to around 2018, whereupon viability improves.

![Table: 30% Affordable Housing](image)
5.9 The viability position that can be achieved at 30% affordable housing assuming a per unit infrastructure contribution of £14,000 and ‘normal’ grant is less favourable than the position shown in Figure 1, with a viable position only being reached in 2025 on the middle scenario.

5.10 21% affordable housing was then tested. Figure 2 shows the viability position based upon a per unit infrastructure contribution of £10,000, ‘higher’ grant and the removal of the £1,200 sum per unit allowed to achieve 10% on site renewable energy.

| YEAR | VIABILITY | REDUCTION DUE TO AFFORDABLE | | | | | |
|---|---|---|---|---|---|
| 2010 | Downside | Middle | Upside | Downside | Middle | Upside |
| 2011 | > 100% | n/a | 4% |
| 2012 | > 100% | n/a | 4% |
| 2013 | > 100% | n/a | 4% |
| 2014 | > 100% | 9% | 10% |
| 2015 | 50% | 5% | 10% |
| 2016 | 35% | 9% | 12% |
| 2017 | 25% | 11% | 13% |
| 2018 | 15% | 14% | 15% |
| 2019 | 15% | 14% | 15% |
| 2020 | 15% | 14% | 15% |
| 2021 | 15% | 14% | 15% |
| 2022 | 15% | 14% | 15% |
| 2023 | 15% | 14% | 15% |
| 2024 | 15% | 14% | 15% |
| 2025 | 15% | 14% | 15% |
| 2026 | 15% | 14% | 15% |
| 2027 | 15% | 14% | 15% |
| 2028 | 15% | 14% | 15% |
| 2029 | 15% | 14% | 15% |
| 2030 | 15% | 14% | 15% |
| 2031 | 15% | 14% | 15% |

5.11 As Figure 2 demonstrates, on the middle scenario assuming a £10,000 per unit infrastructure contribution and ‘higher’ levels of grant, 21% affordable housing is currently marginal although the viability position deteriorates from 2012 to 2018. This is due largely to the introduction of higher Code for Sustainable Homes requirements that come into force during this period (Code Level 4 in 2013, and Code Level 6 in 2016) and the potentially significant increase in build costs.
associated with achieving these standards. On the upside scenario, a viable position will be achieved throughout the Plan period, and should an upside scenario prevail, lower levels of grant than assumed within Figure 2 would be required to achieve a viable position for much of the life of the Plan.

5.12 Figure 3 above shows the position assuming ‘normal grant’ levels and a nil infrastructure contribution per unit. It can be seen that a marginal position until 2020 and thereon a viable outcome is achieved in the middle scenario and when comparing this to Figure 2, the negative impact upon viability that levels of infrastructure contributions required for developments of this nature have can be clearly seen.

Conclusions

5.13 The requirement for infrastructure contributions in excess of £10,000 per unit on schemes of this nature reduces the overall viability of development. Contributions up to £23,000 per unit were assessed and it was found that the greater the contribution per unit, the more adverse the viability position.
5.14 In order to achieve circa 20% affordable housing and assuming housing markets perform to the middle scenario, schemes of this nature would require public subsidy at least at ‘normal’ grant levels. If grant were available at higher levels viability of greater than circa 20% affordable housing would continue to be dependent upon the level of infrastructure contribution required per unit.

5.15 Should upside market conditions prevail the viability position is improved and circa 20% affordable housing may be achievable even with infrastructure contributions of circa £10,000 - £14,000 although it is likely some level of public subsidy would still be required to achieve this.

5.16 The viability position improves on all scenarios over time. Due to the scale of this type of scheme, it is likely development will occur on a phased basis over a long timescale and it may be that increased levels of affordable housing can be achieved on the later phases when the viability position improves. Furthermore, consideration should be given to the phasing of infrastructure works and financial contributions, and where possible, these could be required later in the development process as this will improve the viability of this type of scheme in most cases.

Notional site – 1500 unit Sustainable Urban Extension (SUE)
40 dph – Grantham

5.17 It has been assumed that this development will progress in two main phases, thus 750 units will be developed per phase. The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 16% was used and an alternative use value of £420,000 per hectare. The latter based upon VOA average industrial land values for Lincoln and Nottingham as at July 2009, taking into account an uplift of 20%.

5.18 40% affordable housing was tested assuming nil grant and 100% of the S106 contributions as outlined in Section 4 of this report. The results can be seen in Figure 4 below and show an unviable result for the majority of the Plan period against all scenarios.
This was then tested with the assumption that ‘normal’ grant levels could be applied to the affordable housing units. The results can be seen in Figure 5 below, which shows, should upside market conditions prevail, 40% affordable housing would be viable for the majority of the Plan period. Against the middle market scenario however, viability is compromised from the period 2013 to 2020 due again to the potentially significant build cost increases associated with increased sustainability requirements.
5.20 30% affordable housing was then assessed on this notional development, initially assuming nil grant and 100% S106 contributions. The results can be seen in Figure 6 below that shows, should the market perform to an upside position, a 30% affordable housing requirement may be achievable without grant. If however, middle market conditions endure, 30% affordable housing could not be achieved until circa 2022-2024 onwards.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>VIABILITY</th>
<th>REDUCTION DUE TO AFFORDABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOWNSIDE</td>
<td>MIDDLE</td>
<td>UPSIDE</td>
</tr>
<tr>
<td>2010</td>
<td>≥ 100%</td>
<td>56%</td>
</tr>
<tr>
<td>2011</td>
<td>≥ 100%</td>
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<td>≥ 100%</td>
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5.21 If grant at ‘normal’ levels were applied to this scenario, viability improves markedly on the upside scenario and 30% affordable housing with a 65:35 social rented:intermediate tenure split is viable throughout. Should middle market conditions prevail, viability remains compromised for the period 2014-2018. This is shown in Figure 7.
Finally, 21% affordable housing was assessed both with nil grant and assuming grant at ‘normal’ levels with S106 contributions at 100% of the assumed level. The results are shown in Figures 8 and 9 below. It can be seen that assuming the housing market performs to the middle scenario, grant funding of at least ‘normal’ levels will be required to circa 2020 to achieve this level of affordable housing. If the market however, performs in line with the upside scenario, it is likely nil or very minimal grant would be required to achieve 21% affordable housing.
5.23 In order to achieve 21% affordable housing on this type of scheme in Grantham it is likely that grant would be required until circa 2020 should middle market conditions prevail and S106 contributions required are not in excess of those tested. In some instances 30% affordable housing may be achievable with ‘normal’ grant. Nevertheless, viability is compromised at this level of affordable housing for the period 2015-2019 due to the imposition of increased build costs associated with achieving increased sustainability requirements.

5.24 Should the market perform to the upside scenario, up to 40% affordable housing may be viable with grant at ‘normal’ levels for the life of the Plan and at least 21% should be achievable without grant. This again assumes S106 contributions are not in excess of those tested.

5.25 The viability position for all scenarios improves over time. From circa 2023, the modelling results indicate that 40% affordable housing may be viable without grant. Given the scale and phased nature of developments of this type, the Council may wish to negotiate affordable housing on a phased basis in order to take advantage of improvements to the viability position which may occur over time.

Notional site – 1500 unit Sustainable Urban Extension (SUE) 40 dph – Stamford

5.26 It has been assumed that this development will progress in two main phases, thus 750 units will be developed per phase. The assessment was undertaken against the
two tests of viability. A GDV:RLV ratio of 18% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.27 40% affordable housing was assessed with nil grant and S106 contributions at 100%. Against an upside scenario this was viable throughout the life of the Plan, whilst on the middle scenario it is likely to be viable from circa 2019 onwards. Should the market perform to downside conditions, 40% affordable housing would be unlikely to be viable without grant until at least circa 2024.

5.28 The same assessment was then undertaken assuming grant at ‘normal’ levels’ and S106 contributions at 200% of the outlined requirements. The results are shown in Figure 10. Should the market perform to at least the middle scenario, 40% affordable housing is likely to be viable over the life of the Core Strategy.

5.29 In order to ascertain the viability position without public subsidy, 35% affordable housing was assessed with S106 at 100% of the outlined requirements. As Figure
11 demonstrates, 35% may be viable based on middle market conditions without grant.

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5.30 Finally, 30% affordable housing was assessed with nil grant and 100% S106 requirements and found to be viable over the life of the Plan should the market perform to at least the middle scenario.

Conclusions

5.31 Up to 35% affordable housing is likely to be achievable without grant on this type of scheme in the Stamford area should the market perform to at least the middle scenario and S106 contributions are not in excess of those assumed.

5.32 Should public subsidy be available at ‘normal’ levels, 40% affordable housing may be achievable throughout the life of the Plan, even if S106 contributions are twice the amount of the baseline level. Again this assumes middle market conditions prevail.
5.33 Viability against all scenarios improves over time. Even if the market performs to the downside scenario up to 35% affordable housing should be viable without grant from circa 2023.

Notional site – 400 unit development, 40 dph – Grantham

5.34 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 16% was used and an alternative use value of £420,000 per hectare. The latter based upon VOA average industrial land values for Lincoln and Nottingham as at July 2009, taking into account an uplift of 20%.

5.35 40% affordable housing was assessed and assuming grant at ‘normal’ levels a viable position is only achievable with upside market conditions.

5.36 An affordable housing requirement of 30% was then tested again assuming grant at ‘normal’ levels and S106 contributions at 100% of the baseline level. The results can be seen in Figure 12 below and show, that based on a middle scenario, viability remains compromised for at least the period 2015 to 2020. This contrasts with a viable position throughout the life of the Plan should the market perform to the upside scenario.
5.37 21% affordable housing was then tested to ascertain the viability position assuming nil grant and S106 contributions at 100% of the baseline level against the middle market scenario. The results are shown in Figure 13 below. It can be seen that without grant the viability of an affordable housing contribution at this level remains compromised until circa 2021 onwards.

![Figure 13](image)

5.38 If grant were available at ‘normal’ levels, then should middle market conditions prevail, viability would be compromised for at least the period 2016 to 2018 based on a 21% affordable housing requirement. This is shown in Figure 14 below. If however, the market performs to an upside scenario viability at this percentage may be achievable over the life of the Plan.
Conclusions

5.39 Should the market perform to the middle scenario, and S106 contributions be required at the levels assumed, it is unlikely that an affordable housing contribution of circa 21% will be achievable without recourse to public subsidy at ‘normal’ levels. Even then, ‘higher’ levels of grant are likely to be required for the period 2016 – 2018 to achieve a viable position. Thus, the viability of schemes of this type at circa 21% affordable housing is marginal even with public subsidy.

5.40 If the market performs to an upside scenario, then 21% affordable housing may be viable without grant for the duration of the Plan period should S106 contributions not exceed those assumed.

Notional site – 400 unit development, 50 dph – Grantham

5.41 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 16% was used and an alternative use value of £420,000 per hectare. The latter based upon VOA average industrial land values for Lincoln and Nottingham as at July 2009, taking into account an uplift of 20%.

5.42 The viability position at 30% affordable housing is similar, albeit slightly less favourable, than for the previous assessment of a 40 dph scheme in the same area. Figure 15 below, shows the position assuming grant is available at ‘normal’ levels and S106 requirements are at 100% of the baseline level.
An affordable housing requirement of 21% with grant at ‘normal’ levels and S106 contributions at 100% has thus been tested and is shown below in Figure 16. Again this shows a similar, although slightly less favourable, viability position than the previous similar notional development scenario at 40 dph in respect of the middle market scenario.
5.44 The impact of public subsidy at ‘higher’ levels was then assessed, again against a 21% affordable housing requirement and assuming 100% S106 contributions. This had a very marginal impact upon the viability position as outlined in Figure 16, with the period 2017-2018 remaining unviable should middle market conditions prevail.

Conclusions

5.45 The viability position of this notional development type assessed at 50 dph is very similar, albeit slightly less favourable than the viability position of the 40 dph notional development. Scheme density in this instance thus has a marginal impact upon development viability.

5.46 Should the market perform to the upside position, public subsidy of at least ‘normal’ levels will be required to achieve 30% affordable housing assuming S106 requirements do not exceed those assumed. If however the market performs to the middle scenario, public subsidy at ‘normal’ or ‘higher’ levels would be required to achieve 21% affordable housing, and even if this subsidy were available, viability at this percentage would be marginal with developments commencing in 2017-2018 remaining compromised.

Notional site – 400 unit development, 40 dph – Stamford

5.47 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 18% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.48 40% affordable housing has been tested assuming 100% S106 contributions and nil grant. The results are shown in Figure 17 below. If the market performs to the upside scenario an affordable housing requirement of 40% should be viable assuming S106 contributions in excess of those assumed are not required. On the other hand, should however, the market perform to the middle scenario, viability with this affordable housing requirement would not be viable until at least 2019.
5.49 A further test at 40% affordable housing has been undertaken and found that were public subsidy available at 'normal' levels affordable housing at this proportion could be viable assuming a middle scenario. Furthermore, baseline S106 contributions could increase to up to 200% and a viable position maintained.

5.50 35% affordable housing was tested assuming nil grant. The results can be seen in Figure 18 below. Figure 19 shows the same assessment but assumes 'lower' levels of public subsidy are available. As the Figures show, relatively low levels of public subsidy markedly improve the viability of 35% affordable housing on the middle market scenario.
5.51 Finally, 30% affordable housing was tested assuming nil grant and S106 contributions at 100% of the baseline level. Figure 20 shows that 30% affordable housing is likely to be deliverable without recourse to public subsidy for the duration of the Plan assuming market conditions achieve at least the middle scenario and S106 requirements do not exceed those assumed.
Conclusions

5.52 The higher values that development in Stamford attracts, (as compared to Grantham), improves the viability of affordable housing on this type of development with 30% affordable housing likely to be viable without grant should middle market conditions prevail. Relatively low levels of grant are required to achieve 35% affordable housing, whilst grant at ‘normal’ levels may mean that 40% affordable housing is achievable as long as the market does not perform to the downside scenario. Viability at these levels is likely to be compromised however, should S106 requirements be in excess of those assumed within this study.

Notional site – 400 unit development, 50 dph – Stamford

5.53 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 18% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.54 The viability position in respect of this development is very similar to that of the 40dph notional scheme, albeit slightly less favourable. This is demonstrated by Figure 21 below which shows the viability position of 30% affordable housing, nil grant and 100% S106 requirement. This should be compared to Figure 20 above which is assuming the same assumptions on the 40 dph scheme. As this comparison shows, the viability of the 50 dph is marginally less favourable.
5.55 Nonetheless, 40% affordable housing with grant at normal levels is very likely to be viable over the life of the Plan should the market perform to at least the middle scenario.

Conclusions

5.56 The results demonstrate the impact of density upon the viability of this scheme, with the 50 dph development resulting in a slightly less favourable viability position in comparison with the 40dph scheme across all tests.

5.57 30% affordable housing without grant may be viable should the market perform to the middle scenario however scheme viability will remain marginal until circa 2019 unless the market performs to the upside assumptions. Notwithstanding this, relatively low levels of grant are likely to be required to achieve 30% affordable housing based on the middle scenario until this point. Furthermore, grant at ‘normal’ levels is very likely to achieve 40% affordable housing throughout the Plan period.

5.58 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 16% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.59 A 40% affordable housing requirements was assessed and found not to be viable against any future market scenario. Therefore 30% affordable housing was tested,
assuming nil grant and grant availability at ‘normal’ levels. Figure 22 below shows the results of 30% affordable housing with grant at normal levels and S106 requirements at 100% of the baseline level. Against the upside market scenario 30% affordable housing is likely to be viable however the viability position remains compromised until circa 2020 should middle market conditions prevail.

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5.60 21% affordable housing was then tested, again both with and without public subsidy. Figure 23 demonstrates the viability position assuming grant and normal levels. As can be seen viability remains compromised for the period 2012-2018 against middle market conditions, due in part to the potential large increase in construction costs within this period associated with increased sustainability requirements.
5.61 Assuming nil grant, a 100% S106 contribution, and 21% affordable housing, a viable position should be achievable on the upside scenario for the duration of the Plan. Viability remains compromised until circa 2019 assuming middle market conditions and it is likely some level of public subsidy would be required until circa 2020 to achieve this level of affordable housing. From circa 2022 onwards however, 30% affordable housing without public subsidy may be viable.

Conclusions

5.62 Should the Council seek to achieve levels of affordable housing of circa 10-20% on developments of this nature in this area, without recourse to public subsidy they may wish to consider in the early years, flexibility of affordable housing tenure as a tool to achieve this. An approach such as this may need to be adopted should the market perform to the middle scenario. Increasing proportions of shared ownership property from the levels assumed, (65:35 social rented:shared ownership) would improve scheme viability as would a reasonable proportion of shared equity units should this be delivered instead of social rented units. It is unlikely however that this approach would be required if the market achieves an upside position and should this be the case, 21% affordable housing, increasing to 30% affordable housing over time may be achievable without grant.

Notional site – 400 unit development, 50 dph – Bourne and The Deepings

5.63 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 16% was used and an alternative use value of £660,000 per hectare. The latter
based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.64 40% affordable housing was assessed and found not to be viable against any market scenario, whilst 30% affordable housing was marginal against upside market conditions only. 21% affordable housing was thus assessed and found to be viable should the market perform to the upside for the duration of the life of the Plan. Viability however, remains compromised should middle market conditions endure until circa 2019.

5.65 Figure 24 shows the impact upon viability of grant at ‘normal’ levels should the market achieve middle market conditions.

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5.66 Finally, 10% affordable housing was assessed to ascertain the viability position should nil grant be available. Then results reveal that 10% affordable housing is likely to be viable without grant should middle market conditions endure.
Conclusions

5.67 If the market achieves upside conditions, 21%-30% affordable housing is likely to be viable without recourse to public subsidy. If middle market conditions are realised, public subsidy at ‘normal’ levels will be required to achieve 21% affordable housing, and it is likely that 10% affordable housing would be around the maximum that could be delivered without grant up to circa 2020. From 2020 onwards, viability eases and increased proportions of affordable housing may be viable thereon.

5.68 The results again demonstrate the impact of density upon the viability of this scheme, with the 50 dph development resulting in a slightly less favourable viability position in comparison with the 40dph scheme across all tests.

Notional site – 80 unit development, 40 dph – Grantham

5.69 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 16% was used and an alternative use value of £420,000 per hectare. The latter based upon VOA average industrial land values for Lincoln and Nottingham as at July 2009, taking into account an uplift of 20%.

5.70 40% affordable housing was assessed and assuming nil grant this requirement was not achievable against any scenario over the life of the Plan. Should public subsidy be available at ‘normal’ levels, and market conditions achieve the upside scenario, however then 40% affordable housing may be viable.

5.71 Viability at 30% affordable housing has been assessed. Without recourse to public subsidy affordable housing against the middle scenario remains compromised however should the market achieve an upside position, affordable housing at this level may be achievable for the majority of the life of the Plan without grant. This assumes S106 contributions are not in excess of those assumed.

5.72 Figure 25 below shows the position with 30% affordable housing and assumes public subsidy at ‘normal’ levels is available. Viability remains compromised for the middle scenario for the period 2015-2020.
Further testing at 21% affordable housing against the middle market scenario reveals that should public subsidy be available at ‘normal’ levels the period where viability remains compromised reduces to a two year period, 2018-2020. If nil public subsidy is assumed however affordable housing at 21% remains compromised until 2022.

Finally 10% affordable housing was tested with the assumption that no grant was available. Against the middle market scenario delivery of affordable housing at this level remains marginal until 2023, with the period 2017-2020 requiring public subsidy of least a ‘lower’ level. The results are shown in Figure 26.
Conclusions

5.75 It is likely that should the market perform to the middle scenario, public subsidy of at least ‘normal’ levels would be required to achieve 21% affordable housing in the early years, with the period 2018-2020 remaining difficult. From 2021 onwards 30% affordable housing may be achievable with similar levels of subsidy.

5.76 Should the market achieve the upside position, 21% affordable housing is likely to be achievable without grant over the life of the Plan, and 30% affordable housing may be achievable in some instances.

5.77 If grant funding were not available or available at only ‘lower’ levels, and middle market conditions endured, circa 10% affordable housing is likely to be the maximum that can be achieved until around 2022.

Notional site – 80 unit development, 40 dph – Stamford

5.78 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 18% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.79 35% affordable housing was assessed assuming S106 contributions at 100% of the baseline value and nil public subsidy. The results are shown in Figure 27.
5.80 40% affordable housing was also assessed and if public subsidy were available at ‘normal’ levels affordable housing is very likely to be achievable against a middle market scenario, even when S106 contributions were assumed to be 200% of the baseline figure.

Conclusions

5.81 Affordable housing at 35% may be deliverable over the life of the Plan assuming that the market performs to at least the middle scenario. The input of public subsidy at ‘normal’ levels is likely to secure 40% affordable housing even should S106 contributions be at 200% of the baseline levels.

Notional site – 80 unit development, 40 dph – Bourne and The Deepings

5.82 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 16% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.83 40% affordable housing was tested and found not to be viable against any market scenario. 30% affordable housing, assessed with S106 contributions at 100% of baseline levels, was tested both with nil grant and grant at ‘normal’ levels. The results are shown in Figures 28 and 29.
5.84 Public subsidy significantly improves the viability at 30% against the upside scenario, should the market perform to the middle scenario however, a viable position is unlikely to be achievable until circa 2020.

5.85 Further testing was undertaken at 21% affordable housing. Against the middle scenario, and assuming public subsidy at ‘normal’ levels, viability remains compromised from circa 2012 to 2018 however for all other years 21% affordable housing may be achievable. This is shown in Figure 30.
Conclusions

5.86 It is likely that, should the market perform to the middle scenario, public subsidy of at least ‘normal’ levels would be required to achieve up to 21% affordable housing until circa 2020, where viability pressures ease and up to 30% may be achievable. For the period 2012-2018 it is likely that ‘higher’ grant may be required to achieve 21% affordable housing and if grant at these levels is not available, then 21% affordable housing is unlikely to be achievable.

5.87 Should market conditions achieve the upside, affordable housing at 30% is likely to be achievable assuming grant is available at ‘normal’ levels, throughout the life of the Plan. If grant is not available, then 21% affordable housing may be deliverable throughout the period assessed.

5.88 If the market performs to the middle scenario, viability of affordable housing on this development type is challenging, and the proportion that can be delivered relies upon the availability of public subsidy. If subsidy is not available then the proportion of affordable housing that can be delivered is likely not to exceed circa 10% until approximately 2020.

Notional site – 80 unit development, 40 dph – Local Service Centres

5.89 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 18% was used and an alternative use value of £660,000 per hectare. The latter
based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.90 40% affordable housing without grant was not viable on any market scenario. Grant at 'normal' levels eases viability and 40% affordable housing may be deliverable against an upside market scenario.

5.91 30% affordable housing is viable against the upside scenario without grant input, yet viability remains compromised against middle market conditions until circa 2020. Figure 3 below shows the impact that the provision of 'lower' levels of grant has on the viability of 30% affordable housing provision assuming middle market conditions.

5.92 Finally, 21% affordable housing was assessed both with grant at lower levels and nil grant, to ascertain the likely level of affordable housing that could be delivered should middle market conditions prevail. The results are shown in Figures 32 and 33 below.
Conclusions

5.93 Affordable housing delivered with nil grant, at 30%, may be viable for the duration of the Plan should the market achieve upside conditions.

5.94 If the market performs to the middle scenario, public subsidy at lower levels is likely to be sufficient to achieve 21% - 30% affordable housing (dependent upon the time of development) assuming S106 requirements do not exceed those.
assumed. Finally, if public subsidy were not available, up to 21% affordable may be achievable until 2020, and from then on, potentially amounts in excess of this.

Notional site – 20 unit development, 70 dph – Grantham

5.95 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 17% was used and an alternative use value of £420,000 per hectare. The latter based upon VOA average industrial land values for Lincoln and Nottingham as at July 2009, taking into account an uplift of 20%.

5.96 Affordable housing at 40% and 30% was found to be unviable on this scheme. 21% affordable housing, with public subsidy at ‘normal’ levels is not viable on the middle market scenario and viability remains marginal assuming upside market conditions.

5.97 10% affordable housing was tested, with and without the availability of public subsidy and the results are shown in Figures 34 and 35. As can be seen, viability remains marginal against the upside scenario, whilst should middle market conditions prevail an affordable housing requirement of 10% is unlikely to be achievable.
Conclusions

5.98 It is unlikely that schemes of this nature could deliver affordable housing at any level should middle conditions endure. Affordable housing of up to 10% may be deliverable with public subsidy at normal levels if the market was to achieve the upside scenario.

Notional site – 20 unit development, 50 dph – Grantham

5.99 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 17% was used and an alternative use value of £420,000 per hectare. The latter based upon VOA average industrial land values for Lincoln and Nottingham as at July 2009, taking into account an uplift of 20%.

5.100 10% affordable housing with S106 contributions 100% of the baseline level may be achievable without grant should the market perform to the upside. This is shown in Figure 36.
5.101 Public subsidy at ‘normal’ levels improves viability on all scenarios however delivery of 10% affordable housing may be unachievable for at least the period 2012-2022 against the middle market scenario. This is shown in Figure 37.
5.102 Further testing was undertaken at 10% affordable housing and assumed that all affordable units delivered would be 80% shared equity housing. The results are shown in Figure 38 below.

![10% Affordable Housing Table]

Conclusions

5.103 Unless the market performs to the upside, it will be challenging to achieve even 10% affordable housing until around 2022, even if grant is available at ‘normal’ levels. If grant is not available, then the delivery of the affordable units as shared equity housing achieves at least the same viability position as could be achieved if grant were available.

5.104 A maximum of 10% affordable housing is likely to be achievable if the market performs to the upside scenario, and viability at this level may be improved through the use of a shared equity affordable housing product, rather than the Council’s preferred tenure mix of 65:35 social rented:shared ownership.

Notional site – 20 unit development, 30 dph – Grantham
5.105 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 17% was used and an alternative use value of £420,000 per hectare. The latter based upon VOA average industrial land values for Lincoln and Nottingham as at July 2009, taking into account an uplift of 20%.

5.106 Provision of 40% affordable housing was found to be unviable, whilst provision of 30% affordable housing was marginal against the upside market scenario.

5.107 21% affordable housing was tested and the results, assuming nil grant availability are displayed in Figure 39.

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2012 & 74\% & 38\% & 30\% & 93\% & 40\% & 30\% \\
2013 & 93\% & 40\% & 30\% & 83\% & 39\% & 30\% \\
2014 & 87\% & 40\% & 31\% & 95\% & 41\% & 30\% \\
2015 & 100\% & 43\% & 31\% & 80\% & 41\% & 30\% \\
2016 & 83\% & 39\% & 30\% & 93\% & 35\% & 22\% \\
2017 & 92\% & 30\% & 25\% & 82\% & 32\% & 26\% \\
2018 & 48\% & 32\% & 26\% & 42\% & 30\% & 20\% \\
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5.108 As stated previously in this report, we have assumed developer profit at 17% of GDV for all development scenarios unless explicitly expressed otherwise. In this scenario we undertook a further test of viability assuming developer profit at 20% and the results are shown in Figure 40. The effect upon viability in the years to 2022 on the middle scenario can be clearly seen.
5.109 Two further tests of viability were undertaken at 21% affordable housing. These both assumed developer profit at 17% of GDV and S106 requirements at 100% of the baseline level. Figure 41 demonstrates the impact upon viability of grant at 'lower' levels, whilst Figure 42 shows the impact of grant at 'normal' levels. As the results show, lower levels of grant may be sufficient to deliver this level of affordable housing should middle market conditions prevail, whilst the addition of public subsidy at 'normal' levels improves the viability should ensure that delivery of 21% affordable housing is viable.
Conclusions

5.110 Should the market perform to the upside, 21%-30% affordable housing should be viable over the plan period on this type of development without recourse to public subsidy.

5.111 If the market achieves the middle scenario, public subsidy at ‘lower’ or ‘normal’ levels would be required to achieve 21% affordable housing until circa 2022.

5.112 The impact of increasing developer profit to 20% of GDV has a negative impact upon scheme viability. Profit can be seen as ‘reward for risk’ and it is likely that certain developments will be inherently riskier than others. Therefore there may be occasions where a 20% of GDV profit assumption is reasonable and the Council may wish to consider the impact this may have upon development viability, whilst balancing other objectives such as meeting overall housing need and balancing housing delivery targets.

Notional site – 20 unit development, 30 dph – Grantham (test against PDL – residential, land values)

5.113 An additional assessment was undertaken of this development scenario against two tests of viability. A GDV:RLV ratio of 17% was again used however an alternative use value of £1,000,000 per hectare was assumed based upon VOA average bulk residential land values for Lincoln as at July 2009. This was undertaken to assess the impact of this type of development coming forward on land with an existing residential use.
5.114 Figure 43 demonstrates the viability of 21% affordable housing assuming nil grant availability. The viability position is far less positive than the previous assessments where existing use values of the notional development site were assumed to be Greenfield or industrial use.

5.115 Further testing was therefore undertaken at 10% affordable housing assuming S106 requirements are at 100% of the baseline level. The results of a nil grant and 'higher' grant are shown in Figures 44 and 45 and demonstrate that should the market achieve the upside 10% affordable housing may be marginally viable to circa 2022 when viability pressures would ease. If the market realises middle conditions, then viability at this percentage would be challenging, even with grant at higher levels.
### 10% Affordable Housing

#### NO GRANT sensitivity.

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### Conclusions

5.116 The impact upon viability of this type of site (i.e. where the existing use is residential) coming forward is negative; it is likely that lower levels of affordable housing will be deliverable when compared to schemes coming forward on sites where the current land use is industrial or greenfield.
5.117 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 19\% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20\%.

5.118 40\% affordable housing was tested assuming 100\% S106 contributions and no grant. The results, shown in Figure 46, show that viability is marginal, based upon upside market conditions, whilst viability is compromised until circa 2020 should the market achieve the middle scenario.

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5.119 The addition of public subsidy at ‘normal’ levels improves the viability position at 40\% affordable housing as can be seen in Figure 47.
The provisions of 30% affordable housing was then tested and the results both without and with public subsidy at 'normal' levels are shown in Figures 48 and 49. 30% affordable housing should be deliverable without grant if the market achieves the upside, and it may be deliverable against the middle market scenario although this is marginal. Public subsidy at normal levels improves the viability position on the middle scenario.
Conclusions

5.121 Up to 30% affordable housing may be achievable without grant should middle market conditions endure. From about 2021 viability eases, and up to 40% affordable housing may be viable without grant. Public subsidy at ‘normal’ levels improves the viability of delivering affordable housing at 40% and 30% requirements.

Notional site – 20 unit development, 50 dph – Stamford (test against PDL – residential, land values)

5.122 Again, an additional assessment was undertaken of this development scenario against two tests of viability. A GDV:RLV ratio of 19% was again used however an alternative use value of £1,400,000 per hectare was assumed based upon VOA average bulk residential land values for Peterborough as at July 2009. This was undertaken to assess the impact of this type of development coming forward on land with an existing residential use.

5.123 Testing at 30% affordable housing found that grant at ‘normal’ levels was required to achieve marginal viability against the upside scenario, however viability assessed against the middle market scenario remained compromised.
Conclusions

5.124 Should this type of site come forward for development in Stamford with an existing residential use it is likely that circa 10% affordable housing may be achievable without grant, although in some circumstances grant at ‘lower’ or ‘normal’ levels may be required should the market achieve only middle scenario conditions. Affordable housing in excess of 10% is likely to be achievable from circa 2020 onwards.

Notional site – 20 unit development, 30 dph – Stamford

5.125 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 19% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.126 Figure 50 shows the results of viability testing assuming 40% affordable housing provision, S106 contributions at 100% of the baseline level and nil grant.
5.127 Further sensitivity testing was undertaken with developer profit set at 20% of GDV. The results, shown in Figure 51, demonstrate the impact of profit at this level against the viability position should the market achieve only the middle scenario.

5.128 Up to 40% affordable housing may be viable assuming market conditions achieve at least the middle scenario and S106 contributions are not in excess of those assumed. Developer profit at 20% of GDV compromises viability between circa 2015 and 2018 should the market achieve only the middle scenario. As stated previously, it is likely that developments will involve various levels of risk, and this level of risk, and thus the level of profit to be achieved as a ‘reward’ for this, may vary from development to development.

Notional site – 20 unit development, 30 dph – Stamford (test against PDL – residential, land values)

5.129 Again, an additional assessment was undertaken of this development scenario against two tests of viability. A GDV:RLV ratio of 19% was again used however an alternative use value of £1,400,000 per hectare was assumed based upon VOA
average bulk residential land values for Peterborough as at July 2009. This was undertaken to assess the impact of this type of development coming forward on land with an existing residential use.

5.130 Viability is again compromised due to the assumed existing residential use of the notional scheme. Various iterations of affordable housing percentages were tested and Figures 52 and 53 demonstrate the viability a 10% affordable housing requirement assessed without grant and with the addition of grant at ‘normal’ level.
Conclusions

5.131 10% affordable housing may be achievable should the market achieve at least the middle scenario although grant at 'normal' levels may be required to achieve a viable position in some years should market performance not achieve the upside scenario. From circa 2020, viability eases and higher levels of affordable housing may be achievable.

Notional site – 20 unit development, 50 dph – Bourne and The Deepings

5.132 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 16% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.133 40% affordable housing was tested and found not to be viable. 30% affordable housing was then assessed and found to be very marginal against the upside scenario only, therefore further analysis was undertaken with a 20% affordable housing requirement.
Figure 54 shows the results of a test of 20% affordable housing, 100% S106 contributions and nil grant. As is shown, a viable position is likely to be achieved should the market exhibit upside conditions. Viability remains compromised however until circa 2021 should the market only to perform to the middle scenario.

Although the addition of public subsidy at 'normal' levels eases viability against the middle market scenario it is still likely to be challenging for the period 2015-2017 due to the requirement to achieve enhanced sustainability requirements and the potential additional build costs required to achieve these. The results of this assessment are shown in Figure 55.
Affordable housing at 15% was then assessed with a nil grant assumption and was found to remain compromised against the middle market scenario until circa 2019.

Conclusions

Up to 20% affordable housing may be deliverable, however the exact proportion will depend upon market conditions and in some instances, the availability of public subsidy. Should the market realise upside conditions then the ability to achieve 20% affordable housing without grant would be likely. If only middle market conditions are achieved, delivery of 20% would require public subsidy and it is likely that for at least some of the life of the Plan, provision of 20% affordable and even 15% affordable housing may be a challenge.

Notional site – 20 unit development, 30 dph – Bourne and The Deepings

The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 16% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

Affordable housing at 20% was assessed assuming nil grant and assuming grant availability at ‘normal’ levels. The results are shown in Figures 56 and 57.
Conclusions

5.140 At least 20% affordable housing is likely to be deliverable without grant for the duration of the Plan period should the market achieve upside conditions. If however the market performs to the middle scenario, viability of 20% affordable housing is
likely to be compromised from at least 2014 – 2019. During this period grant funding would be required to achieve a viable position.

Notional site – 20 unit development, 30 dph – Local Service Centres

5.141 The assessment was undertaken against the two tests of viability. A GDV:RLV ratio of 18% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.142 40% affordable housing was assessed, without grant and assuming S106 contributions at 100% of the baseline value. The results are shown in Figure 59 and show 40% affordable housing is likely to be viable throughout the life of the Plan should the market perform to at least the middle scenario.

![40% Affordable Housing](image_url)
Conclusions

5.143 40% affordable housing is likely to be achievable over the life of the Plan.

Notional site – 20 unit development, 30 dph – Local Service Centres

5.144 Again, an additional assessment was undertaken of this development scenario against two tests of viability. A GDV:RLV ratio of 18% was again used however an alternative use value of £1,400,000 per hectare was assumed based upon VOA average bulk residential land values for Peterborough as at July 2009. This assessment was undertaken to assess the impact of this type of development coming forward on land with an existing residential use.

5.145 Testing found that 20% may be deliverable without grant based on an upside market scenario. Against the middle scenario, delivery of 20% is more marginal and is compromised for certain periods. This is displayed in Figure 59.
5.146 Figure 60 shows the viability of 20% affordable housing is improved (should middle market conditions prevail) through the provision of ‘lower’ grant levels.

5.147 Finally, 10% affordable housing was tested without grant, the results of which are displayed in Figure 61.
Conclusions

5.148 10%-20% affordable housing is likely to be viable should the middle market conditions endure however ‘lower’ levels of grant may be required in order to achieve the top end of this range in certain periods. The period 2017-2018 may also require grant at ‘normal’ levels to achieve 20% affordable housing. From circa 2021 viability eases and affordable housing at higher percentages may be viable.

5.149 If the market achieves ‘upside’ conditions 20% affordable housing is likely to be deliverable without grant throughout the life of the Plan.

Sites below the current threshold of 15 units

5.150 In accordance the brief, and following consultation with the Council, it was agreed to assess the viability of sites below the current threshold of 15 units to ascertain their potential to deliver a commuted sum in lieu of on site delivery and to test whether a lower minimum threshold was ‘viable and practicable’23. In all scenarios of 10 units or less, developer profit was assumed to be 20% of GDV, professional fees to total 12% of build costs and S106 contributions to be required at 100% of

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23 Planning Policy Statement 3: Housing paragraph 29 Communities and Local Government 2006
the baseline level. Nil grant was assumed in all tests. A notional 10 unit, 30 dph scheme was then assessed in all value areas.

5.151 Conclusions for all sites of 10 units and less are outlined at the end of this section.

Grantham 10 unit scheme

5.152 This assessment was undertaken against two tests of viability. A GDV:RLV ratio of 26% was used and an alternative use value of £420,000 per hectare. The latter based upon VOA average industrial land values for Lincoln and Nottingham as at July 2009, taking into account an uplift of 20%.

5.153 40%, 30% and 20% affordable housing was tested and found not to be viable. 10% affordable housing was then assessed and the results displayed in Figure 62.

5.154 A further assessment on this same scheme within Grantham was undertaken against a test of viability which assumed an alternative use value of £1,100,000 per hectare. This is based upon VOA data for average residential land values for sites of less than 5 units in Lincoln as at July 2009. It was found that an affordable housing contribution was not viable.
Stamford 10 unit scheme

5.155 This assessment was undertaken against two tests of viability. A GDV:RLV ratio of 25% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.156 30% affordable housing was viable against the upside scenario only and very marginal when assessed using middle market assumptions. 20% affordable housing was then assessed and the results are displayed in Figure 63.

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A further assessment is carried out on this same scheme within Stamford which assumed residential land values of £1,650,000 per hectare. This is based upon VOA data for average residential land values for sites of less than 5 units in Peterborough as at July 2009. It was found that an affordable housing contribution was not viable.
Bourne and The Deepings 10 unit scheme

5.158 This assessment was undertaken against two tests of viability. A GDV:RLV ratio of 25% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.159 40%, 30% and 20% affordable housing was tested and found not to be viable. 10% affordable housing was then assessed found to be very marginal.

5.160 5% affordable housing was thus assessed and the results are shown in Figure 64.

![5% Affordable Housing](image)

5.161 A further assessment was undertaken on this same scheme within Bourne and The Deepings which assumed residential land values of £1,650,000 per hectare. This is based upon VOA data for average residential land values for sites of less than 5 units in Peterborough as at July 2009. It was found that an affordable housing contribution was not viable.
Local Service Centres 10 unit scheme

5.162 This assessment was undertaken against two tests of viability. A GDV:RLV ratio of 25% was used and an alternative use value of £660,000 per hectare. The latter based upon VOA average industrial land values for Peterborough as at July 2009, taking into account an uplift of 20%.

5.163 40% affordable housing was tested and found not to be viable. 30% affordable housing was viable against the upside market scenario and marginal against the middle market scenario. Thus 20% affordable housing was assessed and the results are shown in Figure 65.

Local Service Centres 5 unit scheme

5.164 A further 5 unit development was assessed in this area to test the viability of schemes between 5 and 10 units to deliver a commuted sum in lieu of on site
delivery. This was undertaken due to the number of sites with the potential to deliver this amount of units identified in Local Service Centres in the Council’s SHLAA 2008.

5.165 This assessment was undertaken against the same two tests of viability as the Local Services Centre 10 unit notional development. The results of a test of viability of 20% affordable housing are shown in Figure 66.

![Figure 66](image)

Conclusions – schemes of 10 units and below

5.166 The ability of all value areas to deliver affordable housing as a commuted sum in lieu of on site provision of affordable housing on sites of 10-14 units varies according to the current or existing use value that can be ascribed to the development site. Current greenfield and/or previously developed land with industrial use is more likely to be able to generate a viable position than previously
developed residential land which is more likely to attract a higher alternative use value.

5.167 The ability of two value areas, Grantham, and Bourne and The Deepings to generate any affordable housing contribution from any site type below 10 units is marginal.

5.168 The value areas of Stamford and the Local Service Centres are likely to be able to generate an affordable housing contribution that would equate to 20% affordable housing on sites of 10-14 units, assuming at least middle market conditions are achieved and S106 requirements are not in excess of those assumed.

5.169 Local Services Centres are also likely to be able to provide an affordable housing contribution equivalent to 20% affordable housing on sites of 5-9 units, again assuming at least middle market conditions are achieved and S106 requirements are not in excess of those assumed.

5.170 It is likely that the affordable housing contribution proportions outlined above may only be viable where the development was being brought forward on Greenfield or previously developed industrial land.
6.0 Commuted Sums

Committed Sum Principles

6.1 The principles outlined in ODPM Circular 05/2005 confirm that planning "obligations created run with the land"\(^{24}\) and that "planning obligations should never be used as a means of securing for the local community a share in the profits of development i.e. as a means of securing a betterment levy."\(^{25}\) The Circular considers that the use of planning obligations may include securing "the inclusion of an element of affordable housing in a residential or mixed use development where there is a residential component."\(^{26}\) In addition, the Circular confirms that the obligations should be "fairly and reasonably related in scale and kind to the proposed development, as well as being reasonable in other respects."\(^{27}\)

6.2 Paragraph B14 of Circular 05/2005 states that affordable housing is provided through a presumption of being "in kind and on site", however "there may be certain circumstances ... where provision on another site or a financial contribution may represent a more appropriate option".

6.3 PPS3 was published in November 2006 together with the guidance document Delivering Affordable Housing. It sets out the Government’s strategic housing policy objectives, which include achieving a wide choice of high quality homes, widening opportunities for home ownership, improving affordability across the market by increasing supply, and the creation of sustainable, inclusive and mixed communities in all areas. PPS3 confirms the Government’s commitment to the provision of high quality housing for those unable to access or afford market housing and also helping people make the step from social-rented housing to home-ownership.

\(^{24}\) Paragraph A3 Circular 05/05
\(^{25}\) Paragraph B7 Circular 05/05
\(^{26}\) Paragraph B12 Circular 05/05
\(^{27}\) Paragraph B5 Circular 05/05
6.4 PPS3 states that where it can be robustly justified, off site provision or a financial contribution in lieu of on-site provision (of a ‘broadly equivalent value’\textsuperscript{28}) may be accepted as long as the agreed approach contributes to the creation of mixed communities in the local authority area.

"Decisions on alternative options should be made with regard to what is economically viable and realistic on that site and local housing needs as well as taking into account the mix of tenures on the site (...) the level of developer contribution should be at least maintained, but it should not be assumed the developer can meet the whole cost of the shortfall"\textsuperscript{29}

6.5 Thus, although national policy suggests that on site provision of affordable housing is the preferred approach, there may be some instances where an off site contribution is acceptable. National policy is predicated on the basis that some forms of affordable housing require public subsidy and planning agreements therefore need to maintain flexibility to deal with the eventuality that the subsidy may not be available at the time of delivery. These principles should apply whether the affordable housing is achieved on site or whether it is achieved through a contribution.

**Principle of Equivalence – Practical Methodology**

6.6 This report on the viability of affordable housing has shown that it is important to understand the economics of development when seeking to achieve affordable housing. This involves looking at all costs and values and assessing whether the residual is sufficient, generally, to bring sites forward. There may be instances where it is not possible or desirable to achieve the affordable housing on site and these same principles of applying the economics of development must apply. Therefore, when considering a particular site the principle of “broad equivalence” must apply.

\textsuperscript{28} PPS3 paragraph 29 Department of Communities and Local Government November 2006
\textsuperscript{29} Delivering Affordable Housing paragraph 95 Department of Communities and Local Government November 2006
6.7 Bearing in mind the complexities of assessing the economic implications of affordable housing, a simple formula for developer subsidy can be derived. However, this simple formula has a number of complex inputs that are used to assess individual sites and which maintain a contribution to affordable housing that is broadly equivalent in amount of affordable housing that is achieved and which has a broadly equivalent contribution from the developer thereby ensuring a neutral effect on the economics of provision. In line with PPS3, the presumption should be that the affordable housing is provided on site, but where an off site contribution is proposed, the developer should be neither advantaged nor disadvantaged by agreeing to or proposing an off site contribution.

6.8 Our view is that the economic assessment of a development should be site and scheme specific (it should include all costs and values related to the particular use) but that these costs should be generic (they should be able to be applied to any developer and not be specific to an individual). This will maintain the planning principle that permission runs with the land and not with an individual.

6.9 If a scheme is viable the practical methodology of assessing how much a development can afford involves establishing the developer subsidy. When this is an on site contribution this will be an exercise to establish how much and what type of affordable housing can be achieved on site. When an off site contribution is to be applied it is establishing the amount of developer "subsidy" which is involved to meet the Council’s objectives.

6.10 We have pointed out that the developer subsidy relates to the implications for the land use of a particular site. The developer subsidy is established by looking at the difference in residual land value between the development without an encumbrance (in this case the encumbrance is the imposition of affordable housing) and the residual land value with the encumbrance. The simple formula for developer subsidy is thus:
DEVELOPER SUBSIDY FOR AFFORDABLE HOUSING

= RESIDUAL VALUE OF DEVELOPMENT UNENCUMBERED BY AFFORDABLE HOUSING

LESS

RESIDUAL VALUE OF DEVELOPMENT ENCUMBERED BY AFFORDABLE HOUSING

6.11 Thus the formula involves two discrete calculations and we would suggest a simple matrix that enables these two calculations to be assessed. This is as follows with example figures input30

30 Please note that these figures are for illustrative purposes only
In this example we have assumed the following:

**Gross Development Value** = Current market value of units proposed on site;

**Values/Receipts** = receipts from affordable housing provider and/or for any intermediate dwellings;

**Grant provided** = if policy assumes a certain level of public subsidy;

**Total build Costs** = generic assessment of construction costs (BCIS or QS assessed);

**On costs** = usually at a set percentage;
Other S106 costs = where known;

Sales costs = marketing and legals on market sales and LCHO;

Finance costs = net interest charged/earned during the development period;

Acquisition costs = costs associated with acquisition of the site (Stamp Duty, legal fees etc.);

Developer Profit = at an agreed percentage$^{31}$.

Alternative and Existing Use Values

6.13 In the example above it can be seen that the residual site value of the scheme unencumbered by affordable housing would be £495,000 higher than the site value with affordable housing assuming that the Council’s target percentage and tenure split is being met. Different tenure splits and target percentages will have different effects on site residuals and, therefore, on developer subsidy.

6.14 The next stage in the assessment is to ensure that this level of developer subsidy would be sufficient to ensure that this site comes forward. We would need to assess both the alternative or existing uses of the site. If, for example, an existing use on the site generates a value of £900,000 then the residual value of the site with affordable housing is insufficient to bring this site forward and the developer subsidy would have to decrease in order to ensure that the residual site value is greater than the alternative use value. In this case the developer subsidy would have to decrease by at least £170,000 in order to bring this site forward.

6.15 The same principle applies to alternative uses of the site. In this example, it may be possible to provide a different mix of residential use that establishes an alternative use perhaps without having to provide affordable housing (the number of units would be below the threshold for affordable housing, for example). A similar exercise

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$^{31}$ It must be remembered that developer profit should considered as a fixed cost of development and not as a variable to be increased or decreased in order to ensure a scheme “works”.

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should be undertaken in order to establish residual values. This will use comparable assumptions as in the main assessment.

6.16 Therefore the simple formula can be further modified thus:

\[
\text{DEVELOPER SUBSIDY} = \text{RESIDUAL VALUE OF DEVELOPMENT UNENCUMBERED BY AFFORDABLE HOUSING} \less \text{RESIDUAL VALUE OF DEVELOPMENT ENCUMBERED BY AFFORDABLE HOUSING (TAKING INTO ACCOUNT ANY REALISTICALLY ACHIEVABLE ESTABLISHED ALTERNATIVE OR EXISTING USE)}
\]

Practical Assessment

6.17 It is important that individual site and scheme assessments are undertaken using a set of agreed principles between developer and planning authority. It is for this reason that we propose using generic values and percentages wherever possible and for these to be agreed and audited by one or more third parties to ensure impartiality and legitimacy. Our experience has shown that agreeing these parameters should not be a difficult process and the Local Authority should make it clear and consult upon the parameters to be used. It is also incumbent upon the developer to provide the necessary information to undertake the assessment outlined above but this is not the same as proposing an “open book” approach. If an agreement can be arrived at using generic figures (and we have experience of agreeing developer subsidy where this has been achieved) then it is incumbent on the developer to ensure that the necessary information is provided as soon as possible. However, it may be that the principal input from the developer is for exceptional and abnormal costs associated with the development to be provided.

6.18 Using generic methods to generate the other inputs into the assessment will ensure that two important principles are maintained;
the planning permission does not become personal to a particular developer (it can be transferred to another developer without having to undergo a complete re-assessment of the site); and

the planning permission does not rely upon commercially sensitive information that would benefit a developer’s competitors.

Recommendation

6.19 We therefore recommend that any commutation for affordable housing should be based on the equivalence principle supported through Circular 05/05, PPS3 and associated documents. The developer subsidy for this off site contribution should equate to the developer subsidy that would have been provided had the affordable housing been achieved on site. The developer subsidy equates to the difference in residual values between an unencumbered scheme and the scheme encumbered by affordable housing to meet the Council’s target percentage and tenure mix. This will need to take into account any established alternative or existing use value supported by evidence if necessary. This methodology can be used without recourse to cost and value tables and is able to be used for the lifetime of the affordable housing policy without further amendment to take into account revised tables or cost yardsticks of any sort.
7.0 Conclusions and Recommendations

Small sites (less than 15 units)

7.1 We appreciate that development on small sites in the current economic climate may be more challenging than on larger sites. This is a function of a number of factors including the baseline levels of professional fees, increased risk resulting in higher return, potential higher overheads, potential increased per unit construction costs and land owners expectations. With regard to this latter point, landowners have not previously had the encumbrance of affordable housing negatively affecting land value on smaller sites. Furthermore, on sites of this size absolute values are as important as relative or proportionate values in bringing those sites forward.

7.2 There is a small potential to achieve affordable housing on these sites although it is important to be aware of the above issues when requiring an affordable housing contribution. We would recommend that on sites of 15 units or less a commuted sum, based upon our recommendations in the previous section of this report, be adopted as follows:

- Grantham and Bourne and the Deepings – on sites of 5-14 units, a commuted sum equivalent to up to 10% (depending on viability) affordable housing on site in accordance with our recommended commuted sum formula
- Stamford and Local Service Centres - on sites of 5-14 units, a commuted sum equivalent to up to 20% (depending on viability) affordable housing on site in accordance with our recommended commuted sum formula

General development sites (of at least 15 units)

Grantham

7.3 Grantham is a challenging area to achieve higher levels of affordable housing due to the lower values this area achieves.

7.4 Density has an impact upon scheme viability and this is particularly significant in Grantham. Schemes with higher densities will incorporate a higher proportion of flats and smaller terraces. As these are generally lower value unit types the income
versus cost ratio is less favourable than on developments with detached and semi
detached housing which can command a much higher value.

7.5 At 70 dph the viability of any level of affordable housing is very marginal
throughout the Plan period, even on upside economic conditions. Even at 50 dph,
development viability remains challenging and around 10% is the likely maximum
that could be expected to be delivered until towards the end of the Plan period.

7.6 On lower density development, viability improves and 21% affordable housing is
likely to be achievable without grant for much of the Plan period. The addition of
grant at lower or normal levels will improve the viability position and up to 30%
affordable housing is likely to be achievable.

Stamford

7.7 It should be less challenging to achieve higher levels of affordable housing in
Stamford than in Grantham due to the higher values this area attracts and the type
of units developed. In general development types are more favourable in respect of
their cost to value ratio because of the higher proportion of larger units.

7.8 40% affordable housing is likely to be achievable with grant at ‘normal’ levels
throughout the period of the Plan. If grant is not available, 30%-35% affordable
housing can still be achieved, in most economic conditions with the exception of the
downside.

Bourne and The Deepings

7.9 Despite its geographical location, development economics in Bourne and The
Deepings reflect more the situation in Grantham than in Stamford. That is that
development viability is challenging to achieve higher levels of affordable housing
although probably less grant will be required than in Grantham.

7.10 Within this value area, we recognise that there are likely to be particular ‘pockets’
where residential sales values may be in excess of those assumed for this study.
Development coming forward in such locations may therefore be able to make a
greater contribution to affordable housing provision than shown in this study.
Again the density issue applies in this area with lower density schemes generally achieving higher proportions of affordable housing than higher density ones. At 30 dph 20% affordable housing is certainly achievable with grant throughout the life of the Plan, increasing in the later years to 30%. At 40 dph and above these percentages are less achievable.

Local Service Centres

The nature of this value area is such that development is more likely to be lower density and the type of units developed more likely to be higher value. These factors impact positively upon development viability.

40% affordable housing is likely to be achievable without grant throughout the Plan period should middle market conditions be achieved.

Sustainable Urban Extensions

4000 Unit development – Grantham

40% affordable housing was found to be non viable against any market scenario over the life of the Plan. To achieve any meaningful level of affordable housing until towards the end of the Plan period, grant funding at a minimum of ‘normal’ levels assumed within this report will be required. In some cases, grant funding in excess of these levels may be necessary.

The high per unit level of infrastructure associated with this development scenario has a negative impact upon viability. In order to optimise the likelihood of the maximum affordable housing that can be achieved over the Plan period, careful consideration should be given to reassess phasing of both infrastructure requirements and affordable housing requirements.

It is for these reasons that our tests of viability have concluded that circa 21% affordable housing is the likely maximum amount that will be deliverable for the early life of the Plan increasing to 30% affordable housing in later years.

The Council may seek to lessen the impact of the high levels of infrastructure requirements associated with this development by seeking funding from alternative sources to deliver some elements.
1500 Unit development – Grantham

7.18 The scale of infrastructure/S106 requirements reported by the Council in respect of this development scenario is much reduced in comparison to the 4000 unit development.

7.19 The viability position of this development changes over time. In the early years, grant at ‘normal’ levels is required to achieve 21% affordable housing and potentially up to 30%. In the later life of the Plan delivery of up to 40% affordable housing without grant may be achievable assuming very favourable economic conditions.

7.20 Again, as this development is likely to occur over a significant period, consideration of phasing the affordable housing and S106 requirements over time will maximise the delivery potential.

1500 Unit development – Stamford

7.21 Large site development in Stamford presents far less of a challenge to achieve high proportions of affordable housing than in Grantham. Our results show that up to 35% affordable housing without grant, and up to 40% affordable housing with grant, is likely to be deliverable in the early years. If the market conditions achieve the upside scenario at any period in the life of the Plan, 40% affordable housing should be deliverable.

Further considerations

7.22 The imposition of the higher levels of Code for Sustainable Homes requirements and the potential large increases in construction costs associated with achieving these, impact negatively upon development viability for all scheme types, value areas and market scenarios. Whilst these affect particularly the period 2013-2018, the years following this are also affected due to the higher base build cost position. Whilst we recognise that values may recover by that period, these will not fully compensate for these increases until circa 2018 – 2020 and thereafter.

7.23 A further negative aspect of the Code for Sustainable Homes requirements on the ability to achieve higher levels of affordable housing is that smaller sites are less
able to cope with the impact of construction cost spikes. In other words the relationship between costs and values is more marked.

7.24 In circumstances where pressures upon development viability are particularly acute, it may be beneficial to relax the additional requirements for on site renewables (as discussed earlier in this report) in order to achieve higher levels of affordable housing.

7.25 Where we have tested 80% shared equity housing, it has achieved a more viable results than the 65:35 social rented:shared ownership tenure split. This may be a tool which the Council may choose to use to improve viability in certain conditions however we would not necessarily recommend this approach across the board as it may not meet the identified housing need in the District.

7.26 Given the status of Grantham as a Growth Point, the extent of housing identified for delivery within the Plan period, and the pressures upon development viability, it is probably beneficial to direct grant funding for affordable housing toward development in this area.

7.27 In line with the rest of our study we have used Greenfield/industrial existing use values as one of the tests of development viability. Testing viability against previously developed residential land values will have an adverse affect upon viability.

Viability position over time for each value area

7.28 An indicative picture of the percentage of affordable housing that may be achievable over time (assuming nil grant and with grant at ‘normal’ levels) for development coming forward in each value area is shown in the graphs below. Each graph is based upon the three future market scenarios. These are not meant to be definitive but give a general indication of the likely future achievable targets.
Bourne and The Deepings