

# Havant Viability Assessment

## Final Report to Havant Borough Council



07109527

DTZ, Greyfriars Gate, 5 Greyfriars Road, Reading RG1 1NU

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## Executive Summary

- 1 DTZ was commissioned in 2008 by Havant Borough Council to examine the impact of a range of affordable housing policies on development viability. The assessment also considers the impact of English Partnership Space Standards on development viability and therefore the scope to encourage developers to apply these standards to all new housing.
- 2 This report was prepared in 2008, a year into the housing market downturn following the onset of the 'credit crunch' in August 2007. It is inevitable that this viability assessment has been undertaken at a particular point in time, and reflects a particular set of market circumstances, but the information it yields on how viability varies by site size, development context etc remains useful for policy making even in a changed market environment.
- 3 The approach adopted in this assessment uses standard techniques of development appraisal common place in the development industry. The assessment uses Discounted Cash Flow (DCF) analysis to calculate the Internal Rate of Return (IRR) for developments with particular characteristics.
- 4 The assessment tests a suite of archetypical sites that capture much of the variety of the range of housing sites likely to come forward in Havant in order to analyse different sites on a consistent basis. By implication the study does not analyse viability on a specific housing site that might come forward in future. There will always be a wide range of specific circumstances that will affect viability on a particular site, and a developer will assess these in determining whether to proceed.
- 5 The assessment therefore provides a broad assessment of viability in the study area which is what is needed to inform the setting of affordable housing and other policies.
- 6 The assessment presents findings for a number of different scenarios designed to shed light on particular policy issues. Under each of these scenarios the assessment considers how different value areas (house prices and land values) impact on viability and how far grant aid might be required to achieve viability:
  - The Impact of Different Affordable Housing Quotas on Viability
  - The Impact of English Partnerships Space Standards on Viability
  - The Impact of the Density of Development on Viability
  - The Impact of Affordable Housing Tenure Mix on Viability
  - The Viability of Smaller Sites

### **Affordable Housing Quota**

- 7 The assessment shows that increasing the quota of affordable housing by 10% typically decreases scheme profitability (IRR) in the region of 3% – 8% points. The key variable affecting viability with different levels of affordable housing quota is the value area in which a scheme is located. A 30% affordable housing target should be deliverable *without* grant in high value areas of the Borough, but grant would probably be needed to support this level of provision in medium and low value areas. 40% affordable housing would need the support of grant in all but a few development scenarios in the Borough. With the level of grant tested in this assessment low value areas would still struggle to meet a 40% target even with grant.
- 8 On balance DTZ suggest a target of 30% across the Borough might be the best approach since this quota appears to be within reach of most development scenarios across the Borough, albeit some sites would need grant support whilst others may be able to deliver without grant aid. We would also recommend that the Council's Core Strategy or relevant DPD signals to developers that this policy will be monitored. The Borough's planning policies could state that if this quota is broadly achieved over the next 5 years the Council will review the relevant DPD with a view to increasing quotas either Borough wide or in specific areas or settlements within the Borough.

### **English Partnerships Space Standards**

- 9 Overall, English Partnership Space Standards reduce returns to developers at the margins because of the additional cost of providing extra space in the flats. In some circumstances this is enough to move sites that were in viable territory under 30% affordable housing without grant into non-viability without the support of grant (eg larger sites in high value urban areas).
- 10 There will also be further impacts on viability if the introduction of space standards to a particular development means that the site configuration or unit mix needs to be changed. In some circumstances it may be possible to deliver the same number of units on a site even when higher space standards are imposed. Developers may be able to reduce the amount of external space provided with dwellings on site or, in some circumstances for example, can add an extra floor onto a block of flats to achieve the same number of units and compensate for extra space needed in each unit. Whether the configuration of units in a scheme can be changed to accommodate extra space in the flatted units depends on both the site specific circumstances and the willingness of the developer and local planning authority.
- 11 In some circumstances it may not be possible to simply add another storey to a block of apartments or change the site configuration to secure more internal space within the individual units. In these situations, the additional space provided in individual units will reduce site densities and therefore the number of units that can be achieved on site. According to the viability model, lower densities generally reduce viability at the margins and so this might be a consequence of implementing space standards if flexibilities cannot be achieved elsewhere. The other implication is that, if fewer units can be achieved on a site where English Partnership Space Standards are implemented, all other things being equal this will mean that the Council need to provide more land to achieve its housing targets.

## Density

- 12 In most scenarios both increasing and decreasing densities from the mid density assumption of 70 dwellings per hectare (dph) in urban areas and 45 dph in suburban areas reduces rates of return. The mid-range density assumptions are based on the levels that have been typical of developments in recent years. However, there are some scenarios where increasing densities could improve the rate of return and therefore improve viability. Larger suburban sites appear to perform better under the higher density scenario (which assumes 55dph) than under the mid density scenario of 45dph or the lower density scenario of 35dph. This suggests that there may be scope to enhance the prospect of affordable housing provision by varying density requirements in suburban areas.
- 13 It is also important to note that densities, size mix and English Partnerships Space Standards interact - optimising one of these factors in isolation of the others could affect viability. Higher density developments *with* EP space standards appear to be quite significantly affected in terms of viability. This is because our assumptions expect higher densities to result in a greater proportion of flats and these are affected by the cost of the space standards. Conversely, lower densities result in a higher proportion of houses on site. Under our assumptions these are not as significantly affected by the additional costs involved with applying English Partnership Space Standards.

## Tenure of Affordable Housing

- 14 The results indicate that changes in the mix of affordable housing produce relatively small differences in the rates of return secured under both with grant and without grant scenarios, and with different affordable housing quotas. Increased proportions of shared ownership deliver slight increases in returns under some circumstances. The implication for policy is that flexibility regarding tenure mix would make sense in helping to bring forward marginal schemes, but will only benefit schemes really at the margins of viability given the small impact such changes have on rates of return. Such a policy position may also be helpful since the demand for shared ownership change with market sentiment and the cost and availability of finance.

## Small Sites (under 15 units)

- 15 The broad message of the analysis is that small sites appear to be no less viable than larger sites; and have similar ability to deliver affordable housing without or with grant. There is no reason therefore in terms of economic viability not to extend affordable housing policies to all residential developments. However, some caution must be adopted since smaller the site, the more very specific site characteristics may dominate viability, and the less generic assumptions on costs and values may hold true. Havant Borough Council would also need to consider the administrative costs (eg grant, negotiations etc) in implementing affordable housing policies on sites with fewer than 15 units compared to the benefits in securing increased affordable housing delivery.

## 1. About This Assessment

- 1.1 DTZ was commissioned in 2008 by Havant Borough Council to examine the likely impact of a range of emerging affordable housing policies on development viability. The assessment also considers the impact of English Partnership Space Standards on development viability and therefore the scope of Havant Borough Council to encourage developers to apply these standards to all new build housing in the Borough with the objective of improving the quality and sustainability of new homes.
- 1.2 The assessment follows on from the South Hampshire HMA (2004 and 2006), also prepared by DTZ, which verified the need for additional affordable housing within the Borough and across the wider PUSH sub-region. The South Hampshire HMA suggests that the PUSH authorities need as much affordable housing as they can realistically secure, given the level of housing need identified. However, how far Havant can secure affordable housing through new development depends on the economics of development on specific sites. This is given explicit recognition in paragraph 29 of Planning Policy Statement 3 (Housing) which requires local authorities to set targets for the amount of affordable housing to be provided but that these should reflect an assessment of the likely viability of land for housing within the area.

### Study Purpose and Objectives

- 1.3 A growing proportion of affordable housing is delivered through Section 106 Agreements and tied to the delivery of market housing. It is increasingly important therefore that affordable housing policy is realistic, taking into account the dynamics of the housing market as well as housing need issues. The HMA suggested that up to 40% affordable housing should be secured through new development on the basis of housing need. However, the HMA did not consider the impact of affordable housing or other policies on viability. This viability assessment is designed to ensure that policy proposals put forward by the Borough Council do not prevent sites from coming forward and stifle development of both affordable and market housing.
- 1.4 The key objectives of the assessment are to assess the impact on economic viability of a number of key variables:
- The extent to which 40% affordable housing can be delivered (on sites capable of achieving 15 or more units)
  - The impact of applying English Partnerships Space Standards to all new homes
  - Whether or not grant is available for affordable housing units
  - On smaller sites (eg 10-14 units) how far affordable housing quotas can be achieved
  - Whether altering the tenure split could assist in delivery a greater overall proportion of affordable housing, particularly in areas where proposed quotas may be difficult to achieve
  - The viability of affordable housing quotas and English Partnerships Space Standards in different value areas (areas of high, medium and lower house prices)
  - The impact of different site sizes, locations (urban/ suburban) and densities of development on viability

## Study Approach

- 1.5 It is important to test viability in a range of different development scenarios in order to understand how viability varies with site size, differences in values of the housing developed and in different locations across the Borough. To achieve this, we developed a typology of different types of sites that are likely to come forward for housing, based on the type of developments delivered in Havant in recent years and the type of sites allocated or identified in the emerging Strategic Housing Land Availability Assessment.
- 1.6 The range of sites reflects differences in site values, site size, density and whether the hypothetical development is located in a predominantly urban or suburban location (rural sites were excluded since there were unlikely to be any in the future development pipeline). This approach allows different policy options to be tested in a consistent manner across a range of likely development scenarios. This would not be possible in the same way had the study focused on actual sites where the particular features of those sites would inevitably have made it difficult to generalise about viability.
- 1.7 Central to the assessment of the viability of housing development is the concept of residual land value.<sup>1</sup> Residual land value is the value that can be attributed to the land when the total costs of the development, including an allowance for profit, is deducted from the sales values of the housing built on the site. If the residual land value is higher than the existing use value then the development can be deemed viable; if it is below then the development will not be considered viable by the market.
- 1.1 The majority of developers assess the viability of a prospective development by calculating residual land value. Having calculated its residual present value developers use discounted cash flow<sup>2</sup> analysis to calculate the Internal Rate of Return (IRR)<sup>3</sup> for the project. IRR calculation is a technique that allows different investment options to be compared on a like for like basis. The higher a project's IRR, the more desirable it is to undertake.
- 1.8 For the purpose of this assessment DTZ have assumed, based on our experience of working with developers, that a developer will require a minimum IRR of 10% if they are to proceed with the development of a small scheme, defined as being of less than 50 units; and that the developer will require an IRR of 12.5% when developing sites of more than 50 units. The higher level required for larger sites reflects the higher risks associated with larger developments. Developments that would yield less than these thresholds are deemed not to be viable since they do not generate the target rate of return.

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1 This valuation approach is employed for property with development or redevelopment potential. This equation is: Completed Development Value *less* Planning and Construction cost *less* on-costs and finance costs *less* Developers Profit = Residual Land Value.

2 A Discounted Cash Flow (DCF) valuation approach is used to value a project using the concept of the time value of money. All estimated future cash flows are discounted by a % value usually representing interest on finance to return the future cash flows to a present value.

3 IRR – the rate of interest at which the future outflows and inflows of money are discounted to return a zero net present value.

- 1.9 In summary, the key questions the assessment addresses are whether the level of affordable housing and the balance of tenure proposed can be delivered, whether a particular level of affordable housing will inhibit development generally, and by implication what level of affordable housing provision can delivered with and without subsidy? The assessment shows how viability is affected and when subsidy is likely to be required. The study also tests the impact of introducing English Partnership Space Standards on all new build housing, a policy which the Borough Council are considering introducing in the future.

## **Report Structure**

- 1.10 The rest of this report is structured as follows:
- Section 2 presents information on the policy context in Havant including national policy on affordable housing provision and emerging policies within the Borough and the PUSH sub-region
  - Section 3 sets out in more detail the approach and assumptions that underpin the viability assessment
  - Section 4 presents the results of the analysis
  - Section 5 draws out the implications for policy for Havant Borough Council's consideration



## 2. Policy Context

- 2.1 This section provides the policy context for the subsequent assessment of viability. It examines national policy guidance on planning for affordable housing provision and the relevance of viability to policy making. The section then goes on to consider the current and emerging housing policies in Havant and the wider PUSH sub-region. Current policies in Havant's adopted Local Plan are subject to review as the Borough Council move towards completion of its Local Development Framework.

### National Planning Policy and Affordable Housing Provision

- 2.2 The key statement of the Government's policies for planning and affordable housing provision is Planning Policy Statement 3: Housing, published in November 2006. Affordable housing in PPS3 is defined as follows: *Affordable housing includes social rented and intermediate housing, provided to specified eligible households whose needs are not met by the market. Affordable housing should:*
- Meet the needs of eligible households including availability at a cost low enough for them to afford, determined with regard to local incomes and house prices.
  - *Include provision for the home to remain at an affordable price for the future eligible households or, if these restrictions are lifted, for the subsidy to be recycled for alternative affordable housing provision.*
- 2.3 PPS3 makes clear that the Government's aim is that the planning system ensures that enough land is identified and brought forward for development of new housing in line with targets established through the Regional Spatial Strategies.
- 2.4 However, at the local level, the Government recognises that sufficient land supply will only be delivered if policies towards affordable housing and other development contributions are realistic and viable; otherwise there is a risk that land values fall below that which is sufficient to provide an incentive for the landowner or developer to bring a particular site forward. This is reflected in PPS3 (paragraph 29) which places a requirement on local authorities to set a target for affordable housing provision to be delivered through Section 106 policies that takes into account the need for development to be viable, once allowance is made for factors such as the availability of grant funding.
- 2.5 PPS3 indicates that local authority affordable housing policies need to be developed on the basis of a robust evidence base. Policy must be deliverable, not merely aspirational. However, while detailed guidance is available on the assessment of housing need and demand, there is no formal government guidance on how viability should be tested. PPS3 was prepared before the current slowdown in the housing market and the government has not advised local authorities on how they should respond to changes in market context as they develop their policies.
- 2.6 This report was prepared in 2008, a year into the current downturn in the market, which started to take hold following the credit crunch in August 2007. DTZ's view is that it is inevitable that viability studies will be undertaken at a particular point in time, and reflect a

particular set of market circumstances, but the information they yield on how viability varies by site size, development context etc remains useful for policy making even in a changed market environment. Planning policies for affordable housing also need to be set for the long term, and should have sufficient flexibility to cope with short term changes in the market.

- 2.7 This does imply, however, that authorities need a degree of flexibility in the application of their policies. The existing system allows for developers to make the case to authorities that a policy requirement cannot be delivered on a particular site given the particular circumstances of that site. Some inherent flexibility in how policy requirements for affordable housing can be met is built into the system by options to change the tenure mix (between social rented and intermediate housing for sale) and availability of grant.
- 2.8 It is well known that developers, when acquiring sites in a competitive situation, do not always fully allow for the costs full affordable housing provision in accordance with policy. Similarly, developers will not immediately adjust their bid prices to reflect changes in affordable housing and/or planning policy. It should not be the role of planning policy to compensate developers who have overpaid for land or misjudged other aspects of development costs or revenues by simply adjusting the level of affordable housing that should be delivered on a site.
- 2.9 However, local authorities need to appreciate how development viability is assessed, and to be in a position to negotiate where necessary over affordable housing requirements, while seeking to ensure that policies can be applied to the majority of developments. The balance between being sufficiently robust and forceful to ensure that every application is not the subject of negotiation, while being sufficiently flexible to recognise special circumstances is a difficult balance to strike, but it is in the interests of both the development industry and local authorities to find the right balance.
- 2.10 Government could greatly help authorities by providing greater guidance on how to translate the findings of viability studies into local policy, and by ensuring flexibility in the funding of affordable housing – so that affordable housing provision is not totally dependent on provision through Section 106 agreements, and by ensuring there is flexibility in when grant for affordable housing provision will be available.

#### **PUSH Sub-Regional Policy Context**

- 2.11 The Partnership for Urban South Hampshire's key objective is to improve the economic performance of the sub-region by achieving a growth rate of 3.5% per annum by 2026 and to move the sub-region more in line with the South East region. As part of PUSH's strategy for economic growth the sub-regional partnership recognises the need to increase housing provision, including affordable housing. The PUSH authorities have agreed to a common framework for the provision of affordable housing throughout the sub-region to ensure a consistent approach. This should create certainty for the development industry and also ensure that individual authorities are not played off against each other.
- 2.12 Objectives on housing delivery and affordable housing for the PUSH sub-region are set out in the South Hampshire Sub-Regional Statement in the Draft South East Plan. Policy SH12 states that *'at least 30% of all new housing planned for 2006-2026 needs to be affordable in order to address a backlog of existing unmet need and to provide for newly arising needs. In order to achieve this target, 30-40% of housing on new development sites should be*

*affordable housing*.<sup>4</sup> The policy recognises that achieving this level of affordable housing will 'require substantial Government funding'.

- 2.13 The Sub-Regional Statement acknowledges that individual Local Development Documents will determine the proportion of housing on development sites which should be affordable but that these should reflect the objective to achieve the overall target at the PUSH sub-regional level.
- 2.14 The PUSH draft common affordable housing framework sets out more detail on the nature of affordable housing provision and the way in which it is delivered. The following objectives are relevant to this viability study:
- Local authority grant funding or commuted sums should be used to provide added value through higher design standards and higher levels of energy efficiency of new affordable homes
  - 65% of affordable homes within the overall quota should be social rented with the remaining 35% for affordable home ownership (often referred to as intermediate housing).
  - Developments should aim to deliver affordable housing with reduced levels of public subsidy
  - The PUSH authorities will seek to apply a site size threshold of 10 dwellings in urban areas, above which affordable housing will be required as part of the development
  - New affordable housing should meet the Code for Sustainable Homes (2007) levels as set out in the PUSH Core Strategy Sustainability Policy Framework. Currently, all residential development should achieve Level 3, rising to Level 4 from 2012 and Level 6 from 2016.

## **Havant Local Policy Context**

### **Level of Affordable Housing Provision**

- 2.15 Havant Borough Council's current affordable housing policy, as set out in the Local Plan requires 30% of the total dwellings provided on new housing developments as affordable housing, on sites of 0.5 ha/15 dwellings or more, having regard to the individual site suitability. The policy goes on to state that the affordable dwellings are to be integrated with the other housing built on the site except where the Council and developer agree they should not be provided on the same site. In these cases, an exception will be made to provide affordable housing in an alternative location or by means of a commuted payment.
- 2.16 Havant Borough Council's existing affordable housing policy is being reviewed through the preparation of the new Local Development Framework. The proposal is to introduce a policy of up to 40% affordable housing on development sites of 10 or more units, in line with PUSH's Common Affordable Housing Framework. Given that housing need within Havant and across

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<sup>4</sup> The preferred method for calculating the affordable housing requirement is based on the number of bedrooms rather than units. This implies that the proportion of affordable units on site could be higher or lower than 40% in some circumstances depending on the mix of dwellings provided.

the South Hampshire sub-region is significant there is a case for maximising the supply of affordable housing through new development. The key question for the Borough Council is how far can Havant maximise affordable housing provision, securing up to 40% on new development sites?

### **Affordable Housing Site Size Threshold**

- 2.17 Havant's current site size threshold is 15 units and there is no current proposal to reduce this threshold in the new Local Development Framework. However, the viability assessment examines viability on smaller sites and is able to shed light on the question of whether this threshold could or should be reduced. It is also relevant to note that in the wider PUSH sub-region there is a proposal to reduce thresholds to include sites of 10-14 units. Given the number of smaller sites that have been developed in the past and likely to come forward in the future it is useful to examine whether there is scope for securing contributions from smaller sites, particularly in higher value locations within the Borough where development economics are likely to be more robust.

### **Tenure**

- 2.18 Havant Borough Council currently propose a split between social rented and intermediate housing of 65:35, prioritising the provision of social rented accommodation. This viability assessment considers whether viability can be improved in some scenarios by reducing the social rented component in favour of intermediate housing. This recognises that in some circumstances there may be a need to be flexible over tenure mix to improve viability.
- 2.19 Havant Borough Council also expect affordable housing to be integrated into new developments with clusters of not more than 10 affordable homes in order to prevent mono-tenure development and to encourage a mixed communities. It is not practical to test this in the viability model. However, we assume that the affordable housing size mix mirrors that of the market housing which implies that integration of affordable and market units should be achieved easily in the scenarios modelled.

### **Standards**

- 2.20 Another priority for the Council is to consider the viability of implementing English Partnerships Space Standards across all new build properties. English Partnerships Space Standards are applied to new homes on sites owned or delivered by English Partnerships and ensure homes with different numbers of bedrooms provide sufficient space; or rather a more generous amount of space than has been delivered on private developments in recent years.
- 2.21 There are concerns within Havant Borough Council about the type and size of new homes that have been delivered in recent years. The Council is concerned in particular that the new flats delivered are too small in terms of the amount of space they provide for the number of bedrooms and therefore unsustainable in the longer term.
- 2.22 Havant Borough Council would like to consider applying EP Space Standards to new development for both market and affordable housing but need to consider the impact that this might have on development viability. Providing more space implies higher build costs for

developers and perhaps a different unit mix or lower densities which would impact on the value of the scheme.

- 2.23 In line with the PUSH Sustainable Development Framework the Council are also proposing to require that new developments meet Level 3 of the Code for Sustainable Homes, that this standard move up to Level 4 by 2012 and Level 5 by 2016, in line with the proposed policy in the Draft South East Plan (2007).

### **Density**

- 2.24 The viability assessment has tested different site densities and the impact that this has on development viability when other variables are held constant. Havant Borough Council's draft Strategic Housing Land Availability Assessment (SHLAA) sets out density assumptions for the range of sites in the development pipeline. Different assumptions are made for sites depending on proximity to transport hubs and local services, with the following ranges as a result
- 30-50 dph
  - 50-70 dph
  - 70-90 dph
  - 90-110 dph
- 2.25 These ranges are broadly consistent with those tested in this assessment although the highest range (90-110 dph) is higher than our highest scenario which tests 90dph. Furthermore, the draft SHLAA also refers to good practice examples of well designed new developments which, on average, yielded densities of around 35 dwellings per hectare. The SHLAA suggests this would be a good average to apply across all sites therefore in Havant. We propose to test a range of densities, set out in Section 3.

### **Type and Size of Sites**

- 2.26 Over the past 5 years, there have been housing completions in all areas of the Borough but in the last 2 years there has been more of a focus on Havant town as a result of large previously developed sites coming through the pipeline. Overall, over the last 5 years, 77-100% of completions have been on previously developed sites and many of these sites have been small.
- 2.27 The draft SHLAA reviews existing allocations and permissions and considers sites which might be included in forthcoming site allocations development plan documents. The types of sites identified provide a framework for the viability assessment in terms of the type of sites likely to come forward, their characteristics, and implications for development viability.
- 2.28 According to the draft SHLAA, the types of sites likely to come forward over the plan period fall into the following broad categories:
- Sites within existing urban areas

- Around 2,260 homes could be delivered on sites within the 5 main existing urban areas: Waterlooville (790 homes); Leigh Park (720 homes); Havant (1,060 homes); Emsworth (70 homes) and Hayling Island (30 homes)
  - There are a further 3 sites which are allocated for employment uses but may be surplus to requirements and it is possible that these sites could deliver housing in the future.
- Urban extensions
    - There is scope to deliver around 2,670 sites on urban extensions within the Borough (though these are not expected to come forward until after 2012)
  - The West of Waterlooville MDA
    - Around 600 homes at West Waterlooville have planning permission and are likely to be built out in the short term.
  - Unidentified sites (windfall)
    - Historically, around 50 homes per annum have been developed on small windfall sites (1-4 units)
- 2.29 Within these broad categories the sites fall into a range of different sizes, planning statuses and some will have existing uses eg industrial or amenity uses. The viability assessment takes account of this development context by examining urban and suburban sites, different site sizes and different value areas etc. However, for the purposes of this assessment we have assumed that sites have planning permission for residential development. Small windfall sites will fall below the affordable housing threshold and so we are not proposing to test viability on such sites and due to the nature of the Borough we are not proposing to test viability in rural locations.

### 3. Approach and Assumptions

- 3.1 The approach adopted in this assessment uses standard techniques of development appraisal common place in the development industry. The assessment uses Discounted Cash Flow (DCF) analysis to calculate the Internal Rate of Return (IRR) for developments with particular characteristics (see Appendix A for a more detailed explanation of the IRR calculation and DCF analysis).
- 3.2 The assessment calculates the IRR under a range of different development scenarios designed to be broadly representative of the type of sites likely to come forward for development in Havant Borough. A scheme is deemed to be viable if it achieves a certain defined IRR – 10% on sites yielding less than 50 dwellings, and 12.5% on sites entailing development of more than 50 dwellings.
- 3.3 The assessment has involved three main stages.
- Market research to determine land values, unit sizes, unit mixes and capital values of both the private and affordable units. The selection of the development scenarios to be examined was also informed by discussions with the Council and the draft Strategic Housing Land Availability Assessment (SHLAA).
  - DTZ agreed assumptions regarding key variables with Havant Borough Council, based upon the evidence gathered. The financial appraisal model used to test viability was also developed at this stage.
  - A series of runs of the financial model tested the viability of development on the archetypal sites, and how this would be affected by the application of different requirements for affordable housing provision and the introduction of English Partnerships space standards.
- 3.4 The assessment is therefore tailored to the specific requirements of Havant Borough Council. It takes account of the range of different circumstances applying across the Borough, but does not seek to capture or analyse the specific circumstances of hundreds of individual housing sites in the Borough. To do this would have been impossible in practical terms and inappropriate for a strategic study designed to inform policy development.
- 3.5 By focusing on the development of suite of archetypal sites that capture much of the variety of the range of housing sites likely to come forward in Havant, it has been possible to analyse different sites on a consistent basis. This allows conclusions to be drawn to questions such as *'how does increasing the affordable housing requirement from 30% to 40% affect viability?'*; *'does allowing a higher proportion of shared ownership in the affordable housing mix improve viability?'* and *'to what extent does the introduction of English Partnership space standards impact on viability?'*
- 3.6 By implication the study does not analyse viability on a specific housing site that might come forward in future. There will always be a wide range of specific circumstances that will affect viability on a particular site, and a developer will assess these in determining whether to proceed. In addition developers are not homogenous. They vary in their appetite for risk, and have different requirements in terms of returns. Indeed those requirements may change in different market contexts. The development appraisal technique developed for this study could however be readily applied to an individual site if required.



- 3.7 It is important also to note that the analysis undertaken for the study was prepared during 2008, and the data on land values, sales prices and a number of other variables relate to the first half of 2008. Some of these variables will have changed since the analysis was undertaken. The housing market is a dynamic market and any study can only provide a snapshot of viability. The approach adopted in this assessment, however, illuminates the relationship of viability to particular variables. It is therefore of particular value in informing the development of policy that will need to be robust enough to be applied in different housing market contexts.
- 3.8 The rest of this section sets out the assumptions on which the analysis is based, and the sources of information that underpin those assumptions. In a strategic assessment such as this it is necessary to generalise, but where appropriate we comment on how the specific circumstances of particular sites, the expectations of the developer, or how the costs and revenues of a project may vary from the assumption and hence affect the viability of that particular development.

### **General Assumptions**

- 3.9 This assessment tests viability on the basis of current costs and revenues as applicable in the first half (January to July) of 2008. The model tests viability on the assumption that the sites subject to testing have secured planning permission and there are no abnormal costs associated with their development. It has been important to use this as the basis of analysis to allow like for like comparison of how different policy options affect viability. In reality each site will be different and there are always elements of costs that are specific to the development of a particular site, but these can only be assessed on a site by site basis. Developer returns are also often a composite of the actual development of the residential component of site and returns on the process of securing land value enhancement through securing change of use permission on this site.
- 3.10 The generic assumption has been made that developers of sites generating less than 50 dwellings will require a minimum return (IRR) of 10% and those developing sites generating 50 or more dwellings will require a return (IRR) of 12.5%. These are the typical minimum rates of return, based on DTZ's experience, which developers of residential schemes will require. Schemes that fall below these target rates of return are deemed not to be viable, and those that meet or exceed the target rate of return are deemed to be viable. The higher level of return on larger schemes is required because of the higher risk entailed.
- 3.11 It is important to acknowledge that the returns sought by different developers and how they secure it through the whole development process will vary. Developers will take into account a range of factors relating to the risk profile of a scheme, such as scheme size, time to delivery, location and other market factors, in determining what an acceptable rate of return is. As noted developers may secure their return through a composite process of land assembly, securing permission for development, and the actual development process; and the target rates of return may differ as market conditions change. Such complexity cannot be modelled in a strategic study such as this.
- 3.12 Finally it has been necessary as part of the appraisal to make assumptions about sales rates and interest rates. We have assumed average sales rates for developments which were common before the housing market downturn ie on small sites (0.1 - 0.25ha we assume units



are sold out within a three year period, 4 years on medium sized sites of 0.5 - 1ha and 5 years on larger sites of 3ha). The interest rates used in the model are those applying in the first half of 2008. In 2008, sales rates on current developments have generally fallen, so the average time taken to sell new homes has increased in most areas. This will have a substantial effect on development cash flows and the developer's expected returns. However, the focus of this study is on informing policy that can endure through many different phases of the housing market so it has not been deemed appropriate to try to model short term different movements in the financial and housing markets.

### **The Key Variables for Scenario Testing**

- 3.13 The focus of this assessment has been to test the viability of achieving 40% affordable housing provision within Havant. This level has been tested because the PUSH common affordable housing framework sets a target to achieve 40% of affordable housing on new development sites. However, individuals authorities are expected to determine their own policies based on local conditions. Havant Borough Council understand that 40% may not be achievable in some parts of the Borough and therefore wish to test where it might be possible and what level of affordable housing could be secured elsewhere; or whether the addition of grant could add value and enable a higher quota to be achieved.
- 3.14 A second key objective has been to test the impact of the introduction of English Partnership Space Standards on viability so that the Council can consider the merits of encouraging new build housing to meet these standards. The assumptions used to set these standards are described further on in this section.
- 3.15 The key variables that have been tested in the viability model are as follows:
  - Affordable housing quota
  - Housing Corporation Grant
  - English Partnerships Space Standards
  - Site size
  - Location
  - Density and Dwelling Mix
  - Value Area
    - land values
    - sales values of new market homes
    - sales values of new affordable housing units
  - Affordable Housing mix

## Site Size

- 3.16 The main analysis has focused on assessing viability on sites of 0.1ha, 0.25ha, 0.5 ha, 1.0 ha and 3.0 ha. The number of units that these sites yield depends on the density assumption. Density assumptions also vary between urban and suburban locations (see below).

## Location

- 3.17 The price paid for land, the sales value of new homes, unit mix and density vary systematically with location. The categorisation agreed with Havant was to consider sites in urban (town centre) locations and suburban locations.
- 3.18 The classification of sites into urban and suburban categories was chosen in preference to choosing specific geographic areas or neighbourhoods. Combining this with definition of different value areas (see below) provided an opportunity to test a wide range of options in terms of viability.

## Density and Dwelling Mix

- 3.19 The density of development on a site affects the overall number of units provided for a given land area and hence is a key factor determining the sales values to be derived from a particular plot of land. The absolute number of affordable units provided, whatever the quota, is also determined by the overall number of units to be built, and hence is also affected by the density of development.
- 3.20 The density of development varies systematically with site location (urban and suburban). DTZ has therefore identified the development densities that should be applied to sites in each of these locations. The figures used are based on typical densities of recent development in each location, with a high, medium and low density figure identified so as to enable testing of the degree to which changes in density affect viability.
- 3.21 The density assumptions, expressed as dwellings per hectare (dph), are as follows:
- |          |              |   |                     |
|----------|--------------|---|---------------------|
| Urban    | High Density | - | 90 dph <sup>5</sup> |
|          | Mid Density  | - | 70 dph              |
|          | Low Density  | - | 60 dph              |
| Suburban | High Density | - | 55 dph              |
|          | Mid Density  | - | 45 dph              |
|          | Low Density  | - | 35 dph              |
- 3.22 Within each location and density DTZ have made assumptions on unit mix based on experiences within the market, the South Hampshire HMA and consultation with Havant Borough Council. Assumptions on unit mix for market housing are included in Appendix B.

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<sup>5</sup> 80 dph was tested initially as our high density scenario but revised to reflect recent developments within Havant which have achieved higher densities. We report results for both 80 and 90 dph in Section 4.

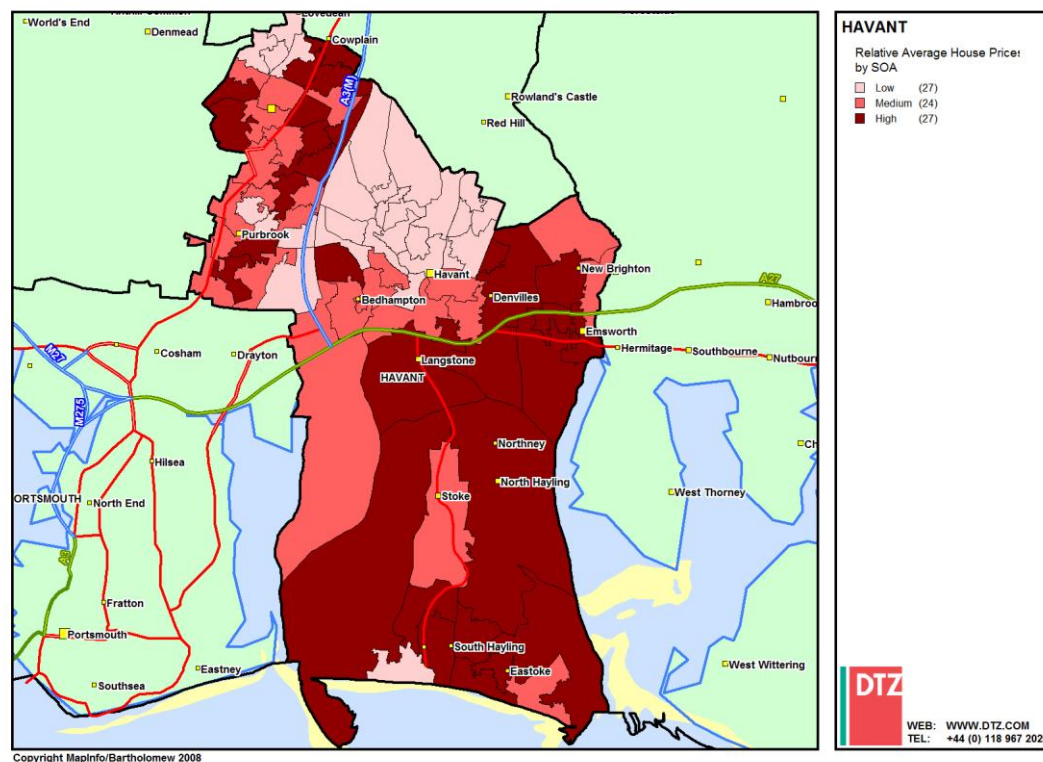
We have assumed the affordable housing mirrors the mix of market housing in terms of unit type and size for two main reasons.

- The emerging affordable housing policy in the PUSH sub-region expects affordable housing quotas to be calculated on the number of bedrooms rather than units. By assuming an identical mix in terms of type and size for the market and affordable homes this means that 30% or 40% affordable housing in terms of overall units equates to 30% or 40% affordable housing in terms of number of bedrooms.
- Analysis of Havant Borough Council's housing waiting lists demonstrates that there is a need for a range of different sizes of affordable homes. Whilst delivery has been dominated by smaller flats in recent years in terms of priority housing need there is a requirement for a broader mix of affordable housing including larger houses. Thus, where we have assumed that a development scenario will deliver 3, 4 and 5 bed houses for the market we have assumed that the affordable proportion will mirror this mix. In some circumstances this may not be practical or appropriate but we consider this the correct assumption to make in terms of policy and therefore in modelling viability.

#### **Value Area**

- 3.23 The sales values of new homes and land values vary across the Borough. This will have a significant effect on the viability of new housing development in different areas. For this reason we have identified three 'value areas', defined simply as high, medium and low, and for these identified the relevant sales values and land values that should be applied in the viability testing (see below under headings Land Values and Sales Values of Private and Affordable Housing).
- 3.24 Broadly these low, medium and high value areas correspond to the pattern of average house prices across the Borough (Figure 3.1). However it should be noted that new development, particularly on large schemes can, under some circumstances, establish new value levels that are not constrained by existing second hand housing prices. Figure 3.1 is therefore illustrative of how values vary across the Borough rather than definitive.

**Figure 3.1: House Prices in Havant, Low, Medium and High Value Areas**



- 3.25 Data on land values and sales values was collected from actual developments and through contact with agents. Information relates to January-July 2008. However, depending on the depth and duration of the housing market slowdown, these may not be applicable during the second half of 2008 and for future years until the market recovers.

### Land Value

- 3.26 This assessment has worked on the basis that the cost of land should be based on the actual price being paid for land by developers. However, in the first half of 2008 there have been very few land transactions to inform this assumption.<sup>6</sup> Discussions with land agents operating in the area suggest that land values in Havant typically equated to around 25-30% of Gross Development Value. We inputted this into the model with the result that an urban site in a high value area equated to around £3.3m per hectare and lower value areas equated to around £2.8m per hectare. We then cross checked the resulting land values with information on the value of residential building land sourced from the Valuation Office Agency property market report (January 2008). The VOA report does not provide values for Havant specifically but figures for Portsmouth suggest a range of residential land values from £3.1m to £3.6m per hectare. However, this does not guarantee that land owners are willing to bring forward their sites, particularly as falls in house prices impact on land values. Indeed, falls in land values

<sup>6</sup> One site currently under offer in a prime location in the Borough is likely to be sold at a rate equivalent to around £3.9m per ha

are disproportionate to falls in house prices since development costs broadly stay the same and so the value of the land is either squeezed significantly or the land owner decides not to sell, waiting for a more favourable market. The behaviour of individual landowners and developers in a falling market is likely to vary according to their financial position.

- 3.27 A developer buying residential land will have taken into account development costs, including affordable housing, when preparing their residual valuation of the land. This valuation will have informed their bid price for the land. Land prices therefore incorporate a discount based on the developer's expectation of how much affordable housing they will have to provide. DTZ would expect land values in the study area to be discounted to reflect current policy requirements for affordable provision equivalent to 30% of the units being built.
- 3.28 In reality a developer may not have fully allowed for provision of the level of affordable housing required in policy believing that they can negotiate a lower level of provision. Where land has been acquired historically and policy has moved on, often this will be compensated for by rising land values. Where a developer has acquired land, perhaps because of intense competition for land, and not made full allowance for provision of affordable housing in the price they have paid, policy should not seek to compensate for this miscalculation. Nevertheless this might result in reluctance on behalf of the developer to bring forward the site for development until land values have increased sufficiently to offset their miscalculation.

## Sales Values of New Market Homes

- 3.29 Average sales values of new market homes (expressed on a £ per square foot basis) are based on data for *new* housing developments across the study area. The sales values assumed are set out in Figure 3.2 for different sized units, in high, medium and low value areas in the study area, differentiated for urban and suburban sites.

**Figure 3.2: Private Revenue Assumptions**

Unit	Value Area	Area sq ft (sq m)	Urban	Suburban
1 Bed Flat	High	500 (46)	£150,000	£135,000
	Mid		£140,000	£125,000
	Low		£130,000	£169,000
2 Bed Flat	High	650 (60)	£188,500	£156,500
	Mid		£175,000	£143,750
	Low		£162,000	£195,000
3 Bed Flat	High	800 (74)	£225,960	£201,750
	Mid		£209,820	£185,610
	Low		£193,680	£169,470
2 Bed House	High	800 (74)	£224,000	£200,000
	Mid		£208,000	£184,000
	Low		£192,000	£168,000
3 Bed House	High	1000 (93)	£270,000	£240,000
	Mid		£250,000	£220,000
	Low		£230,000	£200,000
4 Bed House	High	1300 (121)	£338,000	£299,000
	Mid		£312,000	£273,000
	Low		£286,000	£247,000
5 Bed House	High	1600 (149)	£400,000	£352,000
	Mid		£368,000	£320,000
	Low		£336,000	£288,000

## Revenues from Affordable Housing Provision

- 3.30 A developer also generates revenues from the sales of affordable housing units to RSLs. DTZ has derived estimates of these revenues from talking to RSLs, notably those that are development partners of the Council.<sup>7</sup>
- 3.31 The revenues generated from sales of affordable housing differ depending on whether the unit is for social renting or is a shared ownership unit. Figure 3.3 sets out the assumed revenues

<sup>7</sup> RSLs consulted did not provide specific prices paid for social rented or shared ownership units, rather they quoted a package price for the affordable housing on a development scenario which was used by DTZ to generate assumptions for the revenue from individual units in Figures 3.3 and 3.4

generated from the development of new social rented housing, estimated for different value areas, site locations and dwelling type. Figure 3.4 sets out the same information regarding revenues generated from sale of shared ownership units. It has been assumed that all intermediate housing takes the form of shared ownership, with 40% of the equity being sold to the occupier and 60% retained by the association.

- 3.32 It has been assumed in this study that all affordable homes will find an RSL buyer. It is worth noting however that RSLs may be disinclined to buy (or be party to development of) small numbers of units, where these would be inefficient for them to manage. This would be most likely to be an issue where a scheme only produces a very small number of affordable housing units. This issue needs to be taken into account in thinking about the practicality of applying affordable housing targets to very small schemes and sites, though it is not insurmountable.

**Figure 3.3: Revenues Generated from New Social Rented Homes**

Unit	Value Area	Area (sq ft) (sq m)	Urban	Suburban
1 Bed Flat	High	500 (46)	£60,000	£54,000
	Mid		£56,000	£50,000
	Low		£52,000	£46,000
2 Bed Flat	High	650 (60)	£75,400	£67,600
	Mid		£70,200	£62,400
	Low		£65,000	£57,200
3 Bed Flat	High	800 (74)	£90,400	£80,700
	Mid		£83,900	£83,900
	Low		£77,500	£77,400
2 Bed House	High	800 (74)	£89,600	£80,000
	Mid		£83,200	£73,600
	Low		£76,800	£67,200
3 Bed House	High	1000 (93)	£108,000	£96,000
	Mid		£100,000	£88,000
	Low		£92,000	£80,000
4 Bed House	High	1300 (121)	£135,200	£119,600
	Mid		£124,800	£109,200
	Low		£114,400	£98,800
5 Bed House	High	1600 (149)	£160,000	£140,800
	Mid		£147,200	£128,000
	Low		£134,400	£115,200

**Figure 3.4: Revenues Generated from New Shared Ownership Homes**

Unit	Value Area	Area sq ft (sq m)	Urban	Suburban
1 Bed Flat	High	500 (46)	£105,000	£94,500
	Mid		£98,000	£87,500
	Low		£91,000	£80,500
2 Bed Flat	High	650 (60)	£131,900	£118,300
	Mid		£122,850	£109,200
	Low		£113,750	£100,100
3 Bed Flat	High	800 (74)	£158,200	£141,200
	Mid		£146,900	£129,900
	Low		£135,600	£118,600
2 Bed House	High	800 (74)	£156,800	£140,000
	Mid		£145,600	£128,800
	Low		£134,400	£117,600
3 Bed House	High	1000 (93)	£189,000	£168,000
	Mid		£175,000	£154,000
	Low		£161,000	£140,000
4 Bed House	High	1300 (121)	£236,600	£209,000
	Mid		£218,400	£191,100
	Low		£200,200	£172,900
5 Bed House	High	1600 (149)	£280,000	£246,400
	Mid		£257,000	£224,000
	Low		£235,200	£201,600

### **Affordable Housing Mix**

- 3.33 The base assumption used in the modelling exercise has been that 65% of the affordable housing built will be for social renting and 35% for shared ownership. However consideration has been given to the impact on viability of changing this proportion with the option of 50% social rent/50% shared ownership tested.

### **Housing Corporation Grant Funding**

- 3.34 The base assumption for the modelling has been that grant is not available for affordable housing provision. However, it is important to understand the extent to which grant can enhance viability where this is a problem. The additional income associated with grant aid is additional income to the development, being added to the price paid by the RSLs when units are handed over. We have tested a scenario where grant is provided at £50,000 per social rented unit and £21,000 per shared ownership unit. This assumption is based on discussions with the Council and their experience of grant levels on recent sites in Havant.



### English Partnerships Space Standards

- 3.35 English Partnerships require homes built on sites they own to be built to minimum internal floor areas in relation to the number of bedrooms and occupancy:
- 1 bedroom/ 2 person homes: 51 sq m
  - 2 bedrooms/ 2 person homes: 66 sq m
  - 2 bedrooms/ 3 person homes: 77 sq m
  - 3 bedrooms/ 5 person homes: 93 sq m
  - 4 bedroom/ 6 person homes: 106 sq m
- 3.36 This assessment has tested viability when English Partnership's Space Standards *are* used and when an average assumption is made about internal floor areas (ie when EP standards are not applied). DTZ make the following assumptions about the internal floor area provided when EP standards *are not* used; though we do not make any assumptions for occupancy since this is outside of anyone's control other than for social rented accommodation:
- 1 bedroom flat: 46 sq m (500 sq ft)
  - 2 bedroom flat 60 sq m (650 sq ft)
  - 3 bedroom flat 74 sq m (800 sq ft)
  - 1 bedroom house 56 sq m (650 sq ft)
  - 2 bedroom house 74 sq m (800 sq ft)
  - 3 bedroom house 93 sq m (1,000 sq ft)
  - 4 bedroom house 121 sq m (1,300 sq ft)
  - 5 bedroom house 149 sq m (1,600 sq ft)
- 3.37 It is obvious from the comparison of average floorspace assumptions with the English Partnerships space standards that the key difference is that the English Partnership standards would increase the internal floor area of flats. Thus, the impact which is modelled in this study is the cost of providing extra space in flats. All other things being equal, larger units cost more to build as the cost of building an individual unit is related to the size of the unit.
- 3.38 There are also likely to be other impacts on viability which it is not practical to model in this strategic assessment:
- Impact on revenue from private dwellings ie flats with a larger floor area should command higher prices but it is difficult to assess whether this would actually happen in practice (at least when standards are first introduced) since buyers are not used to this way of measurement.
  - Impact upon site configuration which might have knock on consequences for density and dwelling mix.
- 3.39 Although we are not able to model these impacts, Section 5 comments on the implications for policy, bearing these likely effects in mind.

## Other Assumptions

- 3.40 The model incorporates a number of other assumptions which have been held constant for all aspects of the viability. These are as follows:
- 3.41 **Building Costs:** The building costs used in the viability model are taken from the average residential costs on the Building Cost Information Service<sup>8</sup>, re-based using a location index of 103 for Hampshire. The assessment uses the build cost per square foot of gross internal area, excluding external works and contingencies and with preliminaries apportioned by cost. These rates were correct as of August 2008. However, DTZ's building consultancy team have advised that the build costs reported in BCIS appear on the low side so we make a slightly higher assumption in the model. This view was confirmed through discussion with a developer of a recent scheme in the Borough. This allowance should also enable all housing to meet the design standards to Level 3 of the Code for Sustainable Homes. Recent research by CLG<sup>9</sup> has estimated that Level 3 can be achieved at an additional cost of £41-57 per sq m (£4-5 per sq ft) depending on the development scenario and house type. Our assumptions with regard to building costs cover this additional cost.
- 3.42 On the basis set out above, building costs used in the modelling for private and affordable flats and houses are:
- Private Flat - £120 per sq ft (£1,292 per sq m)
  - Private House - £110 per sq ft (£1,184 per sq m)
  - Affordable Flat - £140 per sq ft (£1,507 per sq m)
  - Affordable House - £130 per sq ft (£1,399 per sq m).
- 3.43 It is acknowledged that for any particular scheme build costs will be affected by site conditions, the configuration of the scheme and the target market at which it is aimed. Large schemes may be able to achieve significant economies of scale. Building costs will also be affected by cost of materials and fuel, but are also likely to reflect the level of activity in the construction sector. However, for the purposes of a strategic study, it is necessary to use typical build costs, allowing for the Code for Sustainable Homes Level 3.
- 3.44 **Section 106 Costs other than Affordable Housing:** Most residential developments will not only be expected to provide affordable housing as part of a Section 106 agreement but to also contribute to other costs imposed by the public sector on the development, such as highway works, provision of community facilities etc. These represent an additional cost imposed on the development and therefore need to be taken into account.
- 3.45 Based on consultation with Havant Borough Council it has been assumed that the following additional costs will be incurred in connection with Section 106 agreements:

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<sup>8</sup> The Building Cost Information Service (BCIS) is the UK property market's leading provider of construction cost and price information. Costs are quoted on a per square metre gross internal floor area basis and are location and build function specific. The costs were last updated 16<sup>th</sup> August 2008.

<sup>9</sup> CLG (July 2008) Cost Analysis of the Code for Sustainable Homes

- Urban            -            £6,000 per unit
- Suburban      -            £5,000 per unit

3.46 **Demolition Costs and Site Preparation Costs:** An allowance of £1.50 per sq ft (£16 per sq m) has been made for demolition and site preparation costs. Site preparation costs on a site with contamination would be significantly higher and this would affect viability on any such site being considered for residential development. However the extent of such costs and the effect on viability would need to be assessed on a site specific basis.

3.47 **Other Costs:** Other standard allowances and costs made in the modelling exercise are as follows:

- Cost of finance of 6.75% per annum has been assumed
- Professional fees assumed at 10% of construction cost
- Disposal costs including marketing and sales expenses for private units assumed at 3% of Gross Development Value
- Site acquisition costs of 6% of land value
- Inflation of 3.5% on costs and 2.5% on revenue.

### The Scope of this Study

3.48 It is important to appreciate that a strategic viability model such as that developed is not designed to test the viability of specific sites. One of the features of residential development is that the character of sites is varied, and the level of costs and the revenues that apply to development on a specific site will vary. This should however be reflected in the price that is paid for the land. Even so costs and revenues are often not predictable and assumptions about the future change in costs and revenues may be proved wrong, delivering either above expected returns or below expected returns.

3.49 This assessment cannot seek to encompass all the potential differences in individual site circumstances that affect viability. The assessment therefore provides a broad assessment of viability in the study area. This is what is needed to inform the setting of affordable housing and other policies. Those policies will, however, need to be sufficiently flexible to take into consideration changes in the market context, especially if they are long lived; but also changes in national policy relating to planning and affordable housing provision.

## 4. Results of Viability Model

4.1 This section focuses on the results of the viability modelling. The findings are presented for a number of different scenarios designed to shed light on particular policy issues with particular regard to affordable housing policy and English Partnerships space standards. This section is structured as follows:

- Scenario 1: The Impact of Different Value Areas on Viability
- Scenario 2: The Impact of Introducing Grant Aid for Affordable Housing
- Scenario 3: The Impact of English Partnerships Space Standards on Viability
- Scenario 4: The Impact of the Density of Development on Viability
- Scenario 5: The Impact of Affordable Housing Tenure Mix on Viability
- Scenario 6: The Viability of Smaller Sites

### Scenario 1: Value Areas

4.2 Scenario 1 focuses on how viability varies according to the prevailing pattern of land values and house prices in Havant – referred to as the value zones. This scenario tests how changing the affordable housing requirement from 30% to 40% affects viability on presumption that grant is not available to fund affordable housing. The initial scenario, Scenario 1a, tests viability on a 30% affordable housing requirement; Scenario 1b tests viability with a 40% requirement.

4.3 The scenarios test viability for five different sizes of sites in two different locations:

- Sites of 0.1ha, 0.25ha, 0.5ha, 1 ha, and 3ha
- Sites in urban and suburban locations

4.4 It should be noted that different density assumptions are applied to sites in urban and suburban locations and therefore sites of the same size but in different locations provide different numbers of new housing.

4.5 All other variables in this scenario are held constant. Thus:

- The density assumptions applied to the different locations (urban and suburban) are the mid-range density assumptions ie 45 dph in suburban areas and 70 dph in urban areas
- It is assumed that affordable housing will be delivered in the proportion of 65% social rented housing and 35% shared ownership.
- Required rate of return of 10% on sites entailing development of less than 50 dwellings and 12.5% on sites entailing development of 50 or more units.

4.6 Throughout the analysis a series of 'traffic lights' – colour codes are used to indicate if schemes are clearly viable, clearly not viable or close to the viability target. These colour codes are as follows:

- Green where the scheme is comfortably viable - where the IRR is more than 2.5% points above the target rate of return
- Red, where the scheme is clearly not viable – where the IRR is less than 2.5% below the target rate of return
- Yellow, where the scheme is close to the margins of viability and hence particular features of an individual site and scheme are likely to be important to whether it achieves viability (target IRR + 2.5% or – 2.5%)

#### Results of Scenario 1a

4.7 Scenario 1a tests the impact on viability, given the above assumptions, of requiring a 30% provision of affordable housing, without grant. Figure 4.1 summarises the results, showing the Internal Rate of Return.

4.8 The message that this scenario conveys is that a 30% affordable housing quota with no grant towards affordable housing provision is not generally achievable across the Borough although some sites in high value zones are viable or on the margins of viability. For medium and low value areas, achieving this level of affordable housing without grant would render development unviable.

**Figure 4.1: Scenario 1a - Viability with 30% Affordable Housing Requirement (with no grant); Developer Space Standards**

IRR Viability Target 10% pm on sites <50 units, 12.5% on sites of 50 & over units						
<span style="color: green;">●</span> IRR >2.5% above target <span style="color: yellow;">●</span> IRR ± 2.5% from target <span style="color: red;">●</span> IRR < 2.5% below target						
Location	Site Size in ha	No of Dwellings	Value Zone			
			High % IRR	Mid %IRR	Low %IRR	
Urban	0.1	7	<span style="color: green;">●</span> 19.7	<span style="color: green;">●</span> 16.4	<span style="color: yellow;">●</span> 12.7	
	0.25	18	<span style="color: yellow;">●</span> 12.3	<span style="color: yellow;">●</span> 8.2	<span style="color: red;">●</span> 3.7	
	0.5	35	<span style="color: yellow;">●</span> 10.6	<span style="color: red;">●</span> 7.0	<span style="color: red;">●</span> 2.9	
	1	70	<span style="color: yellow;">●</span> 13.1	<span style="color: red;">●</span> 7.2	<span style="color: red;">●</span> 3.2	
	3	210	<span style="color: yellow;">●</span> 10.0	<span style="color: red;">●</span> 6.8	<span style="color: red;">●</span> 3.2	
Suburban	0.1	5	<span style="color: green;">●</span> 19.1	<span style="color: green;">●</span> 15.2	<span style="color: red;">●</span> 5.9	
	0.25	11	<span style="color: green;">●</span> 18.6	<span style="color: yellow;">●</span> 14.6	<span style="color: yellow;">●</span> 10.0	
	0.5	23	<span style="color: yellow;">●</span> 9.0	<span style="color: red;">●</span> 4.7	<span style="color: red;">●</span> -0.1	
	1	45	<span style="color: yellow;">●</span> 9.4	<span style="color: red;">●</span> 5.0	<span style="color: red;">●</span> 0.1	
	3	135	<span style="color: red;">●</span> 9.1	<span style="color: red;">●</span> 5.3	<span style="color: red;">●</span> 5.1	

## Results of Scenario 1b

- 4.9 Scenario 1b tests the impact on viability of requiring a 40% provision of affordable housing, without grant. Figure 4.2 presents the results. Given, that 30% without grant was only achievable on a small number of sites in the higher value areas it follows that a 40% affordable housing quota without grant for affordable housing provision is broadly unachievable or at best marginal in the higher value areas in terms of viability.

**Figure 4.2: Scenario 1B - Viability with 40% Affordable Housing Requirement (with no grant)**

IRR Viability Target 10% pm on sites <50 units, 12.5% on sites of 50 & over units						
<span style="color: green;">●</span> IRR >2.5% above target <span style="color: yellow;">●</span> IRR ± 2.5% from target <span style="color: red;">●</span> IRR < 2.5% below target						
Location	Site Size in ha	No of Dwellings	Value Zone			
			High % IRR	Mid %IRR	Low %IRR	
Urban	0.1	7	<span style="color: green;">●</span> 12.5	<span style="color: yellow;">●</span> 8.6	<span style="color: red;">●</span> 4.2	
	0.25	18	<span style="color: red;">●</span> 6.7	<span style="color: red;">●</span> 2.1	<span style="color: red;">●</span> -3.0	
	0.5	35	<span style="color: yellow;">●</span> 7.8	<span style="color: red;">●</span> 3.7	<span style="color: red;">●</span> -0.8	
	1	70	<span style="color: yellow;">●</span> 12.0	<span style="color: red;">●</span> 4.6	<span style="color: red;">●</span> 0.2	
	3	210	<span style="color: red;">●</span> 7.7	<span style="color: red;">●</span> 4.2	<span style="color: red;">●</span> 0.2	
Suburban	0.1	5	<span style="color: green;">●</span> 19.1	<span style="color: green;">●</span> 15.2	<span style="color: red;">●</span> 5.9	
	0.25	11	<span style="color: red;">●</span> 6.0	<span style="color: red;">●</span> 0.9	<span style="color: red;">●</span> -4.9	
	0.5	23	<span style="color: red;">●</span> 5.1	<span style="color: red;">●</span> 0.2	<span style="color: red;">●</span> -5.5	
	1	45	<span style="color: yellow;">●</span> 8.0	<span style="color: red;">●</span> 3.3	<span style="color: red;">●</span> -2.0	
	3	135	<span style="color: red;">●</span> 6.1	<span style="color: red;">●</span> 1.9	<span style="color: red;">●</span> -3.1	

## Indicative Conclusions from Scenario 1

- 4.10 Based on scenario 1 which tests the effect of different affordable housing quotas without grant on viability for different value areas yields we can draw the following broad conclusions:
- The value area in which a scheme is located is a key variable in determining viability. The analysis suggests it would be difficult to achieve even 30% affordable housing without grant in medium and low value zones if new developments in those zones are constrained by the pattern of prevailing land values and prices.
  - However, in the high value areas the analysis would indicate it should be possible to achieve a 30% affordable housing provision without grant; albeit some sites may be marginal. However, a 40% target without grant renders development in all areas unviable.
- 4.11 Small sites (0.1 - 0.25 ha) yield higher returns than the larger sites but this is largely because affordable housing provision has been rounded down to the nearest whole unit ie the quota is less onerous. There is also a pattern that suburban sites generally provide lower returns than urban sites and this is likely to be because we have assumed lower site densities in suburban areas. This impact of density is tested further on in this section.

- 4.12 The analysis points to importance of the prevailing values to viability. For the purposes of this study, it has been assumed that the prevailing values in an area (used to define the value zones) do impinge on the sales values that can be achieved for new housing. Logically this must be true to some extent because the second hand market in a local market constrains the values that can be secured for new housing.
- 4.13 However to some extent existing values may be determined by the existing mix of the stock and therefore new homes may be able to achieve a bigger premium over existing values than in other area. New developments may also be able to establish new value levels that are different to the prevailing norms by providing quite a different style and quality of development that establishes a new market in a locality. This issue is relevant to the redevelopment of areas such as Leigh Park within Havant Borough which is expected to deliver new housing as part of a wider regeneration initiative.
- 4.14 This consideration needs to be weighed in the formulation of policy and the consideration of whether affordable housing targets should vary between value zones. It is also important to keep in mind that in scenario 1 we have assumed mid density development and a split of 65:35 social rented and shared ownership housing. These assumptions are tested for their impact on viability further on in this section and the results suggest it might be possible to improve viability in some circumstances by optimising these factors.

## **Scenario 2: The Impact of Introducing Grant Aid for Affordable Housing**

- 4.15 Scenario 2 continues the analysis presented in Scenario 1 and uses exactly the same assumptions with one exception; namely the assumption that grant is available. Under this scenario we assume that grant is available and equates to £50,000 per social rented unit and £21,000 per shared ownership unit.
- 1.11 This scenario looks at the impact of grant when the affordable housing requirement is set respectively at 30% or 40%. Again, the traffic lights system is used to show how grant aid of the specified amount changes the viability of schemes in different locations, site size and in different value zones, compared to the situation with no grant.
- 4.16 Figure 4.4 shows in Scenario 2a how this level of grant changes viability when there is an affordable housing requirement of 30%. Figure 4.5 replicates this for when the affordable housing level is 40%.
- 4.17 Figure 4.4 shows that with a 30% affordable housing requirement, grant brings most schemes in mid and low areas into the right territory (yellow dots) for viability to be achieved, where without grant aid the majority of schemes in mid and low value areas were clearly not viable (see Figure 4.1). Similarly the availability of grant improves viability in the high value areas making all schemes that fell below the target rate of return (albeit marginally) generate returns above the target rate. In those schemes in high value areas where grant aid was not required for viability (see Figure 4.1) grant merely improves the return to the developer.

**Figure 4.4: Scenario 2a – Impact on Viability with 30% Affordable Housing Requirement and Grant Aid of £50,000 per Social Housing Unit; £21,000 for shared ownership**

IRR Viability Target 10% pm on sites <50 units, 12.5% on sites of 50 & over units					
<span style="color: green;">●</span> IRR >2.5% above target <span style="color: yellow;">●</span> IRR ± 2.5% from target <span style="color: red;">●</span> IRR < 2.5% below target					
Location	Site Size in ha	No of Dwellings	Value Zone		
			High % IRR	Mid %IRR	Low %IRR
Urban	0.1	7	<span style="color: yellow;">●</span> 26.2	<span style="color: yellow;">●</span> 22.4	<span style="color: green;">●</span> 18.2
	0.25	18	<span style="color: green;">●</span> 23.9	<span style="color: green;">●</span> 19.5	<span style="color: green;">●</span> 14.7
	0.5	35	<span style="color: yellow;">●</span> 21.4	<span style="color: green;">●</span> 17.6	<span style="color: green;">●</span> 13.3
	1	70	<span style="color: yellow;">●</span> 21.7	<span style="color: green;">●</span> 17.4	<span style="color: yellow;">●</span> 13.2
	3	210	<span style="color: green;">●</span> 19.1	<span style="color: green;">●</span> 15.8	<span style="color: yellow;">●</span> 12.1
Suburban	0.1	5	<span style="color: green;">●</span> 25.5	<span style="color: green;">●</span> 21.0	<span style="color: green;">●</span> 15.6
	0.25	11	<span style="color: green;">●</span> 25.0	<span style="color: green;">●</span> 20.4	<span style="color: green;">●</span> 15.2
	0.5	23	<span style="color: green;">●</span> 18.3	<span style="color: green;">●</span> 13.8	<span style="color: yellow;">●</span> 8.7
	1	45	<span style="color: yellow;">●</span> 18.6	<span style="color: green;">●</span> 13.7	<span style="color: yellow;">●</span> 8.2
	3	135	<span style="color: green;">●</span> 17.1	<span style="color: yellow;">●</span> 13.0	<span style="color: red;">●</span> 8.2

4.18 Figure 4.5 shows that with a 40% affordable housing requirement, as with the results under 30% affordable housing, grant brings almost all schemes in higher value areas into full viability, and brings schemes in mid-value areas either into viability or into the right territory in terms of viability. It does not do enough however to improve the returns to render all development in low value areas viable with a 40% affordable housing requirement.

**Figure 4.5: Scenario 2a - Impact on Viability with 40% Affordable Housing Requirement and Grant Aid of £50,000 per Social Housing Unit and £21,000 Shared Ownership**

IRR Viability Target 10% pm on sites <50 units, 12.5% on sites of 50 & over units					
<span style="color: green;">●</span> IRR >2.5% above target <span style="color: yellow;">●</span> IRR ± 2.5% from target <span style="color: red;">●</span> IRR < 2.5% below target					
Location	Site Size in ha	No of Dwellings	Value Zone		
			High % IRR	Mid %IRR	Low %IRR
Urban	0.1	7	<span style="color: yellow;">●</span> 24.9	<span style="color: yellow;">●</span> 20.7	<span style="color: green;">●</span> 16.0
	0.25	18	<span style="color: green;">●</span> 22.6	<span style="color: green;">●</span> 17.7	<span style="color: yellow;">●</span> 12.3
	0.5	35	<span style="color: yellow;">●</span> 20.5	<span style="color: green;">●</span> 16.3	<span style="color: yellow;">●</span> 11.7
	1	70	<span style="color: yellow;">●</span> 21.5	<span style="color: green;">●</span> 16.6	<span style="color: yellow;">●</span> 12.1
	3	210	<span style="color: green;">●</span> 18.2	<span style="color: yellow;">●</span> 14.7	<span style="color: yellow;">●</span> 10.8
Suburban	0.1	5	<span style="color: green;">●</span> 25.5	<span style="color: green;">●</span> 21.1	<span style="color: green;">●</span> 15.6
	0.25	11	<span style="color: green;">●</span> 19.3	<span style="color: green;">●</span> 13.8	<span style="color: yellow;">●</span> 7.7
	0.5	23	<span style="color: green;">●</span> 17.2	<span style="color: yellow;">●</span> 12.1	<span style="color: red;">●</span> 6.3
	1	45	<span style="color: yellow;">●</span> 18.6	<span style="color: green;">●</span> 13.6	<span style="color: yellow;">●</span> 8.0
	3	135	<span style="color: green;">●</span> 15.9	<span style="color: yellow;">●</span> 11.6	<span style="color: red;">●</span> 6.6



## Indicative Conclusions from Scenario 2

- 4.19 The analysis undertaken for Scenario 2 indicates that grant can have a significant impact on the viability of schemes, and will have a material bearing on the achievement of higher levels of affordable housing provision. Grant would be widely required to deliver a 30% affordable housing targets in mid and low value areas but at the levels assumed in this assessment there may be some sites in low value areas that remain unviable or marginal and crucially these are larger sites where the potential to deliver affordable housing is greatest.
- 4.20 Grant would be widely required to deliver a 40% affordable housing target in high and mid value areas but the majority of sites in low value areas remain marginal, particularly the larger sites. Clearly increasing the level of grant to these sites would improve viability which may be desirable given the potential then to apply a 40% quota across the Borough; though this would imply subsidy on all sites and significant subsidy on those in low value areas which would need to be weighed against the benefit of the additional affordable units delivered.

## Scenario 3: The Impact of English Partnerships Space Standards on Viability

- 4.21 Scenario 3 continues the analysis presented in Scenarios 1 and 2 and uses exactly the same assumptions but with the introduction of English Partnership Space Standards to new housing developments.
- 4.22 This scenario looks at the impact of English Partnership Space Standards when the affordable housing requirement is set respectively at 30% or 40%. Again, the traffic lights system is used to show how grant aid of the specified amount changes the viability of schemes in different locations, site size and in different value zones.

**Figure 4.6: Scenario 3a - Impact on Viability of Applying English Partnership Space Standards with 30% Affordable Housing Requirement and No Grant Aid**

IRR Viability Target 10% pm on sites <50 units, 12.5% on sites of 50 & over units						
<span style="color: green;">●</span> IRR >2.5% above target <span style="color: yellow;">●</span> IRR ± 2.5% from target <span style="color: red;">●</span> IRR < 2.5% below target						
Location	Site Size in ha	No of Dwellings	Value Zone			
			High % IRR	Mid %IRR	Low %IRR	
Urban	0.1	7	<span style="color: green;">●</span> 16.0	<span style="color: green;">●</span> 12.5	<span style="color: yellow;">●</span> 8.7	
	0.25	18	<span style="color: yellow;">●</span> 7.5	<span style="color: red;">●</span> 3.3	<span style="color: red;">●</span> -1.3	
	0.5	35	<span style="color: red;">●</span> 6.6	<span style="color: red;">●</span> 2.8	<span style="color: red;">●</span> -1.4	
	1	70	<span style="color: red;">●</span> 9.4	<span style="color: red;">●</span> 3.1	<span style="color: red;">●</span> -1.1	
	3	210	<span style="color: red;">●</span> 6.5	<span style="color: red;">●</span> 3.1	<span style="color: red;">●</span> -0.7	
Suburban	0.1	5	<span style="color: green;">●</span> 17.7	<span style="color: green;">●</span> 13.7	<span style="color: red;">●</span> 3.9	
	0.25	11	<span style="color: green;">●</span> 16.8	<span style="color: green;">●</span> 12.7	<span style="color: yellow;">●</span> 8.1	
	0.5	23	<span style="color: red;">●</span> 7.2	<span style="color: red;">●</span> 2.9	<span style="color: red;">●</span> 2.0	
	1	45	<span style="color: yellow;">●</span> 7.5	<span style="color: red;">●</span> 3.1	<span style="color: red;">●</span> 2.0	
	3	135	<span style="color: red;">●</span> 7.5	<span style="color: red;">●</span> 3.6	<span style="color: red;">●</span> 0.9	

- 4.23 Figure 4.6 shows that on site applying English Partnerships Space Standards with a 30% affordable housing requirement and no grant, development in all value areas is broadly unviable; though note that even without applying the standards only high value areas were in viable territory (see Figure 4.1). Under the English Partnership Space Standards suburban sites perform slightly better than urban. The reason for this is because the Space Standards only impact on flats and so have a greater cost impact on the higher density urban schemes where a greater proportion of the housing mix on site is assumed to be flatted development.
- 4.24 The availability of grant improves viability in the high and mid value areas making all schemes that fell below the target rate of return (albeit marginally) generate returns above the target rate (see Figure 4.7). Sites in low value areas remain unviable even with the addition of grant, with the exception of smaller sites. This contrasts with the results (see Figure 4.4) where spaces standards are not applied which shows that sites in low value are in the right territory in terms of viability.

**Figure 4.7: Scenario 3b - Impact on Viability of Applying English Partnership Space Standards with 30% Affordable Housing Requirement and Grant Aid**

IRR Viability Target 10% pm on sites <50 units, 12.5% on sites of 50 & over units						
<span style="color: green;">●</span> IRR >2.5% above target <span style="color: yellow;">●</span> IRR ± 2.5% from target <span style="color: red;">●</span> IRR < 2.5% below target						
Location	Site Size in ha	No of Dwellings	Value Zone			
			High % IRR	Mid %IRR	Low %IRR	
Urban	0.1	7	<span style="color: green;">●</span> 22.0	<span style="color: green;">●</span> 18.1	<span style="color: green;">●</span> 13.7	
	0.25	18	<span style="color: green;">●</span> 18.4	<span style="color: green;">●</span> 13.8	<span style="color: yellow;">●</span> 8.9	
	0.5	35	<span style="color: green;">●</span> 16.6	<span style="color: green;">●</span> 12.7	<span style="color: yellow;">●</span> 8.2	
	1	70	<span style="color: green;">●</span> 17.4	<span style="color: yellow;">●</span> 12.5	<span style="color: red;">●</span> 8.1	
	3	210	<span style="color: yellow;">●</span> 15.0	<span style="color: yellow;">●</span> 11.5	<span style="color: red;">●</span> 7.6	
Suburban	0.1	5	<span style="color: green;">●</span> 23.9	<span style="color: green;">●</span> 19.4	<span style="color: green;">●</span> 13.3	
	0.25	11	<span style="color: green;">●</span> 23.0	<span style="color: green;">●</span> 18.3	<span style="color: green;">●</span> 13.0	
	0.5	23	<span style="color: green;">●</span> 16.3	<span style="color: yellow;">●</span> 11.7	<span style="color: red;">●</span> 6.5	
	1	45	<span style="color: green;">●</span> 16.7	<span style="color: yellow;">●</span> 12.0	<span style="color: red;">●</span> 6.6	
	3	135	<span style="color: green;">●</span> 15.4	<span style="color: yellow;">●</span> 11.3	<span style="color: red;">●</span> 6.5	

- 4.25 Given, that English Partnership Space Standards at 30% affordable housing without grant were only achievable on a small number of sites in the higher value areas it follows that a 40% affordable housing quota with no grant towards affordable housing provision is broadly unachievable, or at best marginal, in terms of viability (Figure 4.8). However, the addition of grant brings both high and mid value sites into the right territory with only low value sites remaining unviable (figure 4.9).

**Figure 4.8: Scenario 3c - Impact on Viability of Applying English Partnership Space Standards with 40% Affordable Housing Requirement and No Grant Aid**

IRR Viability Target 10% pm on sites <50 units, 12.5% on sites of 50 & over units					
<span style="color: green;">●</span> IRR >2.5% above target <span style="color: yellow;">●</span> IRR ± 2.5% from target <span style="color: red;">●</span> IRR < 2.5% below target					
Location	Site Size in ha	No of Dwellings	Value Zone		
			High % IRR	Mid %IRR	Low %IRR
Urban	0.1	7	<span style="color: yellow;">●</span> 8.1	<span style="color: red;">●</span> 4.1	<span style="color: red;">●</span> -0.4
	0.25	18	<span style="color: red;">●</span> 1.3	<span style="color: red;">●</span> -3.4	<span style="color: red;">●</span> -8.5
	0.5	35	<span style="color: red;">●</span> 3.3	<span style="color: red;">●</span> -0.9	<span style="color: red;">●</span> -5.7
	1	70	<span style="color: red;">●</span> 8.0	<span style="color: red;">●</span> 0.1	<span style="color: red;">●</span> -4.5
	3	210	<span style="color: red;">●</span> 3.8	<span style="color: red;">●</span> 0.1	<span style="color: red;">●</span> -4.1
Suburban	0.1	5	<span style="color: green;">●</span> 17.7	<span style="color: green;">●</span> 13.7	<span style="color: red;">●</span> 3.9
	0.25	11	<span style="color: red;">●</span> 3.8	<span style="color: red;">●</span> -1.4	<span style="color: red;">●</span> -7.2
	0.5	23	<span style="color: red;">●</span> 3.0	<span style="color: red;">●</span> -2.1	<span style="color: red;">●</span> -7.8
	1	45	<span style="color: red;">●</span> 6.0	<span style="color: red;">●</span> 1.2	<span style="color: red;">●</span> -4.3
	3	135	<span style="color: red;">●</span> 4.3	<span style="color: red;">●</span> -0.1	<span style="color: red;">●</span> -5.2

**Figure 4.9: Scenario 3d - Impact on Viability of Applying English Partnership Space Standards with 40% Affordable Housing Requirement and Grant Aid**

IRR Viability Target 10% pm on sites <50 units, 12.5% on sites of 50 & over units					
<span style="color: green;">●</span> IRR >2.5% above target <span style="color: yellow;">●</span> IRR ± 2.5% from target <span style="color: red;">●</span> IRR < 2.5% below target					
Location	Site Size in ha	No of Dwellings	Value Zone		
			High % IRR	Mid %IRR	Low %IRR
Urban	0.1	7	<span style="color: green;">●</span> 19.7	<span style="color: green;">●</span> 15.4	<span style="color: yellow;">●</span> 10.6
	0.25	18	<span style="color: green;">●</span> 16.1	<span style="color: yellow;">●</span> 11.1	<span style="color: red;">●</span> 5.6
	0.5	35	<span style="color: green;">●</span> 15.4	<span style="color: yellow;">●</span> 11.0	<span style="color: red;">●</span> 6.1
	1	70	<span style="color: green;">●</span> 16.9	<span style="color: yellow;">●</span> 11.4	<span style="color: red;">●</span> 6.6
	3	210	<span style="color: yellow;">●</span> 14.0	<span style="color: yellow;">●</span> 10.2	<span style="color: red;">●</span> 6.1
Suburban	0.1	5	<span style="color: green;">●</span> 23.9	<span style="color: green;">●</span> 19.4	<span style="color: green;">●</span> 13.3
	0.25	11	<span style="color: green;">●</span> 16.6	<span style="color: yellow;">●</span> 11.0	<span style="color: red;">●</span> 4.9
	0.5	23	<span style="color: green;">●</span> 14.7	<span style="color: yellow;">●</span> 9.5	<span style="color: red;">●</span> 3.6
	1	45	<span style="color: green;">●</span> 16.2	<span style="color: yellow;">●</span> 11.2	<span style="color: red;">●</span> 5.4
	3	135	<span style="color: yellow;">●</span> 13.9	<span style="color: yellow;">●</span> 9.5	<span style="color: red;">●</span> 4.3

### **Indicative Conclusions from Scenario 3**

- 4.26 Scenario 3, testing the effect of English Partnership Space Standards on different affordable housing quotas for different value zone yields the following broad conclusions:
- Overall, English Partnership Space Standards reduce returns slightly because of the additional cost of providing extra space in the flats on site. In some circumstances this is enough to move sites that were in viable territory under 30% affordable housing and no grant (eg larger sites in high value urban areas) into non-viability.
  - 30% and 40% was broadly unviable without grant under normal circumstances and so it is unsurprising that the addition of English Partnership Space Standards serves to reduce the returns under these scenarios on all sites, with only a few sites in high value areas retaining viability
  - The addition of grant moves sites in high and mid value areas into viability under both 30% and 40% affordable housing scenarios but low value areas remain unviable.
  - This is a simplistic way of testing EP space standards since in many circumstances it would be possible to increase density or change the housing mix to improve viability where it is adversely affected by the cost of providing more space in flats. Nevertheless, it demonstrates that, all other things being equal, there would be a cost involved in terms of viability to introduce this policy.

### **Scenario 4: The Impact of the Density of Development on Viability**

- 4.27 As part of the study DTZ also tested whether changing the density of development affects viability. If there were to be a systematic pattern by which viability is enhanced by increasing or reducing density, then the Council might wish to take this into account in developing policy. That is, they might wish to encourage more dense development if that would enhance viability and hence allow greater provision of affordable housing; or they might be willing to accept lower density development if that meant that scheme could go ahead and deliver some affordable housing without grant, where they might get no affordable housing if the scheme stalls because it is not viable.
- 4.28 The analysis, using the example of 30% affordable housing with grant is presented in Figure 4.10 and as with the previous analysis we examine rates of return on development assuming different densities (and by implication dwelling mix) on different sized sites in urban and suburban locations. The implications for viability of seeking different levels of affordable housing provision given different density assumptions are examined. To test the impact of density in isolation this scenario assumes the sites are situation in mid value areas.

**Figure 4.10: Scenario 4a - Impact on Viability of Varying Density Assumptions with 30% Affordable Housing Requirement and Grant Aid**

30% Grant							
Location	Site Size ha	High Density		Mid		Low Density	
		% IRR		% IRR		% IRR	
Urban	0.1	20.3%	●	22.4%	●	22.3%	●
	0.25	19.5%	●	19.5%	●	20.4%	●
	0.5	17.0%	●	17.6%	●	17.5%	●
	1	17.2%	●	17.4%	●	17.5%	●
	3	15.5%	●	15.8%	●	15.7%	●
Suburban	0.1	20.9%	●	21.0%	●	20.2%	●
	0.25	20.1%	●	20.4%	●	16.2%	●
	0.5	14.1%	●	13.8%	●	12.9%	●
	1	14.3%	●	13.7%	●	13.2%	●
	3	13.4%	●	13.0%	●	12.6%	●

- 4.29 In most scenarios both increasing and decreasing densities from the middle density assumption of 70 dwellings per hectare (dph) in urban areas and 45 dph in suburban areas reduces rates of return. The mid-range density assumptions are based on the levels that have been typical of developments in recent years. The results therefore suggest that the development industry – working interactively with the planning system – has been delivering development at levels that maximise returns. While changes in the market context and the relative price of different types of new housing may shift the relative advantage of developing at different densities, it suggests that the market has been working efficiently to maximise development value in urban and suburban areas. This suggests that there is little scope therefore to enhance the prospect of affordable housing provision by varying density requirements.
- 4.30 However, the results also show that there are some scenarios where increasing densities could improve the rate of return and therefore improve viability. Larger suburban sites appear to perform better under the higher density scenario (which assumes 55dph) than under the mid density scenario of 45dph or the lower density scenario or 35dph. This suggests that there may be scope to enhance the prospect of affordable housing provision by varying density requirements in suburban areas.
- 4.31 It is also worth highlighting the impact that the addition of English Partnership Space Standards would have under these different density scenarios. Figure 4.11 provides an example of the analysis for 30% affordable housing with grant when the standards are applied.

**Figure 4.11: Scenario 4b - Impact on Viability of Varying Density Assumptions with 30% Affordable Housing Requirement and Grant Aid with English Partnership Space Standards**

30% Grant							
Location	Site Size ha	High Density		Mid		Low Density	
		% IRR		% IRR		% IRR	
Urban	0.1	13.1%	●	18.1%	●	18.0%	●
	0.25	11.7%	●	13.8%	●	16.2%	●
	0.5	10.2%	●	12.8%	●	13.4%	●
	1	10.4%	●	12.7%	●	13.6%	●
	3	9.5%	●	11.7%	●	12.3%	●
Suburban	0.1	17.6%	●	19.4%	●	19.9%	●
	0.25	17.6%	●	18.3%	●	14.9%	●
	0.5	11.2%	●	11.7%	●	12.2%	●
	1	11.2%	●	11.4%	●	12.3%	●
	3	10.8%	●	11.0%	●	11.8%	●

- 4.32 Under this scenario, higher density appears to reduce returns across all sites – in some cases quite significantly. This is because our assumptions expect higher densities to result in a greater proportion of flats and these are affected by the cost of the space standards. Conversely, lower densities result in a higher proportion of houses on site which, under our assumptions are not affected by the additional costs involved with applying English Partnership Space Standards.

### Scenario 5: The Impact of Affordable Housing Mix on Viability

- 4.33 The assessment has also examined the impact that changing the mix of affordable housing has on viability. The base assumption in most of the modelling has been a split of 65% social rented housing and 35% shared ownership. The implications for rates of return of changing this mix to 50% social rented units and 50% shared ownership have also been considered. The implications of change under the scenarios of 30% and 40%.
- 4.34 The results indicate that changes in the mix of affordable housing generally produce marginal differences in the rates of return secured under both with grant and without grant scenarios, and with different affordable housing quotas (Figure 4.12 provides an example of this analysis for 30% affordable housing with grant). The scenario where shared ownership housing is increased tends to deliver slight increases in returns under some circumstances although on a significant proportion of sites the tenure split appears to make no difference.

**Figure 4.12: Scenario 5 - Impact on Viability of Varying Tenure Split with 30% Affordable Housing Requirement and Grant Aid**

<b>30% GRANT</b>						
Mid value, Mid Density						
Location	Site Size ha	No. Of Dwellings	65/35		50/50	
			% IRR		% IRR	
Urban	0.1	7	14.8%	●	14.8%	●
	0.25	18	14.7%	●	14.7%	●
	0.5	35	12.0%	●	12.5%	●
	1	70	12.0%	●	12.2%	●
	3	210	10.4%	●	11.1%	●
Suburban	0.1	5	10.8%	●	10.8%	●
	0.25	11	11.7%	●	11.7%	●
	0.5	23	9.5%	●	10.4%	●
	1	45	8.5%	●	9.7%	●
	3	135	8.4%	●	9.3%	●

- 4.35 The analysis indicates that the notion that increasing the proportion of shared ownership improves viability in *all* circumstances is invalid. There are circumstances where it does so – but the impact on viability is modest. But there are circumstances where increasing the proportion of shared ownership does not add value. This probably reflects the fairly complex way in which scheme mix (in terms of unit size) and the returns available for units of different size interact and the fact that the level of grant aid for social rented units is more significant than that for shared ownership units.
- 4.36 The implication for policy is that flexibility regarding tenure mix may make sense in helping to bring forward marginal schemes, but will only benefit schemes at the margins of viability given the small impact such changes have on rates of return. Such a policy stance may also be helpful since the demand for shared ownership can wax and wane with market sentiment and the cost and availability of finance.

## Scenario 6: The Viability of Smaller Sites

- 4.37 The viability testing indicates that the small sites tested – those comprising fewer than 15 units - consistently show better returns than those for larger sites. Figure 4.13 summarises viability for the different locations of schemes without grant and with grant (£50,000 per social housing unit and £21,000 for shared ownership). In practice given a 65/35 split the schemes are all dominated by social housing provision).
- 4.38 Where the affordable housing quota would indicate provision of 0.5 of a unit the provision of affordable housing units has been rounded down. The viability modelling has been undertaken on the basis that the small sites being tested are being developed in medium value areas, at middle range densities. The target rate of return is taken to be an IRR of 10%.

**Figure 4.13: Scenario 6 - Viability of Affordable Housing Provision with and without Grant (Mid Value Areas)**

IRR Viability Target 10% pm on sites <50 units, 12.5% on sites of 50 & over units					
<span style="color: green;">●</span> IRR >2.5% above target <span style="color: yellow;">●</span> IRR ± 2.5% from target <span style="color: red;">●</span> IRR > 2.5% below target					
Location	Site Size in Units	Level of Affordable Housing Provision			
		30%		40%	
		Without Grant	With Grant	Without Grant	With Grant
Urban	6	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: yellow;">●</span>	<span style="color: green;">●</span>
	7	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: yellow;">●</span>	<span style="color: green;">●</span>
	9	<span style="color: yellow;">●</span>	<span style="color: green;">●</span>	<span style="color: yellow;">●</span>	<span style="color: green;">●</span>
Suburban	4	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: green;">●</span>
	5	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: green;">●</span>
	6	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: green;">●</span>
	11	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: red;">●</span>	<span style="color: green;">●</span>

- 4.39 These small sites are consistently more likely to meet the viability threshold than the larger sites tested in the previous stages of the study, even where grant is not available. However, the key reason for this is that viability is significantly affected where the number of units to be provided is rounded to the nearest whole number because the application of the quota produces a figure comprising a part unit for provision. Rounding up (from anything over 0.5 of a unit to a whole unit) damages viability, often significantly. Rounding down, especially from anything just below 0.5 to the nearest whole unit, enhances viability.
- 4.40 The sensitivity of viability to this process of rounding following application of the affordable housing quota suggests that a better policy solution would be always to round down the number of affordable housing units to be provided; but then if possible to seek a contribution to affordable housing provision through a commuted sum, proportional to the part unit to be provided. Whilst Havant's policy would expect affordable housing units to be provided on site, clearly the contributions relating to part units would build up a fund to support off-site provision.



## 5. Policy Implications

- 5.1 The purpose of this assessment is to inform the development of the affordable housing and other emerging policies related to development within Havant Borough. The assessment addresses six key issues:
- What level of affordable housing provision is achievable and should Havant seek to increase provision from the current policy of 30%, in line with the emerging PUSH sub-region of 40% provision of affordable housing?
  - How far is grant required to make development viable within the Borough (and under what circumstances would the addition of grant just improve returns to developers)?
  - Could English Partnerships Spaces Standards be introduced across all new housing developments without making schemes unviable?
  - Could altering site densities improve viability and therefore contribute to enhanced delivery of affordable housing?
  - Could changing the tenure split between social rented housing and shared ownership, currently a 65/35 split, help deliver a higher proportion of affordable housing overall?
  - Could affordable housing quotas be extended to smaller sites, capable of delivering less than 15 units of new housing?
- 5.2 This final section of the report addresses these issues in turn. In doing so, DTZ draw upon the findings of the assessment, the analysis contained in the South Hampshire Housing Market Assessment, and wider experience of the operation of affordable housing policies.

### **Policy Implications for Affordable Housing Quotas**

- 5.3 During 2007, Havant Borough Council generally secured quotas of around 30% of affordable housing in residential developments of more than 15 units; though on some of these sites grant aid was also provided.
- 5.4 The viability assessment shows that increasing the quota of affordable housing by 10% typically decreases scheme profitability (IRR) in the region of 3% – 8% points. It also highlights that the key variable affecting viability with different levels of affordable housing quota is the value area in which a scheme is located.
- 5.5 The viability testing would indicate that a 30% affordable housing target should be deliverable without grant in high value areas, but that grant would probably be needed to support this level of provision in medium and low value areas. 40% affordable housing would need the support of grant in all but a few development scenarios in the Borough. With the level of grant tested in this study low value areas would still struggle to meet a 40% target even with grant.
- 5.6 It has been noted, however, that it may be possible for schemes in medium and lower value areas to establish a new benchmark in terms of value, that implies a higher new build premium over existing values. And indeed, English Partnerships space standards may contribute to achieving a higher premium, if households or investors are prepared to pay more for homes with additional space. Achieving a premium on existing values is more realistic on

large sites that are creating a new environmental context and offering a different lifestyle and housing product to that generally available in the area.

- 5.7 In deciding the level of affordable housing provision to be sought it is also important to consider what weight should be placed upon the current (2008) slow down in the housing market. Even if house prices have not fallen very far in Havant, sales rates of new homes have significantly slowed and this has an impact on development viability. But to what extent should policy reflect what may be a slowdown of only two or three years duration?
- 5.8 DTZ's view is that in establishing an appropriate target for affordable housing provision local authorities should not be unduly swayed by the current problems of the housing market; rather they should establish a policy that is robust in that it can be applied, with some flexibility, whatever the prevailing sentiment in the development market.
- 5.9 In achieving this objective the availability of grant aid should, if possible, be used flexibly to help achieve the policy objective at different stages in the market cycle. When the market is buoyant there should be less need to use grant; when the market is depressed grant may need to be used to secure development even on higher value sites. National government – through the Housing Corporation and, in future, the Homes and Communities Agency – should also adapt policy on grant levels to market conditions.
- 5.10 The level of other Section 106 contributions provide another area where flexibility can be applied to enable a particular policy on the level of provision of affordable housing to be applied in different housing market contexts, with willingness to rein back on imposing obligations at times when development is marginal; but seeking full contributions when the market is buoyant. Flexibility on the tenure mix of affordable housing provision can also help viability, though the way this helps viability is very specific to particular sites and times.
- 5.11 The analysis contained in this assessment would indicate that the following policies would be justified:
  - A standard quota of 30% without subsidy or 40% with subsidy in high value areas
  - A standard quota of 25% without subsidy or 40% with subsidy in medium value areas
  - A standard quota of 20% without subsidy or 30% with subsidy in low value areas.
- 5.12 Broadly across the study area a 30% target for affordable housing, based on a presumption that grant is not available would be consistent with the findings of this study, provided some degree of flexibility is built in, in terms of access to grant aid, or ability to reduce other commitments in lower value areas or at times when the market is depressed. A somewhat lower target (eg 20%) might be justified in lower value settlements; a higher target (eg 40%) might be appropriate in higher value areas when grant is available.
- 5.13 However, DTZ anticipate problems embedding the notion of differential quotas in different value areas in policy for four reasons:
  - First, this will require definition of the value areas, and the reality is that value areas do not have hard and fast boundaries; they blend into each other

- Second, value areas can change over time and to have a policy based on value areas would imply the need for some system of updating
- Third, there is the likelihood that some schemes, as noted above, are not constrained by the value geography in which they are located and can establish new values
- Finally, the use of value areas would create complexity for developers, when in reality developers would probably prefer simplicity, since that can then inform what they pay for land.

5.14 In view of these considerations DTZ would recommend that Havant Borough Council move towards an affordable housing quota that:

- Either specifies different affordable housing requirements in different settlements or geographies, since these broadly reflect value zones
- Or adopt a single quota that is uniform across the Borough but acknowledges that scheme economics will vary, and that this can be taken into account in negotiations and access to grant.

5.15 Figure 5.1 identifies some of the advantages and disadvantages of these two approaches. On balance DTZ suggest a target of 30% across the Borough might be the best approach. However, we would also recommend that the Council's Core Strategy or relevant DPD signals to developers that this policy will be monitored and if this quota is broadly achieved over the next 5 years the Council will review the relevant DPD with a view to increasing quotas, in line with the PUSH sub-regional objective of achieving up to 40%, either Borough wide or in specific areas or settlements within the Borough.

**Figure 5.1: Advantages and Disadvantages of Different Approaches to Quotas**

Option	Advantages	Disadvantages
30% Affordable Housing Quota throughout Havant Borough	<ul style="list-style-type: none"> <li>– Simplicity and certainty for developers and land owners; straightforward to factor in to their activities</li> <li>– Likely to be achievable in most areas of the Borough</li> <li>– Modest target more realistic in current market (with option to increase over time by reviewing DPD/ SPD)</li> </ul>	<ul style="list-style-type: none"> <li>– Not possible to negotiate higher quota on developments that might support it (but could have specific quotas on key sites based on masterplan and site specific viability appraisal)</li> </ul>
Different Quotas in Different Settlements eg indicatively: <ul style="list-style-type: none"> <li>– 30% in Havant town and main settlements</li> <li>– 40% across Hayling Island and Emsworth</li> <li>– 20% in Havant Regeneration Areas</li> </ul>	<ul style="list-style-type: none"> <li>– Possible to achieve higher quota and therefore more affordable housing overall in higher value areas (though likely to need grant and unlikely to be areas where majority of supply is being delivered)</li> <li>– Consistent with PUSH objective in Common Affordable Housing Framework to achieve up to 40%</li> </ul>	<ul style="list-style-type: none"> <li>– Still need to negotiate on site specific basis because of variability in values even within broad value areas (see discussion under para 5.13)</li> </ul>

### **Introduction of English Partnerships Space Standards**

- 5.16 The viability assessment suggests that 30% affordable housing is broadly unviable without grant, with the exception of high value areas. Overall, English Partnership Space Standards reduce returns to developers slightly because of the additional cost of providing extra space in the flats on site.
- 5.17 It is therefore unsurprising that the addition of English Partnership Space Standards serves to reduce the returns to developers on all sites apart from under a small number of scenarios in high value areas where viability is retained. In some circumstances this is enough to move sites that were in viable territory under 30% affordable housing and no grant into non-viability (eg larger sites in high value urban areas). The addition of grant moves sites in high and mid value areas into viability under both 30% and 40% affordable housing scenarios but low value areas remain unviable under the higher quota.
- 5.18 This is a simplistic way of testing English Partnerships space standards since in many circumstances it would be possible to increase density or change the housing mix to improve

viability where it is adversely affected by the cost of providing more space in flats. Nevertheless it demonstrates that, all other things being equal, there would be a cost involved with introducing this policy.

- 5.19 It is worth considering here the wider issues related to the introduction of English Partnership Space Standards that could not be tested through the modelling. The key issues, as far as viability is concerned, are:
- Whether the price of units which meet English Partnership space standards increases in proportion to the additional space provided
  - Whether English Partnership space standards are achieved through changes to design or through changes to mix
- 5.20 The viability model assumes that developers receive the same revenue for units that achieve English Partnerships Space Standards as that achieved for those with average space standards. The reason for this assumption is because there is uncertainty as to whether buyers would recognise the difference in, and be willing to pay extra for, flats which have the same number of bedrooms but which have a larger internal floorspace. Traditionally, buyers in the UK have focussed on number of bedrooms or rooms rather than floorspace and indeed floorspace is rarely advertised when houses and flats are marketed, other than in new apartments within London which have a much more international market.
- 5.21 In practice, developers would wish to pass on the extra cost associated with greater floorspace to purchasers if possible. This would result in higher purchase prices for the flats achieving English Partnership Space Standards and would mean, assuming the full cost was passed on, that higher space standards had a neutral effect on viability. However, this highlights that there is a trade off to be considered by policy makers: on the one hand the objective to provide homes with additional space to improve the quality of residents and on the other hand the objective to provide homes that are affordable to local residents (which has been achieved in recent years by building smaller units).
- 5.22 The second key issue which has not been tested as part of the viability assessment is *how* English Partnership Space Standards might be achieved. The viability model assumes that the space standards can be achieved simply within the existing density and dwelling mix.
- 5.23 This assumes that changes in the design of residential developments will deliver more space in individual units whilst density and mix remain the same. There is evidence that changes in design can make more efficient use of space including:
- The tendency, particularly within London, to add additional storeys onto new apartment developments in order to increase the number of units on a particular site, usually to help the development ‘stack up’ financially, particularly as affordable housing quotas were increased to 50% across London
  - The move to the development of 2½ to 3 storey houses – as distinct from 2 storey houses.

- The move to the development of terraces, either of town houses - 3 storey (often with integral garage) - or smaller 2 or 2 ½ storey terraces, in place of detached houses, which were more the norm in mid 1990s developments
  - Economising on external space within the curtilage of the dwellings; most commonly by limiting the distance from the front of the house to the highway, but also limiting parking space in accordance with old PPG3 guidelines, and reducing garden size.
- 5.24 These design measures, *without any change in dwelling mix*, can increase site densities by between a third and a half. Thus, it is sometimes possible to increase the amount of floorspace yielded from a site without changing the dwelling mix.
- 5.25 In some segments of the market, overall dwelling sizes as measured in m2 have been reduced over time, but at the same time in other market segments it has been deemed important to add features such studies, en suite bathrooms etc which mean that the average m2 for dwellings with different numbers of bedrooms has probably been maintained. However, this is hard to validate, since data on the m2 of new dwellings is not standardly collected.
- 5.26 Thus, in some circumstances it may be possible to deliver the same number of units on a site even when higher space standard are imposed since developers can reduce the amount of external space provided with dwellings on site or, in some circumstances for example, can add an extra floor onto a block of flats to achieve the same number of units and compensate for extra space needed in each unit. Whether the configuration of units in a scheme can be changed to accommodate extra space in the flatted units depends on both the site specific circumstances and the willingness of the developer and local planning authority. Space standards may be accommodated through changes to design, building massing and height but this relies to some extent on the flexibility of the authority with regard to these planning considerations.
- 5.27 In some circumstances it may not be possible to simply add another storey to a block of apartments or change the site configuration to secure more internal space within the individual units. This may be due to site specific constraints or the policies of the local planning authority which constrain what can be done (although it is worth noting that Havant's policies do not appear to be prescriptive in this sense). In these situations, additional space provided in individual units will reduce site densities and therefore the number of units that can be achieved on site. According to the viability model, lower densities generally reduce viability at the margins and so this might be a consequence of implementing space standards if flexibilities cannot be achieved elsewhere. The other implication is that, if fewer units can be achieved on a site where English Partnership Space Standards are implemented, all other things being equal this will mean that the Council need to provide more land to achieve its housing targets.
- 5.28 There are also a wider set of considerations that would need to inform any policy on housing mix and room sizes. These are outside the scope of this report but are covered to some extent in the South Hampshire HMA and are summarised briefly below:
- **Stock of existing homes:** new supply contributes up to 1% each year to the overall stock of homes and so it is important to view the type and size of new dwellings in the context of

what is available in the wider stock and indeed how that stock is changing over time through individual householders investing in extensions, loft conversions etc.

- **Household incomes and affordability:** In the market sector the ability of households including families to access family sized housing or homes suitable for their needs – is a function not of the availability of stock of a suitable size but a function of affordability. Families with children compete against childless couples, single people, empty nesters, and the single elderly for the available stock of 2, 3 and 4 bed houses. Other things being equal, the larger the amount of space the higher the cost of housing. Thus whether a family can afford to buy or rent a house – or even a flat – suited to its needs, is entirely a function of household income.
- **The market cycle:** it is important to recognise the stage in the housing market cycle and the pattern of house prices over the period 1997-07. There is clear evidence that the mix of what the development industry builds, as well as the volume that is built, varies over the market cycle. In the late 1980s, the last boom in the housing market (though shortly we will be referring to 1997 - 2007 as the last boom in the market), land values increased, affordability was stretched and the housebuilding industry responded by increasing the proportion of output built as flats and small units.
- Developers have therefore been willing to offer significant discounts to purchasers willing to buy off plan. This has been particularly attractive to investors. In a rising market they stood to secure capital gains simply through the rise of prices during the build out phase. Unlike owner occupiers they were not buying for their own occupation so there has not been the same desire to see and touch the product. Link this to the growing rental market, the product of declining affordability of owner occupation, uncertainties about stock market performance, concerns about pension provision, and one can appreciate why funds flowed into the investment market in significant volumes.
- **A distinct market for new build housing:** economic and social change created for city and town centre apartments – the city living phenomenon apparent in London and other major cities and towns across the country. The revolution in the retail offer, the development of cultural services in city centres, the growth in the professional and business service sector in city centres have all changed attitudes to city centre living.
- City centre living has appealed to a particular demographic; typically comprising those who work in city centres in the service sector; generally well paid professionals, with graduate qualifications in the 20-35 age demographic; singles and couples without children. Obviously some of these are owners, but many chose to rent either out of necessity (they cannot access ownership) or choice (renting provides job and lifestyle flexibility).
- Of course a high proportion, probably the majority, of the increasing number of flats developed have been developed in suburban developments. Here it is more probable that flats in the market sector cater for those who cannot afford to buy a rent or house. The flats sector therefore provides the more affordable end of the market sector, though there will be a premium in terms of prices and rents for new property compared to second hand flats.
- **Land supply:** The market environment in which developers have been operating over the period 2000-07 has been one of increasingly constrained land supply, as greenfield sites have been built out and limited land released for new development; and with increasing reliance on brownfield sites. In a very active market there has been intense competition



for land, the basic factor of production, without which none of the housebuilders have a business.

- The public policy focus on regeneration, the declining supply of greenfield sites and the rising market led to intense competition for land; land values were driven up as developers saw they could sell flatted developments and secure permission for such development. Building at higher densities in a rising market also meant that developers could offset the additional costs of building on brownfield sites, and the increasing demand for affordable housing, another cost on the business.
- In this market environment, especially where there has been a buoyant market for flats, a process has been at work whereby the developer that plans for the most dense development, believing that they will get permission for such a development, and can sell the units, will be able to put in the highest bid for the land and secure the site. In essence the developer that plans for the highest coverage (saleable floorspace/acre) can afford to pay the most for the land, and in a rising market, may also gamble on house prices increasing over the course of the development period.

5.29 It is clear that the pattern of new development has increased the range of product choice within the open market, while simultaneously declining affordability (as distinct from the structure of new supply) has removed choice from many new entrants to the market. It is also the case that the UK is now building the smallest new dwellings in Europe measured in terms of m<sup>2</sup>. That these sell may be in part an expression of people making a trade off between space and location (eg, city centre), but more generally it is likely to reflect the high unit cost of housing per m<sup>2</sup> in the UK and affordability constraints. DTZ consider that the right response to this issue is to address the problem of affordability – by reducing the cost of housing per m<sup>2</sup>, or by boosting the income of low income households.

### **The Effect of Density on Affordable Housing Delivery**

5.30 In most scenarios both increasing and decreasing densities from the mid density assumption of 70 dwellings per hectare (dph) in urban areas and 45 dph in suburban areas reduces rates of return. The mid-range density assumptions are based on the levels that have been typical of developments in recent years. The results therefore suggest that the development industry – working interactively with the planning system – has been delivering development at levels that maximise returns. Changes in the market context and the relative price of different types of new housing may shift the relative advantage of developing at different densities, it suggests that the market has been working efficiently to maximise development value. This suggests that there is little scope therefore to enhance the prospect of affordable housing provision by varying density requirements.

5.31 However, there are some scenarios where increasing densities could improve the rate of return and therefore improve viability. Larger suburban sites appear to perform better under the higher density scenario (which assumes 55dph) than under the mid density scenario of 45dph or the lower density scenario or 35dph. This suggests that there may be scope to enhance the prospect of affordable housing provision by varying density requirements in suburban areas.

5.32 It is also worth highlighting the impact that the addition of English Partnership Space Standards would have under these different density scenarios. Under this scenario, higher



density appears to reduce returns across all sites – in some cases quite significantly. This is because our assumptions expect higher densities to result in a greater proportion of flats and these are affected by the cost of the space standards. Conversely, lower densities result in a higher proportion of houses on site which, under our assumptions are not affected by the additional costs involved with applying English Partnership Space Standards. Consideration therefore needs to be given to the interaction between site density, the dwelling mix and space standards since optimising one of these factors in isolation of the others would appear to affect viability.

### **The Effect of Tenure Split on Affordable Housing Delivery**

- 5.33 The assessment examined the impact that changing the mix of affordable housing has on viability. The base assumption in most of the modelling has been a split of 65% social rented housing and 35% shared ownership. The implications for rates of return of changing this mix to 50% social rented units and 50% shared ownership have also been considered.
- 5.34 The results indicate that changes in the mix of affordable housing have a marginal impact on viability, producing small differences in the rates of return secured under both with grant and without grant scenarios, and with different affordable housing quotas. Increased proportions of shared ownership deliver slight increases in return under some circumstances although on many sites this makes no noticeable difference to the rate of return and therefore viability. This reflects the fairly complex way in which scheme mix (in terms of unit size) and the returns available for units of different size interact.
- 5.35 The implication for policy is that flexibility regarding tenure mix would make sense in helping to bring forward marginal schemes, but will only benefit schemes really at the margins of viability given the small impact such changes have on rates of return. Such a policy position may also be helpful since the demand for shared ownership can wax and wane with market sentiment and the cost and availability of finance.

### **Affordable Housing Provision on Small Sites**

- 5.36 The study brief asked if affordable housing policies could be extended to sites of less than 15 units in order to generate a greater supply of affordable housing. The assessment did not explicitly test the effect of different affordable housing thresholds but by considering viability on small sites (0.1 and 0.25 hectares) the testing sheds some light on this issue.
- 5.37 The broad message of the analysis is that small sites appear to be no less viable than larger sites; and have similar ability to deliver affordable housing without or with grant. There is no reason therefore in terms of economic viability not to extend affordable housing policies to all residential developments.
- 5.38 However, an important caveat to this is that the viability of small sites is very sensitive to the application of a quota to a site. Where the application of a quota results in a requirement for a part of a unit, it would produce a significant adverse effect on viability if the requirement is rounded up to the nearest unit.
- 5.39 Thus if affordable housing quotas are to be applied to small sites, the provision expected should always be rounded down to the nearest unit, and never upwards. An option is to seek

a financial contribution in relation to the fractions of affordable housing that arise from the application of quotas to small sites.

- 5.40 However, some caution must be adopted in rushing to extend affordable housing requirements to smaller sites. Firstly, the smaller the site, the more very specific site characteristics may dominate viability, and the less generic assumptions on costs and values may hold true.
- 5.41 There may also be reasons other than viability why it would be problematic to apply policy to smaller sites. First it remains the case that not all smaller sites can support development without grant aid. Yet it might well be administratively complex to deliver grant aid to such small schemes. Existing RSLs might not want to incur the burden of negotiating and bidding to provide units on sites that would deliver only two or three units.
- 5.42 Similarly, associations might be reluctant to take on management of small numbers of affordable homes, pepperpotted across communities, especially in locations where they have little existing stock. Associations naturally prefer to manage schemes where significant numbers of units are clustered together. It could be costly under existing arrangements to manage a portfolio of affordable housing units widely distributed across a large geography.
- 5.43 Such problems are not insurmountable but could call for innovative approaches. For example it might be necessary to establish some form of block grant arrangement with delegated approval systems to deliver grant aid to small sites for one, two or three projects. Similarly it might be necessary to put in place some form of tailored management arrangements perhaps using local letting agents.
- 5.44 There will be additional revenue costs if such arrangements have to be adopted and the means will need to be found to fund such arrangements. There are parallels with the support provided by authorities to bring empty homes back into use or encourage care and repair of homes owned by elderly or disabled people. One source of revenue funding for such an initiative might be the developer contributions that relate to part units that cannot be built on site.
- 5.45 In view of these issues, if Havant Borough Council wish to pursue the idea of extending affordable housing to sites that will deliver less than 15 dwellings, DTZ would recommend further study be undertaken to establish the practical outworkings of such a policy in terms of how it would be run and the impact on the type of builders who undertake smaller schemes.
- 5.46 However, DTZ believes this would be a fruitful line of enquiry, given the possibility that over time small sites could make an important contribution to affordable housing provision, possibly in areas with limited options for alternative provision.

### Summary of Conclusions

- 5.47 **Affordable Housing Quota:** The viability assessment shows that increasing the quota of affordable housing by 10% typically decreases scheme profitability (IRR) in the region of 3% – 8% points. The key variable affecting viability with different levels of affordable housing quota is the value area in which a scheme is located. A 30% affordable housing target should be deliverable *without* grant in high value areas, but that grant would probably be needed to

support this level of provision in medium and low value areas. 40% affordable housing would need the support of grant in all but a few development scenarios in the Borough. With the level of grant tested in this assessment low value areas would still struggle to meet a 40% target even with grant.

- 5.48 On balance DTZ suggest a target of 30% across the Borough might be the best approach since this quota appears to be within reach of most development scenarios across the Borough, albeit some would need grant support whilst others may be able to deliver without grant aid. We would also recommend that the Council's Core Strategy or relevant DPD signals to developers that this policy will be monitored. The Borough's planning policies could state that if this quota is broadly achieved over the next 5 years the Council will review the relevant DPD with a view to increasing quotas either Borough wide or in specific areas or settlements within the Borough.
- 5.49 English Partnerships Space Standards: Overall, English Partnership Space Standards reduce returns to developers at the margins because of the additional cost of providing extra space in the flats. In some circumstances this is enough to move sites that were in viable territory under 30% affordable housing without grant into non-viability without the support of grant (eg larger sites in high value urban areas).
- 5.50 There will also be further impacts on viability if the introduction of space standards to a particular development mean that the site configuration or unit mix needs to be changed. In some circumstances it may be possible to deliver the same number of units on a site even when higher space standard are imposed since developers can reduce the amount of external space provided with dwellings on site or, in some circumstances for example, can add an extra floor onto a block of flats to achieve the same number of units and compensate for extra space needed in each unit. Whether the configuration of units in a scheme can be changed to accommodate extra space in the flatted units depends on both the site specific circumstances and the willingness of the developer and local planning authority.
- 5.51 In some circumstances it may not be possible to simply add another storey to a block of apartments or change the site configuration to secure more internal space within the individual units. In these situations, additional space provided in individual units will reduce site densities and therefore the number of units that can be achieved on site. According to the viability model, lower densities generally reduce viability at the margins and so this might be a consequence of implementing space standards if flexibilities cannot be achieved elsewhere. The other implication is that, if fewer units can be achieved on a site where English Partnership Space Standards are implemented, all other things being equal this will mean that the Council need to provide more land to achieve its housing targets.
- 5.52 **Density:** In most scenarios both increasing and decreasing densities from the mid density assumption of 70 dwellings per hectare (dph) in urban areas and 45 dph in suburban areas reduces rates of return. The mid-range density assumptions are based on the levels that have been typical of developments in recent years. However, there are some scenarios where increasing densities could improve the rate of return and therefore improve viability. Larger suburban sites appear to perform better under the higher density scenario (which assumes 55dph) than under the mid density scenario of 45dph or the lower density scenario or 35dph. This suggests that there may be scope to enhance the prospect of affordable housing provision by varying density requirements in suburban areas.

- 5.53 It is also important to note that densities, size mix and English Partnerships Space Standards interact - optimising one of these factors in isolation of the others could affect viability. Higher density developments with EP space standards appear to be quite significantly affected in terms of viability. This is because our assumptions expect higher densities to result in a greater proportion of flats and these are affected by the cost of the space standards. Conversely, lower densities result in a higher proportion of houses on site. Under our assumptions these are not as significantly affected by the additional costs involved with applying English Partnership Space Standards. .
- 5.54 ***Tenure of Affordable Housing:*** The results indicate that changes in the mix of affordable produce relatively small differences in the rates of return secured under both with grant and without grant scenarios, and with different affordable housing quotas. Increased proportions of shared ownership deliver slight increases in return under some circumstances. The implication for policy is that flexibility regarding tenure mix would make sense in helping to bring forward marginal schemes, but will only benefit schemes really at the margins of viability given the small impact such changes have on rates of return. Such a policy position may also be helpful since the demand for shared ownership change with market sentiment and the cost and availability of finance.
- 5.55 ***Small Sites (under 15 units):*** The broad message of the analysis is that small sites appear to be no less viable than larger sites; and have similar ability to deliver affordable housing without or with grant. There is no reason therefore in terms of economic viability not to extend affordable housing policies to all residential developments. However, some caution must be adopted since smaller the site, the more very specific site characteristics may dominate viability, and the less generic assumptions on costs and values may hold true. Havant Borough Council will also need to consider the administrative costs (eg grant, negotiations etc) in implementing affordable housing policies on sites with fewer than 15 units compared to the benefits in securing increased affordable housing delivery.