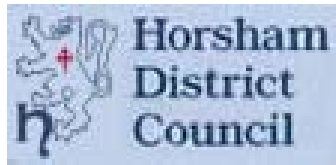


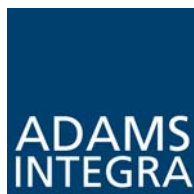
Horsham District Council



**Assessment of Development Viability and
Impact of Affordable Housing Policy**

June 2005

Prepared by



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EXECUTIVE SUMMARY

- Adams Integra were engaged by Horsham District Council to study the potential impact on development viability of revised planning led affordable housing policy being considered in the context of the Local Development Framework preparation process.
- The policy proposals aim to boost planning led affordable housing supply by increasing the proportion sought from 30 to 40%; and lowering of trigger thresholds to 15 and possibly down to 5 in the rural areas.
- The basis of our methodology was to carry out a large number of developer type appraisals on a range of representative notional development scheme types, through which we fixed development values and costs but varied the affordable housing assumptions to demonstrate their effect.
- The key effect studied was reduction in residual land value (the sum available for land purchase once development costs are accounted for).
- Our results show a significant impact across the District on land values resulting from increased affordable housing provision as proposed. Typically we found a likely reduction of between 50% and 60% of residual land value.
- The key feature we noted about Horsham is the relative strength and in particular relative consistency of values across the District when compared with most other areas we have studied in this way.
- This means that while we caution regarding the likely impact on viability, in particular in Horsham and the larger settlements (as opposed to the smaller, rural settlements where values tend to be stronger), there are no low value areas where land values will consistently be compromised to a point that we feel we need to advise firmly against the proposed policy approach. In some previous studies we have encountered situations where the majority of land value has been eroded.
- Overall, the likely impacts are such that providing the Council adopts and practices a genuinely adaptable and practical, negotiated approach to planning led affordable housing (in accordance with established and emerging Government guidance), then as a clear baseline / target level of provision the proposals for 40% affordable housing and applied to sites of 15 units and above should be workable. The proposals if implemented should enable the Council to deliver an increased amount of affordable housing.
- The relative strength and consistency of property and therefore development values across the District is such that it is probably not necessary to consider a more complicated approach with varying proportion targets for different areas.
- There will be instances where the envisaged level of provision will not be met, following open discussion with landowners and developers, but in many cases

the targets should be workable in assisting the Council to gradually redress the imbalance in provision.

- Examples of scenarios where negotiation will result in reduced or alternative provision could be brownfield schemes where there can be particular abnormal development costs such as site clearance or clean up.
- There may also be issues relating to development value not matching or sufficiently exceeding existing or alternative use value, especially when affordable housing and other infrastructure requirement costs are taken into account. These issues could be encountered in tandem with abnormal costs, further impacting on viability.
- While the viability of large scale Greenfield land release schemes should not struggle through existing / alternative value issues, Local Authorities do need to consider the collective burden of infrastructure costs. Priorities may need to be considered where schemes are being required to support substantial new highways and other community infrastructure, including where affordable housing fits into these.
- There are no clear cut off points at which development will become unviable. Much will depend on a site's existing / alternative use value and its owner's needs and aspirations.
- There will inevitably be a degree of hiatus in site supply or at the very least an adjustment process while established land deals and planning consents come to fruition. However we are envisaging an effect of necessarily revised expectations on the part of landowners, over time, as planning infrastructure requirements become a more settled feature of negotiations.
- We advise that further work needs to be considered to look in detail at forecasts of the numbers of additional affordable homes that would flow from additional site capture through lowered thresholds, especially the potential 5 unit trigger point.
- On the smallest sites there are also magnified practical difficulties related to design, tenure mix, affordability and developers' marketability. In some instances elsewhere we have suggested consideration be given to the collection of funds in lieu of on-site provision on such sites.
- In pure financial viability terms the 5 unit threshold should again be workable in many cases, but we would encourage the Council to consider the practical issues alongside the increased delivery estimates. There will be many such sites where ownership or land deal issues prevent them from coming forward if they are unduly fettered. There are also going to be calculation issues relating to rounding of numbers, and on the smallest sites again a "payment or part payment in-lieu" route might be considered.
- A reduced proportion of affordable housing could perhaps be considered if the Council decided to pursue its lowest threshold policy option (5 units).

- This is all in the context of clear LDF Policy, supported by readily updated Supplementary Guidance, and brought to life through a practical negotiated approach; in turn supported by robust Housing Market and Need information.

1. INTRODUCTION

1.1 Background

- 1.1.1 Horsham District Council (HDC) is currently reviewing the 1997 Adopted Local Plan and is in the process of preparing a Local Development Framework. In line with the requirements of PPG3, Horsham District Council is seeking to concentrate development on previously developed land in built-up areas to provide the West Sussex Structure Plan target of 4,010 new homes in the period to 2016.
- 1.1.2 It is envisaged that the review of the Local Plan will include an increase in the required level of affordable housing on sites coming forward for development to attempt to alleviate some of the backlog of required affordable housing highlighted in the David Coultie Housing Needs Survey carried out in January 2003. The DCA report recommended 40% subsidised affordable homes be negotiated on sites coming forward over the plan period and that consideration be given to the adoption of a threshold of 15 units or 0.5 hectare.
- 1.1.3 Aligned to the DCA survey, HDC's Preferred Options papers "The Core Strategy" and "Site Specific Allocations of Land" propose within Policy CP5 and AL2 that:
- "Residential developments of more than 15 dwellings (or on sites of 0.5 hectare and above) or, in settlements of less than 3,000 population, of more than 5 dwellings (or on sites of 0.16 hectare and above) will be permitted provided that they include an appropriate proportion (40% or more) of dwelling sizes and types to meet the proven needs of people (including key workers) who are not able to compete in the general housing market".*
- 1.1.4 Horsham District Council's current position on Affordable Housing is to request 30% subsidised affordable housing on all unidentified and allocated sites on or above a threshold of 25 units.
- 1.1.5 Before taking the proposed policies forward, the Council commissioned Adams Integra to undertake a study of the potential impact of these policies on site economics and development viability to ensure that the supply of land is not inhibited, especially on previously developed land.
- 1.1.6 Thus the aim of this study is to determine whether an increased proportion of affordable housing and lowered trigger threshold will significantly reduce the viability of development on smaller residential sites in particular, and whether profitable development can be maintained without a reduction in smaller sites coming forward for development.
- 1.1.7 This report focuses mainly on those sites which would be affected by the proposed policy changes and so are small in nature (at or close to the proposed thresholds).
- 1.1.8 We use the impact of varying affordable housing requirements on residual land value as our measure in putting forward our judgements and guidelines. With reference to the small sites studied (with the policy proposals aimed at increasing

site capture as well as percentage provision), this means comparing the impact of proposed policy changes with the current position, ie where no affordable housing would be provided on these sites.

- 1.1.9 Given the nature of the District and the Structure Plan requirement to provide 3,500 new homes on strategic sites west of Horsham and west of Crawley, there is likely to be a need for further related discussion on the viability of such sites as more is known about them. This would be in relation to the provision of a wide range of often larger scale infrastructure requirements. Such requirements would need to be considered collectively with affordable housing and other issues in the context of viability and priorities.
- 1.1.10 Finally, a Case Study of an actual development in Horsham has been undertaken to determine what impact proposed policy would have on a site that would otherwise have been unaffected by the requirement for affordable housing.

2. METHODOLOGY AND ASSUMPTIONS

2.1 Introduction

- 2.1.1 This study investigates the impact of increasing the proportion of affordable housing and reducing the threshold on the market viability of relatively small residential development sites in the Horsham District.
- 2.1.2 In considering the factors that need to be taken into account in bringing forward sites for affordable housing it has first been necessary to determine what effect reduced thresholds and increased proportions may have on the value of a potential development site.
- 2.1.3 This report investigates a range of scenarios on development sites of 15 units in the larger settlement areas (population greater than 3,000) of Horsham / North Horsham and Larger Settlements (for example Billingshurst and Storrington). The study also investigates development sites of both 15 and 5 units in the Small Settlements (North) (for example Rusper and Slinfold) and the Small Settlements (South) (for example Cowfold and Ashington) where the population is less than 3,000.
- 2.1.4 A brownfield and greenfield scenario has been modelled on each of the above areas.
- 2.1.5 Finally, a case study on a 21 unit scheme in Horsham was undertaken to determine the impact of proposed policy on this site. This site was chosen as it represents a scheme unaffected by current affordable housing policy but would be “captured” under proposed lower threshold policy. This necessarily used assumptions, as at 3.4 of the report, but does serve to relate our thinking to an actual site.
- 2.1.6 The proposed trigger thresholds for on-site affordable housing are 15 units in the larger areas and 5 in the smaller settlements. The schemes modelled are not in themselves actual developments but reflect scenarios that best match the policy requirements of the Council in terms of this study. Research into local property prices in each area was undertaken to produce realistic sales and therefore development values for each appraisal model (see Model Areas below).
- 2.1.7 The size of the development sites was agreed as best representing development at the margins of the proposed policy, and of a type typically coming forward in the various localities. A 15 and 5 unit scheme in the larger and smaller settlements respectively allows us to model the effects of a policy of 40% subsidised housing requirement compared to the present requirement of zero on such sites. In addition to the 5 unit scenarios of the smaller rural settlements, modelling of 15 units was undertaken to examine any differences between variations in proposed policies.
- 2.1.8 Developer’s profit and landowner’s sale price are key considerations that must be taken into account if residential development is to be undertaken.

- 2.1.9 If profit levels fall below a certain level then developers will not take the risk of developing a site nor will funding organisations lend them the finance to develop. Equally, if the price offered by a developer to a landowner for a site is too low, the landowner may not sell and instead continue with, or pursue, an existing or higher value use. There are also intangibles, for instance some of the sites we are considering here will start out as peoples' homes or gardens which will not be sold unless certain aspirations are met. The same can apply to sites in commercial use, where factors such as business considerations, investment values and costs and availability of replacement facilities can all influence decisions to sell sites.
- 2.1.10 The requirement to place a proportion of affordable housing on a site will inevitably reduce the sales revenue that a developer can reasonably expect to receive. As this reduction will not be accompanied by lower construction costs, the offset must be taken up in either a reduced development profit, lower land price or a combination of the two.
- 2.1.11 Assuming that a developer will require a minimum fixed profit margin on any given site to balance risk and obtain funding, beyond a certain point it is therefore the land value that will be affected by the introduction of affordable housing or other infrastructure requirements, provided the developer's profit expectations are not excessive.
- 2.1.12 To establish the potential effect of affordable housing on the supply and development of relatively small housing sites, it is necessary to compare a site that does not include an affordable housing element (adopted policy at the thresholds being considered) with that which will be subject to the proposed policy within HDC's Core Strategy Document: Preferred Options, Core Policy 5.

2.2 Approximate Residual Land Value

- 2.2.1 In order to determine the impact of proposed affordable housing policy on a range of site types and locations it is necessary to determine a common indicator.
- 2.2.2 In normal circumstances the developer is aiming to secure a predetermined level of profit. From a developer's point of view and assuming a conclusion is reached that a site is viable for development, an appraisal is carried out to discover what sum a developer can afford to pay for the site. Some sites coming forward will have been owned for considerable periods and those will have to be dealt with case by case, however we have to assume that a negotiation has occurred or is underway based on knowledge of the current development climate and policy requirements.
- 2.2.3 The most effective way of checking site viability is via a developer-type residual land value model. We have developed our own spreadsheet model for this purpose. In doing so we have made what we feel are reasonable assumptions but it must be noted that individual developers will have their own variety of approaches, and a developer might also apply a different approach from one site to another. A simplified example is shown below in Figure 1.

Figure 1: Simplified Example of Gross Development Value Calculation for illustration purposes only.

Total Sales Value	
Number of Units =	10
Sales Value =	£120,000
Gross Sales (Development) Value = A	£1,200,000
Development Costs (build costs, fees, etc.) = B	£575,000
Min Development Profit (@15% of Sales Value) = C	£180,000
Land Purchase Costs and Planning Infrastructure (not including affordable housing element) = D	£75,000
Land Residual (Gross Sales Value - Development Costs - Profit - Land Purchase and Planning Gain) = E	
A – (B + C + D) = E	£370,000

- 2.2.4 This general method reflects one of the main ways of how development viability tends to be assessed and land value checked relative to sales values and development costs. Through discussion with developers we have been able to verify our experience and thoughts on components of the model and indicative output land values, as well as the general approach.
- 2.2.5 The model used for analysis in this instance uses a calculation that provides an approximate residual land value, after taking into account assumed normal costs for site development (nb: this study examined the development of both greenfield and simple brownfield notional sites and as such an allowance has been included for uncomplicated clearance / abnormal costs for the brownfield sites). Added on to this is the inclusion of an affordable housing element, whereby the developer receives a payment for a number of completed units based on predetermined calculation (discussed later), but that is not at a level comparable with open market values.
- 2.2.6 In addition, an allowance for other planning infrastructure costs has been made. The figures used for infrastructure payments are as a result of discussions with Horsham District Council officers. The figures are shown in 2.9: “Other Assumptions”.
- 2.2.7 The result then shows the change in approximate land value or change as a percentage of approximate gross development value. It should be noted that this is based on notional sites and is a relative exercise only - to determine the probable effect of revised policy. Therefore not too much weight should be

attached to the actual values arrived at - the *changes* in results as the affordable housing criteria alter are the key outcomes.

2.3 Gross Development Value

2.3.1 Gross development value (“GDV”) has been taken as the amount the developer ultimately receives on completion or sale of the scheme whether through open market sales alone or a combination of those and the receipt from a RSL for completed affordable housing units. Thus the developer’s profit in each case relates to that scheme specific sum rather than to a base level of GDV that assumes no affordable housing. It therefore assumes that the developer has appraised the site and secured land in the knowledge of and reflecting policy that will apply. This can be regarded as a reasonable approach given national policy guidance on the provision of affordable housing.

2.3.2 As policy alters, there will tend to be a hiatus in supply while previous land deals and planning consents come forward (some of those may not be able to support latest policy), but we have to envisage a period of adjustment leading to sites being appraised differently. The approach we suggest of adopting clear targets, but then being prepared to negotiate in light of site specifics should cater for the range of scenarios that the Council will need to deal with.

2.3.3 Ultimately, land value is a product of a series of calculations that provides a residual valuation based on both the specific form of development a site can accommodate and its development costs. While the market uses a variety of approaches to appraise sites and schemes (including comparisons between sites) in early stages of feasibility, a more detailed approach is necessary to understand how the value/cost relationship appears.

2.4 Developer’s Profit

2.4.1 Adams Integra’s experience of working with a range of developers leads us to suggest that they would need to seek a fixed profit of at least 15% (gross) and probably more (depending on a number of other factors – profit expectations could be up to 25% or more) of gross development value. Only if the projections reveal this fixed profit margin (as a minimum) would they pursue a site.

2.4.2 This model uses a developer’s profit (gross) fixed at 15% of gross development value, which is at the lower end of the acceptable profit range in normal circumstances. Some developers will look at alternative profit criteria, for example a higher percentage (perhaps up to 30%) of capital employed. We felt it appropriate to appraise the scenarios at the margins.

2.5 Model Areas and Unit Values

2.5.1 Following discussions with Horsham District Council, it was decided that the following typical example areas would be used to categorise the model scenarios:

- Horsham / North Horsham
- Larger Settlements (population >3,000) e.g. Billingshurst / Storrington etc.
- Small Settlements North (population <3,000) e.g. Rusper / Slinfold etc.

- Small Settlements South (population <3,000) e.g. Cowfold / Ashington etc.
- 2.5.2 A case study of a site in Horsham (town) that currently falls below the affordable housing requirement threshold was also undertaken.
- 2.5.3 The locations chosen represent a spread of property value areas and cover both urban (large settlement areas) and rural (small settlement areas).
- 2.5.4 In carrying out this study, Adams Integra have reviewed the asking and subject to contract sale prices of over 600 one and two-bed flats and two, three-bed houses within the specified example areas to enable us to provide reasonable average values for each area.
- 2.5.5 Property prices for each of the areas modelled were assembled by utilising internet property search engines. The tables and graphs relating to this exercise are shown in Appendix II. The values were verified with a number of estate agents across the Horsham District. Where little data was available at the time of the search, the data has been supplemented by using Land Registry average figures. The values research has been further verified through research and discussions with land agents as to the way in which developers price their new schemes.
- 2.5.6 This report does not attempt to provide comprehensive property valuation data but rather provides average values of unit types within a particular area and does not allow for street by street variations. The values used in the appraisals are an average of all available properties of varying size and type and it must be remembered that any settlement will contain a range of property values covering a single property type. We believe however that the information used is representative.
- 2.5.7 We have deliberately not used top range values. While some new schemes will command high values relative to other and older property stock, we used what we feel were more typical values representative of the range. This enables us to understand how viability might look on an ordinary new scheme rather than only considering the higher value ones. This is because the Council needs to be able to underpin the deliverability of affordable housing schemes on a range of development types.
- 2.5.8 Also relevant in this context is the fact that the values used here can only be on a snapshot / current time basis. To this end is relevant to mention the current relatively uncertain state of the property market, reinforcing our slightly cautious view on likely property sales values.

2.6 Model Scenarios, Unit Types, Mix and Size

- 2.6.1 Horsham District Council required a range of scenarios to be tested across each of the model areas reflecting the impact of differing policy proposals on site viability. These are outlined in Figure 2 below:

Figure 2: Model Scenarios across Horsham District

Location	Land Type	Number of Units (A)	Number of Units (B)	Total Units	Threshold	Affordable Housing Proportion
Horsham / North Horsham	Greenfield	10 x 2-bed flats	5 x 1-bed flats	15	15	0% & 40%
		10 x 2-bed houses	5 x 3-bed houses	15	15	0% & 40%
	Brownfield	10 x 2-bed flats	5 x 1-bed flats	15	15	0% & 40%
		10 x 2-bed houses	5 x 3-bed houses	15	15	0% & 40%
Larger Settlements	Greenfield	10 x 2-bed flats	5 x 1-bed flats	15	15	0% & 40%
		10 x 2-bed houses	5 x 3-bed houses	15	15	0% & 40%
	Brownfield	10 x 2-bed flats	5 x 1-bed flats	15	15	0% & 40%
		10 x 2-bed houses	5 x 3-bed houses	15	15	0% & 40%
Small Settlements North	Greenfield	10 x 2-bed houses	5 x 3-bed houses	15	15	0% & 40%
		5 x 3-bed houses	N/A	5	5	0% & 40%
	Brownfield	10 x 2-bed houses	5 x 3-bed houses	15	15	0% & 40%
		5 x 3-bed houses	N/A	5	5	0% & 40%
Small Settlements South	Greenfield	10 x 2-bed houses	5 x 3-bed houses	15	15	0% & 40%
		5 x 3-bed houses	N/A	5	5	0% & 40%
	Brownfield	10 x 2-bed houses	5 x 3-bed houses	15	15	0% & 40%
		5 x 3-bed houses	N/A	5	5	0% & 40%

2.6.2 The above table indicates the range of scenarios modelled across the Horsham District representing proposed policy.

2.6.3 The 15 unit schemes in the larger settlement areas represents a typical infill/redevelopment site which would be captured by the Council's proposed policy position of 40% affordable housing on or above a threshold of 15 units. These notional sites correspond to typical flatted and housing schemes in the larger settlements on both greenfield and brownfield land.

2.6.4 The 5 unit schemes in the smaller settlements represent a smaller development of townhouses, which would be captured under the Council's proposed policy of 40% affordable housing on sites of 5 or more dwellings. These schemes would

be fairly typical of what developers are pursuing on small infill or ex-commercial sites.

- 2.6.5 For comparison, 15 unit housing schemes in the smaller settlements have also been modelled.
- 2.6.6 The flat sizes used in the modelling are 51 sq m for one-bed and 61 sq m for two-bed flats. We have assumed a bias towards 2 bed flats which would be a typical market led approach. In practice (on a smaller site in particular) a developer might seek a totally uniform scheme. In terms of design and cost – the floor plates, service positions etc. need to marry up reasonably. Therefore a practical approach to policy application will again be necessary.
- 2.6.7 For the two and three bed houses we have used 76 and 86sq m respectively as a representative size. These areas are gross internal.
- 2.6.8 Two-bed units would tend to be more popular on the market generally, with a wider market and increased sales figures tending to encourage developers towards those in many areas. In practice there would also be a tendency towards developers needing to maintain the higher value units within a scheme for private sales whilst thinking about the relationship of the private units to the affordable units in terms of location. These are all factors which in practice (and dependent on the site location and characteristics) will affect the unit and tenure mix.

2.7 Affordable Housing Unit Transfer (to RSL) – Method of Payment Calculation and Type of Unit Transferred

- 2.7.1 Discussions with Horsham District Council indicate that the payments developers receive from RSLs (Registered Social Landlords) for the provision of completed affordable units on-site effectively reflect a free land scenario.
- 2.7.2 With current developments in Government thinking, developers are in some cases going to be providing affordable housing without involving RSLs in the development process. It is a scenario more likely to be relevant to larger schemes. The free serviced land level of subsidy could be aligned to this approach.
- 2.7.3 The amount a developer can expect to receive for completed units is equivalent to the reasonable build costs for the dwelling type and site conditions.
- 2.7.4 We have taken what we feel is a fairly cautious view of the payment likely to be received by the developer from the RSL given the uncertain affordable housing funding climate.
- 2.7.5 In practice, a developer may be able to recoup a larger sum, improving site viability marginally. However there will be costs associated with servicing the affordable housing land to its boundaries and the RSL will also need to fund its own development management cost, hence we have not allowed for the developer receiving back the equivalent of the full design and build package cost.

- 2.7.6 We have assumed a rate of approx £1,000/sq m (gross internal floor area of development) will be received in the case of standard house schemes, and £1,150 in the case of flatted schemes. As above, in practice this might be enhanced but again we consider it appropriate to take a fairly cautious view of factors affecting viability.
- 2.7.7 Within the models used for each of the scenarios listed above we have assumed that the affordable housing element of each scheme is tenure neutral. This is because by applying the assumption that the developer's receipt from the affordable housing will be build cost based, there is little difference between the costs of providing for different tenures. With improved payments to the developer for some forms of low cost market housing for example, this may increase slightly the financial viability of some sites.
- 2.7.8 In reality each scheme will differ as it could be argued that for low cost ownership forms of tenure provided on site, the market value of the remaining private units might not be affected as much as by affordable rented tenure adjacent. As above, we have not reflected such subtleties as it is not possible to do so with notional sites where the positioning of units and accesses etc is not known. These are real factors in the market which again it is suggested should be assessed as part of a practical approach to producing successful development schemes as a whole.

2.8 Design and Tenure Issues

- 2.8.1 These issues will again depend on the site, need, design and other factors; however as a rule and for simplicity (bearing in mind this is a relative exercise), we have assumed that the generally accepted "premium" (price addition) of say 10% for new build property over most older property (not in higher value areas – listed buildings, expensive conversions etc but compared with general market properties) will be cancelled out by the on site affordable housing, particularly in the smaller developments we are considering.
- 2.8.2 This effect on values stems from a perception of affordable housing which we have to acknowledge exists and particularly affects parts of the smaller sites within which it is located in many purchasers' and therefore developers' thinking.
- 2.8.3 The modelling has been based on transferring units for affordable housing in proportion to the number of each type within the overall scheme as far as possible. This would be the Council's likely target approach, to avoid providing all smaller units. For example in a scheme of ten 2-bed units and five 1-bed units, the affordable housing element would be four 2-bed units and two 1-bed units. This approach reflects the likely range of affordable housing need in most locations, but again in practice site specific discussions would prevail.

2.9 Other Assumptions

- 2.9.1 The appraisal model includes other variables such as fees, land buying costs, finance, agency costs and planning infrastructure provision that are all taken into account when calculating an approximate land residual value.

2.9.2 These figures in some instances are factors of other elements of the appraisal and therefore vary by site size and type. In practice each site and developer approach would vary and it is appreciated that the figures used here will not always be appropriate, but this enables a comparison to be drawn across sites on a 'like for like' basis.

2.9.3 The percentages and values assumed for the purposes of this exercise are listed below and are the result of Adams Integra experience and discussions with developers:

- **Build Costs (House Schemes)** – £1,000 / sq m
- **Build Costs (Flatted Schemes)** - £1,150 / sq m

Base costs are likely to be higher than for a scheme of houses particularly for small flatted schemes where sites are small and often difficult to work on (storage, craning etc). Common areas have to be allowed for, as does the degree of repetition of costly elements. Cashflows can also be less favourable as rolling sales are more difficult to deliver.

Build cost figures have been taken as an indicative base level, supported by our discussions with developers and verified through research of BCIS data.

Typical scheme specific additions to these are:

- **Demolition/Site Clearance** – £25,000 for all brownfield schemes. A cost has been added to each appraisal to take this into account. These values are based on our best estimates for an uncomplicated small site clearance with no contamination or deleterious materials. Please note that we have made no allowance for Party Wall complications or other works in this appraisal.
- **Architect Fees** *3.5% of build costs*
- **Consultants Fees** (e.g. engineer, planning supervisor, project manager) *3.0% of build costs*
- **Contingencies** *3.0% of build costs*
- **Insurances** *2.5% of build costs*
- **Marketing and Sales Fees** *1.5% of Estimated Gross Sales Value*
- **Legal Fees on Sale** *£400 per unit*
- **Finance (build)** *6.5% APR on above costs over build period*
- **Build Period** *26 weeks for all sites*

- **Land Survey Costs** *£3,000 per site for the smaller sites, £5,000 per site for the larger sites including basic ground conditions research (there will also be additional cost associated with transport, environmental / landscape, ecology etc).*

- **Legal Fees on Land Purchase** *0.5% of land value (this will often produce a low figure (when looking at very small or low value sites) but only make a minimal difference to outcome.*

- **Planning Application costs** *£220 per unit*

- **Stamp Duty** *Between 0% and 4% depending on residual land value (reflecting 2005 Budget Provisions)*

- **Infrastructure Payments** *£variable per unit (applied in all cases, regardless of site specifics). Following discussions with Horsham District Council a series of calculations was produced to achieve an approximate value for various infrastructure payments. These figures in reality would be based on site specific circumstances and so these payments used are an approximation. Figures used in the appraisal are as follows:*
 - *Horsham DC Community Facilities - £1,000 per small flat; £2,000 per large house (for this exercise, £1,000 has been used for 1-bed flats; £1,500 for 2-bed flats and houses and; £2,000 for 3-bed houses or more).*

 - *Transport Contributions - £900 per 2-bed unit; £1,100 per 3-bed unit; £1,350 per 4-bed unit (no contributions taken from 1-bed units).*

 - *Education - £2,500 used in all cases except 1-bed flats and affordable units.*

Please note that these are the figures used in the appraisals but are not necessarily representative across all new residential developments as each site will be calculated separately.

- **Finance related to land purchase** *6.5% APR on land survey, planning costs, legal fees on land purchase and residual land value over build time plus 26 weeks. No finance arrangement fee has been included for the purposes of this exercise as we are appraising small schemes. As with much of this exercise, this is a snapshot and there are varying views as to what future trends will hold. Over time we would need to see how added costs balanced with what sales values were doing.*

2.9.4 As this is a relative exercise aimed at determining the likely effect of the Council's proposed policy position, the most important factor is consistency between assumptions used for modelling scenarios. As we point out, specific assumptions and values for our notional schemes may not be appropriate for any particular actual development.

3. RESULTS ANALYSIS

3.1 Introduction

- 3.1.1 The results of our modelling are shown in Appendix I. Table 1 shows the reduction in residual land value as a consequence of lowering thresholds and increasing the proportion of affordable housing required. Table 1 is modelled on the basis of transferring completed affordable units to an RSL in return for reasonable build costs.
- 3.1.2 The results have also been represented in a series of graphs (1 to 11) which are sourced from Table 1. Graph 1 shows the percentage reduction in residual land value from existing (no affordable housing) to proposed policy in each of the model areas and across the range of schemes. Graph 2 shows the approximate land residual for each of the areas and compares the effect of proposed policy with existing (no affordable housing). Graph 3 shows the approximate land residual as a percentage of gross development value across the same areas. Graphs 4 – 7 show a breakdown of the same reduction in residual land value information by area. Graphs 8 – 11 again highlight the same information by area but show the values as a percentage of approximate gross development value, as per Graph 3 but amplified for ease of interpretation.

3.2 Reduction in Land Residual - Table 1, Column 10

- 3.2.1 Analysis of the results indicates that, as expected, increasing the affordable housing requirement and reducing the thresholds on the scenarios modelled leads to a reduction in residual land value.
- 3.2.2 A comparison of the reduction in land residual values in Table 1 (column 10) resulting from a proposed policy of 40% affordable housing on sites with 15 or more units in Horsham / North Horsham and the Larger Settlements indicates a reduction of approximately 55.2% for a 15 unit greenfield flatted scheme in Horsham / North Horsham and 56.9% for a similar scheme in the Larger Settlements. For a 15 unit brownfield flatted scheme we see an approximate reduction of 56.9% and 58.9% in Horsham / North Horsham and Larger Settlements respectively.
- 3.2.3 This trend continues throughout the results for Horsham / North Horsham and the Larger Settlements with little variation in the residual land value reduction.
- 3.2.4 When looking at the Small Settlements North and Small Settlements South scenarios, very similar trends can be observed but the likely impact of the policy proposals is smaller and a lower reduction in land residual of between approximately 48.6% and 51.8% can be seen. These reductions in land residual values occur across all notional scheme types whether 15 unit or 5 unit housing schemes.

3.3 Land Residual (as a percentage of GDV) – Table 1, Columns 8 & 9

- 3.3.1 While 3.2 above highlights the impact of affordable housing on site viability by looking at the overall reduction in land residual value, it is also relevant to review the approximate land residual figures produced (in monetary terms) and compare these across the range of proportion and threshold levels considered.
- 3.3.2 These are notional / illustrative only and not too much weight should be attached to them, but what we attempt to do is get a general feel for the amounts of money likely to be available to landowners, to help assess to what extent they might be incentivised to sell. There can be no definite cut off point owing to each landowner's position. It is not appropriate to assume that because a development appears to produce some land value, the land will change hands and the development proceed. This must be viewed alongside the owner's enjoyment / use of the land and other options available to them as we have already commented.
- 3.3.3 As stated above, for background and general comparison the modelling has investigated the residual land value with zero affordable housing to determine the approximate land value if the revised planning policy proposals promoting affordable housing on smaller sites did not apply. That reflects the current position in relation to the smaller sites, which would be captured by the proposed thresholds.
- 3.3.4 In terms of the approximate land residual remaining for the 15 unit schemes (columns 8 and 9 of Table 1), Horsham / North Horsham shows approximate land residual lowering from £800,397 to £358,552 (or from 31.5% of GDV to 18.7% of GDV) as a result of the proposed policy on a greenfield flatted scheme. On a greenfield housing scheme the land residual is reduced to an almost identical degree.
- 3.3.5 Parallels are seen in the Larger Settlements where the land residual drops from £722,990 to £311,624 (or from 29.7% to 16.8% of GDV) for a 15 unit greenfield flatted scheme. Again the effect of proposed policy on a 15 unit greenfield housing scheme is slightly less with approximate land residual lowering from £1,091,026 to £503,836 (or from 33.8% to 20.9% of GDV).
- 3.3.6 Very similar patterns emerge for the brownfield scenarios and across all schemes there is little difference in the relative changes to residual land value between one location and another.
- 3.3.7 In terms of the Small Settlements North and Small Settlements South again a comparable pattern can be seen. As with the reduction in land residual above, the relative reduction in land residual values are lower than for the Horsham / North Horsham or Larger Settlement examples. Overall there is very little relative difference in residual land value reductions between 15 or 5 unit schemes on either brownfield or greenfield land across these areas.

3.4 Case Study – Table 2

- 3.4.1 Finally, the Case Study of the flatted development in Horsham consisting of 6 no. 2 bed, 14 no. 3 bed and 1 no. 4 bed houses (Table 2).

- 3.4.2 This site was chosen through discussion with planning officers as it represents a fairly typical development that under current policy would not be required to provide affordable housing.
- 3.4.3 Table 2 shows a reduction in residual land value of 41.8% from £2,324,049 with no affordable housing requirement to £1,352,380 where 40% affordable housing is required (or 39.9% to 30.2% when related to percentage of GDV). This compares to a reduction of 56.9% for the 15 unit *notional* housing scheme appraised for Horsham / North Horsham.
- 3.4.4 It should be noted that although the results are similar, the case study shows less of an impact on land residual than the other results for Horsham / North Horsham. The reason for this is that in this example, the unit mix was skewed towards larger, higher value properties than the mix used in our appraisals. It may also be the case that values on the development would have been reduced to some tangible degree if affordable housing had been placed within the scheme. It shows that a scheme such as this, if considered under proposed policy, ought to be able to provide 40% affordable housing.
- 3.4.5 A final point to note is that the full details of this scheme were not available (in terms of actual build cost rate, funding and other costs, any abnormal expenses and the like) and as such the modelling uses a number of our assumptions rather than actual details. This case study should therefore be taken as indicative rather than absolute. The lower end values for the scheme (the units ranged in selling price) have been used, together with actual sizes and mix.
- 3.4.6 These figures show that there are small variances across the range of value areas modelled in terms of reduction in residual land value resulting from the proposed policy of 40% affordable housing. Slightly larger differences can be seen between the Larger Settlements / Horsham / North Horsham and the Small Settlements North and South and it appears that the impact of proposed policy may well be marginally greater in the Larger settlements and Horsham / North Horsham than in the Small Settlements.
- 3.4.7 Although as discussed above, there can be no definitive cut off at a point where land will cease to have a high enough value, it does appear that a 40% affordable housing policy in the Small Settlements may be viable at thresholds of either 15 or (in financial terms at least) 5 units. These results ultimately stem from the fact that relative to Horsham / North Horsham and the Larger Settlements, sales values are slightly higher.
- 3.4.8 In the Larger Settlements and Horsham / North Horsham the impact is slightly greater and as such there may, in some cases, be problems applying a policy of 40% affordable housing. Again, this is probably due to slightly lower sales values when compared to the Small Settlements and in such cases, the negotiated approach to achieving affordable housing will be even more important.

3.5 West of Horsham / Large Allocated Greenfield Sites

- 3.5.1 The special circumstances that surround large, allocated greenfield sites within Horsham District preclude this study from appraising those particular areas as

there are too many “unknowns” especially with regard to likely infrastructure requirements.

- 3.5.2 By their nature these areas will tend to be formed from farmland or similar with an intrinsically low existing use value. As such, the expectations from the landowner in terms of residual land value should also be lower. This will lead to the capacity for the land to bear infrastructure costs to be increased relative to the smaller sites examined elsewhere in this report, especially those with high existing use values.
- 3.5.3 Sites that come forward as components of Strategic Development Locations in the Local Development Framework and as part of the requirement under the West Sussex Structure Plan and new Regional Plans targets should therefore be capable of sustaining equivalent levels of affordable housing together with increased levels of other infrastructure such as new schools, health and community, highways etc. It is important to note however that there may need to be a prioritising process when the infrastructure burdens are significant. Such schemes may well involve major Highways and Utility provision works for example. Infrastructure costs, including the affordable housing, will need to be viewed collectively and their overall impact on viability considered.
- 3.5.4 We anticipate that further, more detailed viability appraisal work will need to be carried out on a scheme specific basis once much more is known about such proposals.

3.6 Effect of Other Planning Gain Contributions (Table 3; Graphs 12 – 14)

- 3.6.1 To assess the impact on the affordable housing requirement above of other planning gain contributions, appraisal modelling has been carried out on the Horsham / North Horsham areas only. This gives an example of the effect of planning infrastructure on residual land values. Table 3 and Graphs 12 – 14 give details of the results.
- 3.6.2 To determine the effect other planning gain requirements have had on residual land value, we have carried out the same modelling as before but this time removed the infrastructure contributions from the equations but only for those schemes that include the 40% affordable housing requirement. For the “without affordable” schemes the planning gain contributions have been kept in place.
- 3.6.3 Table 3 shows, as expected, that removing the planning gain contributions increases the approximate residual land value, ie decreases the reduction in residual land value resulting from a change from zero affordable housing to 40%. For example Table 3, Column 10 shows a reduction in land residual value of 49.9% for a flatted 15 unit greenfield scheme compared to a reduction of 55.2% for the equivalent scheme that includes other planning gain costs.
- 3.6.4 This equates to an increase in approximate residual land value from £358,552 to £401,232 (Table 1, Column 8 and Table 3, Column 8 respectively) or from 16.4% to 18.7% when expressed as a percentage of GDV.

3.6.5 These figures are mirrored throughout the Horsham / North Horsham model. These figures can also be extrapolated to the other model areas. This shows overall that the impact of other planning infrastructure costs on a development in the Horsham District (based on the figures provided by Horsham District Council) is to reduce residual land values by between approximately 2 - 3%. It is important to remember however that the planning infrastructure costs used in the modelling are “guesstimates” made by HDC and therefore would not relate to all schemes in the District.

3.6.6 Infrastructure costs will in practice be passed on to the landowner through reducing the land purchase price, and this is demonstrated here. It explains why some Local Authorities adopt a different approach to infrastructure requirements and costs for affordable homes than they do for private homes. Effectively, addition of these requirements will increase the cost which in turn can reduce affordability of those homes.

3.7 Off-Site Contributions

3.7.1 We are aware of a multitude of methods for calculating the level of off-site payments (made in lieu of on-site provision of affordable housing).

3.7.2 It is recognised and should be confirmed in policy / guidance that the core approach will continue to be provision on site. This would not be varied from as a matter of course. However it might be helpful to be clear on setting out examples of cases where consideration would be given to payment in lieu as an exception to the norm. Such cases might include:

- Some sheltered and particular market schemes where design, management and service charge issues might compromise successful development and result in affordability issues.
- Costly and rural conversion type scenarios, which might present cost (viability), design and affordability issues as well as result in locating affordable housing in less sustainable areas or non-priority areas in terms of need level.

3.7.3 Dependent on the Council's final proposed stance on thresholds, this issue might also become a more central part of the approach where practical issues with integrating affordable housing within some small developments might encourage a payment or part payment in lieu approach. This might also fit in with seeking to provide priority needs type of accommodation in terms of location, size and type.

3.7.4 Examples of methods are:

1. Equating the sum to the amount of Social Housing Grant that would have been available to deliver affordable rented accommodation under the former grant regime. In our view this is likely to be seen as an increasingly obscure, mysterious and less relevant approach owing to increasing unfamiliarity with traditional grant rates and calculations.
2. Looking at the land price element within the development appraisal in respect of the number of plots that would have been set aside (at nil cost) ready for

development under the usual on site model. This is sometimes also expressed as a percentage of the relevant TCI (Housing Corporation “Total Cost Indicator”, being the notional land component of the affordable housing development cost build up. In our view this plot value approach is a logical one which aligns itself well to the preferred on-site approach. However references to TCI are likely to become increasingly less relevant owing to their declining use. Thoughts instead will perhaps need to be aligned to simple plot valuation, or relationship to open market value of properties.

3. Looking at the estimated cost of provision of the affordable homes less the amount of mortgage finance which could be raised against the net rental / income flow. This relates to 1 above and again in our view is likely also to be viewed with some confusion by the development industry. It gets quite complex particularly when attempts are made to relate figures to a range of tenure models which produce different financial positions. We need to arrive at mechanisms which are transparent and relate to the private development evaluation process.
 4. Taking the market value of the property type(s) in question and deducting the relevant TCI figure (or a prescribed % of that) giving the difference between developer’s receipt and benchmark development cost for an affordable home in the area. This approach aligns itself to the typical cost limit that would have been / is applied to control costs under the s.106 process. Although the use of TCIs is fading, this can be a simple method which the development industry relates to. As with other methods, it needs to be accompanied by clear assumptions on what form (size & type) of homes the LA is seeking to provide as replacements elsewhere. It needs to be accepted that the type of units sought may not coincide with those being provided on site (and indeed that may be one of the reasons for going down a payment route). We have current experience of this type of approach working, the issue being its longevity bearing in mind the comments made above on TCIs.
 5. Some local authorities have a prescriptive approach set out in a payment table or matrix. These are often allied to approach 3 above, but need regular updating, often struggle to deal with a wide enough range of situations and tend to be viewed as overly prescriptive and theoretical by the development industry where they are not very carefully thought out.
- 3.7.5 We recommend setting out an approach linked to methods 2 or 4 above, which we feel are simpler and more readily related to on-site provision (particularly if a free land approach is confirmed for on-site scenarios). This should form part of simple and readily updated SPG / SPD.

4. Conclusions

- 4.1.1 Horsham District Council's brief set out to assess the deliverability and impact of affordable housing proposals on the viability of new development of a proposed requirement of up to 40% affordable housing provision in tandem with a reduction in proposed thresholds from 25 to 15 units across all areas. In addition the Council wanted to test the possibility of lowering the threshold further, to 5 units, in the smaller rural parishes.
- 4.1.2 The results highlighted above and shown in Tables 1 and 2 and the associated graphs indicate, as expected, that the proposed threshold reductions and increased proportions of affordable housing sought on qualifying sites has a variable impact across the model areas. In all cases though, the proposed policy has the effect of reducing the residual land value significantly.
- 4.1.3 Although there were not large differences between the model areas, a greater impact was seen in the Horsham / North Horsham and Larger Settlements. From this it is possible to extrapolate the results to reflect all areas in the District with similar residential property values.
- 4.1.4 The impact is less in the Small Settlements and the rural areas and again the same results would be seen in other areas within the District with comparable property values.
- 4.1.5 In terms of proposed policy it appears that the higher value rural areas of the Horsham District may be able to sustain the proposed policy changes at either a 15 or a 5 unit threshold. Although the impact is marked and the approximate residual land values are reduced, they still remain *relatively* strong in terms of encouraging land supply.
- 4.1.6 In Horsham / North Horsham and the Larger Settlements, the residual land values are lower relative to other areas of the District and sometimes on the margins of viability (after proposed affordable housing policy impacts). As mentioned previously, these areas are likely to see the greatest impact of proposed policy and as such it is important that the policy proposals are set out as a target or a baseline rather than a minimum. It needs to be remembered that values for residential development must be sufficient relative to existing or alternative use values (e.g. commercial/ domestic) for residential schemes to be pursued and promoted.
- 4.1.7 Given the relative consistency and strength of development values across much of the District, introducing separate policies for different areas is probably not necessary. Sites to the south / south west / west of Horsham in areas where we have identified lower values are typical (eg Southwater) are more likely to be greenfield releases where the existing use value issue is alleviated, and there should be more scope to support affordable housing. This might usefully counterbalance in some way our concerns that viability does look much tighter in such locations on current assumptions. As mentioned below, this is providing that the overall infrastructure burden on a site is not too great.
- 4.1.8 A 40% policy target should be sustainable and help to deliver an increased proportion of affordable homes compared with current levels. Where sites are not

burdened with abnormal costs or very high value competing uses, the 40% should be deliverable.

- 4.1.9 Some of the impact of the proposals in the slightly lower value areas (eg in Horsham / North Horsham and Larger Settlements and similar areas) may be alleviated by careful negotiation. It is therefore important to ensure that flexibility in approach to policy is maintained through the Council's proposed policies on affordable housing, but with clear policy on baseline levels to set the scene for discussions with developers and landowners.
- 4.1.10 With regard to smaller schemes, there will be instances where location, design, servicing cost, marketing or other practical issues will mean that a reduced proportion of less than 40% affordable housing (dependent on the threshold) will need to be negotiated following open discussions with developers. Alternative approaches to affordable housing provision may also be required to ensure a satisfactory level of contribution to affordable housing need (e.g. off-site contributions).
- 4.1.11 This point is also true of all other cases where abnormal conditions or peculiar localised circumstances determine that viability of a site is jeopardised by the impact of infrastructure demands. As stated previously, in these cases it will be particularly important that an open book and negotiated approach with developers is undertaken.
- 4.1.12 There will also be cases where the development value / cost relationship will not be strong enough to support a high proportion of affordable housing and we are unable to state categorically that the proposed policy will be achievable across the board. There is no one "cut-off" point where sites become unviable; each needs to be considered given its specific characteristics. However, the results do indicate strongly in favour of the proposed policy within the highest value areas in the District eg Small Settlement areas both North and South and other areas of similar residential values.
- 4.1.13 Large scale greenfield release sites (perhaps as part of Strategic Development Locations) are likely to require careful site specific consideration of viability issues. Infrastructure costs, including affordable housing provision, will need to be considered collectively. This process may lead to the Council, Community and other agencies to considering prioritisation of infrastructure needs.
- 4.1.14 The proposed policy CP5 requires "Residential developments of more than 15 dwellings (or on sites of 0.5 hectare and above) or, in settlements of less than 3,000 population, of more than 5 dwellings (or on sites of 0.16 hectare and above) will be permitted provided that they include an appropriate proportion (40% or more) of dwelling sizes and types to meet the proven needs of people (including key workers) who are not able to compete in the general housing market".
- 4.1.15 It is suggested that greater flexibility could be attained by viewing the 40% as a "baseline" or target on the basis that developers need to demonstrate why particular targets could not be met if that were the case. This would then allow the Council manoeuvrability when negotiating on sites in lower value areas and

with a workable approach to viability on more difficult sites where abnormal development costs are encountered.

- 4.1.16 In whatever form, it is important that the Council sets clear policy against which a negotiated approach based on site specifics could be adopted. This approach is one advocated by the Government guidance such as c.6/98 and PPG 3, and is an approach likely to be confirmed and strengthened as that guidance is reviewed.
- 4.1.17 Clear policy, targets and Supplementary Planning Guidance (SPG - to become SPD) will ultimately help with land value expectations and site delivery. SPG needs to be capable of being updated readily (a process that may be made easier by the introduction of the Local Development Framework arrangements).
- 4.1.18 Problems will come on those sites which have already changed hands or are committed through option or similar arrangements where figures may simply not work when set against the proposed policy requirements.
- 4.1.19 A degree of hiatus may be experienced during the adjustment process where there will be problems whilst developers / landowners get accustomed to the new policies and expectations are re-modified. The modelling in this study has been carried out on the assumption that knowledge of policies exists and that the landowner / developer education process has been undertaken.

End of Main Report
Appendices follow
June 2005

APPENDICES

**Appendix I - Results of Land Residual Calculations (Tables 1 - 3; Graphs 1 - 14)
Including Case Study (Table 2)**

Appendix II - House Price Data (Tables 4 & 5; Graphs 15 – 17)

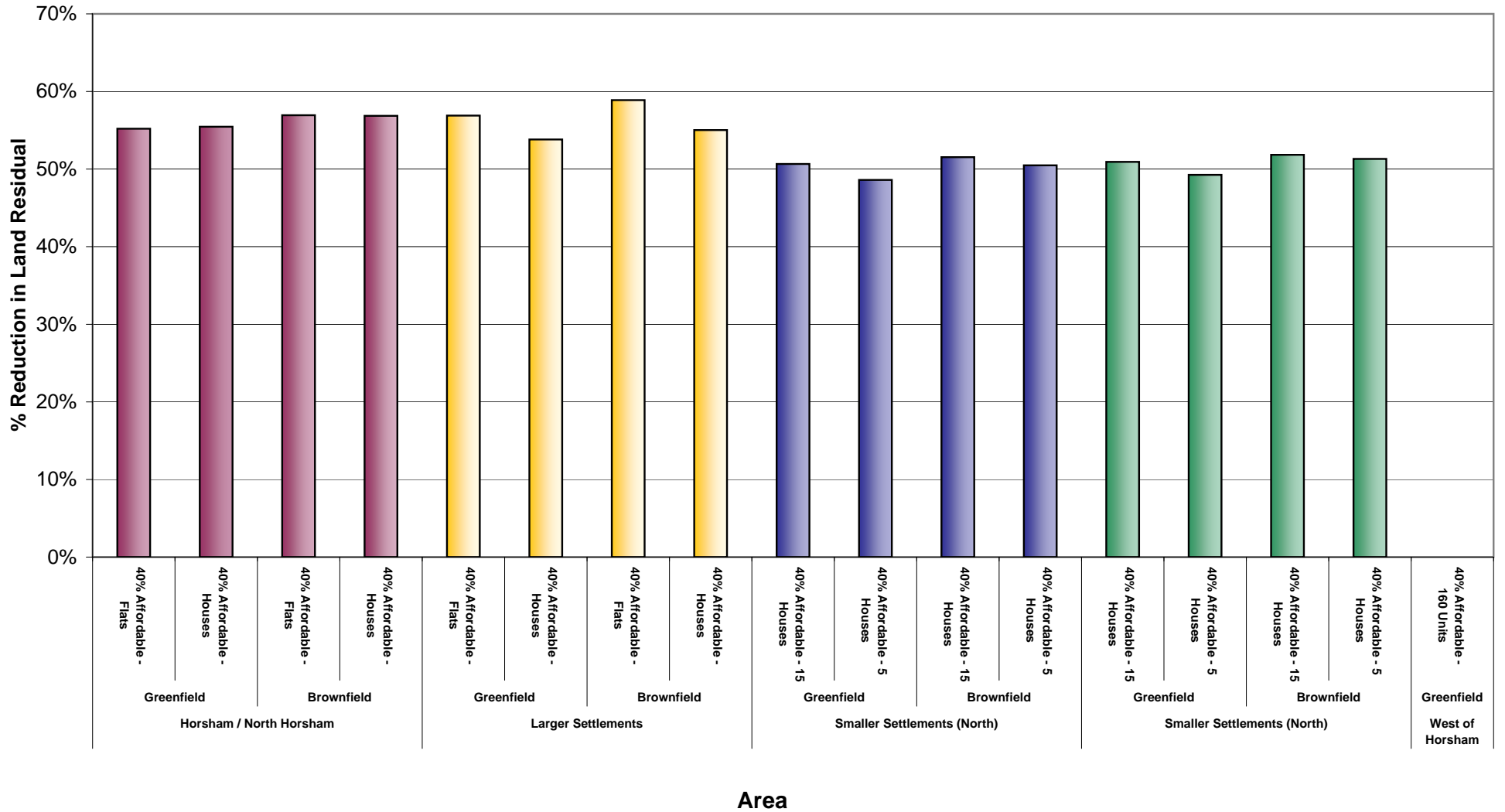
Table 1: Summary Table Showing Reduction in Land Residual Based on Transfer of Affordable Units in Return for Reasonable Build Costs

1	2	3	4	5	6	7	8	9	10
Location		Unit Mix	GDV	Development Cost	Developer Profit (@15%)	Finance & Land Costs	Residual Land Price	% Land Residual (of GDV)	% Reduction in Land Residual (From Zero Affordable Housing)
Horsham / North Horsham	Greenfield	15 Flats, No Affordable	£2,540,423	£1,158,226	£381,063	£163,094	£800,397	31.5%	N/A
		15 Flats, 40% Affordable	£1,922,154	£1,142,984	£288,323	£95,148	£358,552	18.7%	55.2%
		15 Houses, No Affordable	£3,075,425	£1,384,931	£461,314	£208,831	£975,338	31.7%	N/A
		15 Houses 40% affordable	£2,321,255	£1,366,479	£348,188	£127,753	£434,424	18.7%	55.5%
	Brownfield	15 Flats, No Affordable	£2,540,423	£1,158,226	£381,063	£187,094	£776,397	30.6%	N/A
		15 Flats, 40% Affordable	£1,922,154	£1,142,984	£288,323	£119,398	£334,302	17.4%	56.9%
		15 Houses, No Affordable	£3,075,425	£1,384,931	£461,314	£232,831	£951,338	30.9%	N/A
		15 Houses 40% affordable	£2,321,255	£1,366,479	£348,188	£151,753	£410,424	17.7%	56.9%
Larger Settlements	Greenfield	15 Flats, No Affordable	£2,436,529	£1,156,668	£365,479	£153,800	£722,990	29.7%	N/A
		15 Flats, 40% Affordable	£1,859,818	£1,142,049	£278,973	£90,055	£311,624	16.8%	56.9%
		15 Houses, No Affordable	£3,230,699	£1,387,260	£484,605	£222,722	£1,091,026	33.8%	N/A
		15 Houses 40% affordable	£2,414,419	£1,367,876	£362,163	£136,088	£503,836	20.9%	53.8%
	Brownfield	15 Flats, No Affordable	£2,436,529	£1,156,668	£365,479	£177,800	£698,990	28.7%	N/A
		15 Flats, 40% Affordable	£1,859,818	£1,142,049	£278,973	£114,305	£287,374	15.5%	58.9%
		15 Houses, No Affordable	£3,230,699	£1,387,260	£484,605	£246,722	£1,067,026	33.0%	N/A
		15 Houses 40% affordable	£2,414,419	£1,367,876	£362,163	£160,088	£479,836	19.9%	55.0%

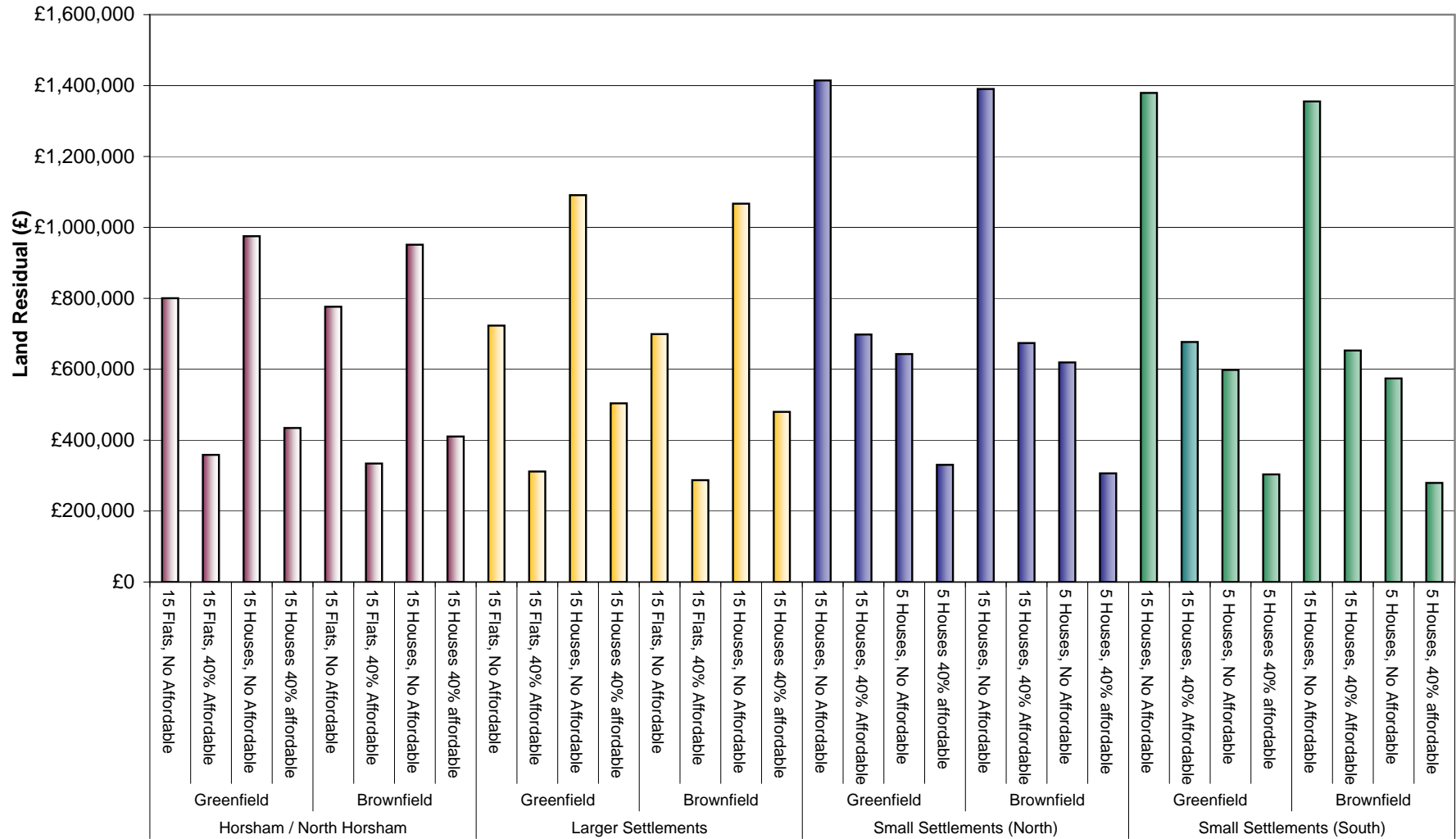
Table 1: Summary Table Showing Reduction in Land Residual Based on Transfer of Affordable Units in Return for Reasonable Build Costs

1	2	3	4	5	6	7	8	9	10
Location		Unit Mix	GDV	Development Cost	Developer Profit (@15%)	Finance & Land Costs	Residual Land Price	% Land Residual (of GDV)	% Reduction in Land Residual (From Zero Affordable Housing)
Small Settlements (North)	Greenfield	15 Houses, No Affordable	£3,664,804	£1,393,772	£549,721	£261,557	£1,414,457	38.6%	N/A
		15 Houses, 40% Affordable	£2,674,883	£1,371,783	£401,232	£159,389	£697,895	26.1%	50.7%
		5 Houses, No Affordable	£1,502,813	£506,142	£225,422	£111,730	£643,068	42.8%	N/A
		5 Houses 40% affordable	£1,073,688	£497,125	£161,053	£68,827	£330,526	30.8%	48.6%
	Brownfield	15 Houses, No Affordable	£3,664,804	£1,393,772	£549,721	£285,557	£1,390,457	37.9%	N/A
		15 Houses, 40% Affordable	£2,674,883	£1,371,783	£401,232	£183,389	£673,895	25.2%	51.5%
		5 Houses, No Affordable	£1,502,813	£506,142	£225,422	£135,730	£619,068	41.2%	N/A
		5 Houses, 40% affordable	£1,073,688	£497,125	£161,053	£92,827	£306,526	28.5%	50.5%
Small Settlements (South)	Greenfield	15 Houses, No Affordable	£3,617,478	£1,393,062	£542,622	£257,323	£1,379,197	38.1%	N/A
		15 Houses, 40% Affordable	£2,646,487	£1,371,357	£396,973	£156,849	£676,739	25.6%	50.9%
		5 Houses, No Affordable	£1,442,300	£505,235	£216,345	£106,317	£597,984	41.5%	N/A
		5 Houses 40% affordable	£1,037,380	£496,581	£155,607	£65,579	£303,475	29.3%	49.3%
	Brownfield	15 Houses, No Affordable	£3,617,478	£1,393,062	£542,622	£281,323	£1,355,197	37.5%	N/A
		15 Houses, 40% Affordable	£2,646,487	£1,371,357	£396,973	£180,849	£652,739	24.7%	51.8%
		5 Houses, No Affordable	£1,442,300	£505,235	£216,345	£130,317	£573,984	39.8%	N/A
		5 Houses, 40% affordable	£1,037,380	£496,581	£155,607	£89,579	£279,475	26.9%	51.3%

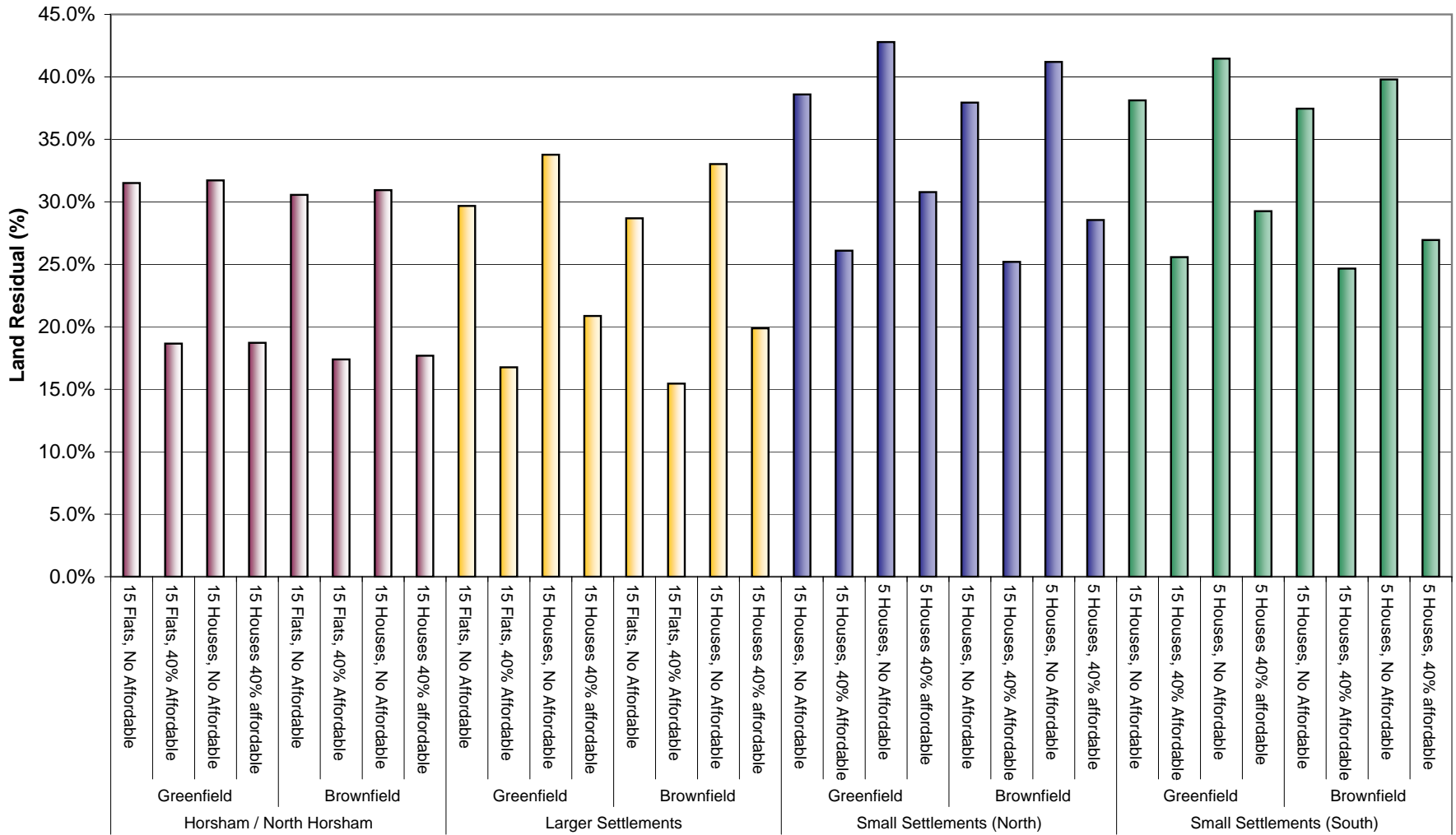
Graph 1: Showing Comparison % Reduction in Land Residual Value in the Model Areas from Zero to 40% Affordable Housing on Brownfield / Greenfield Sites



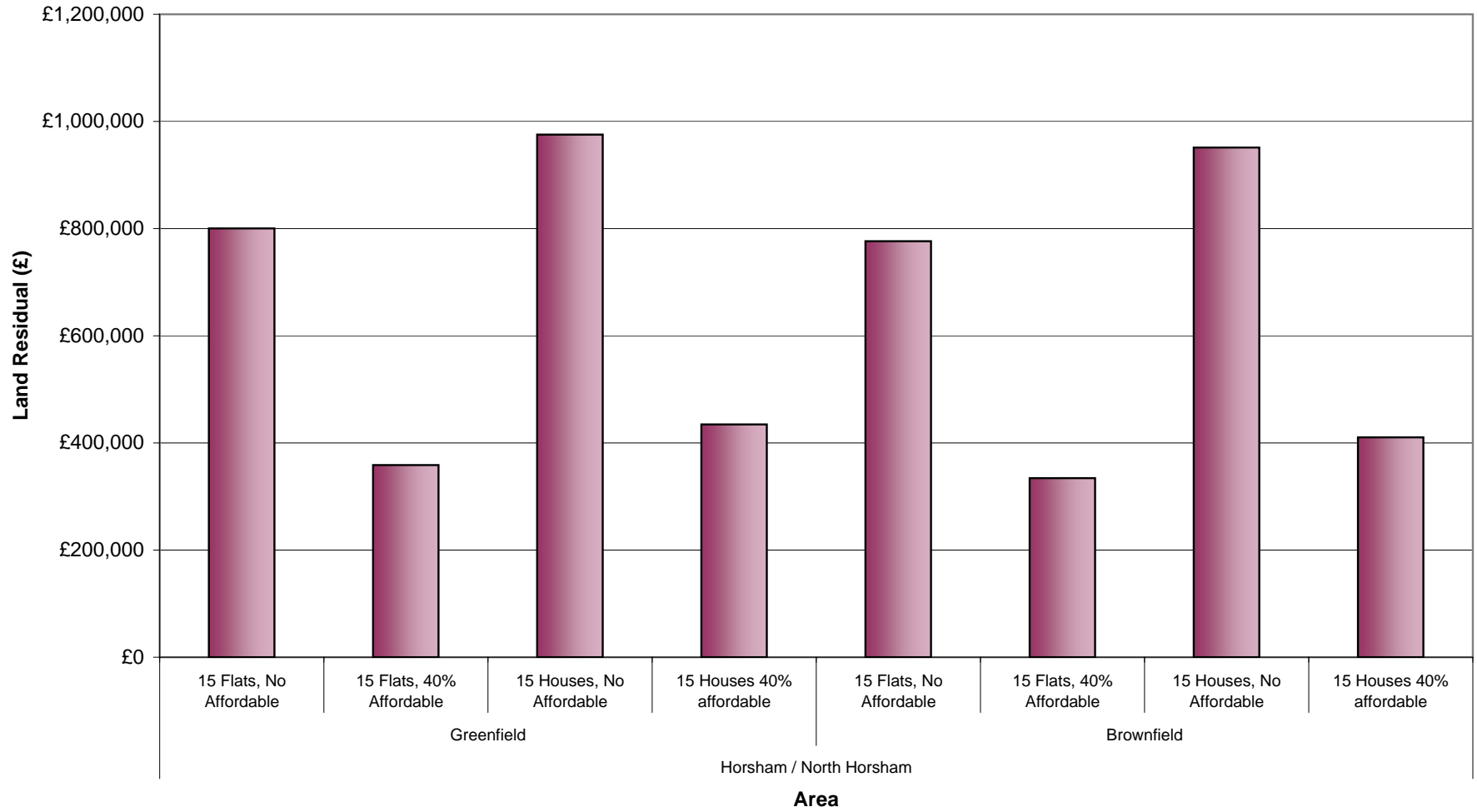
Graph 2: Showing Comparison of Approximate Residual Land Values - All Areas



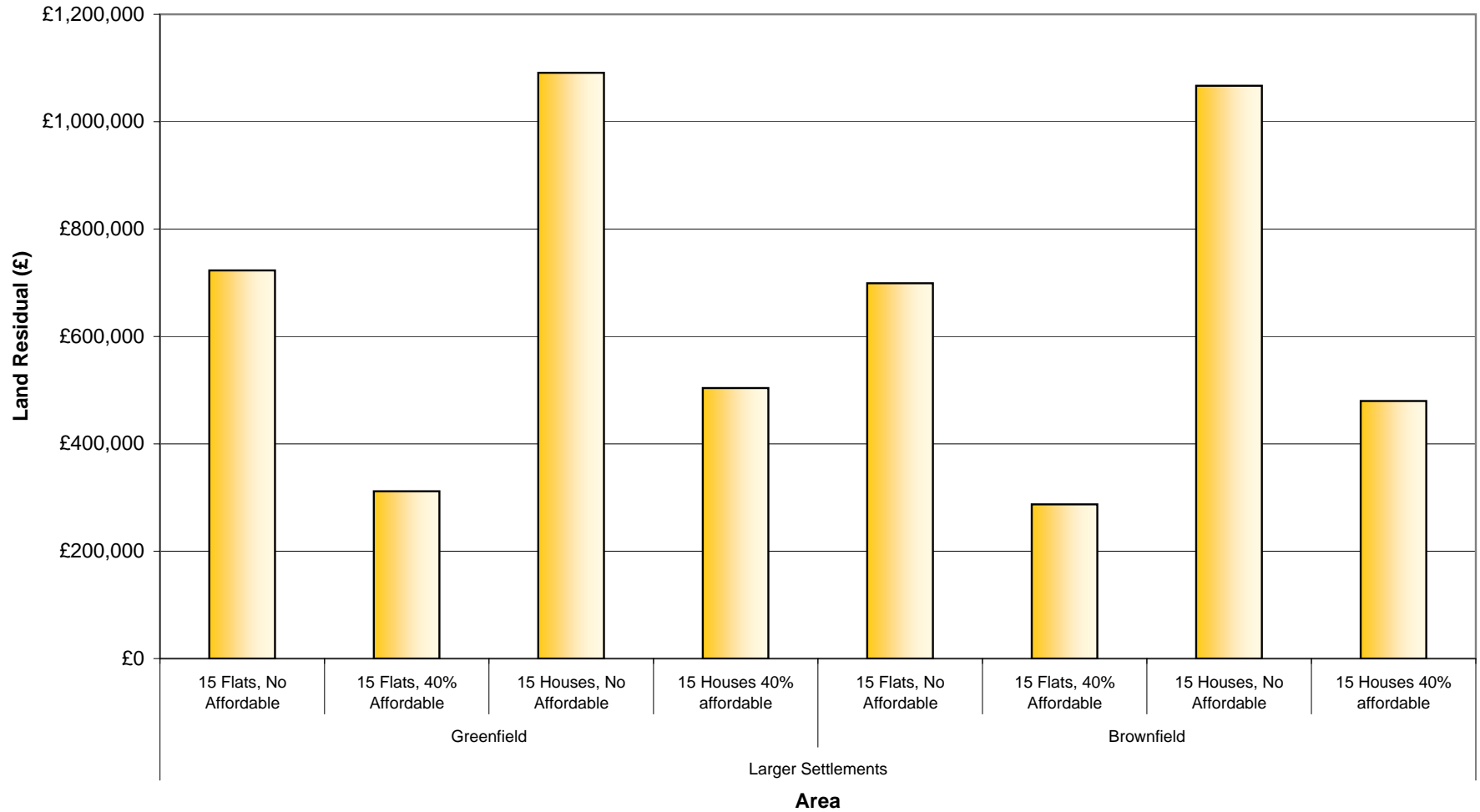
Graph 3: Showing Comparison of Approximate Residual Land Value as Percentage of GDV - All Areas



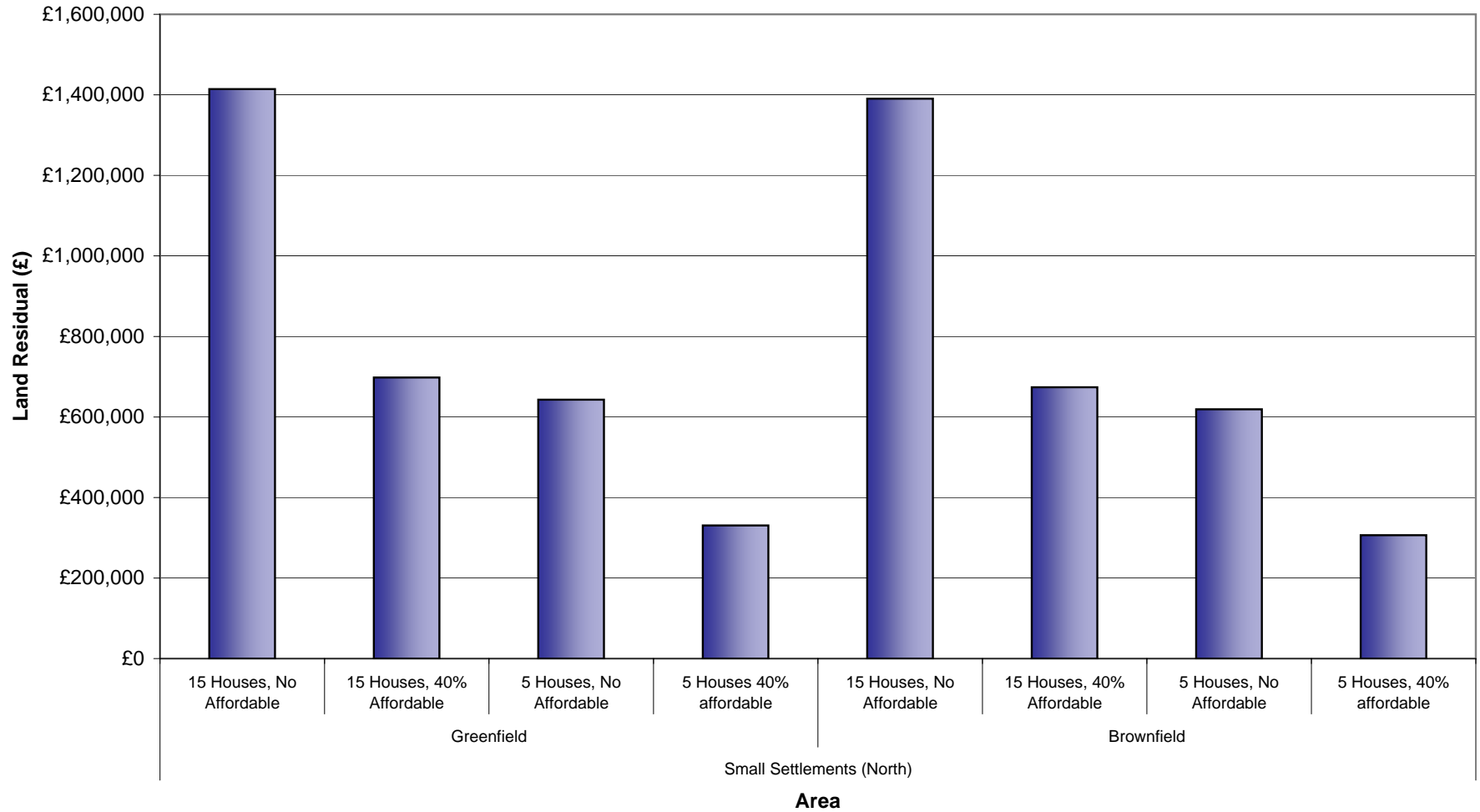
Graph 4: Showing Approximate Residual Land Values (£) for Horsham / North Horsham Varied by Type of Site and Affordable Housing



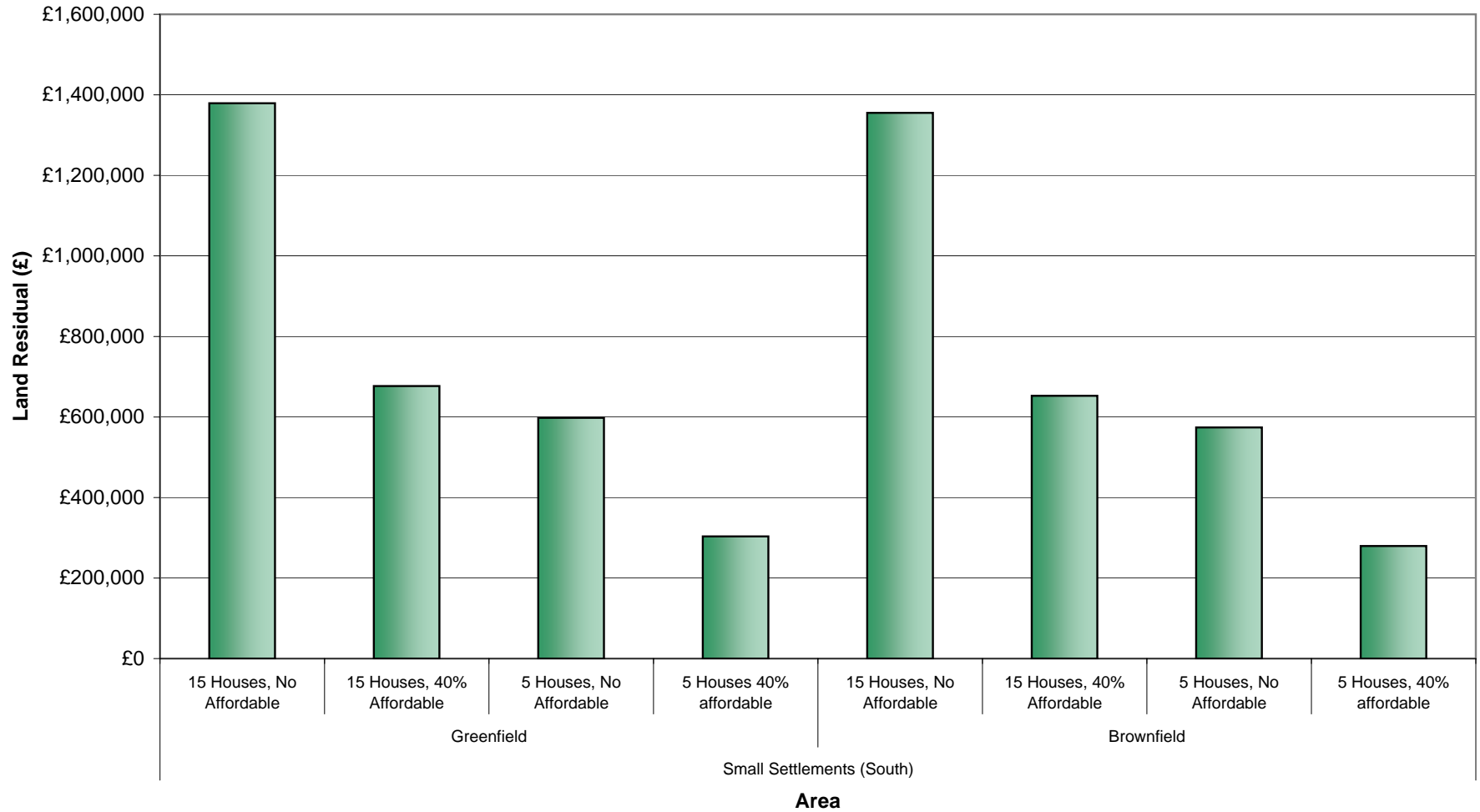
Graph 5: Showing Approximate Residual Land Values (£) for Larger Settlements Varied by Type of Site and Affordable Housing



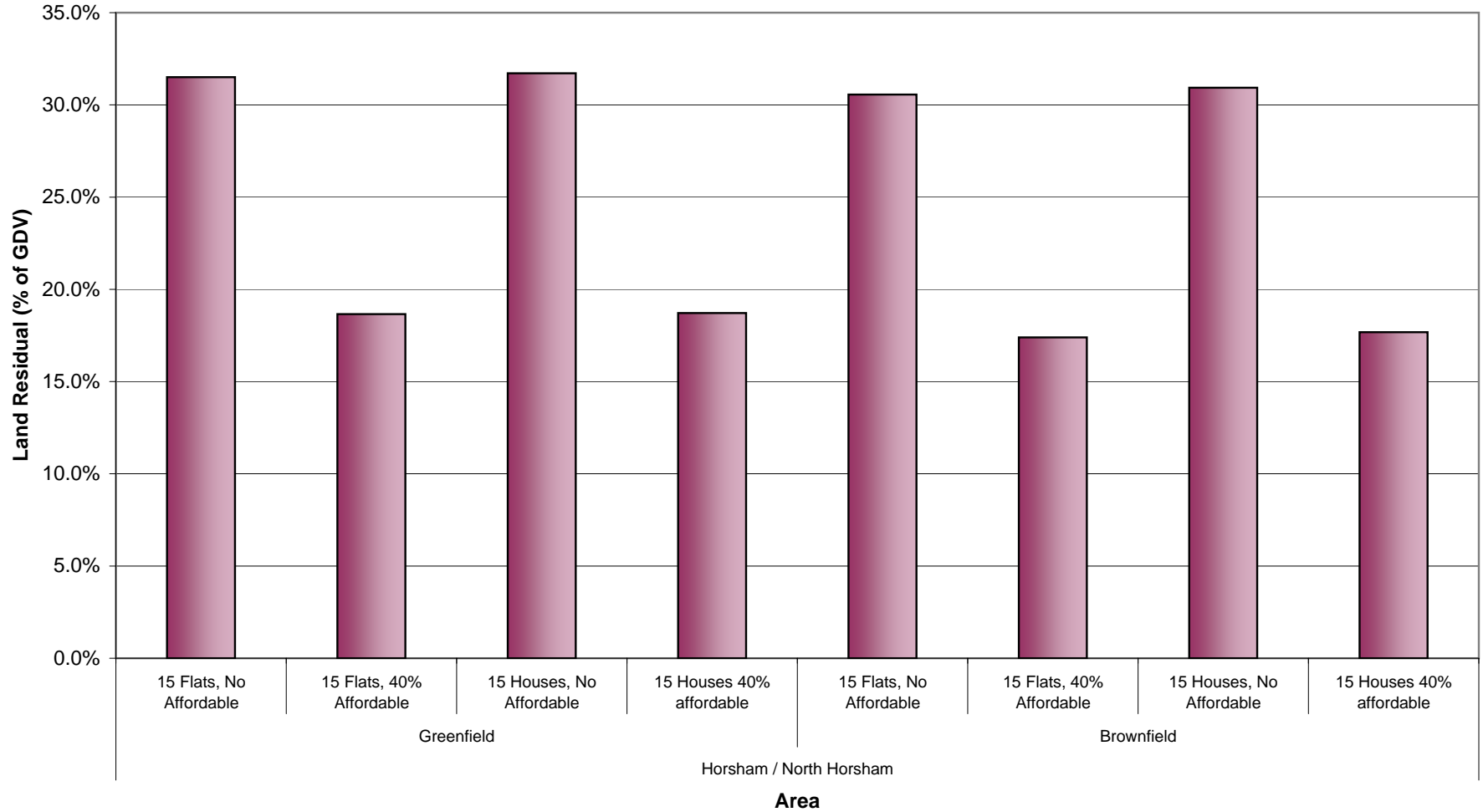
Graph 6: Showing Approximate Residual Land Values (£) for Small Settlements (North) Varied by Type of Site and Affordable Housing



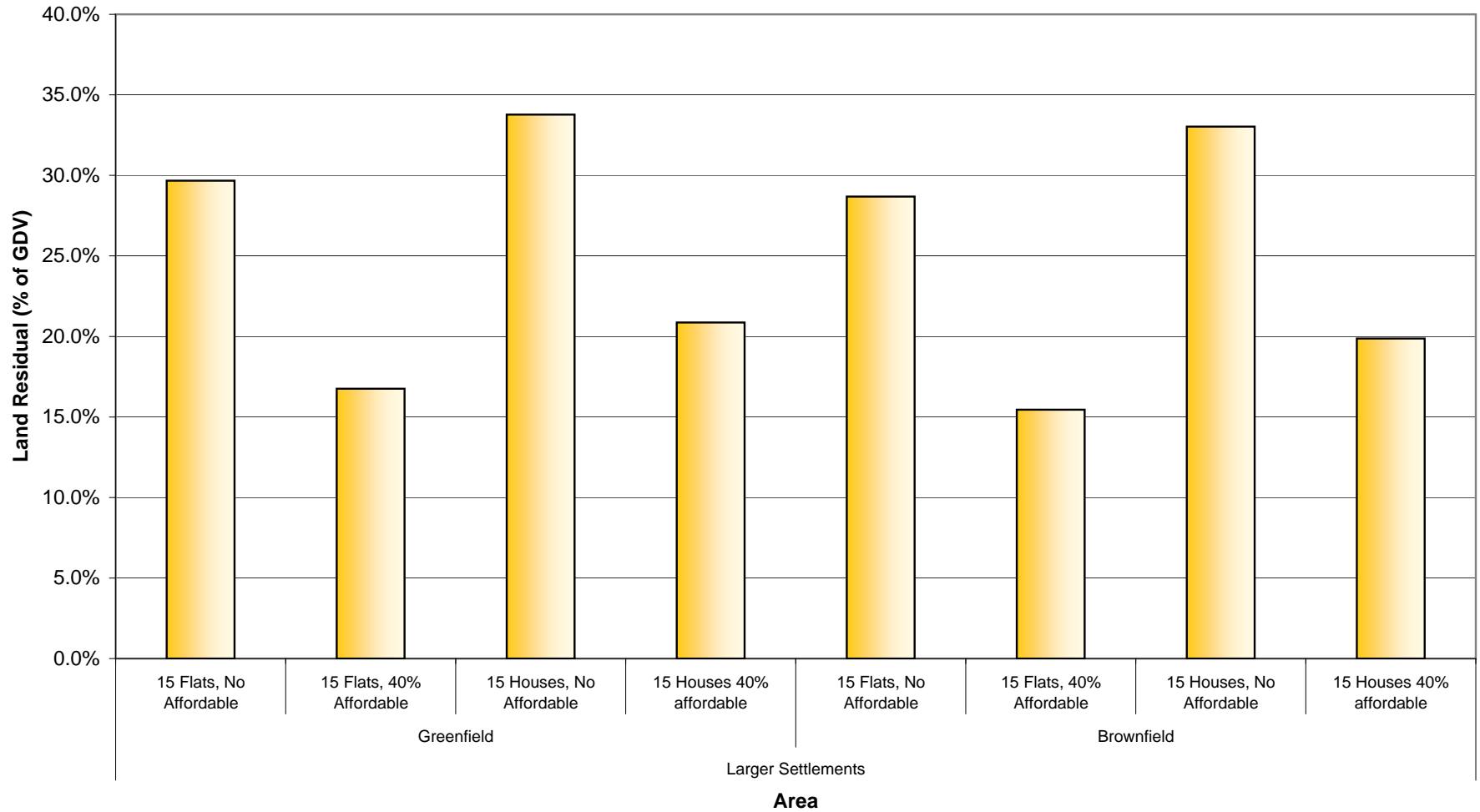
Graph 7: Showing Approximate Residual Land Values (£) for Small Settlements (South) Varied by Type of Site and Affordable Housing



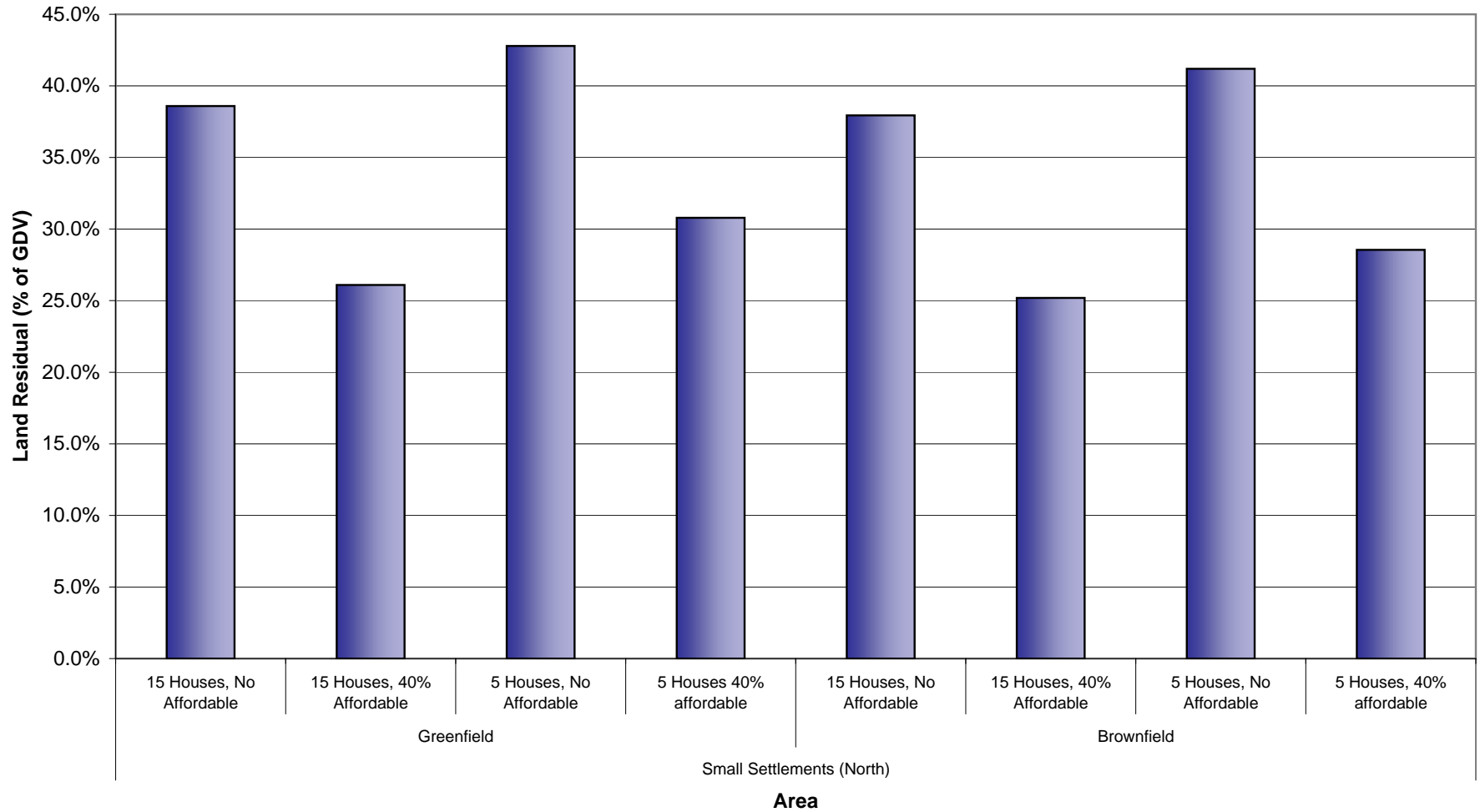
Graph 8: Showing Approximate Residual Land Values as Percentage of GDV for Horsham / North Horsham Varied by Type of Site and Affordable Housing



Graph 9: Showing Approximate Residual Land Values as Percentage of GDV for Larger Settlements Varied by Type of Site and Affordable Housing



Graph 10 Showing Approximate Residual Land Values as Percentage of GDV for Small Settlements (North) Varied by Type of Site and Affordable Housing



Graph 11 Showing Approximate Residual Land Values as Percentage of GDV for Small Settlements (South) Varied by Type of Site and Affordable Housing

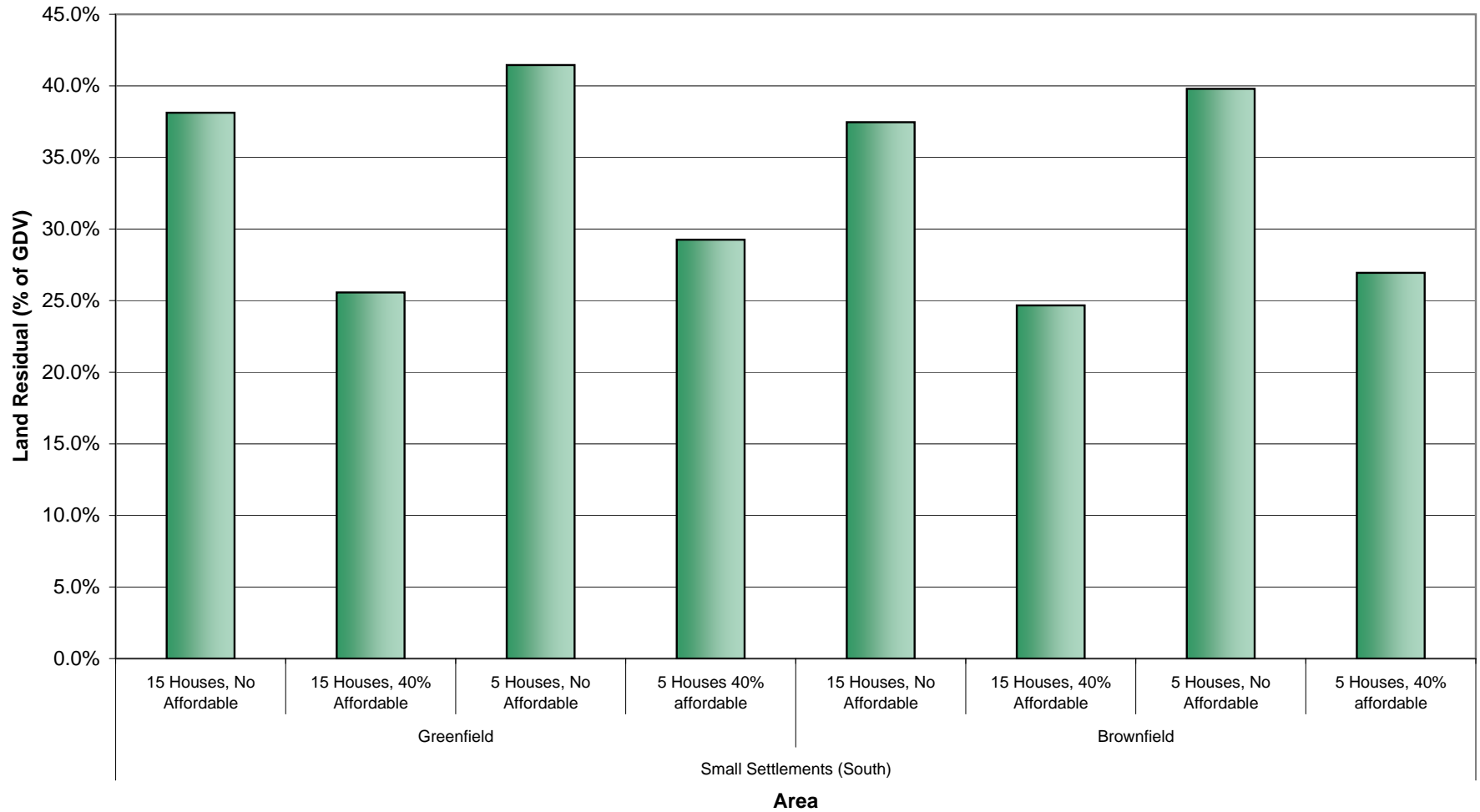


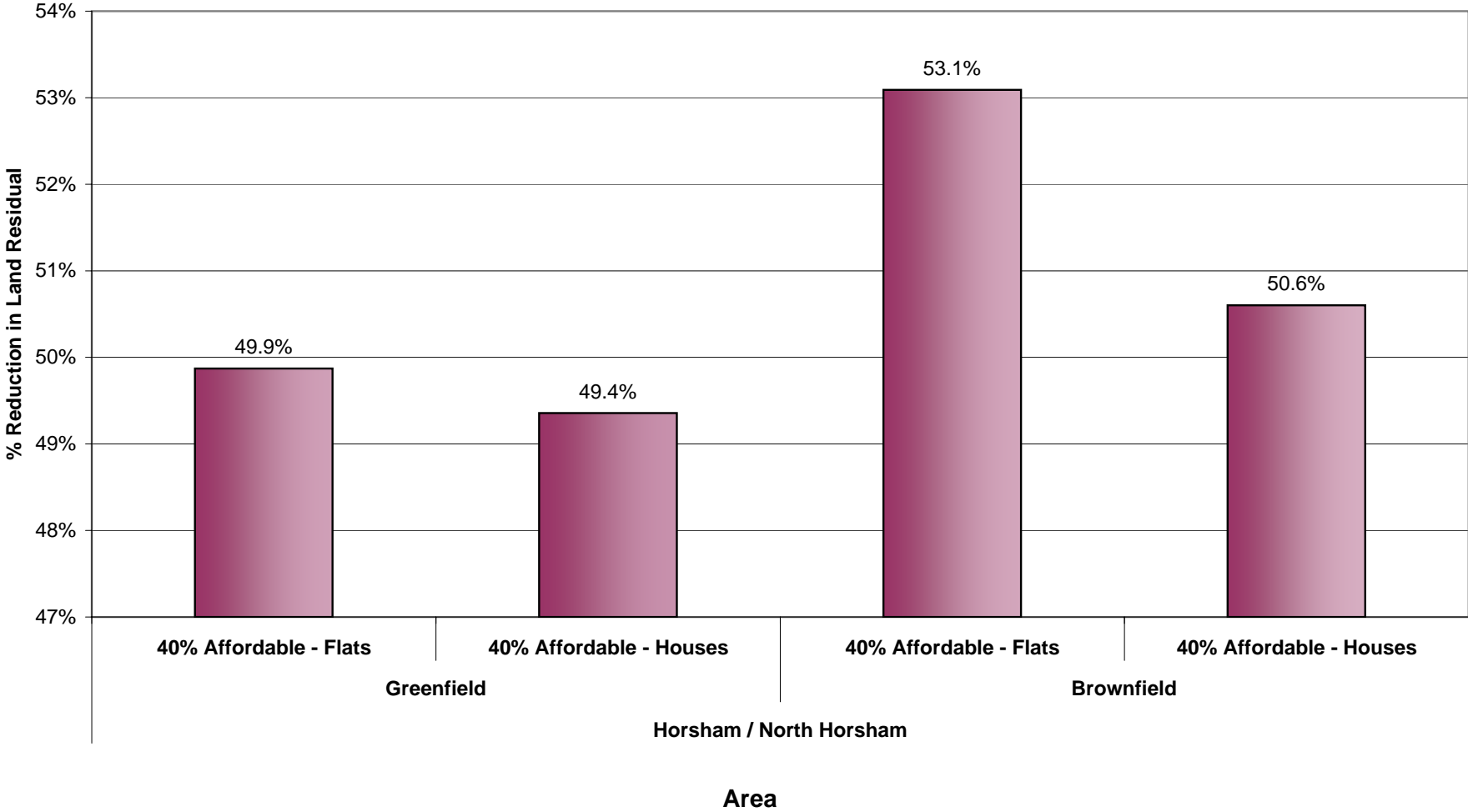
Table 2: Horsham Case Study - Summary Table Showing Reduction in Land Residual Based on Transfer of Affordable Units in Return for Reasonable Build Costs

1	2	3	4	5	6	7	8	9
Location	Unit Mix	GDV	Development Cost	Developer Profit (@15%)	Finance & Land Costs	Residual Land Price	% Land Residual (of GDV)	% Reduction in Land Residual (From Zero Affordable Housing)
Horsham Case Study	21 Houses, No Affordable	£5,820,000	£2,089,300	£873,000	£431,797	£2,324,049	39.9%	N/A
	21 Houses, 40% Affordable	£4,482,000	£2,061,070	£672,300	£295,772	£1,352,380	30.2%	41.8%

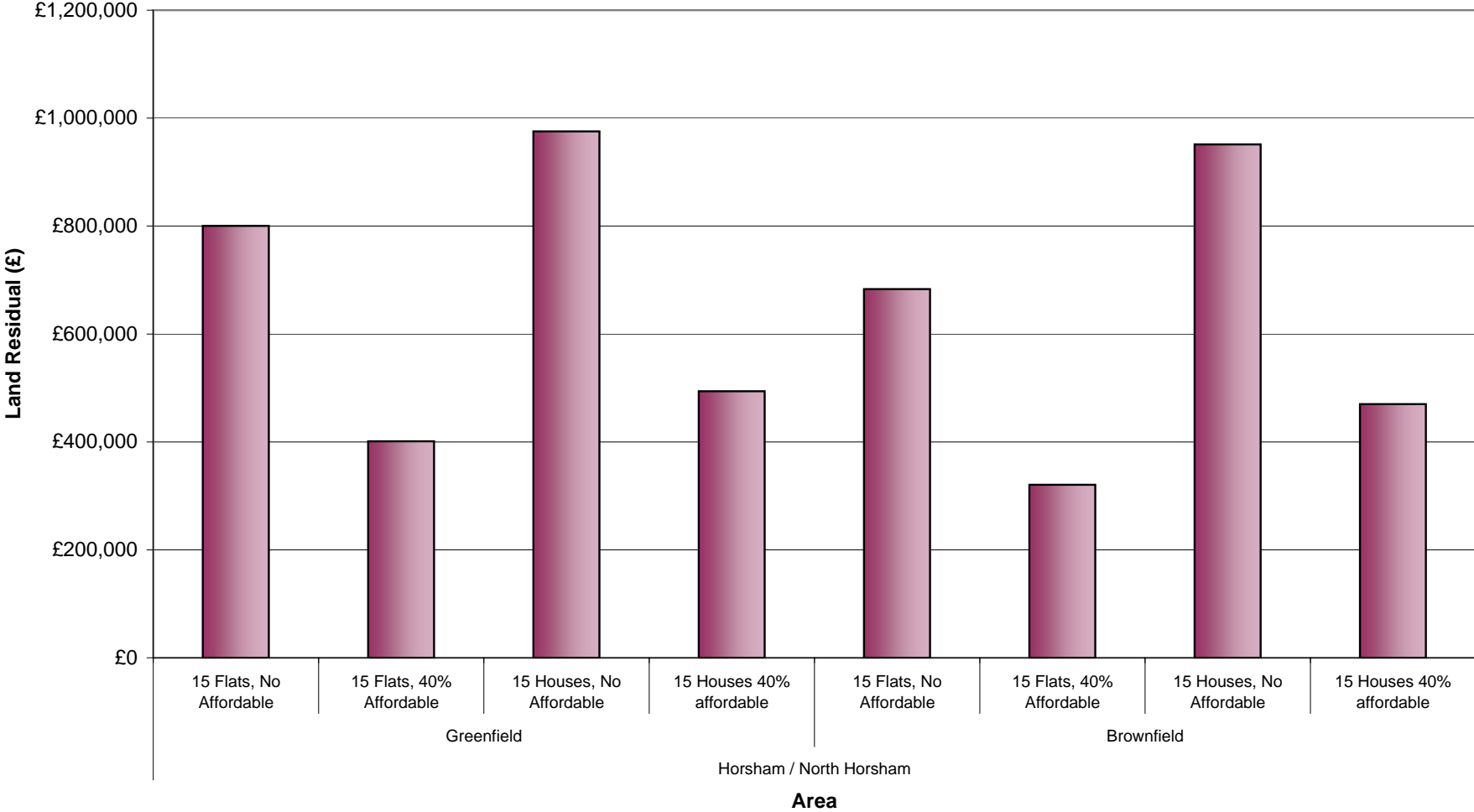
Table 3: Summary Table Showing Reduction in Land Residual Based on Transfer of Affordable Units in Return for Reasonable Build Costs Without Infrastructure Costs for 40% Affordable Housing Schemes - Horsham / North Horsham Only

1	2	3	4	5	6	7	8	9	10
Location		Unit Mix	GDV	Development Cost	Developer Profit (@15%)	Finance & Land Costs	Residual Land Price	% Land Residual (of GDV)	% Reduction in Land Residual (From Zero Affordable Housing)
Horsham / North Horsham	Greenfield	15 Flats, No Affordable	£2,540,423	£1,158,226	£381,063	£163,094	£800,397	31.5%	N/A
		15 Flats, 40% Affordable	£1,922,154	£1,142,984	£288,323	£52,468	£401,232	20.9%	49.9%
		15 Houses, No Affordable	£3,075,425	£1,384,931	£461,314	£208,831	£975,338	31.7%	N/A
		15 Houses 40% affordable	£2,321,255	£1,366,479	£348,188	£68,233	£493,944	21.3%	49.4%
	Brownfield	15 Flats, No Affordable	£2,415,376	£1,156,351	£362,306	£175,908	£683,230	28.3%	N/A
		15 Flats, 40% Affordable	£1,847,126	£1,141,858	£277,069	£70,589	£320,499	17.4%	53.1%
		15 Houses, No Affordable	£3,075,425	£1,384,931	£461,314	£232,831	£951,338	30.9%	N/A
		15 Houses 40% affordable	£2,321,255	£1,366,479	£348,188	£92,233	£469,944	20.2%	50.6%

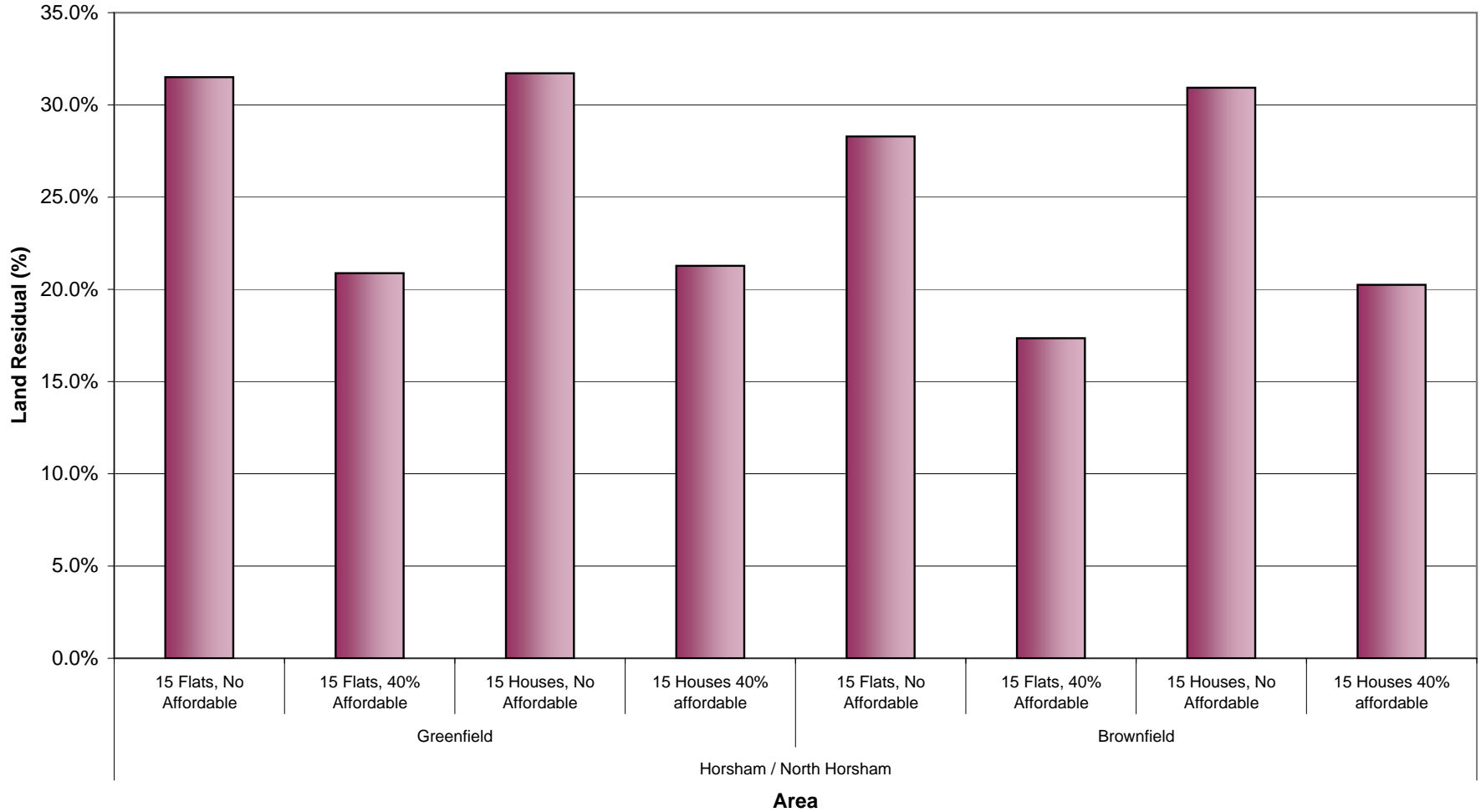
Graph 12: Showing % Reduction in Land Residual Value in Horsham / North Horsham from Zero to 40% Affordable Housing where No Infrastructure Payments Included for Affordable Scenarios



Graph 13: Showing Approximate Residual Land Values (£) for Horsham / North Horsham where No Infrastructure Payments Included for Affordable Scenarios



Graph 14: Showing Approximate Residual Land Values (%) as Percentage of GDV for Horsham / North Horsham where No Infrastructure Payments Included for Affordable Scenarios



Graph 15: House Price Comparison Across Horsham District

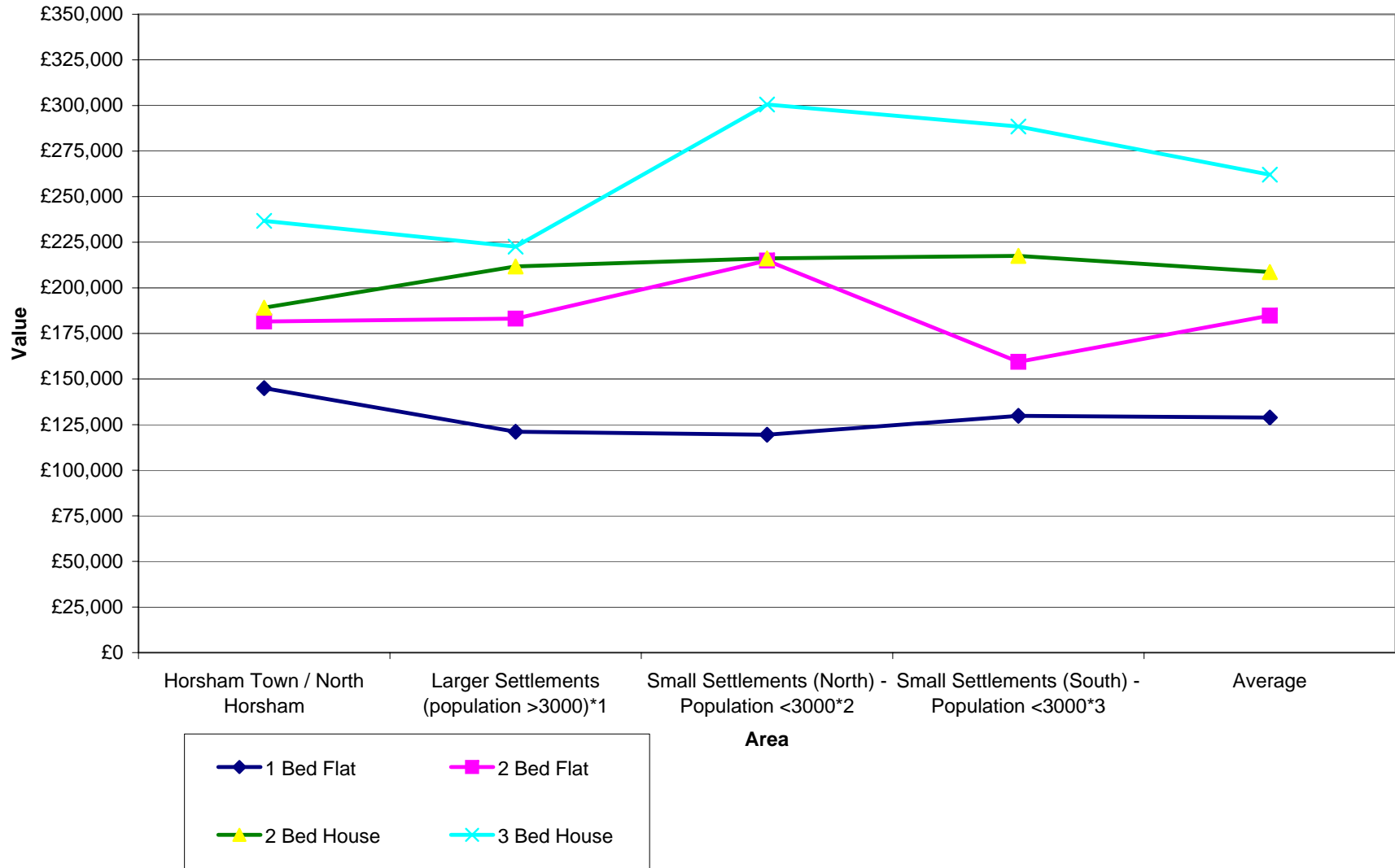


Table 4: House Price Data for Horsham District

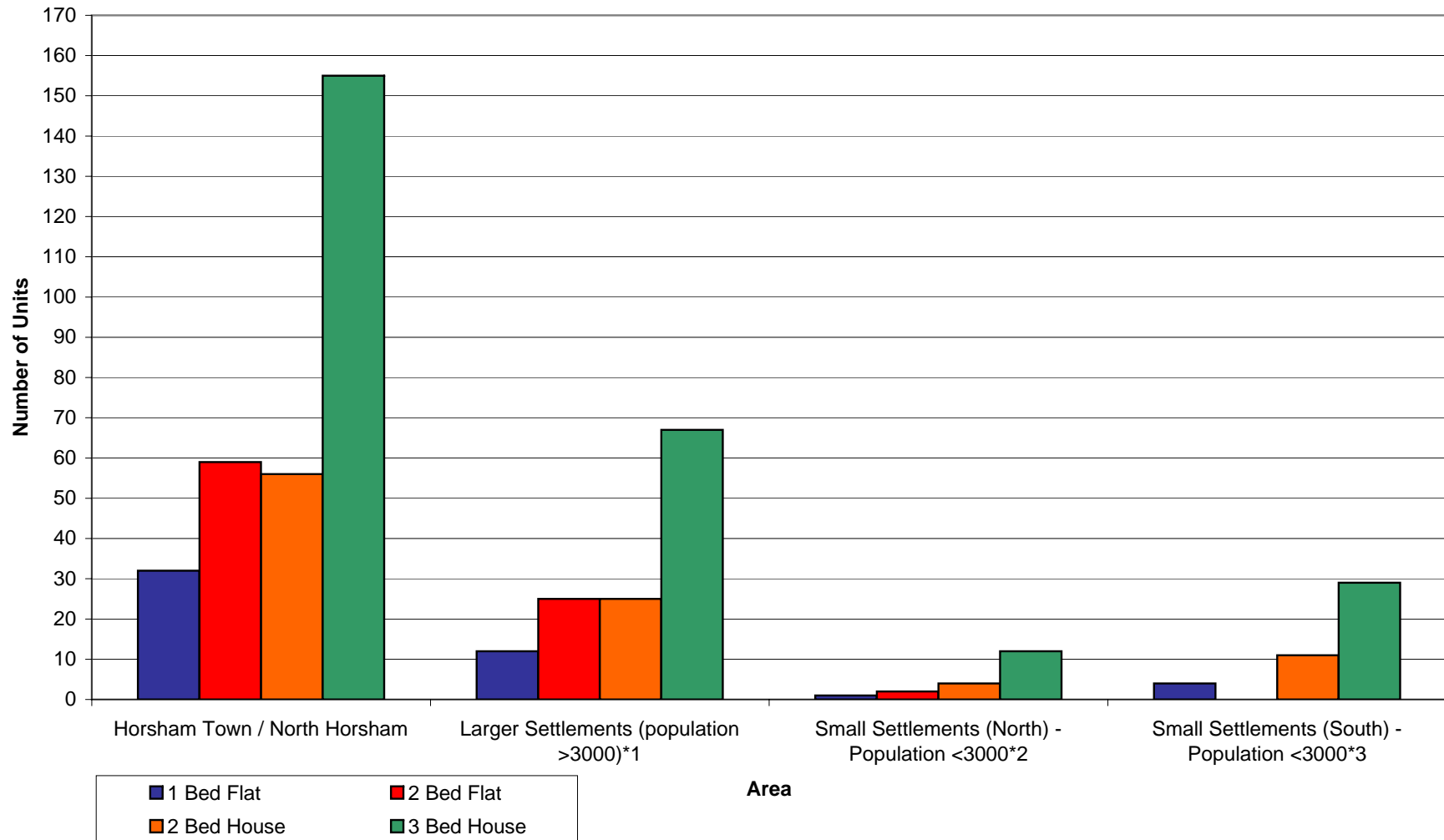
Area	Dwelling Type			
	1 Bed Flat	2 Bed Flat	2 Bed House	3 Bed House
Horsham Town / North Horsham Larger Settlements (population >3000)* ¹	£145,000	£181,542	£189,162	£236,760
Small Settlements (North) - Population <3000* ²	£121,093	£183,106	£211,755	£222,630
Small Settlements (South) - Population <3000* ³	£119,500	£214,975	£216,199	£300,563
Average	£128,861	£184,765	£208,659	£262,103

*¹= For example: Billingshurst, Pulborough, Storrington, Steyning, Henfield, Upper Beeding

*²= For example: Rusper, Colgate, Lower Beeding, Nuthurst, Itchingfield, Slinfold, Rudgwick, Warnham

*³= For example: Cowfold, Shermanbury, Woodmancote, Bramber, West Grinstead, Shipley, Ashurst, Wiston, Ashington, Washington, Thakeham, West Chiltington, Parham, Coldwaltham,

Graph 16: Total Number of Each Unit Type for Sale as of W/C 17th January 2004



Graph 17: Horsham District - Total Number of Units

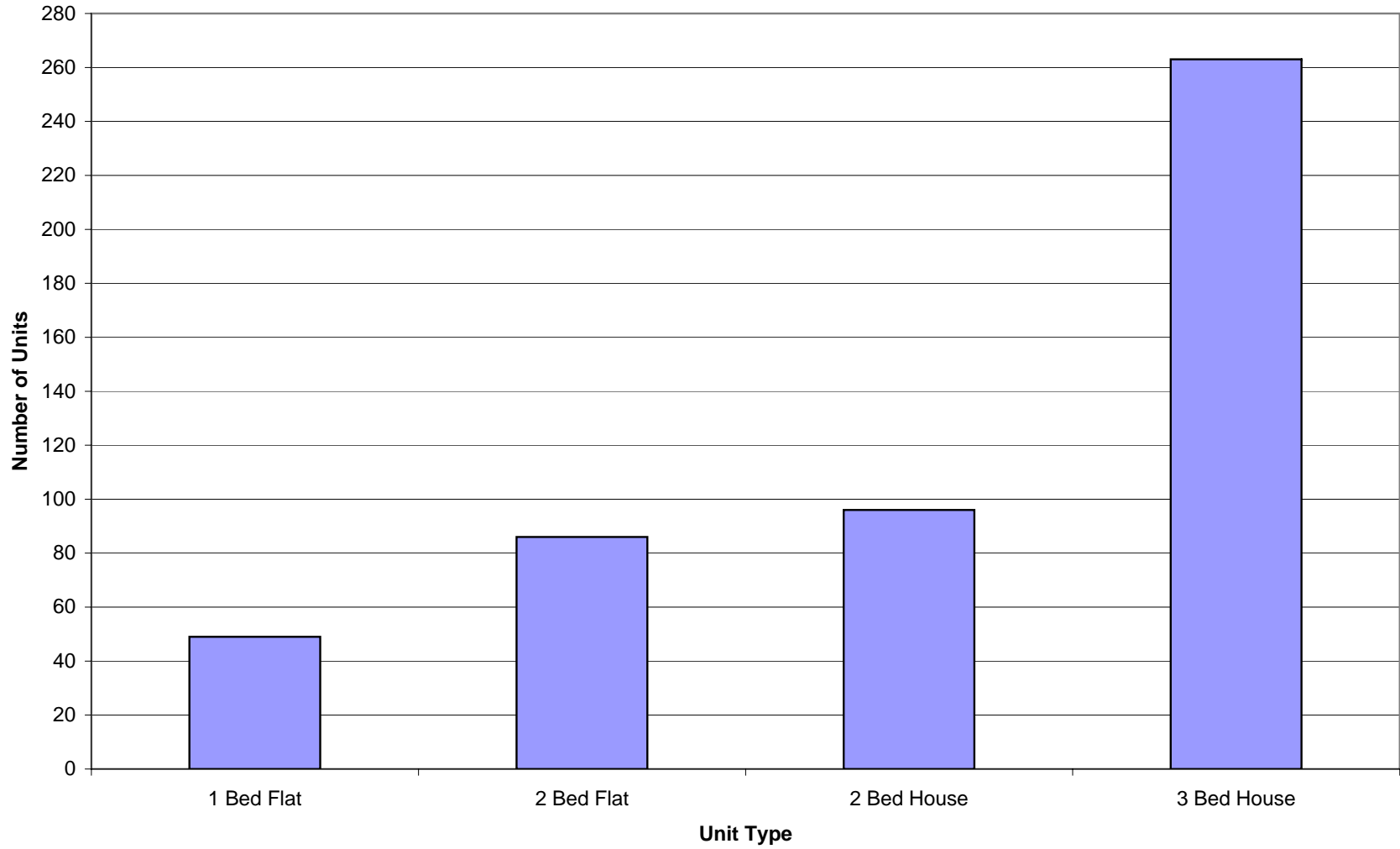


Table 5: Total Number of Each Unit Type for Sale as of W/C 17th January 2005

Area	Dwelling Type			
	1 Bed Flat	2 Bed Flat	2 Bed House	3 Bed House
Horsham Town / North Horsham Larger Settlements (population >3000) ^{*1}	32	59	56	155
Small Settlements (North) - Population <3000 ^{*2}	12	25	25	67
Small Settlements (South) - Population <3000 ^{*3}	1	2	4	12
	4	0	11	29
Total	49	86	96	263
Total Units	494			

^{*1} = For example: Billingshurst, Pulborough, Storrington, Steyning, Henfield, Upper Beeding

^{*2} = For example: Rusper, Colgate, Lower Beeding, Nuthurst, Itchingfield, Slinfold, Rudgwick, Warnham

^{*3} = For example: Cowfold, Shermanbury, Woodmancote, Bramber, West Grinstead, Shipley, Ashurst, Wiston, Ashington, Washington, Thakeham, West Chiltington, Parham,

Italics= no data, value taken from average Land Registry Data

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