

Hertsmere Local Development Framework

Urban Capacity Study



2007 update

June 2007

Contents

1	Executive Summary	3
2	Purpose of the update.....	7
3	The requirements of PPS3	9
4	Housing Requirements	10
5	Assessing unconstrained yield from the Detailed Study Areas	12
	<i>Previously developed vacant and derelict land and buildings (non – housing)</i>	12
	<i>Redevelopment of car parks</i>	13
	<i>Conversion of commercial buildings</i>	13
	<i>Review of existing housing allocations in plans</i>	13
	<i>Review of other existing allocations in plans</i>	14
	<i>Vacant land not previously developed including greenfield sites</i>	15
	<i>Other development opportunities</i>	15
6	Assessing unconstrained yield from Typical Urban Areas and garage courts	17
	<i>Design exercises</i>	17
	<i>Assessing yield</i>	17
	<i>Development of garage courts</i>	19
7	Quantifying the unconstrained capacity from DSAs and TUAs	20
8	Evaluation and discounting.....	21
	<i>Site Evaluation</i>	21
	<i>Previously developed vacant and derelict land and buildings (non – housing)</i>	21
	<i>Conversion of commercial buildings</i>	22
	<i>Review of existing housing allocations in plans</i>	22
	<i>Vacant land not previously developed including greenfield sites</i>	22
	<i>Other development opportunities</i>	23
	<i>Intensification and Redevelopment of Typical Urban Areas</i>	23
	<i>Redevelopment of small garage courts</i>	25
9	Quantifying the Constrained Capacity from DSAs and TUAs	26
10	Trend Based categories	27
	<i>Subdivision of existing housing</i>	27
	<i>Flats over shops</i>	27
	<i>Empty homes</i>	28
	<i>Windfalls</i>	28
11	Applying Scenarios and Conclusions	30
	<i>Phasing</i>	30
	<i>Housing Supply to 2021 and the Regional Housing Target</i>	31
	<i>Demonstrating a five year supply of housing</i>	31
	Appendices	33
	<i>Appendix 1 – Outstanding Housing Commitments at 31st March 2007</i>	35

Note

The Urban Capacity Study is a theoretical exercise, designed to estimate the ability of Hertsmere's towns to deliver new housing development over the duration of the plan period to 2021.

Inclusion of any named site in this study does not predispose the Council towards the favourable consideration of any future applications for the development of those sites.

Neither does discussion of the potential to realise capacity from different types of development (e.g. the subdivision of housing or creation of flats over shops) bind the Council to a favourable decision on any such scheme that may arise.

All proposals for housing development arising during the plan period will be considered on their individual merits in relation to adopted and emerging development plan policies and other material considerations relevant at the time of determination.

1 Executive Summary

- 1.1 Planning Policy Statement (PPS) 12: Local Development Frameworks requires that Development Plan policies are founded on a “thorough understanding” of the needs, opportunities and constraints within the area. Section 2 of this report outlines the purpose of updating the Borough’s 2006 Urban Capacity Study and identifies the key changes and developments since its publication.
- 1.2 Section 3 of this study examines the implications of the recent publication of Planning Policy Statement 3: Housing (PPS3), which requires authorities to critically examine their land allocations and identify a five-year supply of housing land.
- 1.3 Section 4 calculates the number of homes required over the period 2007-2021 in order to meet emerging regional housing targets. The Secretary of State’s Proposed Changes to the Draft Revision of the Regional Spatial Strategy for the East of England (the SOS Modifications) were published in December 2006. This document recommends a target for Hertsmere to provide 5,000 net additional dwellings in the period 2001 to 2021, an average of 250 homes a year.
- 1.4 By deducting completions since the start of the plan period and existing planning permissions, it has been calculated that sufficient capacity for a further 2,608 homes is needed to meet the 5,000 new home target.

Table 1: Residual housing requirement 2007-2021 against Regional Targets

	EiP Report
Housing Target	5,000
Net Housing Completions 2001-2006	1,367
Net dwellings on sites in progress at March 31 st 2006	736
Net dwellings on sites with detailed planning permission	225
Net dwellings on sites subject to completion of legal agreements	37
Subtotal (deducted from RSS Housing Target)	2,392
Residual requirement	2,608

- 1.5 Section 5 provides an updated estimate of the unconstrained yield that could be delivered from the Detailed Study Areas identified in the 2006 Study. Unconstrained yield identifies a theoretical figure of the maximum number of dwellings that could be provided if all sites and opportunities were developed to their optimum potential.
- 1.6 Five sites have been discounted from this update as they have been granted permission since the publication of the original Study, whilst the area of a further site has been reduced to reflect a recent permission covering part of its area. No further changes to the methodology have been made.
- 1.7 The study identifies seven categories of land and estimates an unconstrained yield from these sources of 1,068 units over the period 2007-2021. This capacity is summarised in Table 2 below.

Table 2: Unconstrained Capacity from Detailed Study Areas 2007-2021

Source	Area (ha)	Unconstrained Capacity
Previously developed vacant and derelict land and buildings	2.55	149
Redevelopment of car parks	-	0
Conversion of commercial buildings	-	166
Review of housing allocations	3.77	149
Review of other allocations	-	0
Vacant land not previously developed	2.22	86
Other development opportunities	10.44	518
Unconstrained Capacity from these sources:		1,227

- 1.8 Section 6 updates the unconstrained capacity from the intensification of existing housing, where more efficient use is made of existing land within residential areas requiring no losses, the redevelopment of existing housing, where some existing housing is demolished to facilitate more efficient use of land, and the redevelopment of small garage courts. Typical Urban Areas (TUAs), which identify areas of similar character and density, are used to estimate this figure.
- 1.9 It is considered that there have been no significant changes to the policy framework that require the design exercises used in the 2006 Study to be revisited. Estimates of the amount of land predicted to come forwards within each TUA over the remainder of the plan period has been updated to take account of monitoring figures from 2006/07.
- 1.10 It is anticipated that just over 31 hectares of land will come forwards over the period 2007 to 2021, the majority in areas currently classified as low or very low density. The highest density achieved in design exercises for each TUA was then multiplied by the predicted amount of land. After making an allowance for losses to the existing stock arising from such schemes and for schemes granted planning permission that would not be completed by the end of the plan period, an unconstrained estimate of 1,139 dwellings was made from these sources. This is summarised in Table 3, below.

Table 3: Unconstrained Capacity arising from Typical Urban Areas 2007-2021

TUA Category	Land predicted to come forwards to 2007-2021	Density (dwellings per hectare)	Yield
Very low density	19.72	30.7	605
Low density	8.17	70.6	577
Medium density	2.06	85.8	177
Medium high density	0.14	71.6	10
Higher density	1.30	173.2	225
Urban density*	0.04	100	4
Subtotal	31.43	N/A	1,598
Losses arising from redevelopment schemes			-154
Permissions not implemented prior to the end of the plan period			-305
Total			1,139

*Based on predicted land supply only.

- 1.11 Design exercises were also undertaken on a number of small garage courts. Based upon a prediction that one hectare of land will come forwards from this source, an unconstrained estimate of 54 dwellings is made.
- 1.12 Section 7 quantifies the total unconstrained capacity arising from Sections 5 and 6 of the study and concludes that, if optimally developed for residential use, 2,261 units could arise from these sources.
- 1.13 Section 8 discounts this figure, acknowledging that it is unrealistic to anticipate that all sites and opportunities identified in the unconstrained capacity will be brought forwards and then developed out at the maximum achievable densities. The recommendations of the Home Builders Federation, who surveyed a number of sites for the 2006 Study, are taken into consideration.
- 1.14 Results are presented in relation to two key scenarios. Scenario 1 assumes that current plan policies and designations remain in force for the duration of the plan period with densities restrained to largely reflect those in the surrounding area. Under Scenario 2, a degree of flexibility is assumed in terms of policies, designations and densities.
- 1.15 The discounted capacity for each of the categories discussed in Sections 5 and 6 is then discussed, with the final results summarised in Section 9. A total constrained capacity of 1,073 units has been identified under Scenario 1 from site-specific sources and the redevelopment and intensification of existing residential areas and small garage courts. Under Scenario 2, an additional 532 units would be provided, giving a total constrained capacity of 1,605 units.
- 1.16 Section 10 makes an allowance for capacity not identified elsewhere in the study to prevent an underestimate of true capacity. These are based upon past trends recorded in the Borough Council's monitoring systems and, as such are not subject to the same processes of analysis and discounting discussed above. Trend based data, using updated monitoring figures, is used to inform estimates of additional dwellings arising from the subdivision of existing housing, the conversion and creation of flats over shops, and empty homes.
- 1.17 Four categories of windfalls are also identified, including sites within the principle settlements below the site threshold, previously developed sites outside of the study area and schemes resulting in losses of the residential stock. An additional allowance is also made for large windfalls within the principle settlement as analysis of the results reveals that the DSA sources were likely to represent an underestimate.
- 1.18 Section 11 draws together the findings of the previous sections and presents the final estimates of housing capacity for the period 2007-2021. Estimates are also produced of the likely phasing of this capacity over the short-, medium- and long-term. These findings are summarised in Table 4 below.

Table 4: Anticipated phasing of Identified Urban Capacity

	Short Term (2007-2011)	Medium Term (2011-2016)	Long Term (2016-2021)	Total
Scenario 1	363	601	658	1,622
Scenario 2	497	809	848	2,154

The report concludes by identifying under Scenario 1, the anticipated housing supply over the duration of the plan period is 4,014 dwellings. Under Scenario 2, the anticipated housing supply over the duration of the plan period is 4,546 dwellings. This represents a shortfall of 454 units against the target for 5,000 new homes set out in the SOS Modifications to the East of England Plan. These findings are summarised in Table 5 below.

Table 5: Total Housing Supply 2001-2021

	Scenario 1	Scenario 2
Housing Completions 2001-2007	1,367	1,367
Sites in progress at March 31 st 2007	763	763
Sites with detailed planning permission at March 31 st 2007	225	225
Sites agreed subject to completion of legal agreements	37	37
Identified Urban Capacity 2007-2021	1,622	2,154
Total Housing Supply 2001-2021	4,014	4,546

N.B. All figures are net.

- 1.20 The requirement to demonstrate a five-year supply of land, set out in PPS3, is considered. A site specific housing supply of 1,271 units is identified for the five years to 2012. This figure is in excess of the 1,250 new homes that would be required over five years to meet the 250 homes per year target contained in the SOS Modifications to the East of England plan

2 Purpose of the update

- 2.1 In November 2006, Hertsmere Borough Council produced an Urban Capacity Study. This report aimed to identify the extent to which housing growth in the Borough can be accommodated within existing urban areas over the period to 2021.
- 2.2 The Study was produced in response to the requirements of Planning Policy Statement (PPS) 12: Local Development Frameworks, which requires that Development Plan policies are founded on a “thorough understanding” of the needs, opportunities and constraints within the area. Significant emphasis is placed upon the development of a strong evidence base to support policies.
- 2.3 Using a combination of the identification of specific sites, design exercises and projections of windfall completions, the Study produced estimates of capacity against two key scenarios. Scenario 1 assumed that current plan policies and designations remain in force for the duration of the plan period with densities restrained to largely reflect those in the surrounding area. Under Scenario 2, a degree of flexibility was assumed in terms of policies, designations and densities.
- 2.4 The results were compared against the housing targets for Hertsmere contained in the draft Regional Spatial Strategy for the East of England (the draft RSS) and the subsequent Report of the Panel, following the Public Examination of the draft RSS. These two documents proposed targets of 4,200 new homes and 5,000 new homes respectively to be provided in the Borough over the period 2001-2021.
- 2.5 Under Scenario 1, the anticipated housing supply over the duration of the plan period was 3,911 dwellings, below the target contained in both the draft RSS and the panel report. Under Scenario 2, the anticipated housing supply over the duration of the plan period is 4,435 dwellings. This was above the 4,200 target initially suggested in the RSS, but below the 5,000 target suggested in the panel report.

Table 6: Total Housing Supply 2001-2021 - Urban Capacity Study 2006

	Scenario 1	Scenario 2
Housing Completions 2001-2006	1,093	1,093
Sites in progress at March 31 st 2006	828	828
Sites with detailed planning permission at March 31 st 2006	140	140
Sites agreed subject to completion of legal agreements	29	29
Identified Urban Capacity 2006-2021	1,821	2,345
Total Housing Supply 2001-2021	3,911	4,435

N.B. All figures are net.

- 2.6 The Executive Summary of the 2006 study is available to download free of charge from Hertsmere Borough Council’s website (<http://www.hertsmere.gov.uk/planning/hertsmere-local-development-framework/local-development-framework>), or can be purchased in full from the Planning Department.
- 2.7 Since the publication of the Urban Capacity Study, there have been four key developments and this update has been produced in order to reflect these changes:
- The adoption of Planning Policy Statement 3: Housing (PPS3) in November 2006, replacing the guidance previously contained in Planning Policy Guidance Note 3 (PPG3);
 - The publication of the Secretary of State’s Proposed Changes to the Regional Spatial Strategy for the East of England (the SOS Modifications) in December 2006;

- The joint publication of the Interim Central Hertfordshire Employment Land Review (CHELR) by Hertsmere, Welwyn Hatfield and St Albans Councils; And
 - The production of updated housing completion and supply figures from Hertsmere Borough Council's monitoring systems for the period to 31st March 2007.
- 2.8 This report reflects the requirements relating to land supply contained in PPS3 and considers the implications of the proposed revisions contained in the SOS Modifications. The findings of the CHELR are used to inform these considerations. It also provides an updated picture of housing completions and supply in the Borough, and uses this data set to revise the trend-based figures used in the original report.
- 2.9 It is important to note that this report complements and updates the original report, and does not replace it. The 2006 study should be referred to for more detailed consideration of the methodology, definition of the study area, site identification, and methods used to calculate anticipated yields from sites. These have not been changed unless otherwise stated.
- 2.10 Although they are not Local Development Documents in their own right, the Urban Capacity Study and any subsequent updates form a key component of the evidence base for Hertsmere's LDF and will inform and support the policies contained within the Core Strategy DPD and the designations made in the Site Allocations DPD.
- 2.11 Further information on the timescales for the adoption of these documents is available in Hertsmere's Local Development Scheme.

3 The requirements of PPS3

- 3.1 PPS3: Housing was published in November 2006, replacing the guidance contained in PPG3. PPS3 seeks to deliver a “step-change in housing delivery” by requiring a more pro-active approach towards the identification of land supply at the local level.
- 3.2 PPS3 encourages authorities to critically examine existing land allocations in Local Plans and consider whether sites that are currently allocated for industrial or commercial use could be more appropriately re-allocated for housing development.
- 3.3 The “Plan, Monitor, Manage” approach introduced in PPG3 is retained, with Government policy requiring Councils to identify and allocate at least five years of developable land for new housing development at any time. Where possible, a further ten years should be allocated through the identification of both broad locations and wherever possible, specific sites.
- 3.4 PPS3 specifically states that allowances for windfall sites should not be included in the first ten years of land supply, unless this approach can be robustly justified based upon a Strategic Housing Land Availability Assessment (the revised title for Urban Capacity Studies) and historic rates of windfall development.
- 3.5 Draft practise guidance on the production of Housing Land Availability Assessments was published simultaneously with the draft version of PPS3 in December 2005, though has yet to be published in its finalised form. The draft guidance largely follows the methodology contained in Tapping the Potential, the good practise guidance on urban capacity studies which accompanied PPG3.
- 3.6 Both Tapping the Potential and the draft Practice guidance were considered in the production of the 2006 Study. As such, the methodology used in that report is considered to be sound and has not been changed.
- 3.7 The 2006 Urban Capacity Study contains a more detailed consideration of the wider policy background, which should be referred to for additional information.

4 Housing Requirements

- 4.1 Under the new development plan system introduced by the 2004 Planning and Compulsory Purchase Act, the East of England Regional Assembly through its Regional Spatial Strategy (RSS) will set housing targets for Hertsmere. The Secretary of State's Proposed Changes to the Draft Revision of the Regional Spatial Strategy for the East of England (the SOS Modifications) were published in December 2006.
- 4.2 Following an Examination in Public into the Draft Regional Spatial Strategy (the Draft RSS), the Panel Report proposed an increased housing target for Hertsmere of 5,000 new dwellings in the period 2001 to 2021. This equates to the provision of 250 new homes per year over the twenty-year period. The SOS Modifications retain this target for the Borough.
- 4.3 Although Hertsmere Borough Council have formally objected to this figure through the consultation process, the Council's emerging Core Strategy is based upon a presumption that a housing target of 5,000 new homes will be adopted in the final RSS. The revised figures of capacity and supply in this report have been considered against this target.
- 4.4 By discounting net housing completions and detailed planning permissions granted since the start of the RSS plan period, it is possible to calculate the residual requirement i.e. the number of homes for which land needs to be found over the period to 2021. Housing monitoring figures have been updated to include data from the most recent financial year. A cut-off date of 31st March 2007 has been used in the calculation of housing completions and permissions.
- 4.5 Between April 1st 2001 and March 31st 2007, a net total of 1,367 new dwellings were completed in Hertsmere, an average of 228 new dwellings per annum. Although this is marginally below the RSS target rate, completions the last two years have been significantly above the average of 179 units per annum recorded in the first four years of the plan period. A breakdown of these figures is detailed in Table 7 below.

Table 7: Net dwelling completions in Hertsmere 2001-2007

Year	Net Completions	
	Completions In Year	Completions since 2001
2001/02	295	295
2002/03	104	399
2003/04	143	542
2004/05	174	716
2005/06	377	1,093
2006/07	274	1,367

- 4.6 As at 31st March 2007, development was in progress on 33 sites across the Borough. 763 net dwelling completions were outstanding on these sites at this date. Detailed planning permission for a further 225 dwellings (net) had been granted on sites where development had not started as at 31st March 2007 while detailed permission for a further 37 dwellings (net) had been agreed subject to legal agreements.
- 4.7 A full list of sites with outstanding completions or extant permissions is contained in Appendix 1 to this report. To avoid double counting, none of the sites listed in this Appendix have been considered in the estimates of capacity from other sources. Sites that are currently in non-residential use that have outline planning permission for housing have been included for consideration in site-specific sources of the capacity study and are therefore not counted here.

- 4.8 In total, 2,392 dwellings (net) had been completed, were outstanding on sites currently under construction, had detailed planning permission, or had been agreed subject to completion of legal agreements as at 31st March 2007. Extant housing allocations in the Local Plan that have not been developed, are not under construction or do not have detailed planning permission have not been included in the above figure.
- 4.9 Deducting this figure from the target of 5,000 new dwellings contained in the Panel Report and the SOS Modifications leaves a residual requirement for 2,608 net additional dwellings to be provided in the period 1st April 2007 to 31st March 2021. This information is summarised in Table 8 below.

Table 8: Residual housing requirement 2007-2021 against EiP Panel Report target

RSS Housing Target (following publication of SOS Modifications)	5,000
Net Housing Completions 2001-2006	1,367
Net dwellings on sites in progress at March 31 st 2006	763
Net dwellings on sites with detailed planning permission at March 31 st 2006	225
Net dwellings on sites agreed subject to completion of legal agreements	37
Subtotal (deducted from RSS Housing Target)	2,392
Residual requirement	2,608

5 Assessing unconstrained yield from the Detailed Study Areas

- 5.1 Unconstrained capacity identifies a theoretical figure of the number of dwellings that could be provided if all sites and opportunities were developed to their optimum potential.
- 5.2 The 2006 Urban Capacity Study identified 31 Detailed Study Area (DSA) sites that were considered as having potential to deliver additional housing capacity. Anticipated yields for these sites were calculated based upon density multipliers that took the area type, prevailing densities, accessibility and likely housing types into account. On larger sites, gross to net ratios made an allowance for associated uses, including service roads and open spaces, by assuming that a certain percentage of the total site area would be used for residential development. The total unconstrained capacity for each site specific source was therefore calculated as follows:

$$\text{Gross site area} \times \text{Gross to Net Ratio} \times \text{Density Multiplier} = \text{Unconstrained Capacity.}$$

- 5.3 No changes to this methodology, which is explained in more detail in the 2006 study, have been made. However, five of the identified DSA sites have been discounted from the 2007 update. These are detailed in the table below.

Table 9: Sites discounted from 2007 Urban Capacity Study update

Site Ref	Address	Reason for removal
UC150	Quadrant Works, Radlett	Detailed permission granted June 2006. Site under construction at 31 st March 2007.
UC175	Three Valleys Way, Bushey (part of site)	Detailed permission granted subject to s106 agreement December 2006.
UC177	Brent Timber, Bushey	Detailed permission granted April 2006.
UC1424	Furzehill School Site, Borehamwood	Detailed permission granted October 2006. Site under construction at 31 st March 2007.
UC1441	Site adj The Venue, Borehamwood	Under development for alternative uses.

- 5.4 The Borough Council has not been made aware of any significant additional development opportunities within the defined study area since November 2006. As such, revised estimates of unconstrained capacity have been based upon the remaining 26 sites and are set out in the sections below.

Previously developed vacant and derelict land and buildings (non - housing)

- 5.5 Two sites in this category have been removed from the study. The former Quadrant and Houseboat Works site in Radlett received detailed planning permission for 28 units in June 2006. As such, this site has now been included in the calculations in the previous section so is not included here to prevent double counting.
- 5.6 The vacant site adjacent to The Venue leisure centre in Borehamwood received detailed planning permission for the erection of a 122-bedroom hotel in August 2006. As of 31st March 2007, the site was under development.

Table 10: Unconstrained capacity from previously developed vacant and derelict land and buildings (non-housing)

Site Ref	Address	Town	Site Area (ha)	Unconstrained Yield
UC026	Studio Plaza	Borehamwood	0.928	49
UC044	Foster House	Borehamwood	0.348	30
UC169	Greatham Road	Bushey	0.587	28
UC170	Walton Road	Bushey	0.230	12
UC199	off Station Road	Radlett	0.230	18
UC1487	Land adj BP Garage	Borehamwood	0.232	12
		Total	2.555	149

- 5.7 Applying the density multipliers to the remaining sites produced an anticipated yield of 149 units. This has been carried forwards as the revised unconstrained capacity from this source.

Redevelopment of car parks

- 5.8 At the time of the site surveys undertaken in 2006, all the car parks visited were well used while the Council had no general or specific plans to dispose any of its car parks. This position remains unchanged and, as such, no allowance has been made for capacity arising from this source.

Conversion of commercial buildings

- 5.9 No changes have been made in this category. Based upon the 16,591m² of vacant office space recorded in August 2006, an unconstrained capacity of 166 units from this source has been identified.

Review of existing housing allocations in plans

- 5.10 Policy H2 of the 2003 Hertsmere Local Plan allocates eight sites for housing, estimating a total of 609 dwellings would come forwards in these locations. Policy H3 meanwhile supports the principle of housing development on three surplus school sites in Borehamwood. Table 11, below, summarises the status of each site as at 31st March 2007.
- 5.11 In the 2006-07 monitoring year, the Brent Timber Yard in Bushey and the former Furzehill School site in Borehamwood were both been granted detailed planning permission. Construction is underway on the latter. Both of these sites have been excluded from the calculations of unconstrained capacity in this update.
- 5.12 The site at Hillside School is being redeveloped as a Jewish secondary school, the Yavneh College. The school opened with its first intake of pupils in September 2006. The Local Plan allocation at Croxdale Road is still considered unlikely to come forwards during the plan period. No allowance has been made from either of these two sites.
- 5.13 Detailed permission was granted for an additional nine units at Blackwell House in Bushey in December 2006, subject to the completion of a Section 106 agreement. Unconstrained capacity for this site has been based upon that part of the remaining site area which remains allocated for development but without planning permission.

Table 11: Status of Local Plan Housing Sites at 31st March 2007

Policy	Site	Town	Status	Net Dwellings
H2	Croxdale Road Shops	Borehamwood	Unlikely to proceed	-
H2	Brook House	Borehamwood	Completed	45
H2	Land r/o Arundel Drive	Borehamwood	Allocated	-
H2	Blackwell House	Bushey	Part-completed Part-permission* Part-allocated	55 9 -
H2	Former International University	Bushey	Under construction	303
H2	Brent Timber	Bushey	Detailed Permission	49
H2	Hartspring Centre	Bushey	Completed	65
H2	Sparrows Herne	Bushey	Under construction	53
H3	Hillside School	Borehamwood	Developed for other uses	-
H3	Lyndhurst School	Borehamwood	Part-completed Part-under construction	99 71
H3	Furzehill School	Borehamwood	Under construction	89

*Subject to section 106 agreement.

Table 12: Unconstrained capacity arising from a review of existing housing allocations

Site Ref	Address	Town	Site Area (ha)	Unconstrained Yield
UC175	Three Valleys Way	Bushey	3.100	123
UC1433	Land at Arundel Drive	Borehamwood	0.662	26
		Total	3.772	149

5.14 A revised unconstrained capacity of 149 units has therefore been made for this category.

Review of other existing allocations in plans

5.15 Tapping the Potential identifies that, in areas where designations for alternative uses are unlikely to be taken up, this land should be considered as a potential source of capacity. PPS3 additionally requires authorities to pro-actively consider whether sites that are currently allocated for industrial or commercial use could be more appropriately re-allocated for housing development.

5.16 As part of the evidence base for the Local Development Framework, Hertsmere has undertaken an Employment Land Review in association with the neighbouring authorities of St Albans and Welwyn Hatfield to identify land requirements over the period to 2021. The interim Central Hertfordshire Employment Land Review (CHELR) was completed in November 2006. The CHELR identified a shortfall in office floorspace of 19,963m², and a 14,171m² surplus of industrial and warehousing floorspace. Translated into land requirements, this indicates a projected surplus of 0.88 hectares over the plan period.

- 5.17 The conclusions of the CHELR are important in that they would not support any substantial net loss of employment land. No additional allowance has therefore been made in this category for any housing capacity arising from a review of existing employment allocations.
- 5.18 The 2006 study identified that scope for large-scale re-designation of other allocated areas is similarly limited and that no further Plan designations can be considered suitable for review as part of this study. No additional allowance for capacity arising from this source is therefore made.

Vacant land not previously developed including greenfield sites

- 5.19 It has not been necessary to make any changes to the previously published figures in this category. An unconstrained capacity of 86 units has been identified from this source.

Table 13: Unconstrained capacity from vacant land not previously developed

Site Ref	Address	Town	Site Area (ha)	Unconstrained Yield
UC201	Land adj Railway Line, Bushey Hall Rd	Bushey	0.713	28
UC1385	Land at Caldecote Gdns	Bushey	0.585	16
UC1404	Land r/o Crown Road	Borehamwood	0.313	12
UC1445	The Spinney	Elstree	0.396	20
UC1456	Land at Aberdale Gardens	Potters Bar	0.210	10
		Total	2.217	86

Other development opportunities

- 5.20 Tapping the Potential and the draft good practice guidance both place particular emphasis on ensuring that Capacity studies take all potential sources into account to avoid underestimating. Through the identification of sites, a number of opportunities were identified that could not be categorised into any of the sections above and have therefore been included as a separate source.
- 5.21 No changes to the previously published figures have been made in this category. Applying the density multipliers to the sites detailed in the table on the following page provides an estimate that a further 518 units could arise from this source.

Table 14: Unconstrained capacity arising from other development opportunities

Site Ref	Address	Town	Site Area (ha)	Unconstrained Yield
UC006	Manor Way	Borehamwood	0.374	19
UC042	Borehamwood Fire Station	Borehamwood	0.383	38
UC045	Maxwell Road	Borehamwood	0.277	19
UC049	Borehamwood Library	Borehamwood	0.315	27
UC050	Elstree Distribution Park, Elstree Way	Borehamwood	2.352	85
UC057	Station Road Gas Holders	Borehamwood	0.396	39
UC127	Church Lane	Misc	0.789	24
UC148	Potters Bar Bus Garage	Potters Bar	1.093	64
UC186	Clay Lane	Bushey	1.879	69
UC1355	Land r/o Bushey Grove Road	Bushey	0.231	13
UC1377	r/o 27-47 Claybury	Bushey	0.224	13
UC1412	Oaklands College	Borehamwood	1.101	58
UC1429	Land r/o Tempsford Avenue	Borehamwood	0.494	22
UC1489	Units r/o High Street	Potters Bar	0.530	28
		Total	10.438	518

6 Assessing unconstrained yield from Typical Urban Areas and garage courts

Design exercises

- 6.1 Within the principal settlements, Typical Urban Areas (TUAs) have been identified to inform estimates of capacity arising from the intensification of existing housing, where more efficient use is made of existing land within residential areas requiring no losses, the redevelopment of existing housing, where some existing housing is demolished to facilitate more efficient use of land, and the redevelopment of small garage courts. The 2006 study provides additional information on the TUA identification exercise.
- 6.2 Design exercises were used to assess the achievable yields. The design exercises built upon the characteristics identified within the Typical Urban Area types, applying three different scenarios that increased the overall density and number of dwellings for each site. The densities achieved through the design exercises for each TUA type and scenario are set out in Table 15 below, expressed in the number of dwellings per hectare (dph).

Table 15: Densities achieved through TUA design exercises

TUA Density	Scenario A	Scenario B	Scenario C
Very Low (0-14dph)	17.9	25.2	30.7
Low (15-29dph)	29.4	43.3*	70.6*
Medium (30-49dph)	42.9	67.4	85.8
Medium High (50-74dph)	50.4	71.6	-
Higher (75-99dph)	-	146.3	173.2

*Based on totals from two separate design exercise sites.

- 6.3 The design exercises generally met or exceeded the standards contained in the draft Planning and Design Guide. This Guide was formally adopted as a Supplementary Planning Document in November 2006. There were no significant alterations to the design standards contained within the document prior to adoption. As such, there have been no significant changes to the local policy framework that would require the design exercises to be revisited.

Assessing yield

- 6.4 The design exercises provide a guide as to the densities and yields that can be achieved from the intensification or redevelopment of existing residential areas.
- 6.5 The 2006 Urban Capacity Study produced estimates of the quantity of land likely to arise within each TUA category over the remainder of the plan period based upon planning permissions granted since 1st April 2001.
- 6.6 These figures have been revised, taking account of the latest year's monitoring figures. Estimates of the amount of land likely to arise within each TUA category over the remainder of the plan period is now based upon the average quantity of land that has come forwards over the last six years.
- 6.7 In 2006-07, 2.91 hectares of land from within the TUA areas was granted planning permission for intensification or redevelopment schemes. This was higher than in the previous five years and, as a result, estimates for the remainder of the plan period have been revised upwards.
- 6.8 Unconstrained capacity has been calculated by multiplying this estimate of available land by the highest densities achieved through the design exercises. To prevent overestimates, deductions have then been made to the estimates to take account of:

- Losses to the existing residential stock arising from residential redevelopment schemes (trend based);
And
- Schemes granted permission prior to 31st March 2021 that will not have been completed by the end of the plan period

- 6.9 The estimate of losses to the existing stock is trend-based upon permissions granted since April 1st 2001.
- 6.10 In the absence of any more detailed guidance on the subject, it has been assumed that planning permissions granted will be built out at the rates identified in the table below. These are the rates that are used to calculate the Borough’s housing trajectory. Based on these figures, 78.9% of permissions granted between April 1st 2007 and March 31st 2021 would be implemented before the end of the plan period. A non-implementation rate of 21.1% is therefore made for both the predicted gains and losses.

Table 16: Anticipated build out times of redevelopment and intensification schemes

% of development that will be completed from time of permission					
+1 year	+2 years	+3 years	+4 years	+5 years	+6 years
10%	35%	25%	15%	10%	5%

- 6.11 Based upon past trends, it is anticipated that just over 31 hectares of land will come forwards for residential redevelopment or intensification schemes within the identified TUAs over the remaining 14 years of the plan period. The significant majority of this land, just under 28 hectares (89%), is predicted to arise in TUAs characterised as either very low or low density.
- 6.12 This is considered reasonable insofar as, in terms of area, these categories accounted for some 70% of the identified TUAs across the Borough as a whole. Due to the low existing density, such sites provide the greatest opportunities for infill developments or redevelopments that uplift the overall density.
- 6.13 Table 17 below, identifies the predicted yields from within each TUA category. The achievable density has been based upon the highest density design scheme achieved within each TUA type. From this, it is estimated that planning permission will be granted for a total of 1,598 additional dwellings (gross) prior to the end of the plan period.
- 6.14 Making an allowance for losses to the stock and those permissions that will not be implemented prior to March 31st 2021 results in an unconstrained yield of 1,139 units.

Table 17: Unconstrained Capacity arising from Typical Urban Areas 2007-2021

TUA Category	Land predicted to come forwards 2007 - 2021	Density (dwellings per hectare)	Yield
Very low density	19.72	30.7	605
Low density	8.17	70.6	577
Medium density	2.06	85.8	177
Medium high density	0.14	71.6	10
Higher density	1.30	173.2	225
Urban density*	0.04	100	4
Subtotal	31.43	N/A	1,598
Losses arising from redevelopment schemes			-154
Permissions not implemented prior to the end of the plan period			-305
Total			1,139

*Based on predicted land supply only.

Development of garage courts

- 6.15 The mapping exercise undertaken for the 2006 study identified 24 garage courts within the principle settlements. A number of these sites are currently underutilised while, as the finite supply of previously developed land is further pressured during the plan period, others may be brought forwards for development.
- 6.16 Design exercises were undertaken on a small sample of these sites to assess the potential yield. As with the exercises for the Typical Urban Areas, three scenarios were explored. Each of these provided a different level of parking provision as, due to the small size of the sites, this proved to be the key parameter in influencing the densities that could be achieved.
- 6.17 The average densities achieved from the design exercises across all three sites are summarised in the table below, and these were used to inform the estimates of capacity.

Table 18: Estimates of capacity arising from garage court design exercises

	Total Units	Total Site Size	Dwellings per Hectare
Scenario A	11	0.367 ha	30
Scenario B	14	0.367 ha	38
Scenario C	20	0.367 ha	54

- 6.18 These design exercises are still considered to provide satisfactory layouts when compared to the standards in the adopted Planning and Design Guide SPD.
- 6.19 No housing completions have been recorded on such sites since the start of the plan period, however permission has been granted on a four small sites. Based on the site areas of these permissions and current rates, a trend-based projection shows that 0.86ha of land of this type is likely to come forwards across the remainder of the plan period.
- 6.20 Due to the finite supply of PDL sites in the Borough, land pressure is likely to increase towards the end of the plan period. As such, it is considered reasonable to assume that further small garage sites may come forwards at a rate above current trends.
- 6.21 The unconstrained capacity is therefore based upon the prediction that an additional one hectare of land will come forwards from this source. If this were to be developed out at the higher densities achieved under Scenario C, this would yield 54 additional dwellings.

7 Quantifying the unconstrained capacity from DSAs and TUAs

- 7.1 Unconstrained capacity identifies the potential yield of additional residential units if all available sites were optimally developed for residential use.
- 7.2 Based upon the yields identified in Sections 5 and 6 of this report, a total unconstrained capacity of 2,261 residential units has been identified from site-specific sources and the intensification and redevelopment of typical urban areas and small garage courts for the period 2007-2021. This total is detailed and broken down by category in Table 19 below.

Table 19: Unconstrained Capacity from Site Specific Sources, Typical Urban Areas and small garage courts, 2007-2021

Source	Methodology	Unconstrained Capacity
Sources in the existing stock		
Intensification and redevelopment of existing housing	Design exercises	1,139
Development of small garage courts	Design exercises	54
Brownfield Land		
Previously developed vacant and derelict land and buildings	Site specific	149
Redevelopment of car parks	Site specific	0
Conversion of commercial buildings	Survey	166
Other sources		
Review of housing allocations	Site specific	149
Review of other allocations	Site specific	0
Vacant land not previously developed	Site Specific	86
Other development opportunities	Site specific	518
Unconstrained Capacity from these sources:		2,261

8 Evaluation and discounting

Site Evaluation

- 8.1 It is unrealistic to anticipate that all sites and opportunities identified in the unconstrained capacity will be brought forwards and then developed out at the maximum achievable densities. Conversely, it is important that the discounting process does not take an unnecessarily pessimistic view of future house building potential leading to an underestimate of true capacity.
- 8.2 Members of the Home Builders Federation evaluated a cross section of sites for the 2006 study and their conclusions were taken into account in the production of the final report. In general terms, the opinions of the HBF and its members closely matched those of the Council in terms of both deliverability and time scales.
- 8.3 Discount rates were applied to the unconstrained capacity to reflect the fact that some sites may not be brought forwards for residential development over the plan period or that other factors may exist that could prevent the sites being developed to their full residential potential (e.g. mixed use schemes). The discount rates used for each site-specific source are outlined in Table 20 below.

Table 20: Discount rates

Source	Scenario 1	Scenario 2
Previously developed vacant and derelict land and buildings (non-housing)	75%	85%
Redevelopment of car parks	70%	85%
Conversion of commercial buildings	50%	60%
Review of existing housing allocations in plans	90%	100%
Review of other allocations in the plan	70%	85%
Vacant land not previous developed including greenfield sites	60%	70%
Other development opportunities	60%	70%

- 8.4 Aside from the removal of those sites detailed in Table 9, no changes have been made to evaluation method, discount rates or scenarios that were used in the 2006 study. This document should be referred to for additional details on the methodology.
- 8.5 Two scenarios are used for the presentation of results. Scenario 1 assumes that current plan policies and designations remain in force for the duration of the plan period with densities restrained to largely reflect those in the surrounding area. Under Scenario 2, a degree of flexibility was assumed in terms of policies, designations and densities.
- 8.6 Each site is assigned to a time scale to indicate when it is felt likely to come forwards for development:
- Short term (2007-2011)
 - Medium term (2011-2016)
 - Long term (2016-2021)

Previously developed vacant and derelict land and buildings (non - housing)

- 8.7 Two sites have been removed from this category since the 2006 study, as outlined in Section 5. Of the six sites left in the unconstrained capacity, two further sites were recommended for removal by the HBF. Constrained capacity has therefore been calculated from four sites using the discounting ratios outlined in Table 20 of 75% and 85% for Scenarios 1 and 2 respectively.

Table 20: Constrained capacity from previously developed vacant and derelict land and buildings (non-housing) 2001-2007

Site Ref	Address	Time scale	Constrained Yield	
			Scenario 1	Scenario2
UC026	Studio Plaza	Short	-	42
UC044	Foster House	Short	23	26
UC169	Greatham Road	Discarded	-	-
UC170	Walton Road	Short	9	10
UC199	off Station Road	Short	14	15
UC1487	Land adj BP Garage	Discarded	-	-
		Total	46	93

Conversion of commercial buildings

8.8 No changes to this category have been made since the 2006 study. A constrained yield of 83 and 100 units has been calculated for Scenarios 1 and 2 respectively. In calculations of phasing contained in Section 14, it is presumed that capacity from this source come forwards evenly over the remainder of the plan period.

Review of existing housing allocations in plans

- 8.9 Existing housing allocations are one of the most reliable sources of urban capacity as the principle of residential redevelopment has already been accepted through the plan process. Consequently, the significant majority of identified unconstrained capacity is carried forwards into the final figures.
- 8.10 Constrained capacity is based upon those two sites identified in Section 5 that have not yet been granted permission for development.

Table 21: Constrained capacity arising from a review of existing housing allocations

Site Ref	Address	Time scale	Constrained Yield	
			Scenario 1	Scenario2
UC175	Three Valleys Way	Short	111	123
UC1433	Land at Arundel Drive	Medium	23	26
		Total	134	149

Vacant land not previously developed including greenfield sites

8.11 No changes have been made in this category since the 2006 study. The constrained capacities of 35 and 40 units under Scenarios 1 and 2 respectively match those figures previously published.

Table 22: Constrained capacity from vacant land not previously developed

Site Ref	Address	Time scale	Constrained Yield	
			Scenario 1	Scenario2
UC201	Land adj Railway Line, Bushey Hall Rd	Discarded	-	-
UC1385	Land at Caldecote Gdns	Medium	10	11
UC1404	Land r/o Crown Road	Medium	7	8
UC1445	The Spinney	Short	12	14
UC1456	Land at Aberdale Gardens	Short	6	7
		Total	35	40

Other development opportunities

- 8.12 No changes have been made to the sites under consideration in this category. The anticipated capacity under each scenario is therefore the same as previously published.

Table 23: Constrained capacity arising from other development opportunities

Site Ref	Address	Time scale	Constrained Yield	
			Scenario 1	Scenario2
UC006	Manor Way	Short	-	13
UC042	Borehamwood Fire Station	Medium	23	27
UC045	Maxwell Road	Medium	11	13
UC049	Borehamwood Library	Medium	16	19
UC050	Elstree Distribution Park, Elstree Way	Long	-	60
UC057	Station Road Gas Holders	Long	23	27
UC127	Church Lane	Discarded	-	-
UC148	Potters Bar Bus Garage	Medium	-	45
UC186	Clay Lane	Long	41	48
UC1355	Land r/o Bushey Grove Road	Medium	8	9
UC1377	r/o 27-47 Claybury	Medium	8	9
UC1412	Oaklands College	Medium	35	41
UC1429	Land r/o Tempsford Avenue	Medium	13	15
UC1489	Units ro High Street	Medium	-	20
		Total	178	346

Intensification and Redevelopment of Typical Urban Areas

- 8.13 The constrained capacity from this source has been revised to take account of the adjusted estimates of the quantity of land expected to come forwards. As in the 2006 study, the Scenario 1 capacity is based upon the design exercises that most closely match the density parameters for each TUA type. Under Scenario 2, some policy flexibility has been assumed and design exercises which achieved uplift in densities has therefore been used.

Table 24: Constrained capacity arising from TUAs under Scenario 1, 2007-2021

TUA Category	Land predicted to come forwards to 2021	Density (dwellings per hectare)	Yield
Very low density	18.08	17.9	324
Very low density CA	1.64	13.4	22
Low density	8.02	29.4	236
Low density CA	0.15	22.1	3
Medium density	2.02	42.9	86
Medium density CA	0.04	32.2	1
Medium high density	0.14	50.4	7
Medium high density CA	0.00	37.8	0
Higher density	1.28	146.3	187
Higher density CA	0.02	109.7	2
Urban density*	0.04	100	4
Urban density CA*	0.00	75.0	0
Subtotal	31.43	N/A	872
Losses arising from redevelopment schemes			-154
Permissions not implemented prior to the end of the plan period			-151
Total			567

CA = Conservation Area.

* Based on predicted land supply only.

- 8.14 As with the unconstrained capacity, the estimate of capacity is based upon a prediction of the amount of land likely to come forwards in new permissions from April 1st 2007 with an allowance then deducted for those schemes which will not be implemented prior to the end of the plan period.
- 8.15 Conservation Areas are also taken into account. Within each TUA density, the amount of land predicted to come forwards has been broken down into Conservation Area and non-Conservation Area categories. The proportion of Conservation Area land considered likely to come forwards within each TUA type is presumed to be the same as the proportion of land in the TUA type as a whole that is designated as a TUA.
- 8.16 Under both scenarios, the estimate of losses remains unchanged from the unconstrained capacity as they have been based upon past trends and are therefore not affected by changes in the resultant development.

Table 25: Constrained capacity arising from TUAs under Scenario 2, 2007-2021

TUA Category	Land predicted to come forwards to 2021	Density (dwellings per hectare)	Yield
Very low density	18.05	25.2	456
Very low density CA	1.64	18.9	31
Low density	8.02	43.4	348
Low density CA	0.15	32.55	5
Medium density	2.02	67.4	136
Medium density CA	0.04	50.55	2
Medium high density	0.14	71.6	10
Medium high density CA	0.00	53.7	0
Higher density	1.28	173.2	222
Higher density CA	0.02	129.9	3
Urban density*	0.04	100	4
Urban density CA*	0.00	75	0
Subtotal	31.59	N/A	1,217
Losses arising from redevelopment schemes			-154
Permissions not implemented prior to the end of the plan period (19.7%)			-224
Total			839

CA = Conservation Area.

* Based on predicted land supply only.

Redevelopment of small garage courts

- 8.17 The anticipated capacity from this source remains unchanged from the previous report. As such, a constrained capacity of 30 and 38 dwellings has been made for scenarios 1 and 2 respectively.

9 Quantifying the constrained capacity from DSAs and TUAs

- 9.1 Following the discounting process, a total constrained capacity of 1,073 units has been identified under Scenario 1 from site-specific sources and the redevelopment and intensification of existing residential areas and small garage courts.
- 9.2 Under Scenario 2, an additional 532 units would be provided, giving a total constrained capacity of 1,605 units. The breakdown by source is detailed in Table 26 below.

Table 26: Constrained Capacity from Site Specific Sources, Typical Urban Areas and small garage courts

Source	Methodology	Capacity	
		Scenario 1	Scenario 2
Sources in the existing stock			
Intensification and redevelopment of existing housing	Design exercises	567	839
Development of garage courts	Design exercises	30	38
Brownfield Land			
Previously developed vacant and derelict land and buildings	Site specific	46	93
Redevelopment of car parks	Site specific	0	0
Conversion of commercial buildings	Survey	83	100
Other sources			
Review of housing allocations	Site specific	134	149
Review of other allocations	Site specific	0	0
Vacant land not previously developed	Site Specific	35	40
Other development opportunities	Site specific	178	346
Constrained Capacity to 2021		1,073	1,605

10 Trend based categories

- 10.1 The 2006 study made an allowance for a variety of additional sources, based upon past trends. This allowance was made in response to advice in Tapping the Potential, which advised that studies focusing purely on the identified previously developed sites and the intensification and redevelopment of established residential areas could underestimate true capacity.
- 10.2 The trend based estimates of capacity arising from the subdivision of empty homes, the creation of flats over shops and windfalls have been updated to take account of monitoring data from the last twelve months. The use of six years worth of data should provide more reliable estimates than those in the previous study as the longer time period provides greater scope for short term peaks or troughs to be evened out.
- 10.3 To ensure consistency with other parts of the study, these trends have been based upon the number of units (net) granted permission since April 1st 2001. This gives an estimate of the number of units likely to be given permission between April 1st 2007 and the end of the plan period. A deduction has then been made for those permissions that would not be implemented before March 31st 2021, using the same ratios explained in paragraph 6.10.

Subdivision of existing housing

- 10.4 Between the start of the plan period, in April 2001, and March 2007, permission was granted on 14 sites for the subdivision of existing residential accommodation into smaller units. These permissions are for a total of 27 units, though this is offset by the resultant loss of twelve units from the original stock giving a net gain of 15 units.

Table 27: Permissions for the subdivision of existing housing 2001-2007

Monitoring Year	Gain	Loss	Net
2001/02	0	0	0
2002/03	2	1	1
2003/04	0	0	0
2004/05	14	6	8
2005/06	2	1	1
2006/07	9	4	5
Total	27	12	15

- 10.5 Continuation of this trend for the remaining 14 years of the plan period would see permission granted for an additional 35 units (net). It is estimated that 28 units (net) will be completed within the plan period. This latter figure has been used to estimate capacity arising from this source.

Flats over shops

- 10.6 Both Tapping the Potential and the draft practice guidance both identify flats over shops as potentially significant sources of capacity in urban areas.
- 10.7 Between the start of the plan period, in April 2001, and March 2007, planning permission was granted for 51 units (net) on sites above shops, or from the conversion of town centre floorspace for residential use.
- 10.8 Projecting this trend forwards, and making an allowance for those schemes that will not be implemented prior to the end of the plan period, indicates that 94 units will arise from the provision of flats over shops in the period to 2021.

Empty homes

- 10.9 No change has been made to the anticipated yield from this source. The Ministry of Defence Estate and the site at Munro Road, both identified in the 2006 study, still contain a number of vacant units.
- 10.10 It is not considered likely that housing vacancy rates will change significantly from those recorded in the 2006 study. As such, notwithstanding the two sources identified above, no further trend based allowance has been made for empty homes being brought back into use and a capacity of 63 units arising from this source has been included.

Windfalls

- 10.11 Windfall sites are those sites that have not been specifically allocated or identified in the Development Plan and can arise from a number of sources, notably in those categories discussed previously. However, PPS3 takes a guarded approach towards the inclusion of windfalls in estimates of housing supply and capacity, advising that they should not be included in the first 10 years of land supply unless authorities can provide robust evidence to justify their inclusion.
- 10.12 Hertsmere has a strong tradition of providing housing from windfall sources. Only 22% of housing completions recorded since 2001 in the Borough have been delivered from allocated housing sites. As such, it is considered justifiable to consider the likely contribution of windfalls towards capacity in four key categories which are not covered elsewhere in this capacity study:
- Large windfalls (10+ units) on previously developed sites within the principal settlements identified in the methodology and above the study threshold of 0.2 ha.
 - Windfalls on previously developed sites within the urban areas identified in the methodology but below the study thresholds of 0.1ha for garage courts and 0.2ha for all other sites;
 - Windfalls arising on previously developed land outside of the defined urban areas;
 - Schemes resulting in losses of residential stock;

Large windfalls within the principal settlements

- 10.13 Over the duration of the plan period, sites which could not be considered for inclusion in the detailed study areas at the current moment in time will inevitably be brought forwards for (re)development. This could take the form of employment uses in undesignated areas which are currently in use becoming surplus to requirements or other non-residential private and public land holdings being made available due to operational reorganisations.
- 10.14 Based upon the timescales for each site identified in the tables in Section 8, development on those DSA sites not already allocated for housing in the Local Plan (i.e. sites that would be defined as windfalls) is anticipated to come forwards at the following annual rates under Scenario 2:
- Short term (2007-2011): 83 units per annum
 - Medium term (2011-2016): 44 units per annum
 - Long term (2016-2021): 27 units per annum
- 10.15 This compares with a completion rate from non-residential, previously developed windfall sites of 112 units per annum between 2001 and 2007. It is therefore considered that inclusion of the site-specific sources alone would be likely to lead to an underestimate of true housing capacity.
- 10.16 It is not considered necessary to make any additional allowance over the first half of the study period of 2007-2021 as the implementation of extant permissions and the completion of those sites already under development, discussed and quantified in Section 4, will provide additional capacity over this period. However, it is felt suitable to make an additional allowance over the second half of the study period, for the 7 years between 2014/15 and 2020/21.

- 10.17 It is acknowledged that there is a finite supply of previously developed land in the Borough, while the completion rates to date have been influenced by the redevelopment of a number of large sites, including the former Fire Research Station in Borehamwood. As such, to assume that the level of completions recorded to date continues could result in an overestimate.
- 10.18 An additional windfall estimate of 283 units from large sites has therefore been made. This figure has been calculated by deducting the anticipated completion rates from the DSAs from the 112 dwellings per annum average recorded between 2001 and 2006. This figure has then been discounted by a further 50% and applied to the period 2014-2021.

Table 28: Large windfalls within the principal settlements

	Predicted completions from DSAs	Difference from historic rate discounted by 50%	Years	Yield
Medium Term	44 units p/a	34 units p/a	2	68
Long Term	26 units p/a	43 units p/a	5	215
Total				283

Previously developed sites below the study threshold

- 10.19 As there are a relatively low number of large PDL sites within Hertsmere, housing development arising from small previously developed, non-residential sites in Hertsmere makes a valuable contribution towards the achievement of housing targets.
- 10.20 Between April 1st 2001 and March 31st 2007, permission was granted on fifteen sites below the 0.2 hectare threshold used for the identification of specific sites. These permissions are for a total of 50 net additional units. Continuation of this trend for the remaining 14 years of the plan period would see permission granted for an additional 117 units (net). It is anticipated that 93 units (net) will be completed by 2021. This latter figure has been used to estimate capacity arising from this source.

Previously developed sites outside of the defined urban areas

- 10.21 All of Hertsmere outside of the defined urban areas is designated as Green Belt. Although the advice in PPG2 severely restricts the types of development which can be considered acceptable, it does not preclude the conversion of non-residential premises (e.g. redundant agricultural buildings and barns) into housing whilst there will also be a small number of instances where sufficiently special circumstances are considered to exist to permit new housing on previously developed sites in the Green Belt.
- 10.22 Based on trends recorded in the six years to March 2007, it is estimated that 38 units (net) will arise from this source in the period to 2021.

Losses of residential stock

- 10.23 Although Policy H6 of the Hertsmere Local Plan aims to resist the loss of satisfactory residential accommodation, schemes have arisen since the start of the plan period that have resulted in losses to the housing stock.
- 10.24 Continuation of the trends recorded since April 2001 would result in an estimated loss of 107 units from the stock over the plan period. However, this estimate is significantly skewed by a single permission at Cardinal Court in Borehamwood where 42 units were lost as the result of the conversion of flats into a nursing home.
- 10.25 As such, the trend has been based upon the four other schemes that have been granted permission since the start of the plan period, with a one-off allowance for a scheme resulting in a 40-unit loss. An estimate of 50 units net loss has therefore been included for windfall schemes in this category.

11 Applying scenarios and conclusions

Table 29: Identified Urban Capacity 2006-2021

Source	Methodology	Capacity	
		Scenario 1	Scenario 2
Sources in the existing stock			
Subdivision of existing housing	Trend based	28	28
Flats over shops	Trend based	94	94
Empty Homes	Site specific	63	63
Intensification and redevelopment of existing housing	Design exercises	567	839
Development of garage courts	Design exercises	30	38
Brownfield Land			
Previously developed vacant and derelict land and buildings	Site specific	46	93
Redevelopment of car parks	Site specific	0	0
Conversion of commercial buildings	Survey	83	100
Other sources			
Review of housing allocations	Site specific	134	149
Review of other allocations	Site specific	0	0
Vacant land not previously developed	Site Specific	35	40
Other development opportunities	Site specific	178	346
Windfalls			
Large sites	Trend based	283	283
Sites outside of TUAs below threshold	Trend based	93	93
PDL sites outside of the study area	Trend based	38	38
Losses to residential stock	Trend based	-50	-50
Urban Capacity to 2021		1,622	2,154

11.1 Table 29 above details the total identified Urban Capacity in Hertsmere over the period 2007-2021. Under Scenario 1, it is anticipated that 1,622 additional dwellings will be provided by the end of the plan period, with this figure rising to 2,154 additional dwellings under Scenario 2, which allows for a degree of flexibility in plan policies and designations.

Phasing

11.2 The anticipated phasing of capacity is detailed in Table 30 below, split into the short (2006-2011), medium (2011-2016) and long (2016-2021) term. Under both scenarios, there is a slightly lower level of provision in the short term with broadly comparable numbers in the medium and long term.

Table 30: Anticipated phasing of Identified Urban Capacity

	Short Term (2007-2011)	Medium Term (2011-2016)	Long Term (2016-2021)	Total
Scenario 1	363	601	658	1,622
Scenario 2	497	809	848	2,154

- 11.3 Capacity from the Detailed Study Areas has been phased on a site-by-site basis having regard to the assessment undertaken by the HBF. Large windfall sites have been phased exclusively of the second half of the study period, from 2014 to 2021.
- 11.4 Ratios have been used to calculate the number of dwellings arising from the remaining categories of trend based sources, the redevelopment and intensification of TUAs, the redevelopment of small garage courts and the conversion of commercial floorspace over the study period. 20% of anticipated completions have been assigned to the short terms with 40% expected to come forwards in each of the medium and long term. This apparent lag has been introduced to take the implementation of existing permissions and the completion of those sites already under construction.

Housing Supply to 2021 and the Regional Housing Target

- 11.5 Table 31, below, details the total identified housing supply for Hertsmere over the period 2001 to 2021 for the two key scenarios, incorporating the completions and identified supply detailed in Section 4 of this report and the Urban Capacity identified in Sections 8 to 10.

Table 31: Total Housing Supply 2001-2021

	Scenario 1	Scenario 2
Housing Completions 2001-2007	1,367	1,367
Sites in progress at March 31 st 2007	763	763
Sites with detailed planning permission at March 31 st 2007	225	225
Sites agreed subject to completion of legal agreements	37	37
Identified Urban Capacity 2007-2021	1,622	2,154
Total Housing Supply 2001-2021	4,014	4,546

N.B. All figures are net.

- 11.6 This study therefore concludes that, with a degree of flexibility and / or alteration to current plan policies and designations, 4,546 new homes can be delivered within the Borough's existing urban areas to 2021. This represents a shortfall of 454 units against the target for 5,000 new homes set out in the SOS Modifications to the East of England Plan.

Demonstrating a five year supply of housing

- 11.7 PPS3 requires Local Planning Authorities to be able to demonstrate a five-year, site-specific supply of land. The supply of land for the period 1st April 2007 to 31st March 2012 has therefore been considered.
- 11.8 PPS3 advises that planning consents should only be included if, based upon robust evidence, that sites are likely to contribute to housing delivery at the point envisaged. In the period April 1st 2001 to 31st March 2007, Hertsmere Borough Council has granted planning permission for the delivery of 2258 new homes (net). In the same period, planning permission has lapsed on just eight sites that would have delivered 24 homes (net). This indicates a delivery rate of 99%. As such, it is considered reasonable to anticipate that all extant permissions, including sites currently under construction and those with detailed permission and approved subject to legal agreements will be developed.

11.9 Table 32, below, details the presumed build out rates for new developments. In the absence of more detailed guidance from the Government office or the DCLG, these are the ratios that are used to calculate the Borough’s Housing Trajectory.

Table 32: Build out rates for new developments

Planning Status	% of development that will be completed					
	+1 year	+2 years	+3 years	+4 years	+5 years	+6 years
Commenced	45%	25%	15%	15%		
Detailed PP	10%	35%	25%	15%	15%	
Subject to s.106		15%	35%	25%	15%	10%

11.10 Using these ratios, it is anticipated only a small proportion of units on those sites currently subject to a Section 106 legal agreement will not be developed within five years. In addition, this capacity study has identified eight sites that, under Scenario 2, are anticipated to yield 250 units in the short term (to 2011).

11.11 The phasing periods in this document have been devised to coincide with the plan period for the Regional Spatial Strategy. As such, the short-term period only covers the next four years to 2011. The true level of housing supply from site specific sources may therefore be marginally higher as it is reasonable to presume that one, or more, of the sites identified as medium-term propositions may be delivered in the 2011/12 monitoring year.

11.12 Notwithstanding this point, a site specific housing supply of 1,271 units has been identified for the five years to 2012, detailed in Table 33 below. This figure is in excess of the 1,250 new homes that would be required over five years to meet the 250 homes per year target contained in the SOS Modifications to the East of England plan

Table 33: 5-year housing supply

Sites in progress	763
Sites with detailed planning permission	225
Sites subject to legal agreements	33
Identified sites - Short term	250
Total	1,271

Appendices

Appendix 1 – Outstanding Housing Commitments at 31st March 2007Table 1a: Sites in progress with outstanding completions at 31st March 2007 (net gain <=> 0)

Reference	Decision Date	Address	Town	Gain Outstanding at 31/03/07	Loss Outstanding at 31/03/07	Net Outstanding at 31/03/07
TP/2003/0920	05-Apr-04	Wall Hall College	Aldenham	32	0	32
TP/2005/1336	05-Apr-06	Wall Hall College	Aldenham	1	0	1
TP/2002/0260	27-May-02	4 And 4a Shenley Road	Borehamwood	1	0	1
TP/2003/0987	19-Jul-05	The Gate Studios	Borehamwood	116	0	116
TP/2005/0048	19-Jul-05	Land to side of 120 Brook Road	Borehamwood	1	0	1
TP/2005/1008	27-Oct-05	Land At Berwick Road	Borehamwood	12	0	12
TP/2004/1501	08-Dec-05	55 A, B, C and D Shenley Road	Borehamwood	5	1	4
TP/2004/0615	12-Dec-05	Former Lyndhurst School Site	Borehamwood	71	0	71
TP/2006/0897	10-Oct-06	Former Furzehill Middle School	Borehamwood	89	0	89
TP/1998/0620	06-Jun-01	Former International University	Bushey	306	3	303
TP/2002/0095	31-Oct-02	Land Adjacent To 24 Catsey Lane	Bushey	1	0	1
TP/2003/0706	16-Dec-03	1 Clapgate Road	Bushey	1	0	1
TP/2003/0953	06-Apr-04	Sparrows Herne, Elstree Road	Bushey	14	0	14
TP/2003/1166	10-Jan-05	39-45 Prowse Avenue	Bushey	6	0	6
TP/2005/0178	06-Jun-05	113-129 School Lane	Bushey	3	0	3
TP/2005/0652	02-Sep-05	Land adjoining 6 Herkomer Road	Bushey	1	0	1
TP/2005/0331	29-Dec-05	Land r/o 34 Bushey Grove Road	Bushey	1	0	1
TP/2004/1075	30-Jan-06	90-94 Chiltern Avenue	Bushey	2	0	2
TP/2006/0963	22-Sep-06	Land adj. 81 Bushey Grove Road	Bushey	1	0	1
TP/2005/1117	25-Sep-06	19 Park Close (and r/o 16 Golf Close)	Bushey	7	1	6
TP/2006/1357	27-Dec-06	2a Merry Hill Mount	Bushey	3	1	2
TP/2004/1456	28-Feb-05	36 Beethoven Road	Elstree	1	0	1
TP/2005/0697	20-Oct-05	Rear of 76 Deacons Hill Road	Elstree	1	0	1
TP/2003/0646	15-Jan-04	Dancers Hill House	Other	1	0	1

Reference	Decision Date	Address	Town	Gain Outstanding at 31/03/07	Loss Outstanding at 31/03/07	Net Outstanding at 31/03/07
TP/2001/1118	25-Jul-02	Land R/O 69-73 Mimms Hall Road	Potters Bar	1	0	1
TP/2003/0016	25-Feb-03	Orchard Parade	Potters Bar	16	0	16
TP/2004/0510	12-Aug-04	Garden Cottage Farmyard	Potters Bar	2	0	2
TP/2005/1132	25-Nov-05	St Vincent de Paul	Potters Bar	21	0	21
TP/2005/1405	13-Feb-06	Adj 7 Auckland Road	Potters Bar	1	0	1
TP/2005/0496	02-Mar-06	Land off Anthorne Close	Potters Bar	9	0	9
TP/2005/1112	30-Jun-06	16-22 The Walk	Potters Bar	18	4	14
TP/2006/0049	16-Jun-06	Quadrant & Houseboat Works	Radlett	28	0	28
			Total	773	10	763

Table 1b: Sites with detailed planning permission (not started) at 31st March 2007 (net gain <> 0)

Reference	Decision Date	Address	Town	Gain Outstanding at 31/03/07	Loss Outstanding at 31/03/07	Net Outstanding at 31/03/07
TP/2002/0150	27-May-02	Land Adj 131-133 Furzehill Road	Borehamwood	1	0	1
TP/2003/0608	11-Sep-03	53 A, B and C Shenley Road	Borehamwood	3	1	2
TP/2003/1117	27-Jan-04	110 Hartforde Road	Borehamwood	1	0	1
TP/2004/0206	20-May-04	49 Shenley Road	Borehamwood	2	0	2
TP/2004/0260	07-Jul-04	60 Lullington Garth	Borehamwood	2	1	1
TP/2004/0227	22-Oct-04	19 Woodlands Close	Borehamwood	1	0	1
TP/2004/0695	15-Nov-04	14 Brook Road	Borehamwood	2	0	2
TP/2004/0695	15-Nov-04	14 Brook Road	Borehamwood	2	1	1
TP/2004/1334	07-Jan-05	14 Theobald Street	Borehamwood	2	0	2
TP/2004/1141	20-Jan-05	18 Kingsway House	Borehamwood	8	0	8
TP/2004/1226	21-Jan-05	57 Caishowe Road	Borehamwood	2	1	1
TP/2005/0470	26-May-05	67 Masfield Avenue	Borehamwood	1	0	1
TP/2005/0477	15-Jun-06	143-147 Shenley Road	Borehamwood	3	0	3
TP/2006/0154	11-Jul-06	1 Cranes Way	Borehamwood	2	1	1
TP/2006/0920	23-Aug-06	Flat 8 Opus Court 91-97 Shenley Road	Borehamwood	2	1	1
TP/2006/1174	31-Oct-06	3 Shenley Road	Borehamwood	1	0	1
TP/2006/1420	09-Feb-07	Adj 56 Stevenage Crescent	Borehamwood	1	0	1
TP/2002/0975	23-Jan-03	Land Between 83 And 85 Windmill Lane	Bushey	2	0	2
TP/2003/0797	29-Oct-04	Car Park Between Great Grove And Little Grove	Bushey	3	0	3
TP/2004/0797	22-Apr-05	Land r/o 84-100 High Road	Bushey	3	0	3
TP/2004/1341	23-Jun-05	The Red House (no70-78) & no60	Bushey	3	0	3
TP/2005/1491	05-Apr-06	Brent Timber and Fencing	Bushey	49	0	49
TP/2006/0055	10-May-06	Garage to rear of	Bushey	1	0	1
TP/2005/1023	24-May-06	105 Bushey Grove Road	Bushey	12	1	11
TP/2005/0668	20-Jun-06	Land adjacent to	Bushey	1	0	1

Reference	Decision Date	Address	Town	Gain Outstanding at 31/03/07	Loss Outstanding at 31/03/07	Net Outstanding at 31/03/07
TP/2006/0187	18-Jul-06	Vacant Land Between Blocks of Maisonnets nos 119 & 129 Bournehall Avenue	Bushey	4	0	4
TP/2005/1310	25-Jul-06	65/67 High Road	Bushey	20	2	18
TP/2006/0218	03-Aug-06	1-6 Munro Road	Bushey	12	6	6
TP/2006/0492	11-Aug-06	101 Glencoe Road	Bushey	1	0	1
TP/2006/0191	21-Aug-06	Merryhill Farm	Bushey	2	0	2
TP/2005/0694	23-Aug-06	111 High Road	Bushey	9	0	9
TP/2006/1016	03-Oct-06	32 Park Road	Bushey	2	1	1
TP/2006/1113	20-Oct-06	5 London Road	Bushey	2	1	1
TP/2006/1605	09-Mar-07	Land off Bushey Hall Park	Bushey	7	1	6
TP/2006/1435	23-Mar-07	Land rear of 26-30 Woodfield Rise	Bushey	4	0	4
TP/2004/0508	24-Aug-04	The Leys	Elstree	1	0	1
TP/2004/1464	19-Jan-06	Medburn House Kennels	Elstree	1	0	1
TP/2006/0565	13-Jul-06	Land adj. 2 Sullivan Way	Elstree	1	0	1
TP/2006/0449	23-Aug-06	Solbakken	Elstree	2	1	1
TP/2002/1354	12-Feb-04	Rowley Farm	Other	1	0	1
TP/2004/1163	24-Nov-05	Roundbush Garage	Other	5	0	5
TP/2003/1041	15-Jan-04	22 St. Francis Close	Potters Bar	1	0	1
TP/2003/1234	19-Feb-04	2 Billy Lows Lane	Potters Bar	1	0	1
TP/2004/0151	06-Aug-04	65 Cranborne Crescent	Potters Bar	2	1	1
TP/2005/0122	10-Jan-06	Former Honeywood House	Potters Bar	38	0	38
TP/2006/0313	08-May-06	39 Darkes Lane	Potters Bar	1	0	1
TP/2006/0395	05-Jun-06	Land rear of	Potters Bar	1	0	1
TP/2006/0011	02-Nov-06	170 Dugdale Hill Lane	Potters Bar	3	1	2
TP/2006/1086	13-Nov-06	97 Billy Lows Lane	Potters Bar	1	0	1
TP/2006/0119	14-Nov-06	Preston Grange	Potters Bar	0	1	-1

Reference	Decision Date	Address	Town	Gain Outstanding at 31/03/07	Loss Outstanding at 31/03/07	Net Outstanding at 31/03/07
TP/2003/1192	22-Jan-04	32 Willow Way	Radlett	1	0	1
TP/2003/1270	09-Mar-04	9 Station Road	Radlett	1	0	1
TP/2004/0631	04-Oct-04	Caradene, Gills Hill Lane	Radlett	2	1	1
TP/2004/1112	08-Nov-04	33 Loom Lane	Radlett	1	0	1
TP/2004/0875	26-Nov-04	Land Adj 12 Radlett Park Road	Radlett	1	0	1
TP/2005/1320	05-Apr-06	Kendal Hall Farm	Radlett	1	0	1
TP/2006/0968	05-Sep-06	30 New Road	Radlett	4	0	4
TP/2006/0108	06-Oct-06	Greystones	Radlett	2	1	1
TP/2006/1181	09-Nov-06	2 Rose Walk	Radlett	1	0	1
TP/2006/1207	17-Nov-06	86-96 Watling Street	Radlett	6	3	3
TP/2003/1080	18-Mar-04	Land adj 2 Newcombe Road	Shenley	1	0	1
TP/2005/1331	20-Dec-05	12 Blanche Lane	South Mimms	1	2	-1
			Total	254	29	225

Table 1c: Sites with detailed planning permission subject to completion of legal agreements (not started)

Reference	Decision Date	Address	Town	Gain Outstanding at 31/03/06	Loss Outstanding at 31/03/06	Net Outstanding at 31/03/06
TP/2000/1275	01-Apr-01	Tempsford Avenue	Borehamwood	20	0	20
TP/2005/1497	20-Jul-06	Land adjoining 48 & 33	Potters Bar	10	2	8
TP/2005/1372	17-Dec-06	Blackwell House, Aldenham Road	Bushey	9	0	9
			Total	39	2	37