

HARLOW URBAN CAPACITY STUDY

Harlow District Council

June 2006



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1 Introduction

- 1.1 GVA Grimley LLP was instructed by Harlow District Council (HDC) in September 2005 to undertake an Urban Capacity Study (UCS) for the Harlow District area. A previous UCS was issued by David Lock Associates in April 2002. The purpose of this study is to review the 2002 report and to undertake a new and comprehensive review of land availability within Harlow District, and the resulting housing and employment potential for the 2006-2021 period.
- 1.2 Section 2 of this report sets out the policy background against which this study was undertaken. This includes a review of the National, Regional and Local planning policy and guidance that has informed the methodology and approach to the surveys and analysis of potential.
- 1.3 Section 3 provides a full methodology of how the study has been undertaken. This includes an explanation of the discounting process and how housing potential levels have been arrived at.
- 1.4 In order to understand fully whether sites would come forward for redevelopment, it is necessary to appreciate the market viability of new development in the Harlow area. Property market analysis is included in Section 4.
- 1.5 There are two main sources of land within Harlow, previously developed land (PDL), which is the traditional sources of land for Urban Capacity Studies, and Greenfield land. Greenfield land would not usually be considered as a major land source as part of a UCS but given the specific nature of Harlow New Town's built form GVA Grimley was instructed to consider the potential of this land source. This was because there were already concerns that there would be insufficient previously developed land (PDL) within the New Town fabric to meet the Regional Plan's requirement.
- 1.6 In order to understand the density potential of typical sites in Harlow, a series of design studies have also been carried out.
- 1.7 From these steps the housing potential within Harlow District Council boundaries have been determined.
- 1.8 A set of conclusions and recommendations based on these findings have also been made for consideration by the Council as it completes its LDF Core Strategy process.

2 Policy Background

2.1 There are a number of planning guidance and policy documents that have informed this urban capacity study exercise. These are at the National, Regional and Local levels. A review of the most pertinent documents is set out below but consideration has also been given to documents such as PPS1 (Delivering Sustainable Development), PPS12 (Local Development Frameworks), PPG2 (Green Belts), PPG9 (Biodiversity and Geological Conservation), PPG13 (Transport), and PPG25 (Development and Flood Risk).

National Planning Policy

Planning Policy Guidance 3: Housing (PPG3)

2.2 PPG3 sets out the Government's stance in relation to housing development nationally. It is this document that establishes the need for Local Authorities to assess the capacity for new housing development within their development boundaries. Paragraph 21 states that the Government is committed to promoting more sustainable patterns of development by:

- concentrating most additional housing development within urban areas;
- making more efficient use of land by maximising the re-use of previously-developed land and the conversion and re-use of existing buildings;
- assessing the capacity of urban areas to accommodate more housing;
- adopting a sequential approach to the allocation of land for housing development;
- managing the release of housing land; and
- reviewing existing allocations of housing land in plans, and planning permissions when they come up for renewal.

2.3 PPG3 also sets the Government target to develop 60% of new housing on previously developed land and through the re-use of existing buildings (Para 23). In para 24 the document states that land is a finite resource that is often significantly underused. In order to establish how much additional housing can be accommodated within urban areas and therefore how much greenfield land may be needed for development, all local planning authorities should undertake urban capacity studies. In conducting studies Local Authorities are referred to good practice guidance as set out in Annex D to PPG3.

2.4 Urban capacity studies are not intended to identify specific sites for development. However, aggregate results should be used to determine the quantity of windfall sites with the larger sites being considered as potential new allocations for the Local Development Framework and its Proposals Map. PPG3 identifies five criteria that should be taken into consideration by local authorities when considering designating sites for housing development.

- Availability of previously-developed sites and empty or under-used buildings and their suitability for housing use;
- Location and accessibility of potential development sites to jobs, shops and services by modes other than the car, and the potential for improving such accessibility;
- Capacity of existing and potential infrastructure, including public transport, water and sewerage, other utilities and social infrastructure (such as schools and hospitals) to absorb further development and the cost of adding further infrastructure;
- Ability to build communities to support new physical and social infrastructure and to provide sufficient demand to sustain appropriate local services and facilities; and
- Physical and environmental constraints on development of land, including, for example, the level of contamination, stability and flood risk, taking into account that such risk may increase as a result of climate change.

2.5 These criteria should equally be applied in the assessment of sites surveyed as part of the urban capacity study process. Sites identified by survey should have some indication that they may meet these requirements.

2.6 A consultation paper on new PPS3 'Housing' was issued in December 2005. The underlying principles within this document echo those set out in PPG3. One key change is in the approach to recommended development densities. These now range from 30-40dph in rural areas up to 70dph and above in city centre environments. For suburban areas (most appropriate to the built environment context of Harlow) the range is given as 35-55dph.

Tapping the Potential

2.7 Tapping the Potential was produced by the Government to assist in the delivery of Urban Capacity Studies by Local Authorities and sits alongside guidance contained in

PPG3 (Housing). It identifies four key stages in the process of undertaking a UCS. These are:

Identifying capacity sources

- Identify urban areas to be assessed and consideration of all sources of capacity

Surveying the capacity

- Quantifying capacity using existing data and field surveys. The approach may be comprehensive, based on a full field survey or based on priority area studies or typical urban area studies. A comprehensive approach has been used here.

Assessing yield

- Using density multipliers that reflect efficient use of the available land and taking design-led approaches that assess local site capacity and contextual conditions.

Discounting potential

- Moving from unconstrained capacity by discounting sites that are considered to be inappropriate for development, or unlikely to come forward during the plan period. This may be due to a number of issues including land ownership, access or viability, location, market interest or current use.
- The discounted capacity should be a fair reflection and assessment of the potential of the level of development that may be brought forward within the urban area for the plan period.

2.8 The detailed methodology that has been employed in undertaking this UCS is set out below in Section 3 and Appendix A. Guidance set out in Tapping the Potential has been closely followed in this study.

The Planning and Compulsory Purchase Act 2004 (P&CA 2004) and Planning Policy Statement 12: Local Development Frameworks (PPS12)

2.9 This UCS has been undertaken within the new planning framework as set out in the P&CA 2004 and PPS12. The P&CA sets a revised policy framework for the planning system. The act requires all Local Authorities to review their development plans and put in place new policy documents which are referred to as Local Development Frameworks (LDFs).

2.10 This UCS will feed into HDCs Local Development Framework process and its production of a Core Strategy and new Development Plan Documents.

Regional Policy Context

Regional Planning Guidance 9: South East (March 2001) (RPG9)

- 2.11 Paragraph 4.17 of RPG9 identifies Harlow as one of a number of Priority Areas for Economic Regeneration (PAERs). The criteria for designation include above average unemployment rates, high levels of social deprivation, low skill levels, dependence on declining industries, derelict urban fabric, peripherality and insularity. These areas need tailored regeneration strategies backed up by appropriate resources to address their problems and maximise their contribution to the social and economic well-being of the region.

Draft East of England Plan

- 2.12 The Draft East of England Plan allocates 400 new units per annum to Harlow District, equating to a total of 8,000 units in the period from 2001 to 2021. This annual provision is contributing to a regional total of 23,900 per annum and 478,000 for the plan period.
- 2.13 Harlow's ability to accommodate the number of units allocated to it has been debated at the Examination in Public for the East of England Plan, which was completed on 2 March 2006. The report of the Panel's findings will be produced in summer 2006. The figures included in the Draft East of England Plan are taken as the baseline requirement for Harlow for the purposes of this Study.

Essex and Southend-on-Sea Replacement Structure Plan (April 2001)

- 2.14 The Essex and Southend-on-Sea Structure Plan allocates 5,450 units for development in Harlow for the period 1996 to 2011 contributing to a total of 72,250 units for Essex as a whole. In line with Government guidance, the document seeks the efficient use of land and a sequential approach to site selection.
- 2.15 In relation to employment land the Structure Plan states that Harlow should deliver a total of 50ha of land for employment uses. This includes 35ha that was already committed at the time the plan was written and an additional 15ha of land to be allocated.

Local Policy Context

- 2.16 There are a plethora of documents at the Local level that have informed and provided context to this UCS exercise. These include, the original Gibberd Principles; the Replacement Harlow Local Plan; the 2005 Regeneration Strategy; the Green Spaces Strategy; Garage Strategy; Harlow's response to the East of England Plan EiP; the

previous UCS and the emerging Area Investment Renewal Framework. Key points from each of these documents are drawn out below.

The Gibberd Masterplan

- 2.17 Harlow was built as a new town in the early 1950's to accommodate the overspill population from London. As a new town, Harlow was built on new and innovative planning principles and encouraged the development of a modern and dynamic community. It was built on the sustainability principle of every resident having a good place to live, work, raise children, and spend leisure time.
- 2.18 Harlow was built on the principle of neighbourhoods separated by green wedges where everyone had access to the local school, community centre, surgery, pub, shops, leisure facilities and open spaces. The open spaces in Harlow are unique to the town and are much valued by local people. If the green spaces within the town are taken into consideration then overall the densities in Harlow are low. However, within the built area they are high therefore redevelopment opportunities are slow in coming forward even though the infrastructure is aging.
- 2.19 Sir Frederick Gibberd published his Masterplan for Harlow in 1952. There were a number of underlying principles which still hold true today. These can be summarised as:
- A clear town centre
 - Strong local centres
 - Distinct residential neighbourhoods
 - Walkable districts
 - Green wedges between neighbourhoods
 - Balancing density with open space
 - Access to employment in the town
 - A mix of uses and range of experiences with-in Harlow
 - High quality design

2.20 The following quotes from sir Frederick Gibberd explain the principles that have informed the new Town planning process and are still as relevant today as they were fifty years ago: -

“ The design of a town is not, as so many suppose, simply a matter of making plans – “town planning”.

“ Its concern is with the quality of the environment, with the actual places or spaces which result from a particular arrangements of buildings, landscapes and roads.”

“ The design was developed from the character of the existing landscape. Its foundation is form of the land – its shape. The shape of the land determined the internal subdivisions of the town just as it did the boundary.”

2.21 The master planned nature of the town, and the fact that it was delivered as a series of major phases and complete estates within them, has left a fabric that offers little in the way of the remnant land found in more organically evolving urban settings, and little in the way of windfall sites.

Replacement Harlow Local Plan

2.22 The Replacement Harlow Local Plan is proposed for adoption on 13th July 2006. A Public Inquiry was held and the Inspector’s Report was issued in February 2005. Proposed modifications were issued in the summer 2005 and a further Inquiry was held regarding five specific issues, including housing and employment land. The further Inspector’s report was issued in March 2006 and proposed further modifications were placed on deposit in mid April 2006.

2.23 Key points to raise from the Replacement Harlow Local Plan are as follows:

- The 2nd Deposit Draft allocates a total of 9 sites for residential development and in total the Plan allows for a provision of 2041 units which was the required additional provision at the time the plan was written.
- The second Inspector’s Report also allocates sites at Ram Gorse and Wych Elm for the provision of 110 units each. It also increases the allocated number of units at Harlow Sports Centre (the future Harlow Gateway) from 456 to 530 which reflects the approved planning permission. This is, thus, an addition of 294 units. However,

the Inspector reduced the number of units at New Hall from 871 to 750 and the windfall sites from 520 to 400 units over the remaining 8 years of the Local Plan.

- In the Proposed Further Modifications 6.5ha of land at New Hall Farm which had been proposed for employment development during the Replacement Local Plan modification process will revert to the initial proposal of residential provision post 2011. The 6.5 ha of employment land will be provided at land to the north of Nortel Networks which with the existing allocated site, provides a total of 13.7ha of employment land at Nortel which with the 2 ha allocation at New Hall Farm provides a total of 15.7 ha of allocated employment land.
- The Local Authority had difficulty identifying enough land for housing and employment development requirements to meet requirements up to 2011.
- An underlying principle of development in Harlow is the retention of the Green Wedges identified in the original New Town plan and provision of new Green Wedges where new development takes place.

Urban Capacity Study (2002)

- 2.24 David Lock Associates were instructed by HDC to undertake an urban capacity study in 2001. The final report was issued in April 2002. The Methodology for the UCS was to review the entire district to identify larger development sites, but to then only survey a third of the district to identify a sample of smaller sites. Results from this survey could then be extrapolated.
- 2.25 The final report concluded that there was not a great stock of derelict land within Harlow, and that existing densities in the town were high, reducing the potential yield from intensification of existing areas.
- 2.26 The study estimated that between 750 and 1,100 units could be accommodated on previously developed land. The study also estimated that between 506-787 of these dwellings (based on 35-45 dph) would come forward as non-allocated windfall units during the plan period 2001-2011 amounting to an average of 65 windfall dwellings per annum. However, in the period 2002 to 2006 only 46 dwellings per annum were coming forward from windfall sites. Further details are provided in Section 5.

Harlow Regeneration Strategy (July 2005) (PACEC and Halcrow Group Limited)

- 2.27 The Harlow Regeneration Strategy provides a framework for the economic and social growth of Harlow. It makes a clear link between the current needs of Harlow and the future growth of the town. In doing so, it provides a concise overview of the current issues facing Harlow; quantifies the regeneration needs of the town; and justifies why

the growth of Harlow provides a unique opportunity and necessary pre-condition for regeneration of the town.

Green Spaces Strategy, (Nortoft Consultancy January 2006) & Harlow Urban Green Spaces Assessment, (Christopher Blandford and Associates November 2005).

- 2.28 The Green Spaces strategy, undertaken by Nortoft Consultancy, provides a quantitative assessment of Harlow's existing open space, sport, and recreational facilities in accordance with Planning Policy Guidance 17: Planning for Open Space, Sport and Recreation. This was informed by a qualitative assessment of Harlow's greenspaces, undertaken by Christopher Blandford & Associates, identifying both the landscape quality and landscape character of each greenspace.
- 2.29 This study is of particular relevance to the discounting phase of the Urban Capacity Study with regard to the future potential use of green wedges, allotments, playgrounds and other amenity space as housing or employment sites.

Garage and Hardstand Strategy (2006) (HDC)

- 2.30 Harlow's Garage and Hardstand Strategy attempts to monitor, address, and ultimately improve the future of Harlow's 8,500 garages and 1,600 rented hardstands.
- 2.31 Current resources and responsibilities, stock condition, pricing policy, and satisfaction levels are reviewed whilst suggestions for the upgrade, demolition or residential redevelopment of individual garage sites are discussed.

Technical Paper – Housing and Employment Capacity of Harlow (November 2005) (HDC)

- 2.32 This document sets out HDC's response to the Examination in Public for the Draft East of England Plan. The document concludes that the Draft East of England Plan needs to recognise and take account of Harlow's specific circumstances and these are listed as:
- The physical design constraints of the New Town fabric with defined uses for all land, leaving little left over for future development;
 - The desirability of protecting the green space structure around which the Town was designed, and which is one of its main selling points;
 - The finite supply of remaining undeveloped land, which is mainly greenfield land to the east of the Town; and
 - Limited opportunities for infill and brownfield site re-development.

Area Investment Renewal Framework (Draft March 2006) (GVA Grimley LLP)

- 2.33 The draft Area Investment and Renewal Framework identifies a number of regeneration priorities for Harlow Town. These include two investment districts and six target local action areas. In addition the AIRF broadly assessed all of Harlow's Neighbourhood Centres and Hatches, and a number of housing estates that were identified as being of concern. This effort has identified a range of needs and opportunities for renewal that will offer the potential for new housing and increased housing densities. Studies of a number of these areas have identified potential sites and their potential housing output.

3 Methodology

Identification of Sources of Capacity / Surveying Capacity

- 3.1 Tapping the Potential (TTP) lists out the key sources of potential that should be identified and surveyed in undertaking a comprehensive UCS. There are nine sources in total that should be reviewed and assessed. In Harlow a review was undertaken of all potential sources. The table below sets out the definition of each source type and the survey approach that was taken for the Harlow District Area to each of those typologies.

Table 3.1: Sources of Potential and Methods of Survey		
Source of Capacity	Definition	Assessment of the Source
Intensification of Existing Areas	<p>TTP Definition – Intensification is making the most effective use of land in a given area, for example by developing surplus or under used garage courts rear gardens and backlands</p> <p>Harlow Context – As a post war new town Harlow has a limited number of properties with large gardens. The bulk of the intensification capacity was sourced from garage sites and Harlow's Neighbourhood Centres and Hatches.</p> <p>Harlow has 8,500 garages, which were built into the fabric of many neighbourhoods. Many of these are underused, and in poor condition and could be suitable for redevelopment, depending on parking provision in the area.</p> <p>Harlow's Neighbourhood Centres and Hatches also offer an opportunity to intensify in areas where redevelopment may release the potential for higher density mixed use approaches and address physical and service performance issues.</p>	<p>All Properties in this Type</p> <ul style="list-style-type: none"> ▪ Aerial Photographs ▪ Review of Maps ▪ Review of HDC Planning Applications Database and NLUD <p>Garden Sites</p> <ul style="list-style-type: none"> ▪ As above ▪ Street by Street Survey of Harlow Area <p>Garage Sites</p> <ul style="list-style-type: none"> ▪ As above ▪ Review of Garage and Hardstand Strategy 2006 ▪ Street by Street Survey of Harlow Area <p>Hatches/Neighbourhood Centres</p> <ul style="list-style-type: none"> ▪ As above ▪ Review of all Centres and Hatches in terms of performance, suitability for redevelopment and intensification via site visits ▪ Alignment with Area

Table 3.1: Sources of Potential and Methods of Survey		
Source of Capacity	Definition	Assessment of the Source
		Investment Renewal Framework
Previously Developed Vacant & Derelict Land & Buildings	<p>TTP Definition – This includes a variety of land use types that accommodate derelict buildings and vacant lots. Essentially these are the sites which fit with the normal public perception of brownfield.</p> <p>Harlow Context – For Harlow, this encompasses a range of sites that have had a variety of prior uses, may or may not have buildings on site, may or may not be currently operational and present variable building conditions.</p>	<ul style="list-style-type: none"> ▪ Aerial Photographs ▪ Review of Maps ▪ Review of HDC Planning Applications Database and NLUD ▪ Street by Street Survey of Harlow Area
Conversion of Commercial Properties	<p>TTP Definition – Sourcing the potential for commercial and industrial buildings to housing.</p> <p>Harlow Context – Using the above definition, a very limited number of sites were selected mainly in the Town Centre location.</p>	<ul style="list-style-type: none"> ▪ Aerial Photographs ▪ Review of Maps ▪ Review of HDC Planning Applications Database and NLUD ▪ Street by Street Survey of Harlow Area
Redevelopment of Car Parks	<p>TTP Definition – Surface car parks, and in particular temporary car parks of poor quality should form a major element of this source</p> <p>Harlow Context – There are very few surface car parks in the Harlow, where they do exist they tend to be very well used. The majority of the town enter car parks are operational and well-used multi-storey structures and are not appropriate for inclusion in this category. Where appropriate, surface car parks were included as potential capacity for consideration.</p>	<ul style="list-style-type: none"> ▪ Aerial Photographs ▪ Review of Maps ▪ Review of HDC Planning Applications Database and NLUD ▪ Street by Street Survey of Harlow Area
Review of Existing Housing Allocations	<p>TTP Definition - A review of existing housing allocations represents a good opportunity to revisit these allocations using more up to date approaches.</p> <p>Harlow Context – A total area of 48.79ha is currently allocated for housing in the current Local Plan. These sites have been included in our overall capacity and were reviewed by the project team.</p>	<ul style="list-style-type: none"> ▪ Aerial Photographs ▪ Review of Maps ▪ Review of HDC Planning Applications Database and NLUD ▪ Street by Street Survey of Harlow Area
Review of Other Existing Allocations	<p>TTP Definition – This source includes land allocated for employment and other uses which are not likely to be taken up in the quantities envisaged.</p> <p>Harlow Context – This is quite a substantial source of capacity for Harlow. Included in this are sites currently allocated for:</p>	<ul style="list-style-type: none"> ▪ Aerial Photographs ▪ Review of Maps ▪ Review of HDC Planning Applications Database and NLUD ▪ Street by Street Survey of Harlow Area ▪ Review of Green Space Strategy

Table 3.1: Sources of Potential and Methods of Survey		
Source of Capacity	Definition	Assessment of the Source
	<ul style="list-style-type: none"> ▪ Employment ▪ Green Wedge ▪ Allotments ▪ Playgrounds 	<ul style="list-style-type: none"> ▪ Alignment of Employment Sites to Area Investment Renewal Framework
Redevelopment of Existing Housing	<p>TTP Definition – The redevelopment of existing housing presents an interesting opportunity to increase densities and capacity.</p> <p>Harlow Context – Work currently being undertaken for the Area Investment Renewal Framework will help identify housing sites, which have the potential to be replaced and intensified. However, initial findings are that densities are already high and redevelopment may not deliver significant net gain in housing units (e.g. Lower Meadow / Barley Croft).</p>	<ul style="list-style-type: none"> ▪ Alignment with Area Investment Renewal Framework
Vacant Land Not Previously Developed	<p>TTP Definition – This source refers to land which is shown often within built up areas on Ordnance Survey maps as a white area without annotation. This is frequently mistaken for allotments, playing fields etc, however, these are dealt with under Redevelopment of Other Existing Allocations; remaining white land which is not classified under this category is referred to as Vacant Land Not Previously Developed.</p> <p>Harlow Context – There are a number of apparently vacant sites within Harlow but many of these are used as allotments or playing fields and are therefore discounted from this land type.</p>	<ul style="list-style-type: none"> ▪ Aerial Photographs ▪ Review of Maps ▪ Review of HDC Planning Applications Database and NLUD ▪ Street by Street Survey of Harlow Area ▪ Review of Green Space Strategy
Flats Over Shops	<p>TTP Definition – Sourcing the potential to convert the space over shops into residential use.</p> <p>Harlow Context – The type of buildings that typically offer this source of potential are not very evident in Harlow. Shops are typically provided as single storey buildings in the town's hatches (where suitable these have been identified for intensification) or are part of multi storey buildings that have purpose built flats or offices above. As such, no potential sites were found. However, a review of all hatches did identify sites that have been considered under the intensification category.</p>	<ul style="list-style-type: none"> ▪ Aerial Photographs ▪ Review of Maps ▪ Review of HDC Planning Applications Database and NLUD ▪ Street by Street Survey of Harlow Area
Subdivision of	TTP Definition – This refers to the	<ul style="list-style-type: none"> ▪ Analysis of planning

Table 3.1: Sources of Potential and Methods of Survey		
Source of Capacity	Definition	Assessment of the Source
Existing Homes	<p>subdivision of existing homes into 2 units or more.</p> <p>Harlow Context – The potential for subdivision is difficult to estimate and assumptions rather than site surveys need to be undertaken. Harlow's late 20th Century housing stock has exhibited little capacity for sub-division. Where subdivision has taken place this has been concentrated in older buildings which are found predominantly in Old Harlow.</p>	<p>permissions to ascertain an annual gain rate, which is then applied for the survey period to 2021.</p>
Empty Homes	<p>TTP Definition – Analysis of the opportunity for empty homes to be brought back into use.</p> <p>Harlow Context – The Harlow empty homes rate is below national average.</p>	<ul style="list-style-type: none"> ▪ Current empty homes rate measured from Council Tax register and compared against regional average for empty homes.

3.2 There are a number of different methods for surveying the potential. The application of these methods depends on the land type being surveyed. The key steps taken in surveying potential are set out below.

- Review of Local Plan Proposals Map and allocations, the National Land Use Database (NLUD) and previous UCS report. The HDC database of planning applications from 2002 to 2005 was also reviewed. Data on empty homes rates was analysed.
- Review of Aerial Photographs of Harlow in conjunction with reviewing maps of the district and GIS databases.
- An initial database was set up and a street to street survey of the entire Harlow District Council area was carried out.
- A database of all identified sites with their characteristics was produced and these were mapped. The findings were discussed with HDC and some additional sites were proposed by the Council.
- Further fieldwork was undertaken to review these sites and additional information in the form of the Garage Strategy and Green Spaces Strategy was considered.

Consideration of Employment Land Capacity

3.3 Sites were also considered for employment land potential. As with residential land, suitability of sites were assessed against the following criteria:

- Site Access
- Surrounding Uses
- Site size

Consideration of Greenfield Land

3.4 Greenfield land is defined as land that has not been previously developed. This land source would not traditionally be considered as part of a UCS exercise, however, Harlow District area has limited opportunities for the redevelopment of previously developed land and GVA Grimley was instructed by HDC to consider greenfield land as a separate exercise in the UCS.

3.5 The major source of greenfield land within Harlow is the allocated Green Wedge areas. As stated above, the Green Wedges were a major part of Frederick Gibberd's original masterplan for the town. The philosophy behind the Green Wedge is to bring the countryside into the urban area and to provide clear vistas out to the rural areas beyond Harlow's boundaries. They also provided and continue to provide a green buffer around the New Town's districts. The Green Wedges also coincide with areas that are prone to flooding and therefore serve to reduce the risk of development within floodplains.

3.6 The land that constitutes the Green Wedges takes many forms, including:

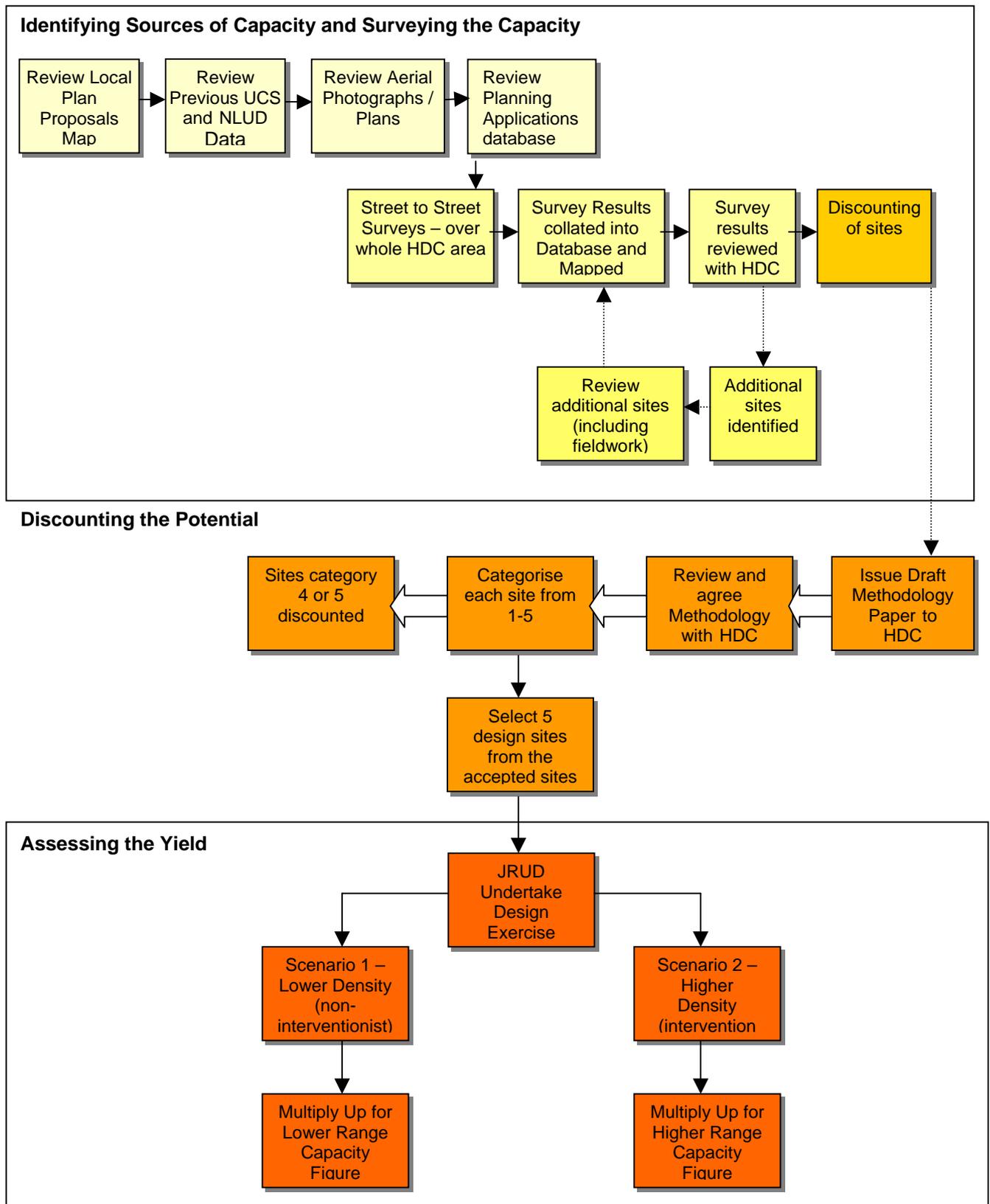
- Schools and their playing fields
- Playing fields
- Informal open space for recreation
- Cycle-ways and walkways
- Floodplain
- Woodlands
- Environmental designations eg SSSI, LNRs etc
- 'Remnant Land' – i.e. land that was left on the edges of built up areas that serves no specific function.

3.7 The contribution to capacity made by greenfield land is considered in section seven of this report.

Survey, Discounting and Yield

- 3.8 The overall process that has been undertaken to determine potential is summarised in the flowchart below. This includes some of the main steps identified in Discounting the Potential and Assessing the Yield which are explained in more detail below.

Figure 3.1 Methodology Process Chart



Discounting the Potential

3.10 Once the surveys had been carried out and the full database of sites completed, the discounting process began. The intent of this step is to discount sites that are not considered to have housing potential in the plan period, leaving a set of accepted sites for taking the study forward. The discounting methodology and criteria was agreed with HDC. The agreed detailed methodology is attached at Appendix A.

3.11 In the main, each identified site was considered against the following criteria:

- Does it have a Local Plan allocation?
- Is it identified for development or some other kind of investment in another Local Authority strategy?
- Would the development of the site be in general conformity with other Local Planning goals and objectives?
- Is the site in operational use?
- Does the site have any particular planning constraints?
- Does the site appear to be in single or multiple ownership?
- Does the site appear to have any physical or access constraints that may inhibit its development for housing or employment use?
- If the site is suitable for development (or redevelopment) is it most appropriate for housing or employment use?

3.12 More specific definitions for each category for each of the types of site are set out in Appendix A. These take into account the different characteristics of the sources of potential being assessed. The five discounting categories are entered in Table 3.2.

Table 3.2: Summary of Discounting Categories	
Category	Broad Description
Category 1	Committed Sites – sites with full or outline planning permission and existing local plan allocations that are deemed appropriate following review under PPG3 and employment land criteria.
Category 2	Likely future development sites – sites with limited constraints and good potential for residential or employment development.
Category 3	Possible future development sites – sites with good residential or employment development potential up to 2021, but which have some constraints to be overcome that are not considered insurmountable.

Category 4	Sites with limited potential – sites with significant development constraints and limited potential for development up to 2021.
Category 5	Discarded sites – sites with overriding constraints and / or unsuitable locations for residential or employment development.

3.13 Each site was assigned to a category. Sites that were assigned as category four or five were automatically discounted for consideration as being highly unlikely to come forward for development during the study period.

3.14 Sites that were placed in categories one, two or three were retained. Five of these sites were selected for bespoke design exercises to establish the likely density of development that may be achievable. The five selected sites are:

Table 3.3: Sites Selected for Bespoke Design Exercise				
UCS Ref	Site Name	Site Description	Type of Land	Site Size
NS31	Howards Way: Car Showroom	Vacant Car Showroom	Previously developed, vacant and derelict land and buildings	0.38ha
<i>2 Design Studies undertaken for NS31 – 1 showing employment use and another showing possible residential use</i>				
GW9	Remnant Land off Mallows Green	Open Space allocated as Green Wedge	Review of other existing allocations / Vacant land not previously developed	1.0ha
NS16	Remnant Land off Latton Common	Open Space	Vacant land not previously developed	0.63ha
NS46	The Hill: Garage Site	Garages	Redevelopment of car parks	0.11ha
NS63	Mandella Avenue Scout Hut	Scout Hut	Previously developed, vacant and derelict land and buildings	0.51ha

3.15 These sites were selected because they are representative of the types and sizes of sites that were considered to have potential to be developed in the study period. In addition to these design exercises this UCS also drew upon the findings of the AIRF, which provides design approaches, housing outputs and indicative densities for Prentice Place, Clifton Hatch, Staple Tye and the Old Harlow Neighbourhood Centre.

Assessing the Yield

3.16 The design analysis was employed to assess the likely capacity of sites within Harlow. It allowed for sites to be categorised according to type and for a design based capacity

approach to be applied. Capacities of each of the selected sites were calculated based on the design analysis of two density scenarios:

- Scenario 1 – based on the densities and standards suggested in PPG3 and emerging PPS3.
- Scenario 2 – based on an approach that maximises the development of sites through a pro-active intervention approach with higher densities and tighter parking and design standards.

3.17 The second of these two approaches relies upon the strategies and interventions proposed in the Harlow Regeneration Strategy and the AIRP being successful at delivering higher density development on sites to maximise population and employment growth in Harlow.

3.18 An average development density that could be applied across Harlow was calculated. More detail on this is included in Section five.

3.19 The yield calculations are included in sections five and six and are divided between capacity on Previously Developed Land (as is traditionally assessed in a UCS) and capacity that may be delivered on Greenfield land, which provides the majority of Harlow's development potential.

4 Market Analysis

- 4.1 In order to inform the UCS exercise a review of the property market in Harlow was carried out. The analysis below provides an overview of the general UK property market and outlook for the future and then focuses on more location and sector specific issues.

General Property Market and Economic Trends

- 4.2 UK economic growth improved in Q4 2005 and should continue improving in 2006 and 2007, but a strong upturn is unlikely. Employment growth is expected to be weaker this year and next year than last year and so occupier demand, and hence rental growth, should improve only slightly over the next few years.
- 4.3 All-property average rental growth in 2006 should be similar to that seen in 2005, at around 2.5%. Higher growth rates will feed through only gradually over the subsequent few years, and by 2010, all-property rental growth should rise to around 3.5% pa. The office sector is expected to be the top performer of the three main property sectors over the next five years, achieving around 3.75% pa, in contrast to being the worst performer over the last five years. All-retail property rental growth will slow somewhat over the next 2-3 years, and should average around 2.6% pa over the next five years. Industrials are likely to show a modest increase in rental growth over the next five years, averaging around 2.1% pa.
- 4.4 The continued high level of investor demand has resulted in further yield compression over the last three months, and all-property returns have risen to an impressive 19%pa. Despite this, equities outperformed commercial property by around five percentage points. We believe that there will be some further downward yield movement during the first half of this year, due to the continued weight of money being directed at the commercial property sector, and our forecast for all property returns in 2006 of nearly 12% reflects this view. However, from 2007 we expect a rate of return slightly below the long-term average, and from 2007 to 2010 (inclusive), we forecast commercial property returns averaging around 7.25% pa.
- 4.5 The housing market has seen a resurgence in recent months, following a slowdown in activity during the summer and autumn of last year. Year-on-year house price growth bottomed out in September 2005 at 2.2%, according to Nationwide figures, climbed to 4.4% in January 2006, but fell back slightly to 3.7% pa in February. Growth measured over three months accelerated rapidly from a low of just 0.1% (annualised) in August 2005 to 9.5% (annualised) as at January 2006. Growth on this measure also fell slightly in February, to 7.5% (annualised) but remains well ahead of the year-on-year rate.

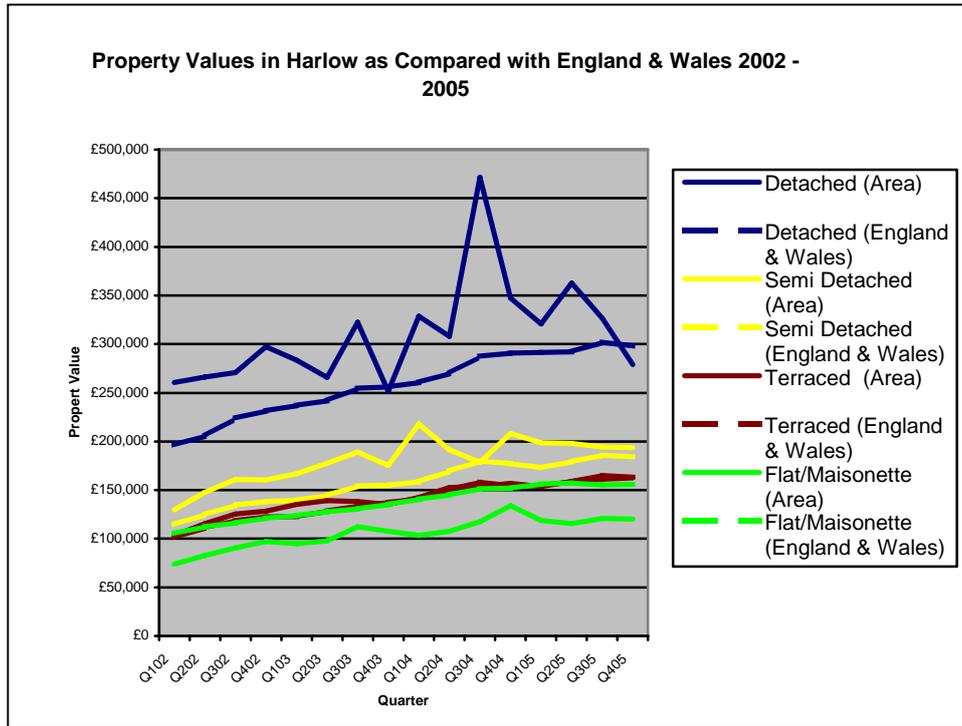
Housing Market

National

- 4.6 Following the boom and bust of the late 1980s and early 1990s, the UK housing market saw almost a decade of sustained very strong house price growth from late 1996 to early 2005. Indeed, from the end of 1996 to the end of 2004, prices rose by 178% (or 13.6% pa) according to the Nationwide Building Society. The market cooled in 2005, as a reaction to the modest interest rate rises in 2004, and a lack of affordability, notably for first-time buyers. Indeed, recent data shows that fewer first-time buyers entered the market in 2005 than in any year since 1980.
- 4.7 Following a slowdown in activity in 2005, the housing market has seen a recent resurgence. Year-on-year house price growth bottomed out in September 2005 at 2.2%, according to Nationwide figures, climbed to 4.4% in January 2006, but fell back slightly to 3.7% pa in February. Quarterly growth accelerated rapidly from a low of just 0.1% (annualised) in August 2005 to 9.5% (annualised) as at January 2006. Growth on this measure fell slightly in February, to 7.5% (annualised), but remains ahead of year-on-year rates.
- 4.8 Our view remains that house price growth will be below wage growth (4.5%) for 2006 as a whole, a view echoed by the RICS, which expects house price growth of 4% in 2006, and the Nationwide, which forecasts growth of 0-3%. We therefore do not think it likely that the current increase in the house price growth rate will be sustained.

Local Housing Market

Figure 4.1: General Residential Property Value Trends from 2002 to 2005



4.9 Since 2002 the detached and semi-detached stock in Harlow appear to have out-performed average national property market trends whilst terraced housing and flats / maisonettes appear to perform either at or below national market levels. The highest end detached houses in Harlow reached a peak at approximately £475,000 towards the end of 2004 when England & Wales property prices were sitting at just under £300,000. However, this housing type is not a common offer within the local market and the data is likely driven by relatively fewer examples than for other housing types.

4.10 A review of information collated by the Land Registry has revealed that in quarter 4 of 2005 the average property price in Harlow was £171,209, this compares with £184,924 in England and Wales. The following table gives a breakdown of the average price of properties by type sold in October to December 2005.

Table 4.1: Average Property Price in Harlow by Type (Oct – Dec 2005)				
Property Type	Price	Change in Last Quarter	Change in Last Year	No. of Sales
Detached	£271,716	-5.5%	-7.7%	47
Semi-detached	£202,693	-1.1%	-3.8%	65
Terrace	£160,964	1.9%	4%	190
Flats	£117,613	-0.8%	0.3%	90

New Developments

- 4.11 There are a number of new developments in Harlow that have either come forward over the past 12-18 months or are in the process of being developed.
- 4.12 The New Hall Farm development is comprised of a mix of contemporary homes of varying types on a newly developing site to the east of Harlow. Currently 150 units have been built and there is potential for another 350 to come forward in the next phases. It is understood from discussions with local estate agents that the development has successfully attracted new residents to the Harlow area who might have otherwise located elsewhere in the region. However these properties are reported to be priced beyond the reach of local residents who tend to prefer the more established and slightly cheaper Church Langley development a short distance to the south if they are seeking a newly built housing unit.
- 4.13 Properties in New Hall Farm currently range from approximately £160,000 for a 1bed apartment to over £400,000 for 4 and 5 bed homes. Church Langley, just to the south has properties ranging in value from approximately £135,000 for a 1bed property to £375,000 for a 4bed property.
- 4.14 Other new developments of note include Barratt's Prospect Royal, which is a development of town houses currently being built to the rear of Tescos off Edinburgh Way. City Links opposite Harlow Town station is another Barratts scheme just recently completed; this development differs in that it provides flat accommodation. Local estate agents have informed us that many of the City Links units have been bought by buy-to-let investors and that they are now being rented at prices that are higher than the Harlow average. A 2bed flat at City Links is priced at approximately £700-£800 per calendar month while a similar property elsewhere in Harlow would usually be priced at approximately £550pcm.
- 4.15 There appears to be a 10-15% price premium on new build properties in Harlow, as compared with the traditional new town stock.

Harlow's New Town Stock

- 4.16 Discussions with local agents have revealed that there has been a reasonable demand across all housing types and price ranges in recent months. There is a definite demand for flats in Harlow. However many of the flats are in new build developments, which are out of the price range of many local people. A sample selection of houses purchased freehold in recent months for each housing type is listed below.

Address	Type	Price	Date
Northbrooks	Terraced	£147,000	Jan 06
Tanys Dell	Terraced	£146,500	Jan 06
Arkwrights	Detached	£164,750	Nov 05
Bishopsfield	Detached	£155,000	Nov 05
Church Keys	Semi-detached	£108,000	Nov 05
Westfield	Semi-detached	£177,000	Oct 05
Kingsland	Flat/Maisonette	£146,000	Oct 05
Primrose Field	Flat/Maisonette	£152,000	Aug 05

- 4.17 In general, the property market in Harlow would welcome more, higher density development. The new development at New Hall is being well received and the Barratts scheme at City Links has sold well. Barratts's confidence in this type of development is demonstrated by its latest project at Prospect Royal, which is providing one and two bed apartments. Asking prices for two bed properties range from £155,000 to £180,000.

Commercial Property

Employment

- 4.18 Harlow's role as a business location has been challenged in recent years. The business sectors, and firms within them that are growing in the East of England region are not typically locating in Harlow. This is reflected most obviously at vacant industrial and commercial buildings at some of Harlow's most visible business locations such as Edinburgh Way and River Way. This is also reflected in the locally supportable rent levels in industrial, commercial and retail sectors.
- 4.19 The following indicate the relative rent performance of Harlow's employment building stock as compared with other regional business locations. These prices reflect market perceptions of the age, quality, and amenity of the locally available business stock.

Property	New	Second Hand	Area
Industrial	£7.00-£8.50	£5.00-£8.00	Harlow
Industrial	£6.75	£4.50-£5.50	Luton
Industrial	-	£6.50	Basildon
Industrial	£7.50	£4.00-£6.00	Dartford
Industrial	£8.00	£5.50-£6.00	Hemel Hempstead
Industrial	£7.50-£7.75	-	Cambridge

- 4.20 Vacancies tend to be focused on large, older, bespoke, single occupier manufacturing units that are increasingly obsolete. Vacancy and rent performance also provide indications that the stock of available buildings is not desirable to higher value businesses. Harlow's 2005 Regeneration Strategy identified a failure to exploit the benefits of existing economic clusters, such as Research and Development, and that these were not generating local spin-off activity. The shortage of appropriate local properties for such businesses may be an issue here.

Table 4.4: Commercial Office Rent Levels (£ per sq.ft. 2005)			
Property	New	Second Hand	Area
Studios	None	£10.00-£17.00	Harlow
Offices	None	£8.00-£14.00	Harlow
Offices	£22.50-£23.50	£16.00-£20.00	Chelmsford
Offices	£20.00-22.25	£14.00-£18.00	Bracknell
Offices	£19.00	£17.75	Luton Outer
Offices	-	£12.00-£14.00	Luton Inner
Offices	£20.00	£14.00-£17.00	Hemel Hempstead Outer
Offices	-	£17.00-£17.50	Welwyn Garden City
Offices	-	£21.50-£23.50	Cambridge
Managed Office	-	£17.00-£23.00	Harlow
Managed Workshop	-	£12.00	Harlow

- 4.21 The market has not actively supported the redevelopment of key employment sites in Harlow, particularly on Edinburgh Way and River Way. The future impact of large scale development and infrastructure improvements such as a second M11 junction may help to resolve this, by raising rents, reordering market dynamics and removing existing constraints to development. However, these key interventions will not be delivered in either the near or medium term.
- 4.22 Commercial office vacancies are focused in older space. There is also evidence of low and partial take-up in some modern space.

Retail

Table 4.5: Commercial Retail Rent Levels (£ per sq.ft. 2005)		
Property	Zone A	Area
Retail	£250	Cambridge
Retail	£180	Luton
Retail	£165	Chelmsford

Retail	£135	St Albans
Retail	£130	Basildon
Retail	£120	Stevenage
Retail	£115	Bracknell
Retail	£110	Welwyn Garden City
Retail	£105	Harlow
Retail	£100	Hemel Hempstead

- 4.23 In October 2005 there were 35 reported requirements for retail space in Harlow, against an average of 60 nationally, ranking the Town 136th of the PROMIS Centres. This level of demand is consistent with the town's size and status.
- 4.24 Harlow's retail stock has seen some diversification as a result of new edge of town style development in the Edinburgh Way corridor. The Town Centre has benefited from the development of The Watergardens, which has provided a more contemporary shopping environment, space for new anchor shops and the integration of a new council Civic Centre. However, the remainder of the Town Centre needs to be upgraded with renovated retail, a stronger employment position and the addition of residential uses.
- 4.25 At the same time, smaller scale retail facilities found in local Neighbourhood Centres and "Hatches" are also challenged by some decline in their physical and economic sustainability.
- 4.26 Harlow's retail offer is now challenged by new retail formats, the increasing mobility of residents through higher rates of car ownership and competing retail locations in north London and regional towns such as Cambridge and Chelmsford.

5 Determination of Future Average Density

- 5.1 The future average density for the sites identified has been determined by the following factors: the existing built context, the density capacity of the sites likely to be developed, the density the market delivers in the area, and wider regional and national policy objectives.
- 5.2 The current overall average density for Harlow is 36.7 development units per hectare (dph). The Old Harlow area has the lowest density (25dph). This area includes a relatively high proportion of pre-New Town and bungalow stock. By contrast, the highest density is found at Toddbrook, with almost 52dph. This area includes flatted accommodation. The vast majority of the housing built in Harlow as part of the New Town stock is in the 30 to 40 units per hectare range.
- 5.3 Estimates of future density were also informed by recent market trends in Harlow. The development proposals at Harlow Gateway are between 40dph and 50dph. The New Hall Farm development is also broadly emerging at this density. It may be possible to achieve higher densities than 40dph in the right locations, for example, the Inspectors Report of March 2006 sought 110 units at 111dph for the Wych Elm Development. However, the town centre location makes this a unique rather than typical example of local density within Harlow.
- 5.4 Determination of an average density to apply to the accepted land identified by the urban capacity study was also informed by a series of design studies of a sample of typical potential sites. The table below shows the number of units that could be accommodated on each of the sample typical sites under two scenarios. The first reflects a lower density scenario, while the second adopts a higher density approach. Greater detail on the approach to each of the sites is included in Appendix B.

Table 5.1: UCS Design Case Study Densities						
Site Number	Area (Ha)	Lower Density Option	Density (dph)	Area (Ha)	Higher Density Option	Density (dph)
Design Study 1: Vacant car showroom at Howard's Way						
NS31	0.38	-	-	0.38	32	84
Design Study 1a: Vacant car showroom at Howard's Way (employment use)						
NS31	0.38	2,300sqm emp	-	0.38	3,450sqm emp	-
Design Study 2: Garage site at The Hill						
NS46	0.105	8 units	76	0.197 (extended site)	14 units	71 (extended site)
Design Study 3: Scout Hut site off Mandella Avenue						
NS63	0.51	15 units	29	0.51	25 units	49
Design Study 4: Remnant land off Latton Common						
NS16	0.63	20 units	32	0.63	31 units	50
Design Study 5: Remnant land off Mallows Green						
(GW9)	1.0	11 units	11	1.0	35 units	35
Total	2.245	54 units		2.717	137	
Average Density	54/2.245 =		24dph	105/2.337 =		50dph

5.5 In addition, the density determination has drawn on design studies carried out as part of the Harlow Area Investment Renewal Framework (AIRF). These focus on the potential redevelopment of currently developed areas particularly around Neighbourhood Centres and Hatches. As such, they give an indication of the potential increase in density that may be derived from redevelopment. The design exercises for the AIRF looked at a higher density approaches to redevelopment on the sites identified in order to deliver ODPM Growth Area Fund II objectives of more houses and more job within Harlow.

Table 5.3: Proposed densities for the AIRF sites			
Study Area	Area (Ha)	Units	Density (dph)
Old Harlow Local Action Area	2.2	262	119
Staple Tye	6.9	345	50
Clifton Hatch	0.27	26	96
Prentice Place	1.29	112	87
Lower Meadow	3.59	126	35
Barley Croft	2.91	114	39
Total	17.16	985	
Average Density	985/17.16		57dph

- 5.6 There are also a number of sites identified in the Adopted Harlow Local Plan. The proposed development density on each of these sites is as follows:

Table 5.4: Proposed densities for sites allocated in the Harlow Local Plan Pre 2011			
Site	Area (Ha)	Units	Density (dph)
Harlow Sports Centre	11.4	530	46
Harlow Swimming Pool	1.3	60	45
Faircroft Little Bays	0.6	27	45
Sherards House	0.4	18	40
Rye Croft	0.4	14	35
Marshgate Farm Depot	0.5	10	20
New Hall (to 2011)	18.0	750	42
Wych Elm	0.99	110	111
Ram Gorse	3.7	110	30
Total	37.29	1629	
Average Density			43.68

- 5.7 Evidence from the existing density of Harlow and more recent developments such as Church Langley and New Hall Farm indicates that it would be reasonable to assume that development on the larger greenfield sites would come forward at a gross density of approximately 40dph. The sample typical sites and new developments at City Links and Prospect Royal indicate that it would be reasonable to assume that the smaller sites should come forward at densities of at least 50dph.
- 5.8 In light of the density of new developments, and emerging national planning guidance, we believe it would be appropriate to apply an average density of 45dph across all the accepted sites. For the purposes of determining future potential development in Harlow an average density of 45 units per hectare has, therefore, been used. While there will be variation in density between individual sites, 45 units per hectare is considered to be a robust average for the coming planning period for Harlow as a whole.

6 Potential Capacity for Harlow – Previously Developed Land

Residential Potential

Comprehensive Survey Sites

6.1 The comprehensive survey identified:

- 70 sites on previously developed land – a total of 34.82 ha
- 30 of these sites were rejected following application of the discounting methodology described in Section 3 – removing 6.96ha

The Accepted Sites – Post Discounting

6.2 The accepted list of sites was comprised of:

- 41 sites on previously developed land – a total of 28.27ha
- Sites ranging in size from 0.02ha to 12.48ha
- 7 of these sites were allocated in the Local Plan to 2011 – a total of 15.59ha (Harlow Sports Centre, Harlow Swimming Pool, Faircroft Little Bays, Sherards House, Rycroft, Marshgate Farm Depot, Wych Elm)
- 34 of these are considered to have potential in the period after 2011 – this includes one site also identified in the local plan as an existing non-housing allocation.

Table 6.1: Potential PDL Capacity by Source			
Land Type	No. of Sites	Area	Potential units @ 45dph
Potential Capacity to 2011			
Review of existing housing allocations (Local Plan to 2011)	7	15.59 ha	697 units
Potential Capacity 2012-2021			
Review of other existing non housing allocations	1	0.54ha	24 units
Previously developed, vacant and derelict land and buildings	10	5.23ha	235 units
Intensification of Existing Areas	23	6.91ha	311 units
Post 2011 Total	34	12.68ha	570 units
OVERALL TOTAL	41	28.27HA	1,267 UNITS

- 6.3 The greatest source of housing potential is existing housing allocations from the Local Plan offering the potential of 697 units.
- 6.4 There are a number of sources of land that were not considered to offer potential in the future. For example, analysis of rates of sub-division of existing properties showed that only 4 new units had been delivered by this source over the past five years. For development on rear garden plots only 33 units were delivered over the same five-year period. In both cases, this reflects the master planned nature of Harlow's housing districts, and individual plots, whereas more organically developed settlements may offer more opportunities for this type of infill and opportunistic development.

Review of Existing Housing Allocations

- 6.5 This includes a total of 15.19ha of previously developed land on 7 sites. At 45 dph this would provide potential for 697 units.
- 6.6 The largest single allocation is the Harlow Sports Centre site now known as the Harlow Gateway) - a total of 11.4ha. This site has planning consent for development of 530units.
- 6.7 The 1.3 ha Harlow Swimming Pool site also has outline consent for residential development, granted in February 2005 with an indicative figure of 60 units.
- 6.8 The remaining 2.49ha of allocated land does not yet have planning permission. The three sites are Sherards House, Littlebays and Wych Elm.
- 6.9 Rye Croft also has detailed permission for 14 units which is under construction.
- 6.10 Greenfield allocations are considered separately in section seven.

Review of Other Non Housing Allocations

- 6.11 Only one site has been accepted within this category: a **0.54ha** car park site at Post Office Road in the Town Centre. This site falls within the Town Centre Redevelopment area and as such it is considered appropriate for the development of a new landmark building that fronts onto Velizy and Fourth Avenues. The Local Plan identifies the site as appropriate for the development of a hotel and conference centre as one use. This could be provided in a mixed-use development including residential uses. It is projected that 24 housing units could be achieved.
- 6.12 This site was also included in the previous Urban Capacity Study. However, it has not yet come forward for redevelopment. We believe that given the limited number of sites

for this type of development within Harlow, it is likely that this site will come forward during the study period from 2006 to 2021.

Previously Developed, Vacant & Derelict Land and Buildings

- 6.13 **5.23ha** of this land source, made up from 10 sites, was accepted. Accepted land within this type includes sites that were already vacant and unused, or those that otherwise have potential and are likely to be redeveloped during the study period. There is potential for 235 units from this source.

Intensification of Existing Areas

- 6.14 **6.91ha** of land at 23 sites within existing developed areas is considered to have potential the potential for intensification. At 45 dph this offers the potential for 311 units. The accepted sites includes a number of different uses:

- 1.46ha of garage sites. Sizes range from very small sites of just 0.03ha to larger sites of greater than 0.1ha. The smaller sites have been included as providing potential, and have not been discounted, because they offer potential in conjunction with an adjoining site.
- 1.83ha of land within local 'Hatches'. These local shopping and service centres have been included in the accepted list because they were either identified as under-performing in the Area Investment Renewal Framework (AIRF); they are the subject of outstanding ODPM Funding bids; or, they already have planning permission for redevelopment.
- 2.29ha of land at Neighbourhood Centres. This land is comprised of 1.31ha at Old Harlow and 0.98ha at Staple Tye. These sites have been included as a result of the findings of the AIRF and they are the subject of successful ODPM Growth Area Funding II bids that will pump prime residential, commercial and public service redevelopment projects.

- 6.15 Development on garden plots also falls under this category. The potential yield from this source can be measured by analysing Harlow's planning applications database and assessing recent trends. This analysis has shown that 33 new properties have been developed on garden plots since 2000. This equates to an annual rate of 6 properties per annum. If this trend were extrapolated to the period from 2006 to 2021 a total of 90 new units could be delivered by this source.

- 6.16 It should be noted, however, that the comprehensive survey of the Harlow area did not identify many remaining sites offering potential for this type of development. A potential output of 90 units may therefore be optimistic.

Conversion of Commercial Properties

- 6.17 No land from this potential source was identified in this study in employment areas. This is because available employment land within Harlow is scarce and it was not deemed appropriate for existing commercial properties to be converted for residential use. The brief to GVA Grimley from HDC was to identify additional employment land as part of this study.

Redevelopment of Car Parks

- 6.18 Only one car park site was identified for redevelopment. This is the car park site off Post Office Road within the Town Centre. This site has actually been considered under the review of other existing allocations because it falls within the Town Centre Redevelopment Area.

Redevelopment of Existing Housing

- 6.19 No additional capacity has been identified from this potential land source. This is because although there are a number of housing areas within Harlow that are likely to be renewed and redeveloped during the study period, it is unlikely that redevelopment will release a significant net gain in housing units. The reasons for this are:

- The existing built areas of Harlow are generally already developed to relatively high density levels.
- Even where the densities are lower, once proper provision has been made for car parking, the actual increase in density will be limited because of the additional land required to make adequate parking provision.

- 6.20 A significant net gain in units via higher densities in these locations would require the following:

- A change in car parking requirements within Harlow, stemming from improvements in provision of other soft modes of transport such as buses, cycling and walking
- Wholesale redevelopment of large areas, requiring HDC (or a private developer) to assemble multiple ownerships.
- The provision of more flats rather than houses for the residents of Harlow.

Vacant land Not Previously Developed

- 6.21 All of this land source is considered under section six of this report.

Flats Over Shops

- 6.22 Although no land has been identified under this particular source a number of 'Hatches' have been identified for redevelopment in order to provide flats over shops. We have considered this land under 'intensification of existing areas' because the provision of flats over shops will be as a result of redevelopment rather than by bringing back into use existing units that are currently underused.
- 6.23 As Harlow is a new town there are a number of locations where flats have been purpose built over the top of retail properties. Our survey revealed that the majority of these properties are occupied and there is therefore limited, if any, capacity to be derived from this land source.

Subdivision of Existing Homes

- 6.24 We have not made any allowance for capacity from the subdivision of existing homes. This is due to the nature of the housing stock within Harlow. As a new town, the majority of the housing has been constructed since the 1950's and is of a type that offers very limited scope for sub-division. Analysis of the planning applications database has revealed that just four new units have been provided from this source in the past four years. Applying the same rate for the study period would provide a potential capacity of just 15 additional units.
- 6.25 The stock of potential units for sub-division is likely to decline as opportunities for sub-division are taken up and brought forward.

Empty Homes

- 6.26 Harlow has a very low property vacancy rate, sitting at just 1.69% in 2003 as against the Essex vacancy rate of 2.39%¹. It is accepted that a certain level of vacant properties is required in order for a healthy property market to continue to operate. As Harlow's empty properties rate is lower than the county average we do not consider that there is any significant potential that can be derived from this source.

Windfall Delivery to Date

- 6.27 The previous urban capacity study undertaken in 2002 predicted that between 506-787 dwellings (based on 35-45 dph) would come forward as windfall during the plan period 2001-2011 on previously developed land. HDC adopted the midpoint of 650 dwellings, an average of 65 dwellings per annum (dpa) as likely to come forward, this was subsequently updated in 2003 to 520. The Inspectors Report of February 2005 reduced

¹ Harlow: A Comparison with Essex: 2001 Census; Elaine Clarke Research Officer, Regeneration Unit Harlow District Council, March 2003

it further to 400 dwellings, or 50dpa, for the remaining life of the plan, (then 2003 to 2011) as it was felt 65dpa was somewhat optimistic.

- 6.28 During the period 2001-2006 there was a total increase of 861 dwellings. This is an average of 172 units per year. Four of the sites were Local Plan allocations, Ryecroft Garage Site creating 14 units, Darlingtons creating 24 units, Church Langley creating 300 units and New Hall Farm where 233 units have been constructed to date giving a total increase of 657 units on allocated sites. The windfall increase over this period was therefore 204 units which is 40 units per year. This is lower than the 50 dwellings per annum determined by the Inspector and significantly lower than the 65dpa established from the previous urban capacity study. This level of windfalls was achieved due to two sites, City Limits at Harlow Town railway station (84 units) and Walford Close (10 units). Windfall sites that generate more than a handful of units are rare in Harlow.
- 6.29 The lack of windfall sites coming forward may be a reflection of the age, design era and character of Harlow and the subsequent difficulties in bringing forward traditional sources of urban capacity such as sub-division of existing properties, the conversion of commercial properties, flats above shops, etc. The already limited provision made for parking in existing urban areas means higher density development may be unlikely. Also, redevelopment within existing residential areas is likely to produce few additional dwellings because the original high density form in many areas is similar to the densities advocated by today's national planning guidance.
- 6.30 It is also possible that the methodology in the previous capacity study may have generated an overly optimistic view of windfall development potential. The study looked at the potential of larger sites across the whole district, but only sample surveyed a third of the district area to identify smaller sites. The methodology of the previous study also states that only areas considered to have the greatest potential yield were surveyed. Results from the entire district were derived from this. The small sample and a focus on areas with greatest potential may have established a potential rate of development for smaller sites that could not be supported. This is particularly significant given that small sites provided the majority of windfall opportunities.

Employment Potential

- 6.31 As part of this UCS, HDC asked GVA Grimley LLP to consider land with potential for employment development as well as land for residential uses.
- 6.32 Once the comprehensive survey of Harlow had been undertaken the sites were considered for their appropriateness for either employment or residential development.

Only three sites were considered to provide potential for employment development. All of these sites were on greenfield land so these are included in Section 7.

- 6.33 Although there are a number of sites within the Edinburgh Way, Temple Fields and River Way employment areas that are vacant or underused these are already allocated employment land and were therefore not considered for the purposes of this study. This was because they would not provide a net gain in employment land.
- 6.34 These areas have been looked at in more detail under the Area Investment Renewal Framework to investigate and propose ways in which redevelopment of underused employment sites can be encouraged.

Conclusions: Previously Developed Land (PDL)

- 6.35 There are some key headline messages that emerge from this analysis.
- 15.59ha of PDL at 7 sites is currently allocated to 2011 within the Local Plan. The accepted list includes an additional 12.68ha on 34 additional sites, from a variety of sources, which have the potential to come forward in the period 2011 to 2021. The overall total of PDL suitable for development is 28.27ha. This is distributed across 41 sites. These sites offer the potential for 1,267 units.
 - Subdivision of units, housing above flats and empty homes will not substantially change results. They have historically made a minimal contribution to Harlow's housing output given the structure and built form of the town, and this is not likely to change.
 - Taking into account past trends, a total of 105 units could be delivered through development on garden plots and subdivision of existing properties, however, it is our belief that this is optimistic because only limited potential from these sources was identified during our survey of the district.
 - Increasing potential will require the use of land that has not previously been developed. The capacity of Greenfield sites is considered next.

7 Potential Capacity for Harlow – Greenfield Sites

Residential Potential

Introduction

- 7.1 Due to the lack of PDL coming forward to meet housing requirements, it is clear that additional land needs to be sought from other sources if the potential of Harlow District is to be increased. In light of this, Harlow District Council instructed GVA Grimley to consider the potential of greenfield sites in the District.

The Comprehensive Set of Sites

- 7.2 The comprehensive survey identified:
- 49 greenfield sites - a total of 165.38ha
 - 20 sites were discounted – a total of 32.11

Discounting

- 7.3 Two sites comprise the majority of discounted greenfield land – Mark Hall Sports Ground (14.00 ha) and a caravan site at Roydon Road (9.30 ha). A number of other sites were considered to be unsuitable because there were environmental considerations such as Tree Preservation Orders, access was poor or there was some other physical constraint that would inhibit the redevelopment of the land in the study period, and beyond.

The Accepted Sites – Post Discounting

- 7.4 The accepted set of Greenfield sites is comprised of:
- 29 greenfield sites
 - A total of 133.27ha
 - Sites ranging in size from 0.07ha to 71.49ha
 - The largest of these sites, Newhall Farm on the eastern edge of Harlow is large enough that components of it will be developed both prior to 2011 and in the 2012 – 2021 periods.

- The next most significant site is at Gilden Way, also on the eastern edge of Harlow at 38.02 hectares, allocated as Special Restraint Area in the Local Plan. It is considered to have potential in the 2012 – 2021 period.

7.5 The identified greenfield land falls almost entirely within three of the land sources identified within Tapping the Potential. These are: review of existing housing allocations; review of other existing allocations; and vacant land not previously developed. The distribution of land across each of these three sources is shown in the table below. There are a number of potential sources of land supply that are not represented. This is because not all land types offered sites that were sufficiently free of development constraints and some land types have been considered under section 5 as capacity provided by PDL rather than Greenfield land.

7.6 The following table is a summary of sources of Greenfield land offering housing potential up to 2011 and thereafter between 2011 and 2021.

Table 7.1: Distribution of Greenfield Land by Type		
Source to 2011	Area	Potential @ 45 DPH
Review of existing housing allocations (Local Plan to 2011)		
• New Hall Farm	18.0	810
• Ram Gorse	3.70	167
Pre 2011 Total	21.7ha	977
Source 2012-2021		
Potential housing identified in Local Plan		
• New Hall (Phase 3)	38.62	1738
• Gilden Way	38.02	1711
Vacant Land not previously developed	5.39	243
Post 2011 Total	82.03	3692
OVERALL TOTAL	103.73ha	4669

Review of Existing Housing Allocations

7.7 Review of existing housing allocations offers 21.7 ha to 2011, with the potential for 977 units. New Hall farm plays a significant role here with 18.0ha and 810 potential units. 3.70ha has also been allocated at Ram Gorse up to 2011 offering the potential for 167 units in total at the average potential density. This source offers the potential for 977 units.

Potential Housing Sources Identified in Local Plan

- 7.8 Later phases of New Hall Farm and the Gilden Way site are also potential housing sites that have been identified in the local plan. Together these represent the potential for 3449 units for the 2012-2021 period.
- 7.9 Vacant land not previously developed also offers the potential for a further 243 units for the 2012-2021 period.
- 7.10 Overall, greenfield land offers the potential for 977 units to 2011, 3692 units for the 2012-2021 period and a total of 4,669.
- 7.11 The largest single source of potential over both periods is at New Hall Farm to the east of Harlow. A total of 2,700 units have been factored into the masterplan for New Hall Farm on 68.35ha. 440 units (11.73ha) currently have planning permission under Phase 1 of the scheme and a total of 188 units have already been constructed. These 440 units are expected to be completed before 2011. A further 750 units (18ha) have been allocated for housing to 2011 but do not yet have planning permission. The remaining 1,510 units (38.62ha) are likely to be built post 2011. However, if New Hall Farm were to be built out at the average of 45 units per hectare, it could offer the potential for 3,076 units.
- 7.12 Gilden Way represents the second greatest source of potential. Allocated as a special restraint area in the Local Plan, it is considered that this potential will be realised after 2012.
- 7.13 GVA Grimley was instructed to consider the potential for development on Green Wedge land and a total of thirteen potential sites were identified in the initial survey. Nine of these were taken forward into the accepted list and these are considered appropriate for development because we do not consider that they would have a material impact on the purpose and integrity of the Green Wedge network. The sites that were rejected at the discounting stage were considered not to have potential because of their form, prominent location or issues of access. Further detail of our consideration of Green Wedge land is included below.

Vacant land not Previously Developed

- 7.14 The amount of accepted land for this source totaled 5.39ha at 7 sites offering the potential for 243 units. Three sites that were discounted were not considered to have potential because two of them were wooded, and included Tree Preservation Orders (TPOs) and one of them had issues relating to access. One of the sites identified under

this land source, land adjacent to Downs Primary School, has planning permission for the development of 24 housing units on 0.52ha land.

- 7.15 The following table presents a summary of the potential offered by sources of greenfield land potential across the entire 2001 – 2021 plan period.

Table 7.2: Distribution of Greenfield Potential by Type 2001 – 2021		
Land Type	Area	Potential units @ 45dph
Review of existing housing allocations	21.7	977
Potential housing identified in the Local Plan	76.64	3449
Vacant Land not previously developed	5.39	243
Total	103.73ha	4669

Employment Potential

- 7.16 Following the comprehensive survey of Harlow, sites were considered for their appropriateness for either employment or residential development. Only four sites were considered to provide potential for employment development. These are set out in the table below.

Table 7.3: Sites Identified for potential employment development			
Site Ref	Site Name	Site Description	Site Area (Ha)
GW5	Land off London road	Grassed area next to employment site	1.96
WOPP6	Caravan site off Roydon Rd (East end)	North of Pinnacles Employment site	9.3
GW8	Vacant Land to East of Temple Fields Employment site	Green Space	2.45
NS31	Howards Way: Office Site	Vacant Car Showroom	0.41ha
Total			14.12ha

- 7.17 The Caravan site off Roydon Road was identified as Special Restraint Area land for the purposes of housing development in the Second Deposit Replacement Harlow Local Plan. This was rejected by the Inspector at the Local Plan Inquiry. This was because the location was considered to be unsustainable for residential development. It is our consideration that this site provides potential for an extension to the Pinnacles

Employment Area and could be accessed via the road infrastructure through the existing employment park. This would provide the potential for an additional 9.3ha of employment land. This site has been considered here because as a 'caravan site' this is considered to be green-field rather than previously developed land due to the temporary moveable nature of the uses on the site.

- 7.18 Two of the other sites that have been considered for employment development, are both currently allocated as Green Wedge land. We consider that this land is 'remnant land', rather than contributing to the fundamental and intentional structure of the Green Wedge open space system. We therefore believe that extensions to the employment land at Edinburgh Way and at Nortel Networks would be possible without damaging the integrity of the Green Wedges. This would deliver a further 4.41ha of employment land.
- 7.19 Design Studies for the vacant car showroom at Howard's Way looked at potential for both residential and employment use. It is our belief that that the site would be better suited for employment due to its location just off the main road, and the fact it is not in a residential area.

Employment Land Potential and Requirements

- 7.20 The Draft East of England Plan sets a target of 40,000 new jobs in the Harlow-Stansted sub-region within the London-Stansted-Cambridge corridor. Harlow has set itself an ambition for job growth within the town. A 2005 Regeneration Strategy produced by consultants for the Council has identified a target of 16,000 jobs. In addition to these targets, PACEC prepared a study on behalf of HDC that provides employment projections under three growth scenarios; lower, medium and higher. Under the 'higher' growth scenario an additional 16,000 to 20,000 jobs would need to be accommodated within Harlow.
- 7.21 The Replacement Harlow Local Plan states that forecasts anticipate potential for the growth of 9,000 new jobs in the town for the period from 1996 to 2011. The County Structure Plan suggests that 50ha of new employment land should be provided for in Harlow. The latest Inspector's report (March 2006) has allowed for the provision of an extra 13.7 ha of employment land to the north of Nortel Networks giving a total of 15.7ha.
- 7.22 If the land identified for employment uses in this UCS were added to the allocated land to the north of Nortel Networks Harlow will have a total of 29.82ha of employment land for future employment growth in the town.
- 7.23 The Employment Land Review Guidance Note issued by the ODPM provides a methodology for converting jobs growth targets into land requirements. As the 16,000

job target in the 2005 Regeneration Strategy is not an adopted target, we have calculated the number of jobs that may be delivered on the land that has been identified in the table below.

Employment land use	Available land (ha)	Employee density (m2)	Assumed plot ratio	No of jobs provided for	No of jobs not provided for
Office	27.82	19	1.5	3,273	12,727
Industrial	27.82	34	0.4	21,963	N/a

7.24 The table above assumes that either office or industrial land uses will occupy 100% of the identified available land. This scenario is unlikely to materialise in reality. A more realistic assumption would be that 50% of the land is developed for office uses and the remaining 50% is developed for industrial uses. The table below illustrates the number of jobs that could be accommodated under this scenario.

Employment land use	Available land (ha)	Employee density (m2)	Assumed plot ratio	No of jobs provided for	No of jobs not provided for
Office	13.91	19	1.5	1,637	-
Industrial	13.91	34	0.4	10,982	-
Total	27.82	-	-	12,619	3,381

Greenfield Land and the future of Green Wedges

7.25 Some elements of the Green Wedges were identified as being poor quality green space in the recent Harlow Urban Greenspaces Quality Assessment (Draft, January 2005) prepared by Chris Blandford Associates for HDC. The total area identified as being of poor quality is limited. Green Wedge land identified as being of poor quality spaces has not been included in either the comprehensive or discounted data set for the UCS. This is for the following reasons:

- There is a commitment to Green Wedges in the Replacement Harlow Local Plan and we understand this is likely to be a continued commitment for the emerging Local Development Framework.
- There is a reported commitment to maintaining the Green Wedges by local stakeholders and residents reported by local officers across a range of disciplines.

- There is an absence of evidence of or expressed market interest in those Green Wedge sites identified as being of poor quality.
- The functional and aesthetic role of Green Wedges as open space and as drainage areas continues to serve a purpose today.
- The Greenspaces Quality Assessment identifies only four major poor quality sites. A review of these sites for potential housing development has led us to believe they are not suitable for redevelop as residential land for the following reasons:

Greenspaces Study, Site Number	Location	Reasons for Unsuitability for Residential Development
21B	Western side of Pinnacles Employment Area	Allocated employment area
15B	Passmores Comprehensive School Playing Fields	Against national planning policy to redevelop playing fields Green Wedge – would compromise integrity of the Green Wedge system
16A	Goldsmiths Playing Fields	Against national planning policy to redevelop playing fields Green Wedge – would compromise integrity of the Green Wedge system
23E	Northbrooks Playing Fields	Against national planning policy to redevelop playing fields Green Wedge – would compromise integrity of the Green Wedge system May be appropriate as part of wider redevelopment of Northbrooks Regeneration Area.

7.26 There is insufficient evidence that Green Wedges offer realistic potential for development within the plan period for policy, market and development potential reasons. A limited number of smaller Green Wedge sites have been included in the UCS. These typically represent remnant land at the very edge of existing residential areas and are of limited depth and size; rather than intrusions into the macro framework of the Green Wedge system.

Conclusions – Greenfield Land

7.27 There are some key headline messages that emerge from these results.

- Greenfield sites provide more potential for delivery of housing units in Harlow than previously developed land. The 103.73ha of land with potential to come forward in the plan period offers the potential for 4669 housing units.
- Whilst greenfield sites provide significant potential for Harlow two sites, at New Hall Farm and Gilden way, provide 946.4ha and 4259 of this potential. There is significant reliance on these two sites to progress towards regional targets.

8 Timing

- 8.1 The Draft East of England Plan allocates 8,000 residential units to Harlow for the period from 2001 to 2021. GVA Grimley LLP was instructed to undertake a UCS for the period from 2006 to 2021.
- 8.2 The housing completions that have taken place since 2001 amount to **861 units**. A further **486 units** have planning permission. If all units with permission come forward in the 2006-2021 period. This leaves a balance of **6,653 units** for which there is no planning permission if the regional target of 8,000 units is to be met.
- 8.3 The table below sets out the timing and source from which the residential potential identified by this Urban Capacity Study is likely to come forward. Sites in the period 2006-2011 are from current Local Plan allocations. The later period factors in sites and sources of potential which are likely to come forward in the 2012 to 2021 period. (1)
Note: New Hall Farm is represented in both periods and is considered as one site.

Table 8.2: Potential 2006-2021				
Period	Category	Sites	HA	Potential
2006-2011	PDL	7	15.59	684
	Greenfield	2	21.7	977
	Sub-Total	9	37.29	1674
2112-2021	PDL	34	12.68	570
	Greenfield	24	82.03	3692
	Sub-total	58	94.71	4262
2006-2021	PDL	41	28.27	1267
	Greenfield	26	103.73	4669
	Total	67	132	5936

- 8.4 In summary, a total of 37.29 ha of land is likely to come forward for residential development by 2011 creating approximately 1674 dwellings at an average density of 45 dph.

- 8.5 A further 94.71ha of land has the potential for residential development in the period 2012-2021 with the capacity to provide some 4,262 dwellings.
- 8.6 In total 132 ha of land has the potential for residential development between 2006 and 2021 in Harlow. If developed at an average density of 45dph, this offers the potential for 5,936 dwellings. New Hall Farm is the single largest source of this potential. Gilden Way is next. The importance of the release of this land and the development of the infrastructure needed to enable them come forward needs to be highlighted.
- 8.7 To date, 187 units have been built at New Hall Farm. A total of 440 units have detailed Planning Permission. A further 13.51 ha of land that has been included in the accepted list has planning permission for 632 units. Although smaller, these key sites will also play a significant role in realising housing potential in Harlow in the 2006-2021 period. If developed at an average density of 45 units per hectare, this could generate 817 units.

Table 8.4: Additional sites with planning permission			
Site Name	Site Size	Planning Permission	Capacity @ 45dph
Maunds Hatch	0.29ha	18 units	13 units
Harlow Gateway	11.40ha	530 units	513 units
Harlow Swimming Pool	1.30ha	60 units	59 units
Downs Primary School	0.52ha	24 units	23 units
Total	13.51 ha	632 units	608 units

- 8.8 Table 8.5 considers regional housing targets, units developed in the 2001 to 2006 period, the potential identified by this UCS for the 2006 – 2001 period, and the balance against regional targets. The potential shortfall in housing unit delivery is 2,291 units.

Table 8.5: Table showing total number of units for which capacity is required	
	No of Units
No. of Units to meet DEEP 2001- 2021	8,000
No. of Units developed and completed since 2001	861
Potential Identified by UCS 2006 – 2021	5936
Sub-total – developed and potential 2001 – 2021	6797
No. of additional units required to meet the DEEP target	1203

Contribution of Windfall Sites to Harlow's Capacity

- 8.9 A number of the PDL sites that have been identified as part of this UCS should be classified as windfall sites. This is because they are not large enough for HDC to allocate them for housing development, however, we believe that they have the potential to make a meaningful contribution to Harlow's housing target over the study period.

Subdivision of Existing Properties and Intensification

- 8.10 The contribution of windfall sites to Harlow's capacity will be limited for the period to 2021 due to the nature of Harlow's built form. Windfall sites are often garden plots that are infilled and sub-division of larger properties to provide additional units.
- 8.11 Harlow's planned nature means that garden plots and residential properties are generally unsuitable for subdivision and intensification. Over the past five years a total of just 37 new units have been delivered on this land type equating to an annual rate of just 7 units per annum.
- 8.12 Assuming a similar rate is maintained for the study period, a total of 105 units may be delivered by redevelopment of gardens and subdivision of properties up to 2021.

Empty Properties

- 8.13 Harlow has a very low property vacancy rate, sitting at just 1.69% in 2003 as against the Essex vacancy rate of 2.39%. As Harlow's empty properties rate is lower than the county average we do not consider that there is any significant potential that can be derived from this source.
- 8.14 One of the Council Best Value Indicators (BVI) is a count of the number of private sector vacant properties that are returned to ownership in any one-year. HDC does not have a target against this BVI, however, if we compare this to neighbouring Broxbourne Borough Council the target for 2003/04 was 10 units and outturn was 7, the target for 2005/06 was also 10 units.
- 8.15 If neighbouring Broxbourne's target of 10 units per annum were applied this would deliver an additional 150 units over the study period. This may be high, given Harlow's low vacancy levels.

Total Potential Capacity from Intensification, Subdivision and Empty Properties

- 8.16 By extrapolating these rates, comparables and trends the potential delivery of an additional 255 units may be achieved. However, this is considered to be an optimistic view of the potential from these sources, and delivery would reflect the best case scenario.

9 Conclusions and Recommendations

- 9.1 The residential development potential of previously developed land in Harlow is 1,267 units on 28.27ha developed at 45dph. This would be achieved through development at 41 sites. The potential of greenfield land is 4,669 units on 103.72ha of land developed at 45dph. This would be achieved through development at 26 sites. Harlow has a total potential of 5,936 units. This would be achieved on 132.0 hectares of land developed at an average density of 45 dph across 67 sites for the 2006 to 2021 period.
- 9.2 The housing target for Harlow District Council set by the Draft East of England Plan is 8,000. A total of 861 units have been built since 2001. The remaining number of housing units required to be built to meet the regional target is, therefore 7,139. With a potential for 5,936 identified by this Urban Capacity Study, Harlow District is faced by a gap between local potential and regional targets of 1,203 units for the period to 2021.
- 9.3 This shortfall is significant enough that it cannot be addressed by minor changes to the density targets.
- 9.4 Achieving the potential identified is highly dependent on a small number of sites. Particularly New Hall Farm and Gilden Way. These two sites are orders of magnitude greater in size and potential delivery than the next set of sites. Harlow Gateway is next in size at 11.4 ha followed by sites such as Ram Gorse at 3.7 ha.
- 9.5 Only nine other sites over 1 hectare in size, one of which was the allocated Harlow Swimming Pool site, were accepted as having potential. The nine sites amounted to some 12.49 hectares. The table below lists the nine other sites over 1ha.

Site ID	Type	Address	Area	Units @ 45dph
GW13	Greenfield	Land off Rye Hill Road	1.87ha	84
PCS1	PDL	Road Safety Centre	1.6ha	72
GW4	Greenfield	Land at Hawthorns	1.55ha	70
GW6	Greenfield	Norman Booth Leisure Centre	1.39ha	63
NS108	PDL	Old Harlow Neighborhood Centre (Flats above shops)	1.31ha	x
NS8	Greenfield	Wayside Farm	1.26ha	57
GW3	Greenfield	Land off Rundles	1.22ha	55
PP16	PDL	Harlow Swimming Pool	1.17ha	53
GW9	Greenfield	Land off Mallows Green	1.12ha	50

9.6 A further 30 sites totaling 17.57 hectares were identified on the accepted list ranging from 0.98 to 0.02ha.

9.7 Delivery of the potential identified by this Urban Capacity Study will be heavily dependent upon the following points:

- Release of land at New Hall Farm and Gilden Way. These are major greenfield sites that will require significant infrastructure works before land can be delivered for development. The front loaded nature of the investment required to deliver this kind of development can have an adverse impact on viability. This may effect the timing of development on these sites.
- Harlow has a limited supply of larger sites. It is crucial that these sites come forward for development if Harlow is to come close to meeting its target.
- In order to realise the identified potential, Harlow District Council DC should encourage development to come forward at an average density of 45dph. This is considered to be achievable given site and market conditions. Achieving this average will be dependent on land coming forward at this density across the allocated and larger sites.
- In order to achieve regional target to 2021 it will be necessary to consider release of previously restrained areas for development such as Green Belt and, or, consider approaches to redevelopment on existing New Town districts in a manner that also increases densities.
- In order to encourage market investment in new housing improvements to regional and local transport infrastructure will be required. This will be necessary to strengthen regional and local connections for residents. However, it will also be critical to the economic and employment development of Harlow. Absent these improvements, the local business, jobs, retail and entertainment base may not be sufficient to support a bouyant local housing market either in terms of local incomes or quality of place.
- Land available for development for employment uses is scarce. Only a further 14.12ha of land that may be considered appropriate for this type of development was identified by the Urban Capacity Study. This falls well short of providing the land needed to meet the employment target set out in the 2005 Regeneration Strategy of an additional 16,000 jobs. It is critical that existing employment land, some of which is vacant or under-used be protected from further encroachment by

residential and retail uses. Further information on approaches to the re-positioning of Edinburgh Way and River Way employment areas for future employment use is provided in the 2006 Area Investment and Renewal Framework.

Appendices

APPENDIX A

Discounting Approach

The purpose of this paper is to establish the discounting approach used to discount the comprehensive list of sites that have been identified by the Urban Capacity Study.

The following discusses the major sources of potential supply, and the discounting approach to each. For identifiable sites we propose to put each into one of five categories relating to the likelihood of a site coming forward in the plan period – with categories 1 – 3 being the most likely. Where we are addressing non site-specific sources we will assess recent trends and project a future potential.

The following potential types are addressed in order of the amount of un-discounted land identified by the comprehensive survey.

Existing Housing Allocations

This housing land source is based on sites allocated for housing in the Local Plan. This was considered separately from the other land types to allow the Council to make a decision on how much additional land will be required, given the potential identified in the accepted list of sites. Existing housing allocations were viewed as capacity to 2011 whilst additional identified sites were seen as capacity 2011-2021.

Previously – developed, vacant and derelict land and buildings

This typology encompasses a variety of sites. It also encompasses what is a common public perception of brownfield land. These sites were predominantly business rather than residential uses in the past. However, they do also encompass a range of sites that have had a variety of prior business uses, may or may not have buildings on site, may or may not be currently operational and present variable conditions.

Properties that would require redevelopment of sites to allow them to become a residential use fall within this category.

For discounting purposes, sites and properties have been categorised on a score of 1 to 5, with 1 being a site almost certain to come forward and 5 being one that is highly constrained and unlikely to come forward. Within these categorisations a number of further assumptions have been made for this type of site. The category criteria are summarised below:

Category 1	- Sites with planning permission that are highly likely to come forward given market conditions and site assets
Category 2	- Sites that are vacant, derelict and non-operational

	<ul style="list-style-type: none"> - Sites that have no significant planning constraints - Sites that are in single ownership - Sites that the conversion of which has been suggested as being compatible with local planning goals in conversations with development control and local plan planners
Category 3	<ul style="list-style-type: none"> - Sites that are vacant and non-operational - Sites that are operational but can be relocated to other employment areas - Sites falling under more than one ownership's - Sites with some, limited planning constraints - Sites that have some, limited access and physical constraints - Otherwise constrained sites located near to stronger residential sub-markets
Category 4	<ul style="list-style-type: none"> - Sites that are operational - Sites that are in multiple ownership - Sites that have physical or access constraints - Sites that have planning constraints, including adjacent non-residential uses
Category 5	<ul style="list-style-type: none"> - Sites that are operational - Sites that are in multiple ownership - Sites that have significant physical or access constraints - Sites that have significant planning constraints, including adjacent non-residential uses - Sites that have locational constraints - Sites that have been discounted following conversations with development control and local plan planners.

There are market considerations that would suggest whether a previously developed site is appropriate for residential development, including location and adjacent uses. For example, a vacant and derelict industrial property in an edge of town industrial estate may not be appropriate for housing, but in a central district near to other residential developments, the market may take a more positive view.

A key assumption within this typology is that land and buildings do not have to be 'vacant' or 'derelict' to be classified within this type. As there is no strictly defined typology within TTP relating to operational commercial buildings that could be redeveloped into residential, these types of sites fall within this category of 'previously-developed'.

An operational site would generally place such a property in category 4. They would not then be included within constrained capacity figures. There are other indicators that may suggest that a currently operational commercial site is likely to come forward for residential purposes within the plan

period if it is within a strong residential sub-market. Such indicators may include proximity to Harlow Town Centre, rail transport, or major public amenities such as Town Park.

Conversion of Commercial Properties

In some cases, existing buildings may be convertible to a residential use through refurbishment or renovation, without site redevelopment.

In the discounting process to gain a discounted figure only sites with existing planning consents for conversion will be included within category 1.

An assumption could be made that currently operational commercial buildings are unlikely to come forward for conversion to residential through renovation and refurbishment during the plan period because of their active use. Thus they were categorised as either 4 or 5 and generally not included in the final constrained potential figures.

However, there are indicators that may suggest that currently operational commercial buildings may come forward for residential purposes within the plan period. Such indicators may include proximity to Harlow Town Centre, rail transport, or major public amenities. We will evaluate such sites on the comprehensive list with a view to this potential. Those that meet these requirements and have no obvious other constraints are included as category 3.

Category 1	<ul style="list-style-type: none"> - Premises with planning permission for conversion to residential that are highly likely to come forward given market conditions and site assets
Category 2	<ul style="list-style-type: none"> - Premises that are vacant, derelict and non-operational - Premises that have no significant planning constraints - Premises that are in single ownership - Premises that the conversion of which has been suggested as being compatible with local planning goals in conversations with development control and local plan planners
Category 3	<ul style="list-style-type: none"> - Premises that are vacant and non-operational - Premises falling under more than one ownership's - Premises with some, limited planning constraints - Premises that have some, limited access and physical constraints - Otherwise constrained sites located near to stronger residential sub-markets
Category 4	<ul style="list-style-type: none"> - Premises that are operational - Premises that are in multiple ownership - Premises that have physical or access constraints - Premises that have planning constraints, including adjacent non-residential uses - Sites that local development control and local plan planners

	have indicated are not in conformity with local planning goals.
Category 5	<ul style="list-style-type: none"> - Sites that are operational - Sites that are in multiple ownership - Sites that have significant physical or access constraints - Sites that have significant planning constraints, including adjacent non-residential uses - Sites that have locational constraints - Sites that local development control and local plan planners have indicated conflict with local planning goals.

Intensification of Existing Areas

A survey has been undertaken to assess the potential for intensification of existing areas. In most local authority areas this potential is derived from redevelopment of sites associated with larger detached or semi-detached housing. Potential is seen within the grounds of such properties. As a post war new town Harlow has a limited supply of such properties. There are a larger proportion of attached properties, with limited garden space and open space more typically distributed as shared public open space. Instead, the more likely candidate areas include Harlow's Neighbourhood Centres and Hatches, where redevelopment may release the potential for higher density mixed use approaches. Sites offering the potential for intensification will be tested against the following categories in the discounting process.

Category 1	<ul style="list-style-type: none"> - Sites with planning permission that are highly likely to come forward.
Category 2	<ul style="list-style-type: none"> - Neighbourhood Centres and Hatches that need redevelopment because they are no longer sustainable of existing conditions, and offer the potential higher density housing.
Category 3	<ul style="list-style-type: none"> - Larger residential sites with detached dwellings with potential access where intensification would have limited impact on adjacent character
Category 4	<ul style="list-style-type: none"> - Sites with semi-detached or attached dwellings - Sites with limited site access opportunities - Sites where intensification would challenge local character
Category 5	<ul style="list-style-type: none"> - Sites with semi-detached or attached dwellings - Sites where site access requires demolition - Sites where intensification would conflict with local character, plan and policy statements

Garage sites adjoining residential areas were also included in this category. We have been provided with a copy of the Council's Garage Strategy and also carried out a sample survey of residential garage sites. This information will be used to provide an overall rate of redevelopment of garage sites as residential potential.

Vacant land not previously developed

Here an important assumption has been made in regard to the composition of this typology. Unconstrained capacity figures within this 'type' only included land that is shown on ordnance survey plans and the local plan as 'white land'. TPP states that this typology has been mistakenly assumed to include land in built up areas that is used for agricultural uses, allotments, playing fields, parks or allotments. Thus these 'classified or designated' areas of open land have fallen within the typology 'land allocated for other uses' and will be considered separately later in this paper.

On this basis the discounting criteria can be summarised as follows:

Category 1	- Sites with planning permission that are highly likely to come forward
Category 2	- Sites that have been suggested as being in conformity with local planning goals if they were to come forward as housing in conversations with development control and local plan planners and with indications they are likely to come forward
Category 3	- Areas of vacant land that are underused and not functional and with limited physical or planning policy constraints
Category 4	- Areas of vacant land that are underused and not functional but that have significant planning policy, physical and/or access constraints
Category 5	- Functional and well used amenity land

Review of other existing allocations

As with 'vacant land not previously developed', an important assumption has been made in regard to the composition of this typology. This category 'review of other existing allocations' includes land allocated for non-residential uses in the Harlow Local Plan. The typology includes 'classified' areas of open space, including allotments, playing fields and parks/recreation grounds and sites that are considered green wedges.

The discounting criteria can be summarised as follows:

Category 1	- Sites with planning permission that are highly likely to come forward
Category 2	- Sites that have been suggested as being in conformity with local planning goals if they were to come forward as housing as part of parallel studies being carried out in Harlow and in conversations with development control, local plan and regeneration planners and with indications they are likely to come forward
Category 3	- Allocations and classified sites that may be deemed to be good strategic future housing sites for locational and market purposes, but which are allocated for valued non-residential uses
Category 4	- Allocations and classified sites that have planning policy or

	physical constraints
Category 5	- Allocations and classified sites that have significant physical constraints and which would conflict with local planning goals and policy.

A series of assumptions and exceptions have been made during the discounting process that underpins the discounting criteria. Firstly, not all allotments will be discounted as category 5. Conversations with Harlow District Council have identified a small number of allotments that are underused or could be seen as good future strategic housing sites and thus potential sources of capacity.

Playing fields and other classified areas of amenity space have been fully discounted into category 5 unless conversations with the council suggested otherwise. The Greenspaces Strategy undertaken by Chris Blanford Associates was also taken into consideration.

A final assumption has been that designated employment land will not come forward for housing and thus these sites have been discounted as category 5. This assumption will be further tested through our market analysis.

Redevelopment of Existing Housing

Parallel studies of Harlow's housing stock have identified areas of priority housing redevelopment as properties reach the end of their habitable life and social and economic sustainability. Due to relatively high residential densities across much of Harlow it is possible that much of this land would not deliver a net gain in units if redeveloped. We are also aware that there are ownership issues in relation to the redevelopment of a number of these areas. Given this, the categories for this type of land for discounting purposes are as follows:

Category 1	- Sites with planning permission or sites identified within the Harlow Borough Local Plan for redevelopment.
Category 2	- Sites that were identified in the previous urban capacity study.
Category 3	- Sites that have been identified as part of the Area Investment and Renewal Framework and through discussions with Council housing and regeneration officers.
Category 4 / 5	- Sites where redevelopment would mean an over intensification of use or have access or other constraining issues.

Subdivision of existing housing

Subdivision of existing housing refers to the division of existing housing into two or more units.

The potential for subdivision of existing housing is difficult to estimate and assumptions need to be made given the potential scope of this 'type'.

The conversion of existing larger properties into two or more dwellings will generally require planning permission. There is a very limited stock of larger units within Harlow and this is likely to deliver only a very small source of new housing during the plan period.

In order to establish the rate at which this type of development may come forward the planning permissions data will be analysed to gain an annual rate, which can then be applied for the survey period to 2021. A 'sense' check will need to be applied to be sure that the potential level of units from this source does not exceed the likely potential for this type of development.

Flats over shops

Flats over shops refers to the potential to convert the space over shops (and local offices etc.) to residential flats. As with the subdivision of existing housing this is a difficult source of capacity to estimate. Thus a similar approach has been taken for flats over shops as was taken for subdivision of existing housing.

To calculate an appropriate rate, net unit gains arising from planning permissions granted for the conversion of space over shops from 2001 to 2005 will be counted and totaled. An annual rate will be calculated and this will be applied for the period to 2021. The discounting process will also seek to determine the rate at which permissions have resulted in actual provision of flats over shops.

An estimated rate will then be applied for the period to 2021 to assess the likely capacity that will come forward during the next plan period.

It should be noted that the type of buildings that typically offer this source of potential are not in evidence in Harlow. Shops are typically provided as single story buildings in the town's hatches, or are part of multi story buildings that have purpose built flats above.

Empty Homes

The current empty-homes rate will be measured from the Council tax register and this will be compared against the regional average for empty homes of approximately 2.8%.

The assumption will be that the vacancy rate will be unlikely to fall below the regional average, and that if it does the market will respond by creating additional units.

