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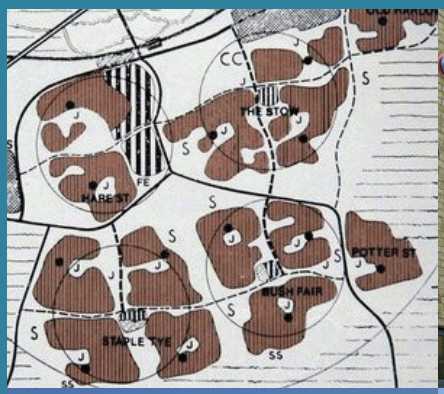
Planning. Design. Economics.

Harlow Future Prospects Study

Linking Regeneration & Growth



HARLOW DISTRICT COUNCIL
AUGUST 2013

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Harlow Future Prospects Study: Linking Regeneration & Growth

Main Report

Harlow District Council

August 2013

13454/MS/CGJ/MT/

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Executive Summary

Nathaniel Lichfield & Partners (NLP) was appointed to prepare a study examining the relationship between regeneration and growth in Harlow and to assess the town's prospects under different levels of future development. The study's main findings are summarised below.

Harlow Evolution

In the early years of the town's development (1950s and 1960s), Harlow provided an excellent location for homes and businesses and enjoyed a long period of economic growth with the town being home to large employers in the manufacturing and industrial sectors. The town reached its original target population of around 81,000 people in 1974 but was subsequently followed by a period of stagnation and decline with long term reductions in population and falling levels of employment. This coincided with a period of economic stagnation, increased mobility and demographic changes which had an adverse impact on the town. At its lowest point in 1994, Harlow's population fell to 73,000 people.

Although the town's population began to grow again in the late 1990s and 2000s (as a result of the development of Church Langley and other development schemes) the town only exceeded its original target population in 2011. Similarly, although the number of jobs in the town has remained reasonably consistent since the 1970s it has fallen substantially in recent years (since 2008) as a result of the 2007/08 financial crisis and subsequent recession. However, this hides a number of structural changes within the town's economic history. The town's strength as a manufacturing and industrial base declined throughout the 1970s and 1980s with a number of large employers moving out. This had consequences for the employment prospects of the local population. These jobs were replaced with high skilled jobs in pharmaceuticals, ICT and research and development. However, given the lower skills of the resident population this job growth benefited non-Harlow residents who generally commuted into the town for work.

The long term stagnation of both the town's population and jobs growth (over a 40 year period) coincides with the emergence of a wide range of socio-economic and physical issues now affecting Harlow. These issues include localised deprivation, skills shortages, economic restructuring, areas of poor quality housing, insufficient range of housing, inadequate infrastructure and aging physical environment.

There is a well-founded concern that these issues will continue to affect the town without concerted effort to address these. Without intervention Harlow's long term prospects are considered to be weak, particularly given the position of comparator towns and cities elsewhere.

Regeneration and Growth

The study concludes that there is a clear link between growth and regeneration outcomes. The development of housing enables greater social mobility and provides labour for local employers, helping businesses to expand which in turn benefits the wider local economy. The delivery of new housing at the right scale can also enable a critical mass to be reached. This means providing a sufficient number of people to sustain services, facilities and employment. Harlow has not achieved the scale it needs to sustain the kind of infrastructure, economy or town centre from which many of its comparator towns benefit. Furthermore, it is evident form recent developments in Harlow that these have delivered jobs, homes, infrastructure investment as well as new facilities for the community.

As a result of recent changes in the systems of planning and local government finance, Harlow has the opportunity to make some clear choices about how it might grow in the future and how the benefits of growth might be retained. There is an opportunity for Harlow to deliver regeneration objectives through growth in order to achieve its aspirations for economic and social prosperity, which would reflect the objectives in the Council's Corporate Plan.

Harlow Future Prospects

The future prospects for Harlow have been assessed under five development scenarios. These show that the outcomes for Harlow vary substantially depending on the amount of growth provided.

1 **Scenario A:** Do Nothing More (3,913 dwellings, -1,207 jobs). Under this scenario the town would experience decline in its younger (0-17) and working age population (18-64) as these groups move out in search of employment and housing. This option increases the risk that schools would have to close and that businesses would choose not to invest due to lack of labour supply. As shown during the 1970s and 80s, the town faces a real prospect of decline under this scenario.

2 **Scenario B:** Meeting Development Needs (7,485 dwellings, +3,057 jobs). This scenario is the point at which the potential for future decline is minimised. This scenario corresponds to growth in both the younger (0-17) and working age population (18-64) of Harlow. This scenario also corresponds to an increase in jobs over the period, albeit not enough to regain the jobs lost between 2008 and 2011. Under this scenario the town would grow but would fail to deliver sufficient growth to meet a wide number of objectives.

3 **Scenario C:** Jobs Led (11,490 dwellings, 8,060 jobs). This scenario would see an increase in 0-17 and 18-46 age groups of 23% and 25% respectively. This scenario corresponds to the ambient job growth potential of Harlow and is the point at which the town can deliver the majority of its affordable housing needs. A number of other regeneration objectives also become more likely to be delivered at this level of growth. This scenario would see Harlow growing to a similar size as Basingstoke or Crawley.

4 **Scenario D:** Growing Centre (15,000 dwellings, 12,099 jobs). Under this scenario the town would experience significant increases in the number of 0-17 and 18-46 year olds (41% and 33% respectively). This scenario would lead to Harlow's population increasing to 114,000 people, the equivalent of Welwyn-Hatfield. This level of growth could support a substantially improved retail offer and enhanced higher education offer.

5 **Scenario E:** Transformed Centre (20,000 dwellings, 18,121 jobs). This scenario sees Harlow expanding to a town of 132,000 people, larger than present day Cambridge. This would correspond to significant increases in the number of 0-17 and 18-46 year olds (81% and 49% respectively). This option is considered to be the point at which multiple regeneration objectives could be delivered, including comprehensive town centre regeneration and a 'step change' in economic growth.

Table ES1 summarises potential benefits of each of the scenarios.

Table ES1 Summary of Scenario Outcomes by 2031

Scenario: / Receptor:	Scenario A. 'Do Nothing More'	Scenario B. 'Meeting Housing Needs'	Scenario C. 'Jobs Led'	Scenario D. 'Growing Centre'	Scenario E. 'Transformed Centre'
Demographic Outcomes					
Dwelling Change	+3,920	+7,483	+11,490	+15,000	+20,000
Dwellings p.a.	***+196***	***+374***	***+575***	***+750***	***+1,000***
Population Change	+4,022	+12,908	+22,997	+31,812	+44,455
of which Natural Change	+12,341	+14,155	+15,582	+18,155	+20,917
of which Net Migration	-8,319	-1,246	+7,415	+13,656	+23,538
Household Change	+3,853	+7,356	+11,295	+14,749	+19,659
Labour Force	-575	+3,938	+9,230	+13,504	+19,876
Jobs, Spending and Economic Outcomes					
Jobs	-1,207	+3,057	+8,060	+12,099	+18,121
Jobs per annum	***-60***	***+153***	***+403***	***+605***	***+906***
Total GVA (p.a.)	£2.0bn	£2.2bn	£2.5bn	£2.7bn	£3.0bn
Business Starts (p.a.)	300	330	365	395	483
H'hold Spending (p.a.)	£1.9bn	£2.1bn	£2.3bn	£2.5bn	£2.7bn
Public Finances					
Council Tax Base (p.a.)	£49.2m	£53.6m	£58.6m	£62.9m	£69.1m
New Homes Bonus	£33.2m	£63.4m	£97.4m	£127.2m	£169.5m
Business Rates (p.a.)	£42.7m	£47.6m	£53.3m	£57.9m	£64.8m
CIL/s106 Receipts	£46.8m	£89.5m	£137.5m	£179.4m	£239.3m
Community & Environment					
New Primary Sch. Places	0	+366	+1,566	+2,858	+4,600
New Secondary Sch. Pl.	0	+152	+659	+1,476	+2,384
New GP Needs	0	0	+1	+6	+13
New Open Space Needs	+11.6 ha	+22.1 ha	+27.7 ha	+44.2 ha	+59.0 ha
Land Take of New Devt.	196 ha	374 ha	575 ha	750 ha	1,000 ha
J7a funding gap (£45m option / £200m option)	£39.7m / £194.7m	£34.8m / £189.8m	£29.4m / £184.4m	£24.6m / £179.6m	£17.9m / £172.9m
New Affordable Housing	+1,174	+2,246	+3,447	+4,500	+6,000

Source: NLP

Table ES2 provides an overview of the likelihood that the Council's objectives would be met under each development scenario.

Table ES2 Traffic Lighting Deliverability of Outcomes at Different Levels of Growth

Scenario/Dwelling Growth: Objective/Infrastructure:	Scenario A. +3,920	Scenario B. +7,483	Scenario C. +11,490	Scenario D. +15,000	Scenario E. +20,000
Delivery of **new M11 Junction** (7a) alongside link-road or northern by-pass					
Priority **Estates Regeneration** & improving neighbourhood centres					
More and better quality **housing** stock (meeting housing needs)					
An excellent place to do business, with more **jobs** and a thriving economy					
Skills support & delivery, including further education (FE) institutions					
Enhanced and transformed **town centre** with new retail & leisure offer					
Supporting and underpinning viability of existing **facilities and services**					
Protection & enhancement of **Green Wedges**. Provision of open spaces					

Source: NLP

The study concludes that both Scenario A and B would fail to provide sufficient growth to deliver a wide number of key objectives for Harlow. Under Scenarios A and B there is the prospect that the lower population growth associated with these options would fail to substantially underpin the improvement in services and facilities for the town. Significantly, Scenario A could even mean services facing cut-backs; for example with a decline in school age population.

Scenarios E and D, and to a lesser extent Scenario C, would provide the critical mass to deliver a number of key objectives for Harlow. Under these scenarios the prospects for Harlow are that increased population can underpin expansion in shops and services and critically provide a custom base to trigger investment into the town centre. In particular, greater levels of growth above 11,500 new homes 2011-2031 increase the scope for more benefits and the Council's corporate objectives to be achieved. The study concludes that higher levels of development and growth will mean a larger population base in Harlow and a larger employment base, meaning that there would be more people to sustain services and facilities and also a larger economic base for the town with more money flowing through the local economy. Moreover, greater levels of development will deliver better outcomes for public finances through factors

such as New Homes Bonus, CIL, Council Tax receipts and business rates. Whilst new development can increase pressure on already pressed infrastructure, it can also help provide and/or unlock the resources needed to overcome problems.

At the highest level of growth assessed (Scenario E) it is more likely that the town will be able to deliver some of its key infrastructure objectives, generate sufficient critical mass to secure the transformation of Harlow Town Centre, and realise its economic potential. However, the appropriate level of growth for Harlow to plan for will depend upon the balance of priorities between the benefits accrued by different levels of growth, and other factors assessed and evidenced in other areas of evidence base, such as development needs, deliverability, and environmental and infrastructure constraints. However, to achieve the most benefit Harlow should seek to optimise its scale of growth within what is realistically deliverable and consistent with the National Planning Policy Framework (NPPF).

With respect to deliverability, although completion rates were very high in the early years of the town's development later models of house building meant that completion rates were more closely aligned to wider market conditions. Moreover, although housing completions topped 600 per annum in the mid-1990s completion rates have been much lower throughout the 2000s (circa 100 – 200 per annum). Any strategy that seeks to increase build rates above this will need to ensure that there are no barriers to achieving those higher rates of delivery in terms of suitability, availability and achievability of land and provision of necessary infrastructure, and other factors impacting on viability.

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1.0 Introduction

1.1 Nathaniel Lichfield & Partners (NLP) was appointed by Harlow District Council to undertake a study examining the link between regeneration and growth in Harlow, with a particular focus on establishing the prospects for Harlow based on different levels of growth in and around the town.

1.2 The purpose of the study is to consider the relationship between growing Harlow, through new development, and the wider regeneration benefits that this could generate. The intention is that, by providing evidence investigating the extent to which regeneration and growth are linked (and the town's future prospects under each scenario), this will support the consideration of a range of potential development scenarios during the preparation of the emerging Local Plan. The study therefore sets out a range of development scenarios to examine and evaluate the potential regeneration benefits that could accrue from different levels of growth.

1.3 In this context 'regeneration' encompasses all the wider economic, social and environmental benefits that might be able to be delivered. This includes both place-based regeneration (i.e. physical; that which is built) such as new or improved homes, shops, offices, places, open spaces and all supporting infrastructure (including roads, schools, hospitals and community facilities among others), as well as business or social-based regeneration (i.e. that which is not built) such as employment, spending in shops and services, skills, wellbeing and public finances.

Background

1.4 Central Government requires Local Planning Authorities to undertake assessments of the social, economic and environmental conditions of their administrative areas in order to inform the preparation of their Local Plans which set out the future growth of an area.

1.5 Recent Government reforms to the planning system have included the introduction of the Localism Act in November 2011 and subsequently the National Planning Policy Framework (NPPF) in March 2012. Although these reforms have removed the regional tier of planning and returned key strategic decisions to the local level, with this responsibility comes additional local scrutiny and the NPPF reinforces the importance of robust evidence to underpin the preparation of development plans. In particular the NPPF requires that plans should be based on adequate, up-to-date and relevant evidence about the economic, social and environmental characteristics and prospects of the area. The NPPF also requires that Local Planning Authorities set out a positive vision for the future of their areas.

1.6 Local Planning Authorities, such as Harlow District Council, will need to ensure, that their strategies for housing, employment and other uses are integrated, meeting the need and demand for such uses within the local area, and that

they take full account of the range of factors relevant to considering how much growth for which an area should plan.

Report Structure

1.7 The analysis and evidence within this report is structured as follows:

- **Section 2.0** outlines the approach to considering and assessing the link between regeneration and growth within Harlow;
- **Section 3.0** provides a review of previous evidence on regeneration and growth, focusing on relevant research and case study examples and evidence from New Towns;
- **Section 4.0** provides a review of the context and assesses some of the trends observed in Harlow previously. This includes considering how Harlow has been shaped over time, how it has accrued past benefits of growth and how it has arrived at its current position;
- **Section 5.0** focuses on establishing and testing he consequences of a range of different growth scenarios for Harlow to assess what regeneration benefits could be achieved in the future;
- **Section 6.0** tests the outcomes of different the scenarios tested in Section 5.0 and sets the against the objectives and priorities in Harlow to consider the extent to which varying levels of growth can deliver different objectives; and
- **Section 7.0** draws together the evidence to conclude how the future growth of Harlow can best align with objectives and deliver regeneration to address the problems Harlow currently faces.

1.8 Appendices with supporting information are contained in a separate volume.

2.0 Approach and Methodology

2.1 This section outlines the approach to considering and assessing the link between regeneration and growth within Harlow. The study seeks to illustrate the prospects for Harlow under different development scenarios with the overarching aim of distilling potential regeneration benefits that would accrue under each growth option.

Approach to Linking Regeneration & Growth

2.2 The link between regeneration and growth is a complex and dynamic one. There are a range of factors relevant to considering and assessing links, with the very nature of 'growth' and 'regeneration' taking many different forms. This means that a single definition or single way of quantifying them is difficult. For this reason, NLP's approach to considering the link between regeneration and growth has been to adopt a bespoke staged approach which draws upon wider evidence and applies it to Harlow. The methodology is 'outcome' focused by seeking to illustrate Harlow's prospects under different development scenarios. In particular the approach establishes a set of Harlow specific 'regeneration' outcomes; each growth scenario is then assessed against these and the likelihood of success is assessed. Broadly the approach has been split into three stages:

1 **Existing evidence and past change:** reviewing the range of existing evidence and research on the links between regeneration and growth to establish the extent to which this has been demonstrated. It also considers this in the context of how Harlow has changed previously and how growth could deliver the key regeneration objectives for Harlow contained within the existing evidence base;

2 **Scenario testing different levels of growth:** establishing and testing the consequences of a range of different growth scenarios to identify the outcomes for a range of regeneration themes, including the economy, social and demographic outcomes and infrastructure. This assessment seeks to quantify the scale of regeneration benefits that could accrue for Harlow under different levels of growth; and

3 **Meeting strategic objectives through growth:** testing the outcomes of different levels of growth to consider the future prospects for Harlow, and in particular, how these could support and deliver the previously identified key regeneration objectives for Harlow.

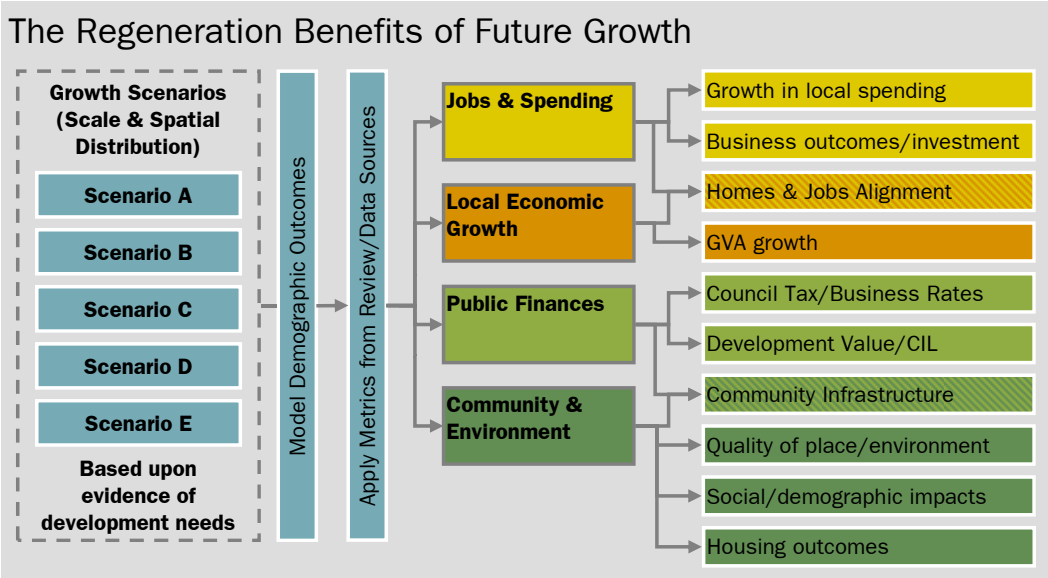
2.3 These stages synthesise the key elements of growth and regeneration to provide a key narrative, underpinned by empirical evidence, as to how Harlow has changed in the past and how Harlow could continue to change in the future.

Methodology for Assessing Regeneration Benefits

2.4 NLP's methodology centres on testing different scenarios of growth in order to identify the benefits which could be accrued under each. In order to do this several growth scenarios have been identified reflecting different scales of growth for Harlow, in terms of how many new homes might be planned for in the future. Firstly, each scenario is tested in terms of its population outcomes to identify how many households and people will be resident in Harlow under different levels of growth and furthermore how many of those people will be economically active and able to support job creation in the area. Secondly a range of metrics are applied to the population in order to understand how they will impact upon different regeneration themes.

2.5 Figure 2.1 illustrates the methodology adopted for the purposes of evidencing the connection between growth and regeneration in Harlow and assessing the impacts. This flows from the growth scenarios on the left of the chart to the outcomes for various regeneration themes (also called 'receptors' being the factors that will be stimulated by and respond to different levels of development and population change) on the right of the chart. These receptors fall into two main groupings, economic impacts which can be quantified and community and environmental impacts (including infrastructure and service delivery) which may be quantified or may be considered in terms of more qualitative outcomes.

Figure 2.1 Methodology for 'Making the Connection' between Regeneration and Growth in Harlow



Source: NLP

Projecting the Demographic Impacts of Growth

2.6 Each of the growth scenarios has been assessed for its likely impact upon the population of Harlow. This has been assessed by fully modelling the demographic impacts associated with delivering different levels of house building in the future through the specialist demographic modelling and forecasting tool POPGROUP. This approach is consistent with the way Harlow,

and neighbouring authorities, have been considering the future demographic changes projected to occur across the area within the Essex Planning Officers Association (EPOA) Demographic Forecasts project.

2.7 The demographic modelling seeks to provide an in-depth and robust understanding of what would happen in terms of household, population and labour force change if a given amount of housing development were to occur in Harlow in the future. The full approach and range of assumptions are set out within Appendix 1.

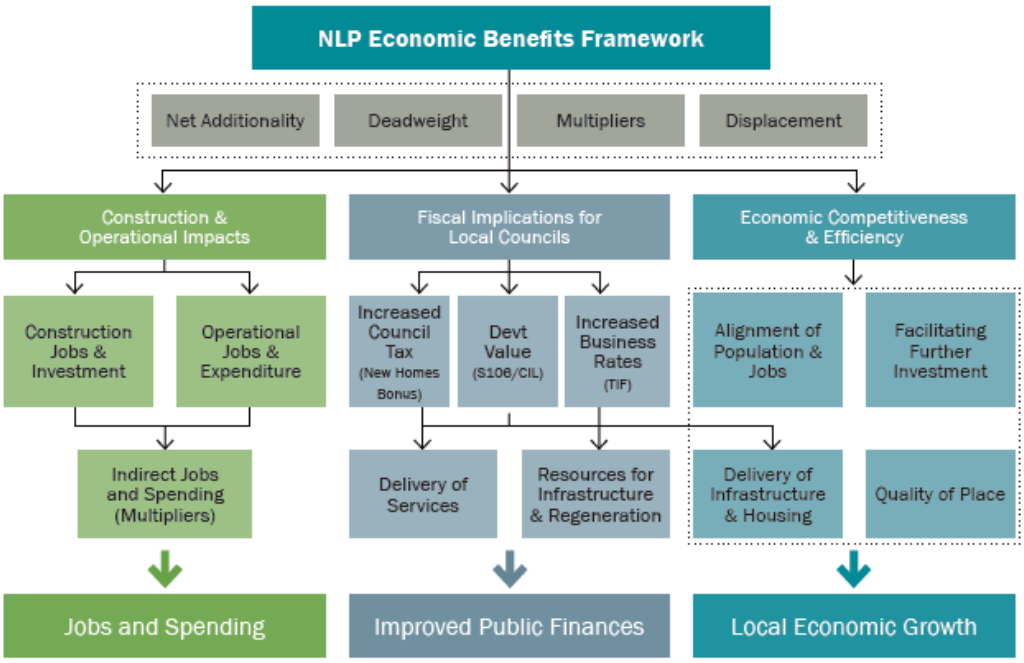
Assessing Economic Benefits

2.8 The methodology for assessing the quantitative economic benefits of development focuses on identifying the outcomes for Harlow in terms of homes, jobs and the monetary benefits they bring in terms of:

- spending - for example in local shops, services or in supply chains;
- local economic growth - for example in terms of the productivity of Harlow, Gross Value Added (GVA), and generating. incentivising or facilitating further business investment in the town; and
- improving public finances - for example through generating additional tax receipts, planning gain or central government funding, each of which the Council will be able to reinvest in Harlow's services and infrastructure in order to help deliver regeneration.

2.9 This is applied upon the basis of NLP's eVALUATE framework for assessing the economic benefits associated with development and growth, shown in Figure 2.2.

Figure 2.2 eVALUATE - The NLP Economic Benefits Framework



Source: NLP

2.10 Important to considering the economic benefits is an understanding of how they can also link directly back into delivering physical regeneration by providing the financial means to help overcome delivery barriers. They can also generate cumulative and multiplier effects, meaning, at the very simplest level, the additional benefit of twice as much growth may be more than a simple doubling of the outcomes. The full approach to each economic receptor is described in Appendix 4.

Assessing Community, Environment and Infrastructure Outcomes

2.11 As well as assessing purely economic outcomes, the methodology also seeks to assess community, environmental and infrastructure outcomes, including seeking to identify whether particular levels of growth would have benefits in terms of overcoming key infrastructure hurdles in Harlow (such as providing a solution to traffic issues within the town) or would generate sufficient critical mass in order to underpin the viability of existing facilities or trigger investment in new ones (such as providing confidence or sufficient customers to encourage investment in the regeneration of the town centre). To consider these outcomes for different receptors a combination of approaches have been utilised, including considering how the economic benefits could generate knock-on effects, as well as benchmarking Harlow against what has occurred in other locations. Such a benchmarking approach uses evidence on what has actually happened in comparator locations to identify a theoretical tipping point whereby if Harlow grows to a certain size, it could expect certain kinds of outcomes.

2.12 The main themes looked at in this respect are health, education, retail and leisure as a component of a revitalised town centre, housing, open space, road infrastructure and environmental implications. The full approach to each community, environment and infrastructure receptor is described in Appendix 4.

The Harlow Area

2.13 For the purposes of this study Harlow is taken to be the extent of the future built up area of the town and its immediate environs. When assessing the benefits to Harlow as a town, the assessment does not take into account the administrative boundaries between Harlow and its neighbours. Although developments may occur on the edge of Harlow as a settlement, but outside the bounds of Harlow as a District, the benefits will still accrue locally to the town.

Defining the Future Scenarios to Test

2.14 Each of the scenarios assessed for the benefits that would accrue are predicated on a different level of growth, measured by how many new jobs or homes each would deliver. The future scenarios to test were agreed between NLP and Harlow District Council at the outset of the study, and are solely intended to provide a range of different hypothetical options against which to

test regeneration outcomes. Some scenarios reflect objectively assessed development needs whereas others reflect policy or outcome-led scenarios. The scenarios tested are as follows:

a **'Do Nothing More' -** based upon the remaining deliverable and developable sites within the current development trajectory within the Annual Monitoring Report (AMR) - **3,913 dwellings** 2011-2031 (196 dwellings per annum);

b **'Meeting Development Needs'** - based upon an objective assessment of development need arising from the EPOA demographic forecasts[1] using the 2010-based Sub-National Population Projections (SNPP) scenario - **7,485 dwellings** 2011-2031 (374 dwellings per annum);

c **'Jobs Led'** - based upon the Employment Land Review Policy-On Scenario[2] of delivering 8,050 additional jobs by 2031 - **8,050 jobs** 2011-2031 (402 jobs per annum);

d **'Growing Centre'** - based upon the 14,000 to 16,000 dwellings growth range set out in the deposit draft and final adopted RS, with the mid-point of 15,000 adopted for testing - **15,000 dwellings** 2011-2031 (750 dwellings per annum);

e **'Transformed Centre'** - based upon sufficient growth to support a 'transformed' Harlow town centre. This scenario was further substantiated through an assessment of how much growth would be necessary to support substantial redevelopment and regeneration of Harlow Town Centre to provide a transformed retail and leisure offer (see Appendix 3) - **20,000 dwellings** 2011-2031 (1,000 dwellings per annum).

[1] The Greater Essex Demographic Forecasts (Edge Analytics, January 2013)

[2] This scenario was developed by the Employment Land Review as a policy objective to a) regain the approximate 4,000 jobs that were lost in the town between 2008 and 2011 and b) for the town to experience jobs growth in line with the national average between 2011 and 2031.

3.0 The Link between Regeneration and Growth

3.1 This section provides a literature review of previous evidence on regeneration and growth, focusing on examples and evidence from New Towns. For the purposes of this study it was not feasible to undertake a comprehensive review of all studies that exist. Instead this review provides an overview of relatively recent findings.

Literature Review

3.2 The extent to which there is a relationship between growth and regeneration is a recurrent topic of academic research and policy-making. Much research has focused on debating the so-called 'trickle down' effect; namely, to what extent does growth targeted at supporting exogenous or indigenous businesses and higher earners in an area then benefit residents on lower incomes or out of work via spending, job opportunities, and other indirect/induced benefits (e.g. mixed communities). The regenerative effects of 'trickle down' remain debatable; what is clearer is the contrast between growth and economic success in some localities with the difficult economic futures faced by shrinking or moribund towns and cities. A number of academic, policy and analytical reports have been reviewed to help interrogate the hypothesis that growth in a given location is a key driver to delivering economic success.

3.3 In the latest *Cities Outlook* publication produced by Centre for Cities (2013)[3] consideration is given to the economic potential for England's cities in the context of the current recession and associated sluggish economic recovery. It identifies the key drivers of economic growth as investment in infrastructure, the delivery of housing and improving the skills set of the population. Housing delivery is identified as being of the upmost importance because, despite technological advances, people still want to live close to sources of employment. It states that:

"Tackling the shortage of housing can prevent instability in the wider economy because of the impact a place to live has on businesses, labour markets and individuals. An insufficient supply of housing can restrict labour market mobility, raise business costs and exacerbate inequality – constraining economic growth."

3.4 However, it is also acknowledged that some cities have the opposite problem whereby they have weaker economies and supply exceeds demand for housing.

"In weaker economies….. housing shortages and high house prices are less likely to be the fundamental barriers to economic growth, as often skills, the quality of local jobs and connectivity to other places are more immediately pressing. In these cities, economic priorities may be more about investing in education, better public transport and wider quality of place improvements, as well as upgrading the existing housing stock."

[3] Centre for Cities (2013) Cities Outlook 2013. Centre for Cities, London.

3.5 The significance of the role of the housing market in the national economy has also been the subject of research undertaken by the Chartered Institute of Housing (CIH) and the Homes and Communities Agency (HCA). Kamm and Chivunga (2010)[4] produced a report for the CIH to highlight the interconnections between housing and the economy at a national level, with a primary focus around the impacts of the recession. It has a particular focus around the need to deliver affordable housing to aid economic growth.

"Investing in affordable housing, be it in the private rented sector or in the social sector, is absolutely fundamental to create sustainable communities that, in turn, can contribute to the development of the economy……Housing can, therefore, be a catalyst for sustainable economic growth through the multiple roles it plays. In supporting several vital sectors such as health, education and the labour market; by providing affordable and market housing, employment and allowing for labour and social mobility which are all fundamental drivers for economic prosperity."

3.6 The HCA commissioned independent research on the relationship between housing and economic growth in the context of the recession and a climate of government cuts.[5] The main argument for increased investment in housing is the close link between the national economy and the housing market including links between housing booms and the economic cycle. It also considered the impact of a national fall in affordable housing development on local labour markets stating:

"The fall in the size of the social rented sector and the increasing polarisation of the sector as a place where people who are economically inactive or on the lowest incomes are concentrated."

3.7 Equally some of HCA's own research indicates the following:

"Some ongoing research for HCA suggests that housing quality (as proxied by various measures) is a significant explanatory variable associated with levels of worklessness and GVA per employee at a local level."

3.8 This study draws out the benefits of the delivery and subsequent purchase of housing and the benefits it brings to the local economy, namely those with housing assets have a more profound role in the local economy through local spending, investment and indirect enterprise.

3.9 Work by NLP to provide input to the Adonis Review of the economy of North East England on behalf of the housing sector[6] explored the economic development role of housing development in the North East LEP area. It found that:

1 Together housebuilders and housing associations employ more than 10,800 people and train approximately 280 apprentices in Durham, Tyne/Wear and Northumberland (a total of 7 local authority areas). In

[4] Kamm, O. and Chivunga, M. (2010) *Housing and economic linkages,* Chartered Institute of Housing. Available at http://www.cih.org/resources/PDF/Policy%20free%20download%20pdfs/Housing%20and%20economic%20linkages.pdf
[5] Regeneris Consulting and Oxford Economics (2010) *The role of housing in the economy*, Regeneris Consulting Ltd.
[6] Nathaniel Lichfield & Partners (2013) North East Economic Review Submission by the North East Housing Sector, NLP http://nlpplanning.com/uploads/ffiles/2013/02/314636.PDF

2012 the sector achieved turnover in excess of £1 billion in the NELEP area. In 2012 alone 400 acres of brownfield land was remediated, 3500 new trees were planted and over £31 million was invested in transport infrastructure and new community facilities.

2 If NELEP acted to increase housing supply, then, by 2018, over 5,000 extra jobs would be created on top of the 10,800 existing jobs in the sector. This new employment would, in turn, slash £74.5 million each year from the Jobseekers Allowance bill. £965m of extra money would be generated in the wider economy and the local councils in the NELEP area would receive an extra £22 million each year from the Government in New Homes Bonus at a time when arts and libraries are being considered for closure.

3 Part of the work also involved testing popular perceptions about housebuilding. One perception was that the sector is a low pay, low value sector in the NELEP area. In reality the average sector salary was found to be £28,000 – some way above the regional average. Secondly, the perception was that industry does not drive economic growth. The research found that each volume housebuilder supports, on average, 140 supplier businesses, whilst good quality new homes will actually attract new footloose entrepreneurs and wealth generators to the NELEP area.

3.8 The Department for Business, Innovation and Skills (2010)[7] produced a report which investigates the choices firms make in relation to their location. The paper provides an economic analysis of urban areas and aims to ensure that Government policy reflects these findings. It argues that the location of firms depends on where their needs can be best accommodated, which includes infrastructure, as such this can be deemed important for economic growth:

"…people and firms locate in areas which best serve their needs. At its simplest, they will locate in areas that will give them the highest real income or profit; more broadly people and firms will also consider other valuable amenities that a place may possess such as the quality of the environment, access to cultural attractions or good school."

3.9 Research by Whitehead et al (2006)[8] investigates the link between urban quality improvements, including upgrading transportation, in the context of economic activity by considering changes in the take up of retail and office space, footfall and employment. Firstly an assessment of current literature is undertaken and secondly a framework is proposed to forecast economic impacts based on economic activity. The study uses Manchester as a case study for the forecast and concludes that urban quality improvements, by way of public transport improvements led to only very slight increases in retail activity (offset by increased traffic and congestion) and increases in employment (0.3%) reflecting better access for labour. Office and retail rents increase as a result of increased demand but any impact on office development was too small to be

[7] Department for Business, Innovation and Skills (2010) *Understanding local growth*, DCLG.

[8] Whitehead, T., Simmonds, D. and Preston, J. (2006) 'The effect of urban quality improvements on economic activity'. *Journal of Environmental Management* 80(1), p.1-12.

significant. There was an increase in population of working age and the unemployment figure dropped from 1.5% to 1.2%. The study also indicates that even modest improvements in the quality of the environment, as opposed to growth, can positively impact economic growth.

3.10 Finally, the Barker Review (2004)[9] considered the underlying lack of housing supply and responsiveness of housing at a national level as well as the role of competition, capacity, technology and finance of the house building industry and the interaction of these factors with the planning system. It also highlighted that inadequate housing supply constrains economic growth:

"… the volatility of the housing market has exacerbated problems of macroeconomic instability and had an adverse effect on economic growth. Higher and more responsive levels of housebuilding, leading to a lower trend in real house prices, would benefit the UK in economic terms. A more responsive housing market would:

- *help to reduce volatility in house prices thereby improving macroeconomic stability and supporting growth;*
- *improve flexibility and performance of the UK economy via greater labour mobility; and*
- *bring greater access to housing for many households, avoiding unwelcome distributional effects, and the ill-effects of poor housing."*

The link between regeneration/development and growth

There is evidence of a link between regeneration, partly through housing provision, and growth. It does however depend on the scale and extent to which the benefits of growth can be captured more widely and create wider effects.

The development of housing, particularly affordable housing, can aid social mobility and is linked to the ability of local employers to recruit more easily and as a result expand. In turn benefits to the wider local economy through support for education and health facilities could also be supported through additional people living in the locality.

The delivery of new housing at the right scale can also help a critical mass to be reached to warrant the development of new infrastructure. As good quality environment and infrastructure have been identified as factors impacting on the location of firms, a trickledown effect of improvements to infrastructure, including the location of new business and jobs could bring wider local economic benefits.

New Town Context

3.11 Today Harlow faces a number of social, economic and physical challenges, many of which mirror the challenges arising in other New Towns across the country. The general overriding challenges facing New Towns include the need

[9] Barker, K. (2004) *Review of housing supply. Delivering stability: Securing our future housing needs*, HMSO, Norwich.

for upgrading buildings and infrastructure as well as considering the future development of the towns as they approach or exceed their intended capacity. As a fairly unique type of development, it is important for successful features of other New Towns to be considered in the context of the future development of Harlow.

3.12 The physical challenges facing New Towns with regards to deteriorating town centres, poor connectivity and transportation were explored by the Department of Transport Local Government and the Regions (DTLR) Committee report (2002)[10], Cervero (1995)[11] and Gardiner (2004)[12].

3.13 The report produced for the DTLR Committee (2002) was written to express concern regarding the lack of a review into New Towns at the time of their de-designation by Central Government. It highlighted the physical and social problems currently facing New Towns and looks into the regulations operating within them as well as the involvement of local authorities and other bodies. Finally, any potential they have for wider regional economic growth was considered. Three site visits were undertaken as part of the Select Committee's work, including to Harlow. The outcomes of this study were recommendations that growth should be directed to New Towns as it is considered this could help revitalise urban centres. Some of the main problems facing New Towns are brought out in the report.

- The original design for Harlow encouraged a mix between social and market housing which today has led to pockets of deprivation across the town. Harlow as a result has been unable to bid for regeneration funding as the deprivation is not concentrated.
- The town centres of New Towns are often of poor design, quality and layout with limited ability to be accessed by car or public transport. As such towns are losing spending to other retail centres, it is estimated that 73% of all disposable income in Corby is being spent outside of the town. It is also often the case that the town centres offer little in terms of leisure uses and have limited or no evening economy, this has also led in some instances to town centres become locations for anti-social behaviour.
- The report identified the use of trial building techniques which have not been durable and consequently much of the housing requires at least upgrading and in some cases demolition and new build.

3.14 Cervero (1995) looked at New Towns as self-contained communities and considers the commuting patterns of their residents based on studies in the US, UK, greater Paris and Stockholm. Of relevance to this study is the UK example. The findings of the study explain that although the principle of the original plan for New Towns was that of self-containment, with the population working and living in the same town, motorisation has increased and people are

[10] Transport Local Government and Regions (2002) *New Towns: Their problems and future*, 19th Report to the TLGR Committee.
[11] Cervero, R. (1995) 'Planned communities, self-containment and commuting: a cross-national perspective'. *Urban Studies* 32 (7), 1135-1161.
[12] Gardiner, J. (2004) *The new towns special report*. Regeneration and Renewal 29/10/2004. http://www.regen.net/news/454344/Regeneration–amp-Renewal-special-report–-new-towns/?DCMP=ILC-SEARCH

more willing to commute significant distances to work. The later wave of New Towns, including Milton Keynes, were car-orientated in design, yet their job market is more self-contained than other New Towns. The overall findings of the study are that the self-containment of a settlement, with jobs filled by local residents, appears to be attributed to the remoteness of the location and not just motorisation. Also coordinated transit services influence commuting patterns more so than balancing jobs against workers to create self-containment in New Towns. This highlights that some New Towns are suffering as a result of their self-contained design through poor connectivity and public transportation.

3.15 Gardiner (2004) researched the successes and failures of the New Towns programme and expressed concerns regarding this information not being considered by the Government in relation to Growth Areas. The main areas evaluated included the failings of the built environment, social engineering and economic intervention. Key findings relevant to Harlow are stated below.

"… some new towns were experiments by new, young architects: contracted to design large swathes of council estates, many opted for the now-infamous Radburn principles, which separate cars from people - and have a disastrous impact on the crime-limiting effects of 'natural surveillance'."

3.16 The study also points out that the low density of development has had negative impacts on New Towns.

"…low densities have often made it impossible to sustain public transport routes and local services."

3.17 The economic problems facing New Towns today are specifically drawn out by Bennett (2005)[13]. The report explores the successes and failures which arose from the New Towns programme and reflects upon which critical lessons can be learnt from this experience for Growth Areas. The analysis found that where New Towns surrounding London were successful in attracting office developments and a more diverse economic base, some New Towns based around a sole manufacturing or industrial sector have suffered as the sector has declined. Bennett goes on to state that such locations have never managed to overcome significant shortcoming to enable an economic recovery.

"…it may be that they have never truly overcome their tenure balance being dominated by social rented housing at the outset, and the unpopularity of their design and architecture".

3.18 However, it is established that a better economic performance has been demonstrated in the next wave of New Towns including Peterborough and Milton Keynes.

[13] Bennett, J. (2005) *From new towns to growth areas learning from the past.* Institute for Public Policy Research, London.

"Through a combination of being larger than the earlier New Towns, attracting employers from sectors that have achieved sustained growth, such as electronics, IT and financial services, and achieving the more balanced approach to new housing development, with a proportion of home ownership as well as rented housing".

3.19 The study is focused on recommendations about how new Growth Areas could avoid these problems rather than how existing New Towns can improve themselves economically. However, it advises that a key lesson from New Towns is that housing growth must be linked with economic growth and that the most successful have a broad economic base.

3.20 The Department for Communities and Local Government (2006)[14] publication documents the main findings of a review of the literature surrounding New Towns to identify lessons that might be applicable to Growth Areas. Eight themes were considered as part of the study but the two of relevance to this study include 'economic achievement and competitiveness' and 'physical environment and design'. The following statement highlights the reports position with regards to the economic potential of New Towns:

"It must also be noted that economic robustness – as a dimension of flexibility is generally associated with larger conurbations than those represented by the New Towns. They were not self-contained urban units, and have not shown the productivity gains from agglomeration economies."

3.21 There is however limited literature regarding the outcomes of this physical regeneration on social and economic problems facing New Towns specifically. The report concludes that due to the lack of research undertaken around New Towns it is recommended that substantial new research is undertaken regarding the implementation of Growth Areas.

3.22 Some of the social disadvantages relating to the New Towns programme are documented in the work of Stott, Stott and Wiles (2009).[15] The report reviewed community facilities in New Towns. It highlights the importance of community and the problems that have been faced as a result of significant underinvestment. The content of this article has little relevance to the overriding assessment regarding physical growth and regeneration of New Towns but does indicate some of the social concerns they now face. For example, New Towns were designed in neighbourhood units with local shops, schools and community facilities in walking distance, but many are removed from the town centre and places of work. This has implications for travel as they need to be accessed by car or public transport. Those in society on the lowest incomes can therefore effectively become excluded from the town.

[14] Department for Communities and Local Government (2006) *Transferable lessons from the new towns*. DCLG.
[15] Stott, M., Stott, N. and Wiles, C. (2009) *Learning from the past? Building community in new towns, growth areas and new communities*. Keystone Development Trust, Thetford.

A summary of the key issues facing New Towns

New Towns face a unique range of economic, social and environmental challenges that reflect their original design, age and evolution.

The problems facing New Towns are almost universal and as all aspects of these towns were built at the same time, everything needs replacing as one. One of the most acute problems is that the earliest New Towns were not planned for car usage and many walkways and green spaces are out of sight of both houses and roads creating expanses of unsafe land. Low density development typical of the New Town design has also made operating public transport financially unviable with residents cut off from services and the town centre. Skills shortages in all New Towns are mainly attributed to the provision of large quantities of social housing.

The use of experimental architecture styles and materials has led to swathes of undesirable and some structurally unsound homes and town centres. The difficulty of accessing the town centre by car means residents shop elsewhere.

Many New Towns have failed economically due to be of modest scale and with an over-reliance on one sector of employment. The key message from the literature is that bigger populations can sustain more diverse economies which are better placed to endure economic decline and attract inward investment whilst evening out the split between housing tenures.

4.0 The Harlow Story So Far

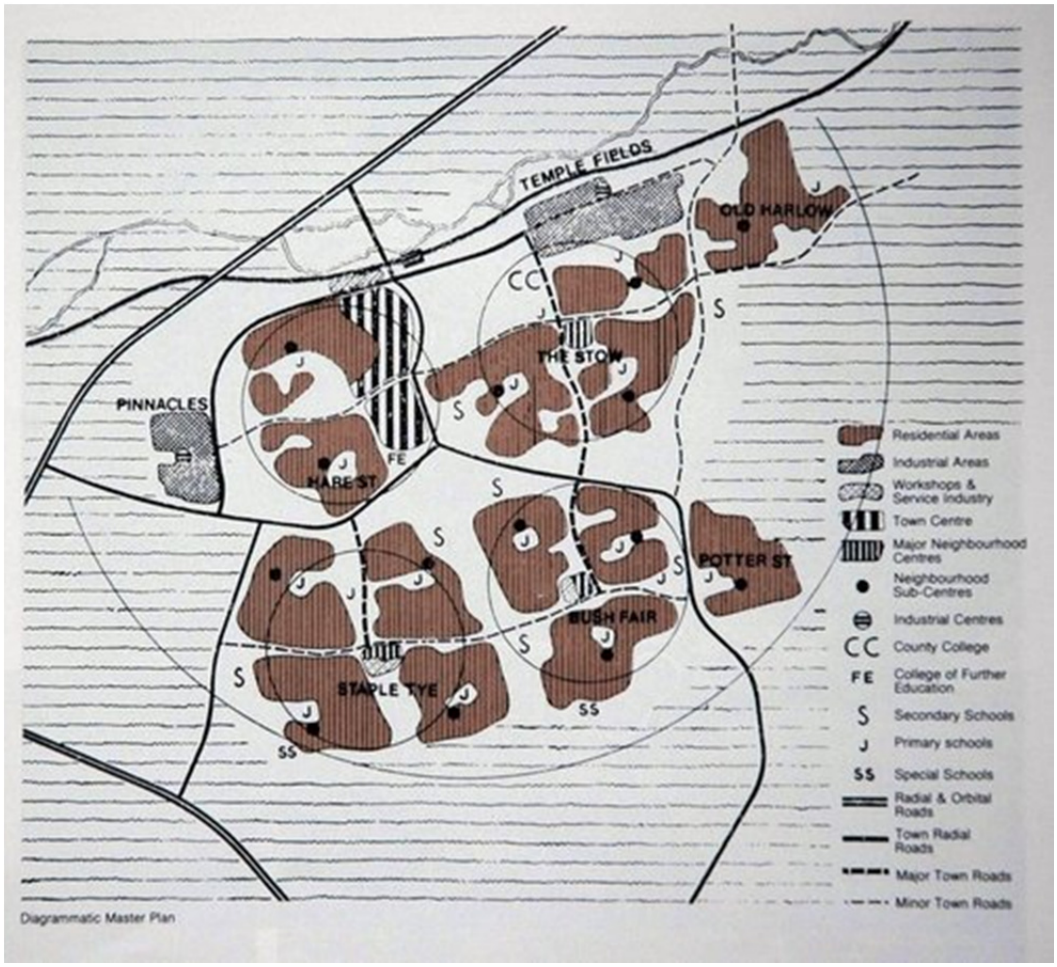
4.1 This section provides a review of the context and assesses some of the trends observed in Harlow previously. This includes considering how Harlow has been shaped over time, how it has accrued past benefits of growth and how it has arrived at its current position.

The Strategic Context

Gibberd Master Plan and its Legacy

4.2 Harlow is a former New Town, conceived in the 1940's in response to post war housing need in London and the South East. Sir Frederick Gibberd was commissioned to prepare a masterplan that would meet housing, employment, leisure and other community needs in a planned and co-ordinated way (Figure 4.1).

Figure 4.1 Harlow New Town Master Plan, 1949



Source: Gibberd, Frederick – 'Harlow New Town: A Plan Prepared for the Harlow Development Corporation' (1947) and 'Harlow New Town Master Plan (2nd Edition)' (1952)

4.3 At the time, the masterplan represented an innovative, unique and desirable layout and design typical of the period based around a series of linked but distinct and compact neighbourhoods separated by 'green wedges' of structural landscaping through which key transport corridors ran. The neighbourhoods each had their own local services (such as school and community hall) but were arranged in clusters around 'major neighbourhood centres' containing shopping, sports and social facilities. Envisioned initially as a town of 60,000 population in the original plan of 1947, this had been revised upwards to 80,000 population by the final 1952 masterplan in order to generate sufficient critical mass of population to support the viability of the towns services and provide institutions with more solid economic support.

4.4 Whilst elements of the masterplan continue to have merit today, much like the plans of other New Towns, some elements of layout, design and ultimately implementation of the masterplan have presented subsequent challenges in responding to the changing social, economic and political demands upon such towns. These are well documented, both at the government level, such as the DTLR Select Committee Report (2002), as well as reflected within local strategies with numerous studies and strategies produced outlining and evidencing the need for regeneration to address issues within Harlow.

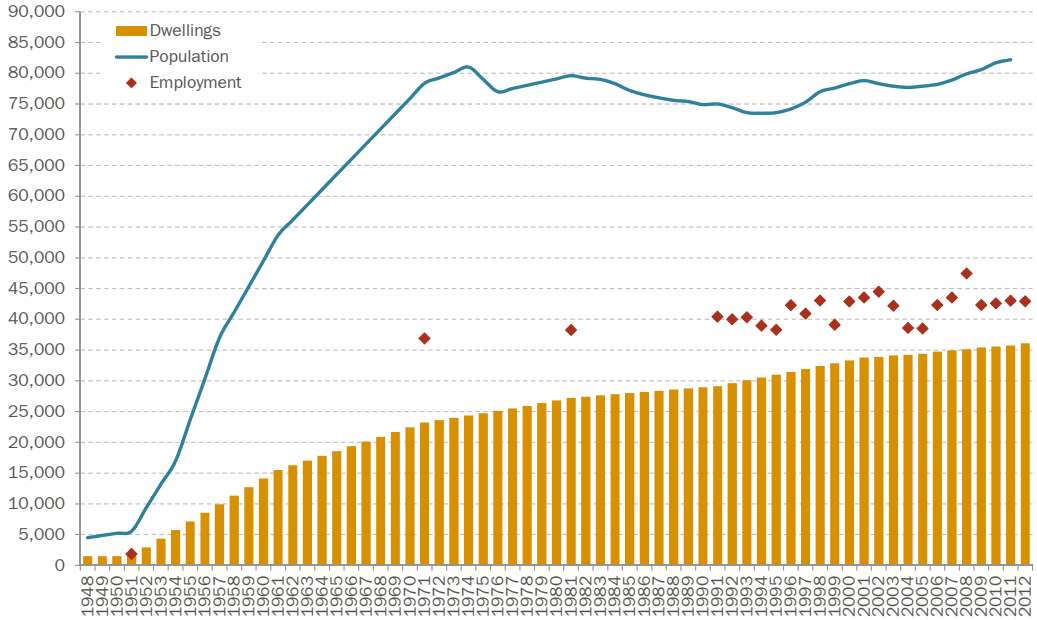
The Evolution of Harlow

4.5 Harlow underwent rapid growth during the 1950's and, to a slightly lesser extent the 1960's, reaching a peak population of 81,000 in 1974. Although through the masterplanning there had been an increase in the target population of Harlow to 80,000, this was not supported by a commensurate increase in the designated area of the town and the additional numbers were generally accommodated by building to a greater density in the later stages.

4.6 As illustrated in Figure 4.2 this rapid population growth was the result of 14,000 dwellings being built in the first 10 years of Harlow's development (1951 to 1961), with 7,700 dwellings built in the next 10 years up to 1971. Undoubtedly growth had brought investment by business and the employment base of Harlow had grown from 1,900 jobs in 1951 to more than 35,000 jobs by 1971. This was supported by development of all the infrastructure and facilities envisaged by the masterplan, including a town centre (with Sainsbury's, W H Smith's, Woolworth's and Boots stores established by the late 1950's), neighbourhood centres, schools, an Odeon Cinema, a sports centre stadium and by the mid-1960's a general hospital.[16] The growth of Harlow had generated a need and warranted the delivery of such facilities to the benefit of the town's residents.

[16] Bendixson, T. (2000) '50 Years of New Towns - The Story in Brief' (2000) http://www.idoxplc.com/idox/athens/ntr/toc34.htm

Figure 4.2 Dwelling Stock Population and Employment in Harlow Town 1948 to 2012



Source: Assembled from various (incl. Census, ONS, Experian, EEFM, Harlow Council, http://www.visionofbritain.org.uk/)

4.7 By 1970 the town was approaching its originally planned population size, but a plan in middle of that decade, supported by Sir Frederick Gibberd, to increase the population of Harlow New Town to upwards of 100,000 people by delivering another substantial phase of development, was rejected by Government. This led to a sustained period of relative stagnation, in stark contrast to the first 25 years of Harlow's development. Although a series of 'mini-expansions' occurred throughout the 1970s and 1980s in order to meet the needs of a changing demographic in the town (with smaller average household sizes, more elderly people and a second generation of families forming in the town) the population fell from a high in 1974 of 81,000 to a low of 73,500 just two decades later by 1994.

4.8 This period of population decline in Harlow coincided with a period of economic restructuring for the country, with a decline in the traditional manufacturing base that Harlow's economy had been built upon. Although the number of jobs within Harlow has been relatively consistent since 1971 this hides a number of structural changes to the Harlow economy. For instance, the town was originally a strong manufacturing and industrial centre but as these industries declined they were replaced in Harlow by growth in the service sector and pharmaceuticals, ICT and Research and Development. However, the skills shortages within the local community meant that many of these new jobs were taken up by higher skilled individuals based outside the town.

4.9 Notwithstanding these changes the combination of slowed growth and wider economic factors has contributed to average job growth in Harlow of just 150 jobs per annum over the 40 year period since 1971, compared with average job growth of 1,750 jobs per annum over the 20 year period to 1971.

4.10 Population decline also had a series of social impacts for Harlow. One significant impact was falling school rolls, with an educational re-organisation in Harlow during the early 1980's leading to the closures of Latton Bush Comprehensive and Nettleswell Comprehensive Schools.

4.11 The town's prospects were a concern as early as the late 1970s and early 80s. The concern about population decline and the impact this would have on the viability of maintaining local services and facilities. In 1980 the (Ruth) Glass Report was published into population forecasts for Harlow. This study identified that the town was experiencing net out-migration of 800 people per year and that this would lead to a decline in population to approximately 73,000 by 1991. The report advocated policy interventions to boost the town's population to 80,000 by 1991 through the provision of approximately 4,000 dwelling to be constructed over the next decade. The findings of this report led to the allocation of future housing growth to Harlow, including Church Langley, in the Essex Structure Plan.

4.12 Notwithstanding, the decline in population continued throughout the 1980s and early 1990s until the town's population began to increase again in the late 1990's and throughout 2000's. However, these changes only brought the town's population back up to levels recorded in the mid 1970s. Harlow's population continued to increase throughout the 2000s to reach the town's largest ever population of 82,200 in 2011, still only marginally above that originally envisaged total population (and previous high point in 1974). As explained this population increase has been down to a number of developments, schemes and regeneration programmes which have delivered tangible outcomes and benefits for Harlow. These projects include the Church Langley, Newhall and Harlow Gateway developments.

The Current Position

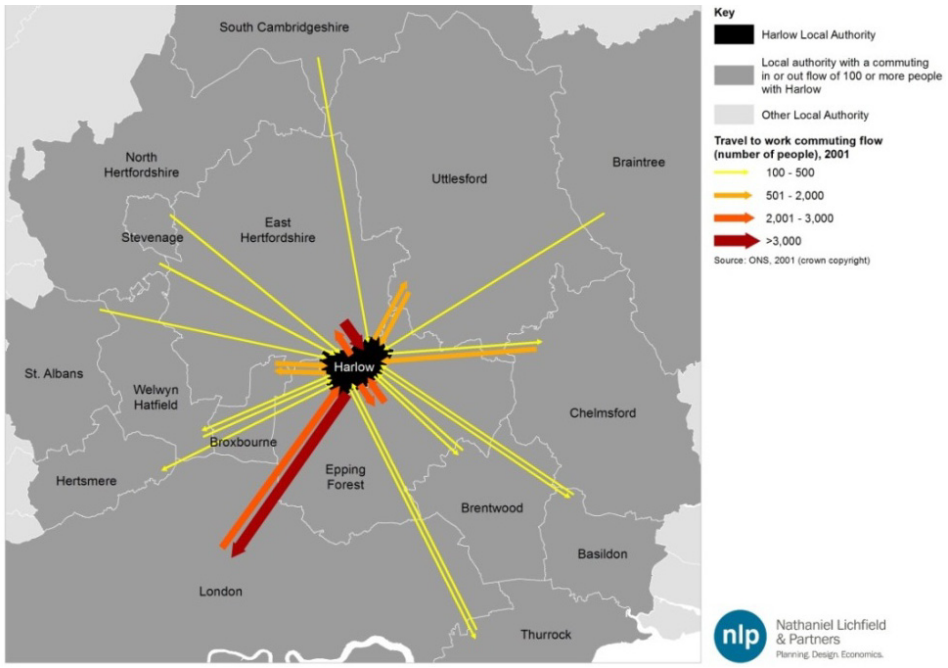
The Challenges

4.13 Today Harlow town benefits from its strategic location along the M11 corridor which links London, Stansted Airport and Cambridge. It also has a presence of renowned international companies whilst maintaining links to its manufacturing and engineering past. However, Harlow does now face a number of key social, economic and physical challenges, many of which mirror the challenges arising in other New Towns. These include industrial decline, a lack of investment, ageing/inadequate infrastructure and population stagnation.

4.14 There is a structural imbalance in the relationship between jobs and labour supply in the town. In this regard, Harlow's knowledge-based jobs are more likely to be taken by in-commuters to the town (Figure 4.3) partly because many local residents lack the skills necessary to meet the requirements of employers in knowledge-based sectors but also partly because the current stock of housing lacks choice in the range and quality of market housing options which can attract such workers to also live within the town. This weakens the attachment that key firms will have to Harlow, and also limits the extent to

which the wages those firms pay their employees to feed through into local shops and services. At the same time, many Harlow residents commute out of the town for work, particularly London.

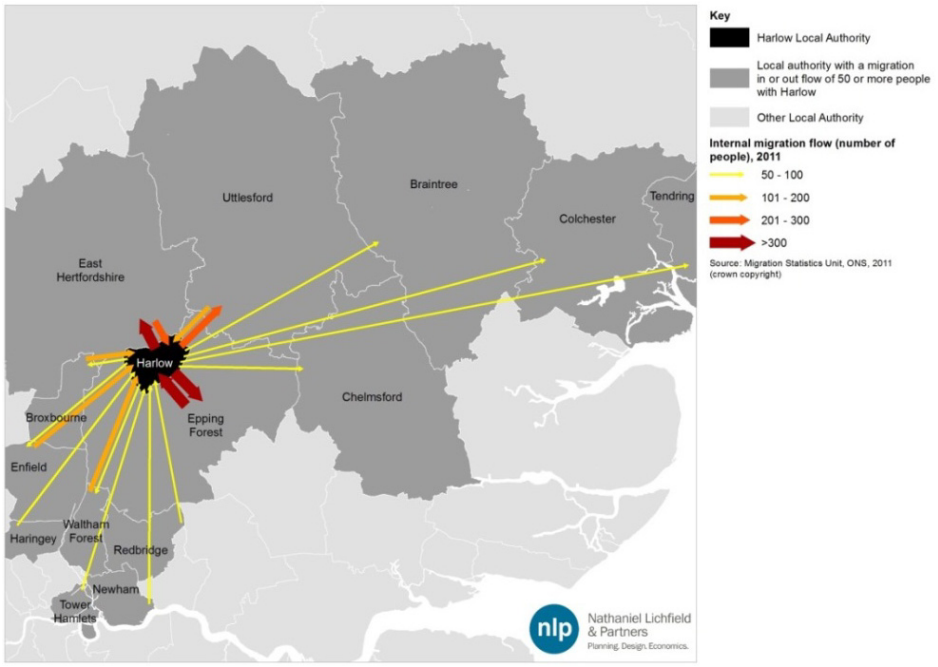
Figure 4.3 Commuting Flows to and from Harlow District



Source: ONS Census 2001

4.15 A further factor is Harlow's housing offer, with the relative affordability of housing in Harlow also supplemented by some issues with the poor quality of some of the housing stock. As might be expected, there are close housing market relationships (Figure 4.4) with contiguous districts, but a noticeable trend is housing-led net-inflows from north east London (i.e. those priced out of owner occupation in the capital and its immediate fringe), supplemented by net outflow to East Hertfordshire and eastwards into Essex.

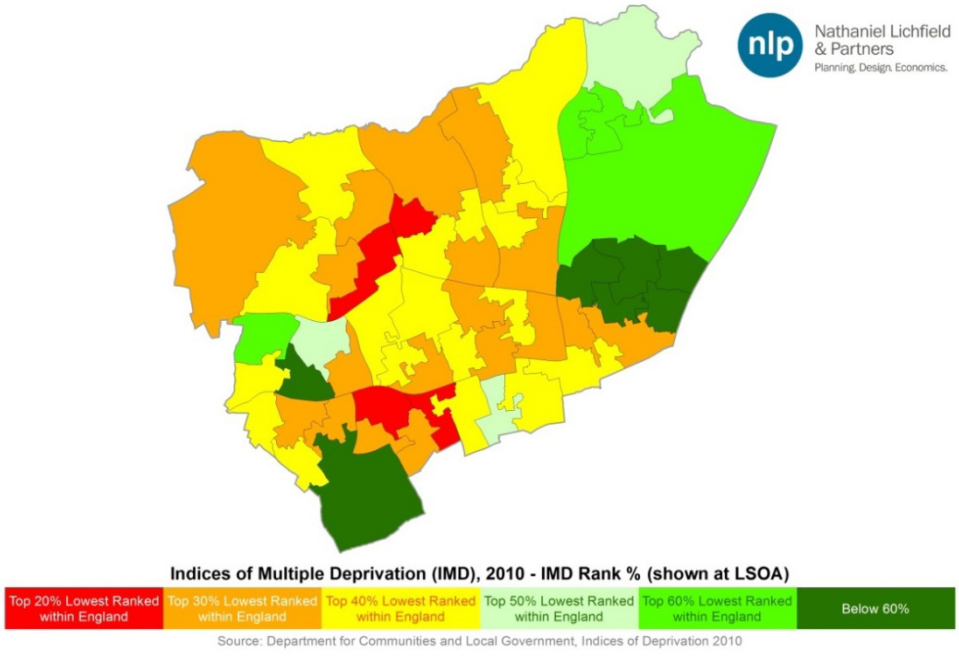
Figure 4.4 Migration Flows to and from Harlow District



Source: ONS Migration Statistics (2011)

4.16 Whilst such challenges present themselves across the District, clearly Harlow is not homogenous. The problems that flow from the town's challenging economic circumstances are not evenly spread with certain neighbourhoods within the District faring better than others. However, as Figure 4.5 shows, a number of the LSOAs within Harlow rank among the 20-30% most deprived in England. Conversely, few are in the 50% least deprived.

Figure 4.5 CLG Index of Multiple Deprivation in Harlow



Source: CLG Index of Multiple Deprivation (2010)

Issues Identified in Previous Studies

4.17 The issues affecting Harlow have been widely documented and have featured in a number of plans, strategies and studies at the local, regional and national level over the past ten to fifteen years. These plans and studies share the same general conclusion that development and change is needed in Harlow to ensure the town does not slip back into the relative stagnation and decline of previous decades and that additional development will provide the impetus to deliver local regeneration objectives. Having reviewed the evidence, the selected studies below all consider the main issues facing Harlow and how growth could support the wider regeneration of Harlow from key junctures since 2001.

Harlow Area Study: Master Planning Principles and Sustainability Criteria (2005) & Harlow Area Investment & Renewal Framework (2006)

4.18 The Harlow Area Study: Master Planning Principles and Sustainability Criteria (2005) and The Harlow Area Investment and Renewal Framework (2006) both provide a detailed and nuanced assessment of the issues affecting Harlow and priorities for future strategies. The Harlow Area Study highlighted the following key issues:

a A lack of diversity and mix of uses;

b A lack of continuity and enclosure of spaces;

c Poor adaptability of the town and local environment; and

d Areas of poor quality public realm.

4.19 Flowing from this the Harlow Area Study identified the following priorities for future investment:

a Provide a new high quality sustainable transport system;

b Revitalise current neighbourhoods;

c Town Centre revitalisation;

d Broaden the employment base;

e Foster quality spaces and streets;

f Intensify use of green corridors;

g Resource management and emission control;

h New neighbourhoods along the new public transport system;

i Creating best practice urban settings; and

j Retaining an enduring Harlow spirit and character.

4.20 The Harlow Area Investment and Renewal Framework (2006) identified the following issues for Harlow:

a Continued economic restructuring resulted in the loss of a number of key historic employers in the manufacturing, transportation and telecoms sectors. In many instances, losses have not been replaced and have left

a legacy of obsolete and under used land and property that is uneconomic to redevelop.

b Even before the recession the economy of Harlow was not keeping pace with competing centres and completion for business and retail investment will increase.

c Harlow experiences pockets of acute deprivation in a number of key domains or for key indicators.

d Perceptions of the town are poor with much of Harlow built at a single point in time during the 1950s and 1960s. It is, therefore, all ageing at the same rate. Some highly visible parts of Harlow have not performed as well as intended.

4.21 The following priorities were identified for Harlow:

Table 4.1 Priorities Identified for Harlow in the Investment & Renewal Framework (2006)

Theme	Goals
Economic Development	1. Sustain the existing employment base 2. Support the growth of local businesses 3. Attract new businesses 4. Ensure strong, attractive locations for existing, relocating and new businesses 5. Continue to strengthen the retail role of the Town Centre 6. Strengthen Neighbourhood Centres and Hatches.
Housing	1. Renew housing at the most challenged estates 2. Bring more housing to neighbourhood centres 3. Diversify housing stock 4. Include high quality, contemporary architecture 5. Bring more housing to the Town Centre.
Transport	1. Strengthen regional connections 2. Strengthen links to M11 3. Pursue progressive regional public transport initiatives 4. Pursue progressive local public transport initiatives.
Open Space	1. Activate all open spaces, including Green Wedges, to make full use of their recreation and relaxation potential 2. Create connections through open spaces between neighbourhoods 3. Make Town Park into a great civic park for the town and the region.
Planning Framework	1. Consolidate under-used land to create development opportunities 2. Encourage more mixed-use environments within Harlow 3. Establish development, transport and open space frameworks that ensure that future developments are fully integrated with the exiting framework of the town and with each other.

Source: Harlow Area Investment and Renewal Framework

4.22 There are consistent messages emerging from these evidence base studies. It is clear that the town centre needs to be rejuvenated, the mix of housing needs to be broadened, the town's infrastructure needs upgrading, and an increase in the business base needs to be achieved. All of these are considered necessary to help change the image and perception of Harlow. Addressing these issues

will require coordinated and sustained investment in the town and its physical and social infrastructure.

Future Scenarios Study (DLA, 2001)

4.23 This study was undertaken to give recommendations concerning how Harlow could grow in the future using a range of hypothetical scenarios. These scenarios assessed the potential issues and benefits of varying levels of population growth regarding facilities and infrastructure with quantifiable thresholds that are primarily influenced by a catchment population. Additionally, the scenarios purported to include New Town principles from the original design of Harlow including using optimum neighbourhood sizes in with specific distances from a public transport stop and the provision of green wedges at the same proportion per head as the existing population. The four scenarios below were tested in the report:

- **Natural Growth to 2021** – this scenario considers current population trends will continue until 2021 with a population increase of 7,000 people.
- **Moderate Growth** – maximising development within the existing administrative boundary of Harlow, this would include releasing Green Belt land. This would yield sufficient capacity for an additional 16,700 people.
- **Strategic Growth Option 1 (North and South East)** – in addition to land released in the above scenarios this includes satellite settlements in proximity to north and south east Harlow, with capacity for 82,700 people.
- **Strategic Growth Option 2 (South and West)** – growth beyond that provided in Growth Option 1 in a modest neighbourhood extension to the west and a satellite cluster to the south of Harlow with capacity to accommodate 117,200 people.

4.24 The Strategic Growth Scenario 2 would equate to a new free standing New Town with numerous improvements in facilities, employment and housing. The key link between growth and regeneration drawn out in the Natural Growth Scenario is that additional dwellings constructed (3,000 at an average household size of 2.42) might support the renewal of some of the older housing areas. It is also noted that the scale of population growth would also reach the critical mass to help sustain the vitality and viability of the town centre.

4.25 The work identified a link throughout the outcomes of each scenario that the greater the increase in population, the greater the potential for regeneration and the upgrading of infrastructure. With greater quantities of population growth in the Moderate Growth and Strategic Growth Option 1 Scenarios regeneration in relation to college and higher education facilities are considered feasible. Equally bigger transport improvement projects ranging from bus priority routes to the extension of the Central Line from Epping to a new transport station in Harlow are considered achievable. The Growth Option 1 Scenario also

considers that population increase of 82,700 people would ignite the night time economy in the town centre.

RPG14 Strategy review London-Stansted-Cambridge-Peterborough corridor (2004)

4.26 This independent review[17] of all the studies relating to the (Growth Area) London-Stansted-Cambridge-Peterborough corridor ultimately offered advice for what should be included in the final RPG14 policy for the East of England. The report drew a direct link between housing development and the associated regeneration impacts in a specific locality and ultimately concluded that the level and locations of growth in the Growth Area be readjusted and development be concentrated on regenerating the sub-regional centres of Harlow, Peterborough and Stevenage. The report condones growth as a means of wider regeneration. Paragraphs 9.21 and 9.22 of this study assume that Harlow can grow through provision of 10,000 houses and that associated regeneration will follow, funded from Section 106 payments. Equally it states that the influx of new housing would allow the critical mass to be reached to justify upgrading infrastructure. It is acknowledged that an improvement in skills levels and local transportation would also be needed but that this could be supported by the growth which would enable regeneration to deliver new employment, retail and cultural facilities. This study advocates an amalgamation of housing and infrastructure growth which would be followed by regeneration.

Previous Regional Plans

4.27 The evidence supporting the now abolished East of England Plan (2008) considered that the provision of 16,000 new homes and approximately 8,000 jobs in the Harlow area would help address the underlying issues affecting Harlow by stimulating the regeneration and renewal of the town. This fed through into Policy HA1 of the East of England Plan. The Council, as well as the East of England Plan Panel, believed that this level of growth would not only meet the needs of the existing community but help address a number of the other complex issues affecting the long term prosperity of Harlow, ultimately leading to a renaissance of Harlow.

4.28 It is also important to reflect on previous manifestations of what became the East of England Plan as this sheds further light on the historical context on the need to regenerate Harlow.

4.29 As mentioned the approach set out in the then East of England Plan was the latest in a number of previous district, county and regional plans extending back to the 1980s which sought to implement strategies to regenerate the town. These sought to ameliorate the impact of economic restructuring in Harlow, poor building stock and growing deprivation. In particular, the publication of Regional Planning Guidance (RPG) 9 in 1994 and again in 2001, which covered the wider south east of England, first identified Harlow as a

[17] Robin Thompson Associates and Volterra Consulting (2004) *RPG14 Strategy review London-Stansted-Cambridge-Peterborough corridor*

Priority Area for Economic Regeneration (PAER). Regional planning bodies were reorganised and Regional Planning Guidance was prepared for the eastern region, of which Harlow was then part of. Draft RPG14, published in 2002, also identified the need to regenerate the town. Harlow was identified as both a PAER and as a Priority Area for Regeneration (PAR). As RPG14 was developed (and subsequently evolved into the East of England Plan in 2004) further detail was provided on the strategy for Harlow but the core requirement for change in Harlow remained. This eventually led to what became the adopted East of England Plan (2008). This contained a range of policies aimed at the growth and renewal of the town culminating in Policy HA1 (Key Centres for Development and Change).

4.30 Any new strategy for Harlow will need to seek to replace Policy HA1 in setting a strategic vision for the scale of growth. New initiatives such as the Harlow Enterprise Zone will also play a crucial role in defining the town's future growth potential. However, growth is not an end in itself and needs to be linked to a range of initiatives to address key objectives and barriers to economic stagnation and current social issues.

Harlow Regeneration Strategy (PACEC and Halcrow Group Ltd, July 2005)

4.31 This study was commissioned in May 2004 by Harlow Council because Harlow had been identified as a potential growth area in the Sustainable Communities Plan. The purpose of the study was to assess the regeneration needs for Harlow and consider the extent to which this could be achieved through different growth, mainly housing growth.

4.32 The study articulates many of the current problems faced by Harlow. Most notably the New Town has reached capacity and now has a legacy of decaying infrastructure and is suffering relative economic stagnation despite being in a good physical location which should be performing better considering the proximity to London, Stansted Airport and the Cambridge Knowledge Corridor.

4.33 The report highlighted the link between concentrating growth of population and employment in existing urban areas to generate economic growth. Additionally, it drew out the relationship between more skilled labour (something Harlow is currently lacking) and the quality of life and infrastructure required to retain them in an area.

4.34 It is highlighted that expansion and population growth are essential for increased economic potential, the following three scenarios were tested to establish what varying levels of expansion would mean for the economic potential of Harlow.

- **Continuation of Trends:** Continuation of the current employment trends with between 4,000 to 6,000 jobs to 2021 and population increase of 10,000. Development would be constrained by the administrative boundary, current infrastructure, economic problems and additionally Harlow would not attract levels of investment required for regeneration.

- **Broadening Horizons:** A major sub-regional centre with increased sub-regional population and greatly expanded Stansted Airport. Additional 11,000 to 13,000 jobs and population increase of 22,000. Growth would be required outside of the administrative boundary and economic growth would require investment in infrastructure to maintain or improve Harlow's economic position in the M11 Corridor area.
- **Dynamic Transformation:** A major expansion in the Harlow economy with integration into an M11 high -technology corridor and growth of Stansted Airport and restructuring towards a 'knowledge -based' economy. Additional 16,000 to 20,000 jobs and population growth of 30,000 - 35,000. This would require major physical regeneration to attract residents with the skills appropriate to a 'knowledge –based' economy. Significant investment would be needed to create this environment.

4.35 The report identified the potential benefits associated with different growth levels but did not quantify the majority of them. The Dynamic Transformation scenario was considered appropriate for the rapid future development of Harlow and highlights the link between investment in growth and then associated regeneration, as highlighted below.

"The strategy's roots lie firmly in Harlow's identified needs, and the premise that the greatest potential for regeneration is facilitated through growth and building critical mass for investment."

4.36 The report highlighted that to achieve the step change in economic growth to support 16,000 to 20,000 additional jobs, the following additional initiatives will be required.

1 A sub regional shopping centre.

2 A top quality business park including research and development (R&D).

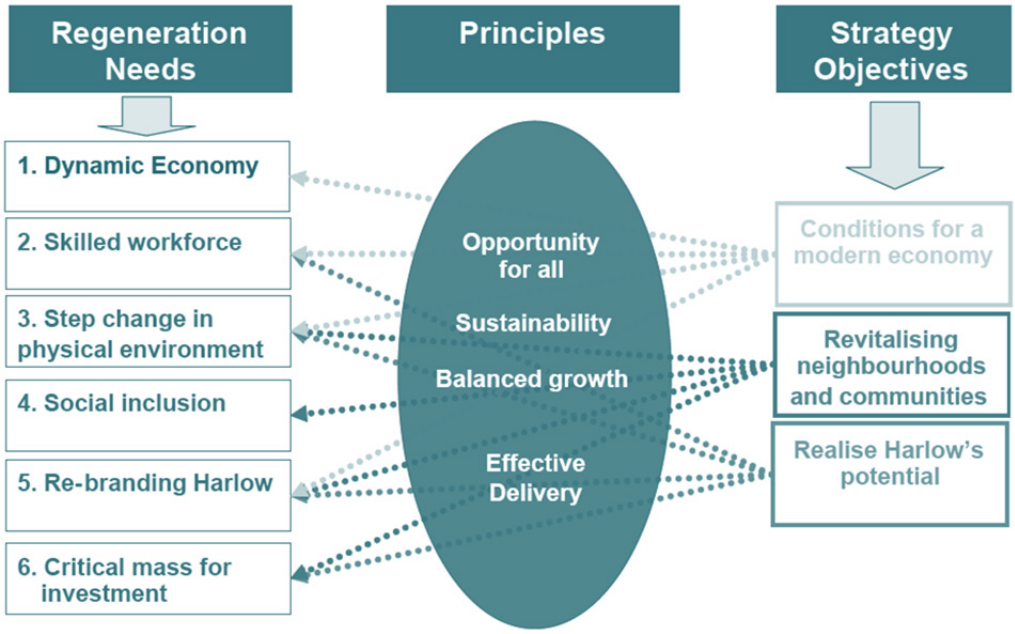
3 Incubators and enterprise training; to help small firm start-ups.

4 The possible addition of an R&D higher education facility.

5 An airport services cluster and upgrading of communication links.

4.37 Figure 4.6 seeks to illustrate the objectives set out in the report to assist Harlow in fulfilling the identified regeneration needs and to work towards meeting the Dynamic Transformation scenario.

Figure 4.6 Objectives to stimulate the regeneration of Harlow



Source: Harlow Regeneration Strategy (July 2005)

The Need for Regeneration in Harlow: Report for Scrutiny Committee (March 2011)

4.38 The purpose of this report was to highlight to the Council's Scrutiny Committee that regeneration is needed in Harlow. The three elements of the report looked into social, economic and physical regeneration needs within the town and discuss current initiatives as well as those which will be implemented in the future.

4.39 The need for social regeneration in Harlow was highlighted by the high levels of deprivation; below average proportion of residents with at least NVQ level 2 qualifications and already high unemployment which has doubled between May 2008 and March 2010. An analysis of demographic data in the report led to recommendations being made about the future of the town, including the need to increase skills and education levels so local people can achieve better jobs, improve wages and in turn reduce deprivation and child poverty and addressing inequalities in health in the town. The vision of a regenerated Harlow (as stated in the 2010/15 Regeneration and Social Inclusion Strategy) includes an aspiration for development into a university town, increasing the educational opportunities of local residents as well as attracted those with higher educational attainment to the town.

4.40 Potential for economic regeneration centres around the fact that Harlow has lower than average quantities of business stock, low levels of business start-ups and VAT de-registration is high. The report highlights aspirations to support the growth of existing business stock and growth centres, encourage more business start-ups and attract more businesses to Harlow to provide employment.

4.41 The need for physical regeneration in Harlow is centred on the need to make the town centre more attractive to encourage investment, new residents, businesses and visitors, with this in turn helping to 'catalyse economic growth throughout the town' by developing employment opportunities, leisure and housing. It is also stated that the development of a night-time economy would also make the centre more attractive to potential residents. The vision of a regenerated Harlow (as stated in the 2010/15 Regeneration and Social Inclusion Strategy) includes an aspiration for the town to evolve into a sub-regional centre as well as a destination for retail.

4.42 Housing is also highlighted as a key physical problem with poor structure, layout and not all social housing meeting the standards of decency set as a Government Objective. The report aims to ensure all social housing tenants have good quality homes. Issues regarding movement of residents and visitors into and around Harlow have also been highlighted and road connections in and around the town are proposed.

4.43 The report expressed a clear view that the key catalyst to bring positive change and regeneration to Harlow is the development of the town centre. The report highlights the assumption that the regeneration of the town centre would lead to not only direct jobs in retail but improve the image of Harlow as a whole, encouraging more people to live there and new businesses to locate in the town.

A Comparative Analysis of Harlow

4.44 In order to provide a context to the scale of the issues facing Harlow, an assessment of the performance of the town against comparator towns has been undertaken. Table 4.2 compares the performance of Harlow across a range of socio-economic indicators with other New Towns and settlements of comparable scale/distance from London. These comparator towns have been specifically chosen as they either represent locations with similar characteristics to Harlow, represent a potential competing location (e.g. for locating businesses) or represent a settlement which Harlow may be able emulate in aspects of growth. The purpose of such comparator towns is to consider how Harlow is performing in comparison to such other settlements, and further to identify what other towns are achieving that Harlow could aspire to under different scenarios of future change.

Table 4.2 Ranking of Harlow against Comparator Towns

Rank	Population Growth % (01-11)	Employment Growth % (01-11)	GVA Per Worker £ (2013)	Knowledge Based Businesses % (2010)	Business Growth	Skills Base (NVQ 4 & above)	Retail Ranking
1	Milton Keynes	Oxford	Reading	Reading	Reading	Cambridge	Reading
2	Peterborough	Welwyn Hatfield	Crawley	Basingstoke	Watford	Oxford	Milton Keynes
3	Welwyn Hatfield	Basildon	Luton	Cambridge	Milton Keynes	Reading	Watford
4	Watford	Basingstoke	Welwyn Hatfield	Milton Keynes	Welwyn Hatfield	Watford	Peterborough
5	Cambridge	Milton Keynes	Watford	Welwyn Hatfield	Basingstoke	Basingstoke	Northampton
6	Oxford	Stevenage	Oxford	Watford	Basildon	Welwyn Hatfield	Oxford
7	Basingstoke	Peterborough	Stevenage	Stevenage	Cambridge	Milton Keynes	Crawley
8	Luton	Northampton	Cambridge	Oxford	Northampton	Northampton	Cambridge
9	Northampton	Luton	Milton Keynes	Crawley	Crawley	Luton	Basingstoke
10	Reading	Crawley	Northampton	Peterborough	Luton	Stevenage	Basildon
11	Crawley	Cambridge	**Harlow**	Basildon	Peterborough	Crawley	Luton
12	Stevenage	**Harlow**	Peterborough	Northampton	Oxford	Peterborough	Stevenage
13	**Harlow**	Reading	Basildon	Luton	**Harlow**	Basildon	Welwyn Hatfield
14	Basildon	Watford	Basingstoke	**Harlow**	Stevenage	**Harlow**	**Harlow**
Src.	*ONS Mid-Yr Pop. Est.*	*Experian*	*Experian*	*UKCI 2010*	*ONS Business Demography*	*Census 2011*	*Management Horizons*

Source: Various/NLP Analysis (See Appendix 4 and Table 5.5)

4.45 Ranking Harlow against these comparator locations across a number of socio-economic metrics suggests that Harlow is under-performing compared to these other locations, in particular with the analysis demonstrating constrained population and job growth in recent years. Harlow appears to face a number of economic challenges. Not only has growth in the number of jobs been low in comparison to other areas over the past decade, the town appears to have some structural economic barriers to improving the town as a place for businesses to grow. Growth in the number of businesses is relatively low in Harlow, whilst the proportion of businesses operating within knowledge industries (e.g. scientific and technological activities) is the lowest of all comparator towns, potentially exacerbated by low skills levels of residents. This contributes to a relatively low productivity within Harlow's economy, with a reasonably low GVA per worker for jobs in Harlow. Overall, Harlow appears to be performing poorly in terms of its current local economy, with opportunity to improve its rankings substantially.

4.46 The retail ranking is a measure of the range of 'multiple' (e.g. chain) retail and food/drink outlets available within a retail centre. It is based on a weighted scoring system, with higher order/quality retailers scoring more (e.g. John Lewis) and lower order/quality retailers scoring less (e.g. Primark). It therefore provides a comparative measure of the relative strength of a town centre and

its ability to attract visitors for shopping and leisure trips. Harlow has the lowest retail ranking of all the comparator town centres, scoring worse than even similar size towns such as Stevenage. This further illustrates the relative weaknesses of Harlow Town Centre's offer as a retail destination.

4.47 Understanding the current position of Harlow and how it has been arrived at is important to considering the future prospects for the town. If Harlow is to avoid the decline and stagnation that occurred in the 1970's and 1980's, as well as secure regeneration benefits over and above what will naturally occur at Harlow's current scale, it is considered that further development is likely to be required. As was the case during the previous periods of decline schools could face closure and other services and facilities could be at risk of closure as the existing population base becomes less capable of supporting these. There are likely to be implications for Harlow's population structure as the population ages and is not replaced by younger people, as these leave the town in search of employment and other facilities.

A summary of the key issues facing Harlow

Harlow experiences a number of localised regeneration issues which are well documented in previous studies. A long period of stagnation has led to aging infrastructure and built form with a number of residential and commercial areas looking dated. The main physical issues facing the town include the failure of the town centre, which has a limited night time economy and experiences the loss of retail spending to locations outside of Harlow, and the fact that some houses were built using experimental designs meaning some social housing is not reaching government set standards of decency.

Harlow is also performing poorly against other comparator towns identified in the assessment, particularly in relation to population growth, jobs growth and retail provision.

The town also suffers from economic stagnation despite its close proximity to London (and position on the M11 corridor linking it with Cambridge and proximity to Stansted) with lower than average levels of business stock, low levels of business start-ups and high levels of business closure. Exacerbating this economic situation is the low skill levels of residents and high levels of unemployment.

The previous plans and strategies all confirm the issues affecting Harlow and all identify a requirement for significant development and change to address these issues and to allow Harlow to break out of the current cycle of a relatively poor performing centre. These strategies focus on providing additional growth to a) increase the town's population and b) act to catalyse regeneration within Harlow. It remains that a substantial increase in population is needed to create a catalyst for change.

The Current Objectives and Barriers

4.48 It is clear that the above challenges demonstrate a need for regeneration in Harlow with the current plan-making phase presenting opportunities to address these key factors, overcome barriers and enable Harlow to prosper in the future. The combination of the current position in the strategic planning of Harlow, with the previous regional East of England Plan now revoked and an opportunity for Harlow Council to set the planning agenda for the future development of the town, and the current position in the long term growth of Harlow, with recent tentative growth following a period of maintaining status quo, provides an important decision point to consider the vision and objectives for Harlow moving forward.

4.49 As is the case with other New Towns, Harlow is reaching the capacity of its original boundary and, if the original principles of masterplan and its green wedges are adhered to, it is likely that some future growth needs will be delivered in the form of urban extensions rather than continued intensification within the existing compact neighbourhoods. In evidence to the House of Commons Select Committee in 2002, the Harlow 2020 Local Strategic Partnership noted the benefits that new growth could bring:

"Through sustainable growth beyond its existing boundaries, Harlow could address some of the issues it currently faces in terms of poor image, under-investment and ageing infrastructure. New businesses would be attracted to Harlow because of its position on the M11 corridor and new investment in the town could lead to a significantly improved town centre and leisure and cultural facilities."

4.50 Against this backdrop, Harlow Council, through its existing evidence base as well as their planning and corporate strategy, has identified a number of key objectives and infrastructure interventions in order to achieve regeneration. These have recently been comprehensively brought together within the Harlow Council Corporate Plan 2013/14 - 2015/16, which, alongside other evidence, has led to the identification of the objectives and infrastructure priorities set out in Table 4.3.

Table 4.3 Objectives for Infrastructure Delivery to Secure Wider Regeneration

Objective/ Infrastructure	Weakness or Opportunity Addressed	Securing Regeneration & Capturing Benefits	Source of Objective
Delivery of **new M11 Junction** (7a) alongside link-road or northern by-pass	Reduce congestion through town and improve connectivity. Key to open up Harlow business and investment.	Improve opportunities for business by reducing infrastructure deficit, capturing uplifts in rates and local supply chain spending.	Transportation Study (2005), Infrastructure Study (2009). Corporate Plan (2013) Priority 2.7
Priority **Estates Regeneration** & improving neighbourhood centres	Poor quality of existing stock of homes and urban fabric.	Improving community prospect and securing better efficiency of stock (e.g. cost savings through health improvements, lower demand for utilities).	Corporate Plan (2013) Priorities 2.3 and 2.6

Objective/ Infrastructure	Weakness or Opportunity Addressed	Securing Regeneration & Capturing Benefits	Source of Objective
More and better quality **housing** stock	Imbalances in stock type/size. Meeting housing needs and improving affordability.	Fiscal benefits such as new homes bonus/Council Tax/CIL. Improving overall stock to improve opportunities to access good quality housing.	Corporate Plan (2013) Priority 1
An excellent place to do business, with more **jobs** and a thriving economy	Delivery of Enterprise Zone and achieving economic growth in line with local and national aspirations.	Increasing GVA of Harlow; creating trickle-down effects; and delivering economic prosperity.	Corporate Plan (2013) Priority 2.2
Skills support & delivery, including further education (FE) institutions	Address skills gap and support key local sectors, including health, advance manufacturing & IT.	Supporting business growth and inward investment. Attract and retain skills within the town through good quality educational offer. Indirect benefit of increasing spending through higher wages.	Harlow EZ Skills Plan (March 2013) Corporate Plan (2013) Priority 4.3
Enhanced and transformed **town centre** with new retail & leisure offer	Address poor quality network of existing retail centres in Town and help to retain expenditure	Capturing a greater proportion of household expenditure locally and reducing leakage of spending. Generating a Harlow Pound effect (money earned in Harlow is spent in Harlow).	Corporate Plan (2013) Priority 2.1
Supporting and underpinning viability of existing **facilities and services**	Threats to viability of public services (e.g. hospitals). Maintaining and securing new higher order services.	Creating critical mass of population to underpin vitality of local services.	Corporate Plan (2013) Priority 5
Protection & enhancement of **Green Wedges**. Provision of open spaces	Maintaining important and hugely valued element of original masterplan	Important character feature of Harlow that can help improve perception and ensure a good quality environment for residents.	East of England plan (2008) and Corporate Plan (2013) Priority 3

Source: Various/NLP Analysis and review of existing evidence

4.51 These priorities and objectives form the touchstones for regenerating Harlow. Each has dependencies upon other parts of the strategy and all the elements will ultimately work best if they are secured together and deliver cumulative benefits. However, many of these objectives face particular barriers, including funding, critical mass of population or economic activity in the town as well as wider perceptions of Harlow. Having demonstrated the wider link between regeneration a growth, it is clear that in the specific context of Harlow, such factors could be overcome by delivering growth. The questions therefore are:

- What benefits could different levels of growth bring to the town?; and
- How much growth would be necessary to deliver these objectives?

The Benefits of Recent/Proposed Developments

4.52 Looking at recent developments in Harlow provides some insight into the extent to which growth has delivered benefits over the past decade. The tangible outputs of twelve schemes in Harlow have been considered, with each reviewed

for their housing, employment, commercial floorspace and infrastructure outcomes. Applying some evaluative metrics, a picture of how recent developments have contributed to the growth of Harlow in terms of population and employment as well as the wider benefits secured for regenerating the town. A range of scheme sizes have been considered, including a number of smaller scale developments identified by the Council.

Recent Completed Developments

Newhall

4.53 Newhall is an urban extension located approximately 2.5 miles east of Harlow town centre. It was designed to integrate into the structure of the New Town as originally laid out by Sir Frederick Gibberd. The emphasis is on creating a sustainable neighbourhood with heavy emphasis on good design; the initial completed stages have already won design awards. The scheme is privately funded by Hall Projects Ltd who are delivering the project and North Chase, Linden Homes and Slo Living are involved in the construction and selling of homes. Phase I was completed at the end of 2011 (621 dwellings) and Phase II (2,300 dwellings) is about to commence on site. The second phase will also deliver a primary school and nursery, parkland and recreation, two hectares of employment space to be delivered through mixed uses and a district centre. The scheme is due to be a larger neighbourhood with district centre facilities including a wider range of shops and purpose built offices.

The Harlow Gateway Partnership

4.54 The Harlow Gateway Partnership was formed in 2003 to find new land for housing and relocate and upgrade the sporting facilities in the town. The members of the Partnership include Harlow Council, Harlow and District Sports Trust, the Homes and Communities Agency, the East of England Development Agency, MP and local groups. The aim of the programme was to create stronger links between education, sport and health whilst creating jobs and training opportunities. Harlow Gateway and the Leisure Zone are two schemes which were undertaken by this Partnership.

4.55 **Harlow Gateway** is an 11 hectare brownfield site (formerly Harlow Sportscentre site) approximately 1.7 miles south of Harlow town centre gained consent for a residential led development including leisure and community facilities subject to section 106 agreement in 2008.The scheme increased the quantity of dwelling proposed in a previous proposal to 553 units including social housing, the scheme is to be delivered in 11 phases. The site was owned by English Partnerships and formed part of the Gateway project which was delivered by the Gateway Partnership. The scheme Harlow Gateway Project cost £50 million and was part of the wider Harlow Gateway Project. A contribution of £10.9m came from the Department for Communities and Local Government, with the balance coming from the three funding partners, Harlow Sports Trust, Homes and Communities Agency and Harlow Council (using existing public assets to generate funds, including the sale of the former Harlow sports centre and the

former swimming pool site). The focus of our scheme was a series of green spaces running through the centre of the site, providing pedestrian and cycle routes from the railway station and included a Sustainable Urban Drainage Strategy.

4.56 **The Leisure Zone** forms part of the £50m Harlow Gateway Project. It includes a multi-purpose sports hall, indoor tennis centre, two swimming pools, squash and badminton courts, a fitness gym, heavy weights gym and fitness studios. Other complementary organisations are also based at Leisure zone including catering, physiotherapy, a day care nursery, hairdressers, Harlow Health Trust and an interactive science centre for 'Science Alive'. The centre is also capable of hosting major sporting, musical and social events. Replacement Car Parking for Harlow College and Office Accommodation are also included in the scheme. As with the Harlow Gateway housing site government funding contributed £11m to the scheme which was opened in January 2011.

4.57 The Harlow gateway Project also delivered new Harlow Town Football Club stadium, a county standard athletics track at Mark Hall School and were due to invest in pitch regeneration and associated facilities.

Old Harlow

4.58 The Old Harlow scheme at Fair Croft/Little Bays included the construction of 43 properties comprising a mixture of housing and flatted development for sale, rent and shared ownership. This scheme recently completed and all properties are now occupied and/or sold.

Proposed (or Under Construction) Development Schemes

Priority Estates

4.59 A Council programme established in 2007 which is intended to create a long term vision for the regeneration of Harlow Priority Estates. The intention is for the Council to create strategies in consultation with local communities which will form the base of long term changes and improvements to the environment of the estates. The delivery of the Priority Estates Programme is included as a key objective in the Harlow Regeneration and Social Inclusion Strategy (2010 - 2015).

4.60 **The Briars, Copshall Close and Aylets Field** are the first three estates which the programme seeks to tackle. The three estates are to be wholly redeveloped as options to refresh or retrofit the existing area would not have given the opportunity to improve the whole environment. A Design & Development Brief has been delivered and agreed by the Council. The preferred scenario could deliver (net) c.400 dwellings at a density of approximately 72 dwellings/ha. Complaints from residents concerning the existing areas included insufficient car parking and safety and security concerns. The remodelling of the estate with higher density housing will provide greater housing for Harlow as well as improving overall access, layout and safety and allowances for car parking are

made on site. Opportunities to improve connectivity of pedestrian and cycle routes could also be explored. The redevelopment of the areas would also make better use of open space to enhance amenity. There would be no net loss of open space, but it would have a better definition of uses. The scheme is to be delivered by Harlow Council in partnership with a Development Partner sourced via a competitive OJEU tender process.

4.61 **Northbrooks** will form a later stage of the programme. The Council are currently considering options on this estate and are working to formulate a Design and Development Brief for those areas of the estate which require physical regeneration. The rationalisation of pedestrian and cycle routes through the estate and the enhancement of connections to the 'Green Wedge' could also be included. The specifics of the scheme are yet to be finalised but the comprehensive redevelopment of the estate could generate 423 new units. Again this scheme is to be delivered by Harlow Council with a Development Partner.

4.62 **Clifton Hatch –** This scheme involves the redevelopment of the three existing retail units and the erection of 28 new residential units and two new retail units (A1 and A5). The proposed scheme consists of a mixture of housing and flatted development. Work is currently underway on this scheme. One of the retail units has already been leased.

4.63 **Carters Mead –** This scheme involves the construction of 27 new homes: five of which will be for social rent, six for shared ownership and 16 for private sale. Construction dates have yet to be established.

Other Developments

4.64 **Harlow Council Garage Sites** – 14 of the Council's underused or disused garage sites are due to be redeveloped to provide at least 50 residential units. The scheme will also provide around five apprenticeships for young people.

4.65 **Wissants** – The site, which currently accommodates a block of 21 bed sit apartments which have been disused and derelict for a number of years, is to be cleared and seven new houses are to be provided to better suit the housing requirement in the area. Discussions are underway with a local Registered Provider to build out this scheme.

4.66 **Former Council Social Club** – Planning permission has recently been granted for four three bed houses on the site currently occupied by the former social club (which closed five years ago). The Council are currently working with a local Registered Provider to build out this scheme.

Enterprise West Essex @ Harlow (Enterprise Zone)

4.67 Two sites totalling 51 hectares make up the Enterprise Zone; it is yet to be developed but is planned to focus on businesses from the health and allied industries (incorporating medical technologies); advanced manufacturing and ICT. The Council has prepared two Local Development Orders for the London

Road Site which have now been adopted. A third Local Development Order for the Templefields East site (28 hectares) is expected to be in place later in 2013. The Enterprise Zone has the potential to create between 2,500 and 5,000 jobs and seeks to attract 100 businesses. As part of the proposal there would be a £3.5m investment to road infrastructure on the A414 to provide access to the EZ sites as well as improvements to Edinburgh way. In June 2013 it was announced that a £12.75m investment from Government was secured (subject to due-diligence) to deliver enabling works and infrastructure at the London Road site for the development of a new Life Sciences Medtech Innovation Centre alongside the existing Nortel Campus. This could unlock the delivery of 22,000 sqm of high grade office space and highlights how the Enterprise Zone has already been successful at securing central government funding and using it to leverage private sector investment.

4.68 The scheme is being delivered by a consortium of groups, including Harlow Council, the West Essex Alliance (Sub-regional Economic Partnership), Essex County Council, the South East Local Enterprise Partnership, Anglia Ruskin University, Harlow Chamber of Commerce; the Federation of Small Businesses; three developers (ING Real Estate, Newhall Estates and Goldacre (Offices) Ltd).

Assessing what these schemes will deliver

4.69 Bringing together the outcomes of these select schemes, Table 4.4 illustrates the benefits that have accrued from completed schemes and those expected to be accrued through the schemes in the pipeline. A range of standard employment multiplier and resident expenditure assumptions and benchmarks have been applied to available scheme metrics (such as number of new homes and commercial floorspace delivered, estimated construction cost) to estimate the likely scale of benefits generated by each development for the local economy. Estimates are based on current (2013) prices.

4.70 Once complete and operational, these developments have the potential to deliver over 4,450 new homes, create and support up to 14,800 direct and indirect jobs, generate just under £100m of resident expenditure each year alongside a variety of community, transport and other local infrastructure provision.

4.71 Whilst these schemes will contribute to the wider regeneration of the town and will lead to improvements locally, the scale of the issues facing Harlow are such that these schemes (or schemes of a similar scale and nature) alone will not provide the degree of change required. Therefore, larger developments are likely to be required in and around Harlow in the future.

4.72 It should be noted that these schemes have not been subject to a detailed impact assessment (with the exception of Enterprise West Essex Enterprise Zone), therefore this post-development appraisal presents a high level overview of potential development outcomes rather than a longitudinal assessment of the scale of regeneration effects.

Table 4.4 Benefits and expected benefits from identified development schemes in Harlow

Scheme	Delivery Timescale/phasing	Est. job numbers†	Housing	Commercial Floorspace	Community infrastructure	Transport & Other Infrastructure	Est. Household Spending Uplift¥
Completed[18] Schemes							
Newhall	Phase I completed end of 2011. Phase II about to commence on site.	Direct: 3,630 Indirect: 1,120	2,921	2 ha. of employment land	Community centre Parkland Primary school Sports and leisure space	New foul sewage installed	£65.4m p.a.
Gateway	Completion in 11 phases, completion was due in 2012	Direct: 580 Indirect: 350	553		Open space/ landscaping Linked to delivery of 'Leisure Zone' scheme.		£12.4m p.a.
Leisure Zone	Opened 25 January 2011.	Direct: 280 Indirect: 100	0	Office accommodation within centre	Wet and dry sports centre		n/a
Old Harlow	Completed 2012	Direct: 45 Indirect: 40	43				£963,200 p.a.
Pipeline Schemes							
Priority Estates	The Briars, Copshall Close and Aylets Field Details of the scheme are yet to be finalised and no timescales set.	Direct: 420 Indirect: 170	400 (preferred scenario)		Public spaces Green spaces Improvements to community facilities	537 car parking spaces.	£8.9m p.a.
	Northbrooks Details of the scheme are yet to be finalised and no timescale has been set. The metric analysis has assumed comprehensive redevelopment of the estate.	Direct: 450 Indirect: 390	423		Public spaces Green spaces Improvements to community facilities	Rationalisation of pedestrian and cycle routes through the estate and the enhancement of connections to the 'Green Wedge'	£9.4m p.a.

[18] For the purposes of the analysis Newhall is classed as a completed scheme

Scheme	Delivery Timescale/phasing	Est. job numbers†	Housing	Commercial Floorspace	Community infrastructure	Transport & Other Infrastructure	Est. Household Spending Uplift¥
Enterprise W. Essex	The Council has prepared 2 LDOs for the London Road site. These have now been formally adopted by the Council after being approved by the Secretary of State in spring 2013. No timescale for start on site.	Direct: 2,500 - 5,000* Indirect: 1,000 – 2,000*	0	51 ha.		£3.5m investment to road infrastructure A414. £12.75m investment in enabling works & infrastructure at London Road site.	n/a
Clifton Hatch	The scheme to redevelop the existing hatch is underway and due to be completed in 2013/14.	Direct: 30 Indirect: 25	28	25 sq m (net)			£627,200 p.a.
Carters Mead	The scheme to construct 27 new homes is yet to commence.	Direct: 30 Indirect: 25	27				£604,800 p.a.
Harlow Council Garage Sites	Details of the scheme are yet to be finalised and no timescales set	Direct: 50 Indirect: 45	50		5 Apprentices are expected to be offered to local young people		£1.1m p.a.
Wissants	Details of the scheme are yet to be finalised and no timescales set.	Direct: 10 Indirect: 5	7				£156,800 p.a.
Former Council Social Club	Details of the scheme are yet to be finalised and no timescales set.	Direct: 5 Indirect: 5	4				£89,600 p.a.

Source: Harlow Council / NLP Analysis

* Employment impacts for the Enterprise Zone are presented as a range (2,500 minimum direct and 5,000 maximum direct)

† Notional job estimate based on approximate scheme construction cost, commercial floorspace and HCA benchmark employment multipliers

¥ Uplift estimate based on applying average household expenditure in Harlow (current prices) to the number of new homes delivered

5.0 Future Development Scenarios

5.1 This section details the implications that each development scenario will have on Harlow and provides an overview of the expected outcomes for the town. The five scenarios adopted to test the benefits of growth have each been assessed for their potential demographic and economic outcomes to help understand the potential benefits for Harlow. The outcomes of the scenarios are expressed for the period 2011 to 2031; the base date of 2011 reflecting the year for which the most recent comprehensive set of data is currently available. The detailed approach and outputs for the modelling are included in Appendix 1 and Appendix 2.

Demographic Outcomes

5.2 NLP has used specialist demographic modelling and forecasting tool POPGROUP to model the future trends in demography associated with the different scales of housing growth under each of the scenarios. POPGROUP is an industry standard demographic modelling software package and is used by Government Agencies, County Councils and Local Authorities across the UK.

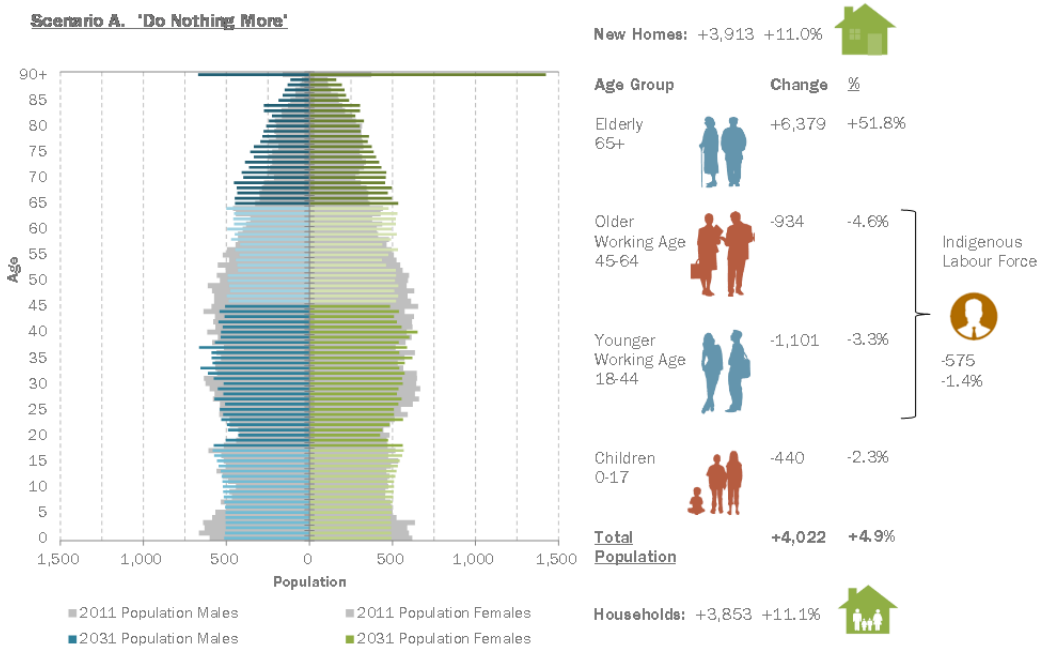
5.3 Where applicable NLP has sought to adopt similar/the same inputs assumptions as utilised within the EPOA demographic projections work (which also utilised POPGROUP), but equally where these have been superseded by newer or more relevant data, or the inputs to the EPOA modelling are not made explicit, NLP has adopted differing inputs to ensure the projections are as robust as possible to withstand scrutiny. A comprehensive list of all the assumptions used in the demographic modelling is included in Appendix 1.

5.4 The purpose of each scenario is explained below alongside a review of the headline outputs for demographic change, employment and household growth.

Scenario A: 'Do Nothing More'

5.5 This scenario is based upon the assumption that only currently committed housing development in the Annual Monitoring Report (AMR) as of April 2011 will come forward over the period 2011 to 2031 and nothing in addition to this. The current AMR trajectory has commitments for 3,913 dwellings over this period, or 196 dwellings per annum. The purpose of this scenario is to establish the demographic and economic outcomes of 'doing nothing more' in terms of development in Harlow than is already in the pipeline.

Figure 5.1 Demographic Outcomes Summary for Scenario A



Source: NLP Analysis Using POPGROUP

5.6 As set out in Figure 5.1 the delivery of 196 new dwellings per annum would lead to a projected population growth of just over 4,000 people to 86,348 people. The shift in population structure would be significant, with the ageing of the existing population leading to a more than doubling of the existing 65+ aged population (51.8% increase). Conversely the number of children and young people (0-17 years), the number of younger working age people (18-44 years) and the number of older working age people (45-64 years) would decrease by -2.3%, -3.3% and -4.6% respectively. Under Scenario A it is projected that younger adults and families could face the prospect of moving out of Harlow due to constrained housing supply and increasing affordability pressures. The decline in the working age population will also lead to a 1.4% contraction in the number of economically active people (i.e. workers) living within Harlow, which may lead to problems for businesses in recruiting.

Scenario B: 'Meeting Development Needs'

5.7 This scenario uses the number of dwellings projected in the EPOA 2010-based sub national population projections (SNPP) scenario (374 dwellings per annum) to model the demographic and economic change associated with this level of housing delivery. Using recent 2011-based headship rates as well as consistent assumptions around economic activity rates this scenario gives an update estimate of demographic and economic change to the original EPOA scenario.

Figure 5.2 Demographic Outcomes Summary for Scenario B

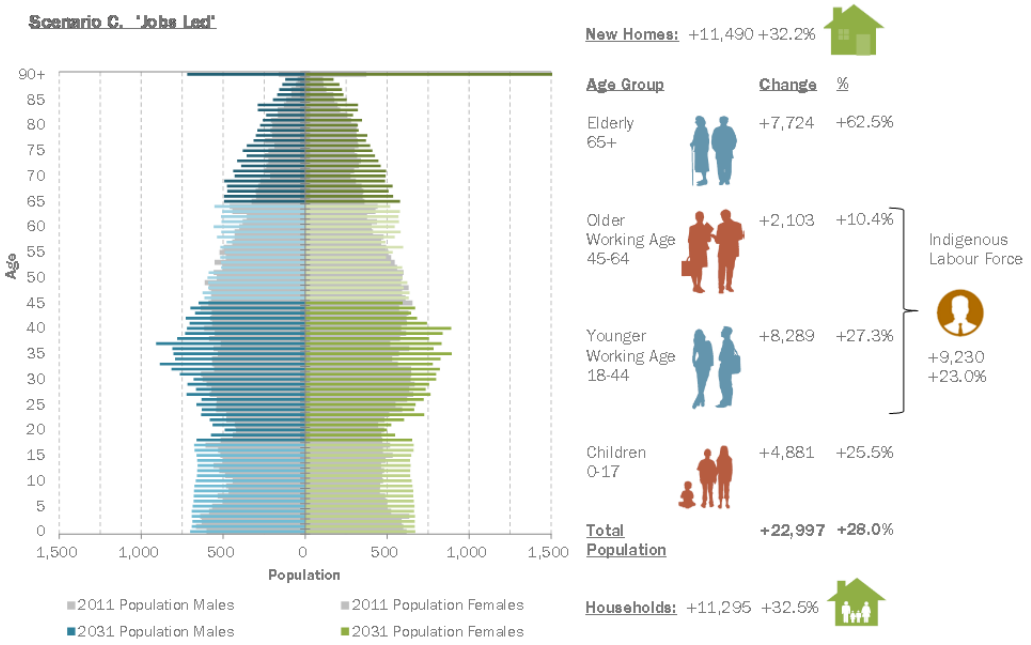
Source: NLP Analysis Using POPGROUP

5.8 As summarised in Figure 5.2 the delivery of 374 dwellings each year over the period to 2031 would represent a 21% increase on the existing dwelling stock. Associated with this would be a population growth of 12,900 people, increasing Harlow's total population to over 95,000. The change in the population profile would mean significant growth in the elderly 65+ population, but also a reasonable growth in the number of younger working age people (18-44 years) as well as children and young people (0-17 years) of 10.1% and 11.2% respectively. This scenario would lead to an increase in the number of families moving into Harlow and emerging from the existing population. Economic growth would be moderate, with an increase in the indigenous labour supply of over 3,900 people, which could provide an underlying employee base to support job growth of c.150 jobs per annum. However, this level of jobs growth would only be a similar rate to that which Harlow has achieved over the long term since the mid-1970s; a period where growth in the town was relatively muted.

Scenario C: Jobs Led Scenario

5.10 This scenario uses the job projection from the Policy Scenario in Harlow's Employment Land Review (January 2013) to ascertain the demographic change and housing growth required to meet this economic potential. The job projection assumes the same level of job growth as the East of England Forecast Model forecast used in the EPOA study, but also assumes that the jobs lost during the recession are regained. The economic Policy Scenario assumes the creation of 8,050 additional jobs over the period 2011 to 2031, or 403 per annum.

Figure 5.3 Demographic Outcomes Summary for Scenario C



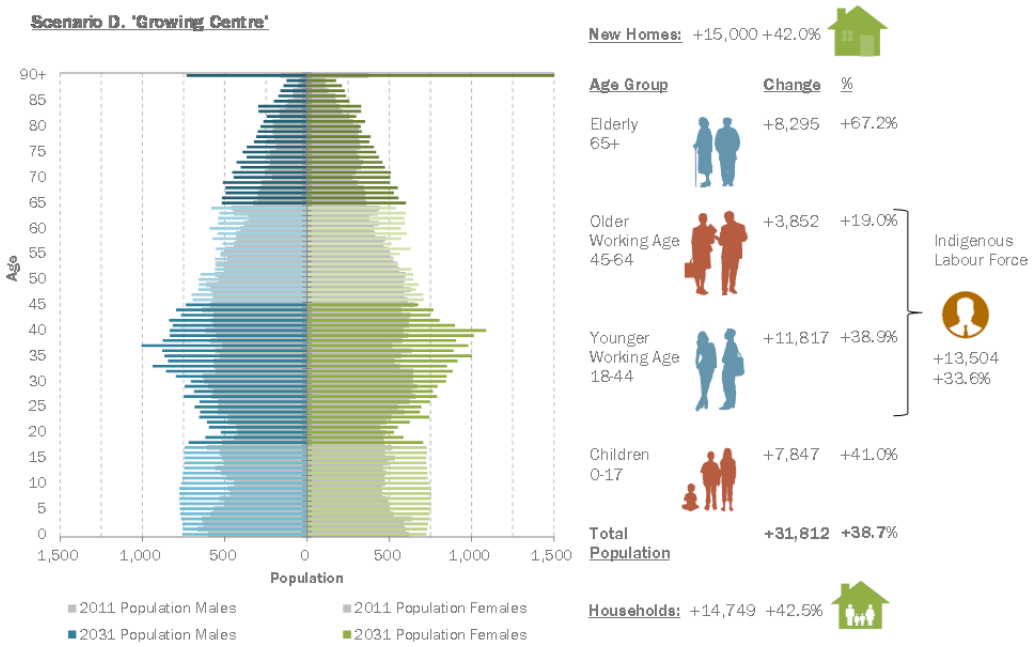
Source: NLP Analysis Using POPGROUP

5.11 Figure 5.3 summarises the necessary housing growth and associated demographic change underpinning a growth scenario which would support and underpin the delivery of 403 jobs per annum. As set out this scenario would necessitate (taking account of commuting rates) a 23% increase in the indigenous labour force. When taking into account wider changes in the population a total population growth of almost 23,000 people would be needed to correlate with the jobs growth target. This would raise the town's population to 108,158 by 2031. Over 10,000 of this increase would be accounted for through a 10.4% increase in the number of older working age people (45-64 years) and a 27.3% increase in the number of younger working age people (18-44 years). Similarly, the number of children and young people (0-17 years) would increase by 25.5%. Household growth associated with the population would total almost 11,300 necessitating almost 11,500 dwellings, or 575 each year, to be delivered.

Scenario D: 'Growing Centre'

5.12 The deposit draft and final adopted Regional Strategy (RS) set out strategies for the growth of Harlow of 14,000 and 16,000 homes respectively, over a 20 year period. This scenario, therefore, looks at the demographic and economic implications of delivering housing development within the middle of the Regional Strategy range; 15,000 dwellings or 750 dwellings per annum. Although the RS only extended to 2020, for the purposes of this scenario the homes are assumed to be delivered over the 20 year period 2011 to 2031.

Figure 5.4 Demographic Outcomes Summary for Scenario D



Source: NLP Analysis Using POPGROUP

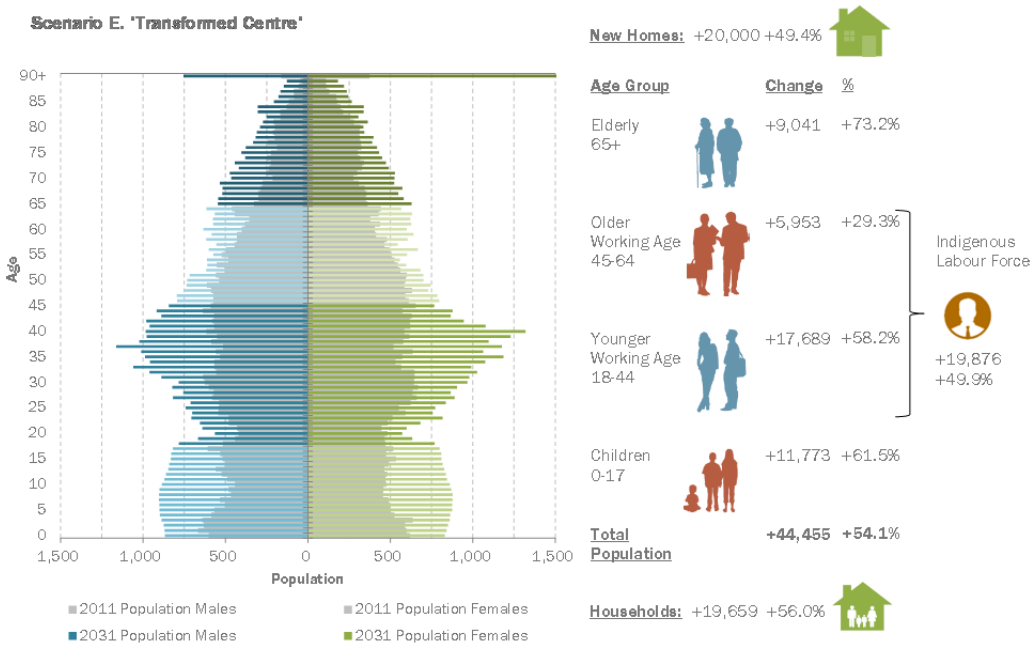
5.13 Representing a 42% increase in the dwelling stock for Harlow, Figure 5.4 shows that delivery of 750 new homes per year would lead to a population growth for Harlow town of over 31,800 people, leading to a settlement size of 114,000 people. Population growth would occur across all age groups, with particularly large growth in children and young people (a 41% increase) and younger working age population (a 38.9% increase). Combined, this would lead to an increase in the locally resident labour force (i.e. workers) of 13,500 people (33.6%), sufficient to support the generation of almost 12,100 jobs, exceeding that targeted within the Harlow Employment Land Review's Policy Scenario.

Scenario E: 'Transformed Centre'

5.14 This scenario is based upon delivering sufficient growth in Harlow to create a catalyst for the transformation of the town centre retail offer to a level commensurate with larger competing centres. A strategic retail benchmarking exercise looking at urban area population and the amount of town centre floorspace of competing centres to Harlow including Chelmsford, Watford and Cambridge identifies a clear correlation between the size of the population, their available disposable income to spend in shops and the amount and quality of retail and leisure uses within the town centre.

5.15 Using these centres for comparison, this assessment (included in Appendix 3) implies that an increase in population of circa 40,000 people could assist in Harlow achieving an increase in its retail offer to match these centres. As such it is considered that housing growth of circa 20,000 dwellings is a reasonable estimate to test a 'transformed centre' outcome.

Figure 5.5 Demographic Outcomes Summary for Scenario E



Source: NLP Analysis Using POPGROUP

5.16 As illustrated in Figure 5.5, delivery of 20,000 new dwellings would be a 50% increase on the current number of homes in Harlow. Growth of 44,500 people and 19,700 households would lead to a total town population of 132,051 people equivalent to a present day Cambridge. This scenario would see a significant increase the scale of disposable income available across Harlow to support shops and services. Associated increases in the indigenous labour force would lead to 19,900 more workers resident in Harlow; almost a 50% increase. The number of children and young people in this scenario would increase by 61.5%. The potential jobs growth supported by this expanded work force could be upwards of 900 per annum, subject to Harlow attracting

businesses and delivering workspaces for this expanded labour force to work in.

Summary of Scenarios

5.17 The scenarios outlined above present a range of different demographic, economic and housing outcomes based on their principle drivers. These are summarised in Table 5.1.

Table 5.1 Summary of Scenario Demographic Outcomes (2011-2031)

Scenario:	Scenario A: 'Do Nothing More'	Scenario B: Meeting Development Needs	Scenario C: Jobs Led Scenario	Scenario D: Growing Centre	Scenario E: Transformed Centre
Population Change	+4,022	+12,908	+22,997	+31,812	+44,455
of which Natural Change	+12,341	+14,155	+15,582	+18,155	+20,917
of which Net Migration	-8,319	-1,246	+7,415	+13,656	+23,538
Household Change	+3,853	+7,356	+11,295	+14,749	+19,659
Dwelling Change	+3,920	+7,483	+11,490	+15,000	+20,000
Dwellings p.a.	***+196***	***+374***	***+575***	***+750***	***+1,000***
Labour Force	-575	+3,938	+9,230	+13,504	+19,876
Jobs	-1,207	+3,057	+8,060	+12,099	+18,121
Jobs per annum	*-60*	*+153*	*+403*	*+605*	*+906*

Source: NLP Analysis using POPGROUP

5.18 The scenarios show that the demographic outcomes for Harlow vary substantially depending on the amount of growth accommodated in the town. It is clear that a level of housing delivery commensurate with the 'do nothing more' scenario, which only delivers existing development commitments, would likely have negative structural economic impacts for Harlow. This is likely to return the town to the stagnation and decline experienced in the 1970s and 80s. The constrained housing supply would force many newly forming households out of Harlow and limit in-migration. In turn, economically active people are more likely to move out of Harlow for employment and housing opportunities and others may simply retire as the population ages. This would lead to the labour force decreasing by 575 people and, at existing relative commuting rates, this could place as many as 60 jobs per annum at risk as businesses contract or seek to move in order to access labour supply and premises.

5.19 At the other end of the scale, the most ambitious scenario could increase the population of Harlow by circa 45,000 people. This would see a substantial increase in all groups but particularly children and young people and those of working age. Such a scale of growth would have the strongest labour force and job growth, with the delivery of 1,000 dwellings per annum increasing the

indigenous labour force of Harlow by nearly 20,000 people. This level of housing delivery and associated population growth gives an approximate indication of the critical mass which could act as a catalyst to fundamentally transform Harlow's town centre.

5.20 Under Scenario C (11,490 dwellings) the town does show a sizable increase in the number of younger people (0-17) and working age people (18-64). This would provide additional support for local services and facilitates as well as a significant increase in the labour force to support local businesses.

Key Outcomes of Different Scenarios

5.21 The key outcomes of the above scenarios have been further assessed against the following outcomes using the various metrics identified.

Jobs, Spending and Economic Outcomes

5.22 A range of economic benchmarks and assumptions have been used to estimate the employment, economic output, business growth and expenditure impacts associated with each scenario. A comprehensive list of all the assumptions used as part of this analysis is contained in Appendix 4.

5.23 As indicated in Table 5.3, the scale of these potential economic outcomes varies significantly by scenario, closely aligned with demographic and housing change implied by each. The 20 year employment change (2011 to 2031) ranges from a decline of 1,207 jobs under Scenario A to an increase of 18,121 jobs under Scenario E.

5.24 The level of economic output (measured by GVA) generated by Harlow's economy in 2031 under Scenario E (£3.0bn per annum) is 50% higher than that implied by scenario A (£2.0bn per annum). Scenario E results in the highest level of new business starts, equating to more than 180 additional start-ups per year than the picture of growth implied by Scenario A. Resident expenditure outcomes also vary significantly depending upon the scale of growth, ranging from £1.9bn per annum under Scenario A to £2.7bn per annum under Scenario E.

5.25 It should be noted that assumptions and benchmarks have in some cases been adjusted to reflect the differing economic growth aspirations of some scenarios. For example, the assumed rate of new business start-ups and survival has been increased for Scenario E ('Transformed Centre'), to reflect the higher than average start-up and survival rate in the retail sector at a national level. Similarly, the rate of business closures has been reduced under this scenario, echoing the wider trend in the retail sector.

Table 5.2 Summary of Jobs, Spending & Economic Outcomes by 2031

	Scenario A.	Scenario B.	Scenario C.	Scenario D.	Scenario E.
Jobs	-1,207	+3,057	+8,060	+12,099	+18,121
GVA (p.a.)	£2.0bn	£2.2bn	£2.5bn	£2.7bn	£3.0bn
Business Starts (p.a.)	300	330	473	395	483
Spending (p.a.)	£1.9bn	£2.1bn	£2.3bn	£2.5bn	£2.7bn

Source: NLP Analysis (See Appendix 5)

5.26 It is clear from Table 5.2 that the greater the level of the growth the more significant the economic outcomes delivered for Harlow District. In terms of supporting regeneration, greater economic growth, higher GVA and increased household spending within the economy will support both wider economic effects as well as help underpin the viability of other services and jobs through supply chain and spending effects. Some indicators, such as GVA, have the potential to increase exponentially as productivity and output is pushed up by higher value activities (in which Harlow has particular sector strengths) such as pharmaceuticals, R&D and advanced manufacturing/engineering, not constrained by job growth. GVA projections for Harlow indicate that the town's economic output is expected to increase significantly over the next 20 years, both through job growth under Scenarios B to E, but also with average GVA per worker increasing by around 40% to 2031 under all scenarios.

5.27 In terms of delivering the economic potential of Harlow, the ELR defines this as c.8,050 jobs over the plan period, and as such a growth scenario equivalent to Scenario C or more would help to ensure this economic potential is met.

Public Finances

5.28 A further key benefit of growth is the impact upon public finances. Looking at the range of different income streams to the Council, and assuming current prices, the difference between Scenario A and Scenario E in terms of the Council Tax base for the town would be £20m per annum by 2031. New Homes Bonus payments would be £33.2m over the plan period at the lowest level of growth, but almost £170m at the highest level of growth under Scenario E. Projected levels of business rates receipts in Harlow follow a similar pattern, with scenario E generating £22.1m more business rate revenue per annum than scenario A. Adopting current rates of section 106 contributions[19], between £46.8m and £239.3m could be received through developments, depending on the scale of growth.

5.29 Additional income to the Council will mean that the Council has a better financial base to draw upon in order to support and deliver regeneration objections. As set out in Table 5.3 factors such as increases in the Council Tax base, the New Homes Bonus, Business Rates and CIL or s106 receipts will all contribute greater amounts to Council budgets at higher levels of growth.

[19] As summarised in the London Commuter Belt Sub-region Strategic Housing Market Analysis: Viability Assessment - 2010 (Appendix 6). This is based upon current prices and published of s106 tariffs. This could change following more detailed CIL work undertaken by Harlow District Council.

Table 5.3 Summary of Public Finances Outcomes by 2031

	Scenario A.	Scenario B.	Scenario C.	Scenario D.	Scenario E.
Council Tax Base (p.a.)	£49.2m	£53.6m	£58.6m	£62.9m	£69.1m
New Homes Bonus	£33.2m	£63.4m	£97.4m	£127.2m	£169.5m
Business Rates (p.a.)	£42.7m	£47.6m	£53.3m	£57.9m	£64.8m
CIL/s106 Receipts	£46.8m	£89.5m	£137.5m	£179.4m	£239.3m

Source: NLP Analysis (See Appendix 5)

Community and Environment

5.30 The majority of other impacts of growth will fall under the broad headings of social and environmental impacts and include the extent to which growth will either make best use of, or tip over into generating a requirement for, new or improved infrastructure. Table 5.4 shows the community and environmental outcomes of each scenario, in terms of the requirements associated with growth.

Table 5.4 Summary of Community, Infrastructure & Environment Outcomes by 2031

	Scenario A.	Scenario B.	Scenario C.	Scenario D.	Scenario E.
New Primary School Places	0	+366	+1,566	+2,858	+4,600
New Secondary School Places	0	+152	+659	+1,476	+2,384
New GP Needs	0	0	1	6	13
Open Space Needs	11.6 ha	22.1 ha	27.7 ha	44.2 ha	59.0 ha
Land Take of New Devt.	196 ha	374 ha	575 ha	750 ha	1,000 ha
Central funding required for J7a (£45m option / £200m option)	£39.7m / £194.7m	£34.8m / £189.8m	£29.4m / £184.4m	£24.6m / £179.6m	£17.9m / £172.9m

Source: NLP analysis (See Appendix 5)

5.31 In terms of schools capacity, delivery of Scenario A would not place any additional capacity pressures upon schools, and would simply utilise existing capacity. Whilst under Scenario A, primary and secondary pupil rolls would not significantly fall over the period to 2031, the overall population of children (0-17) would reduce, particularly characterised by fewer nursery age children. As such, under this scenario there is risk that some schools face closure in the long term as the number of children in the town declines. At the other end of the scale growth above Scenario B would require new provision of school places, whilst Scenario E would increase primary school needs by 4,600 places (circa 10 new primary schools at an average size of 460 pupils) and secondary school needs by almost 2,400 places (or circa 2 new secondary schools).

5.32 Even small levels of growth would continue to support the case for retaining higher order health services in the town, including the Hospital and A&E facilities, with evidence from comparator locations demonstrating a strong correlation that settlements of Harlow's current size or greater tend to warrant a hospital with accident and emergency. Surplus GP provision against

benchmark standards would support growth up to Scenario C, thereafter necessitating new provision.

5.33 More widely community facilities and services rely upon continued use to ensure their viability. Whether a library, community centre, sports centre, public house or post office, they each need enough people to use them in order to survive. In terms of demand for such services from the population, a greater critical mass of people will better support effective and efficient delivery of such facilities and services ensuring they are well utilised. The inference of Scenario A, where there is a significant reduction in younger people, could adversely impact the viability of services that rely on such age groups. Simply extrapolated, greater population will mean greater use of community facilities and therefore better viability and greater impetus to improve facilities or provide new ones.

5.34 In terms of environmental outcomes, the greater the level of growth, the greater the necessary amount of land that would need to be built upon. The extent of Harlow Town currently covers c.2,240 hectares and has a gross density (i.e. including all uses across the town, such as retail, leisure, open space) of 16 dwellings per hectare. If it is assumed new development will be at a marginally increased gross density of 20 dwellings per hectare, the land take associated with growth would total between 196ha for Scenario A, equivalent to a 9% increase in Harlow's physical size, whilst Scenario E would be associated with a land take of 1,000 hectares, equivalent to a 45% increase in Harlow's physical size. Notwithstanding these environmental implications, there would be benefits, with formal open space provided as part of growth delivering up to 59ha of new parks, playing pitches, neighbourhood play areas, allotments and recreation areas.

5.35 The funding solution for the delivery of new Junction 7a motorway junction on the M11 is dependent upon a wide range of variables, including the extent to which central funding can be levied and the extent to which either a developer or Harlow Council themselves can fund a portion of the scheme. The two options, a £45m junction and link-road option and a £200m junction and northern by-pass option, would both appear to be reliant upon levying central funding, however, as set out in Table 4.1 the gap in funding decreases significantly at higher levels of growth assuming that c.50% of current transport related planning obligations are pooled for delivery of the junction.

Benchmarking Impacts and Benefits

5.36 The impacts and benefits of growth have been assessed across a range of 'themes' and 'receptors'.

5.37 Firstly, a series of appropriate 'benchmarks' and 'tipping points' have been identified. Benchmarks are characteristics, factors or standards of provision for any particular themes that have been identified using either published evidence or through comparison with other similar settlements (for example how many GP's are required per 1,000 population). Tipping points are identified

thresholds of settlement size, or levels of growth, at which there becomes either a need, demand or a mechanism for delivery of a certain type of benefit (for example what size of town would successfully support the on-going need for an Accident and Emergency department). This is also referred to as the 'critical mass' to support a certain service, facility or piece of infrastructure.

5.38 Once these benchmarks and tipping points have been identified, these are applied to the key demographic, economic and development outcomes of each scenario, as set out in Scenarios A to E previously. This allows consideration of the extent to which each scenario would generate impacts and deliver benefits, as well as considering how much growth would be needed in order to meet specific objectives.

Identifying Benchmarks and Tipping Points

Comparator Towns

5.39 In identifying and considering the benefits that could accrue for the growth of Harlow, a range of comparator settlements have been looked at to identify at what size of settlement could different types of benefit be secured. In particular these comparator towns include other New Towns and settlements of comparable distance from London and comparable scale to that which Harlow could become in the future.

5.40 In looking at these comparator towns, factors linked to the key objectives for Harlow set out in Table 4.3 have been identified in order to assess what Harlow could realistically expect if population increased to a comparable scale. Such factors looked at include: how many motorway junctions they have; what secondary healthcare services they offer; what higher and further education facilities they have; and how many department stores are located within their town centre.

5.41 A summary of these comparator towns and their key metrics is illustrated in Table 5.5.

Table 5.5 Comparison of Harlow with Benchmark Towns across range of Themes and Receptors

Theme:	**Population**		**Road Network**	**Health**	**Education**	**Town Centre / Evening Economy**				**Jobs, Spending & Local Economic Growth**					
Receptor:	*Population*		*Motorway Junction*	*Hospital*	*Further/Higher Education*	*Department Anchors*	*Retail Ranking*	*Cinema Screens*	*Professional Theatre*	*Employment*	*GVA Per Worker*	*Knowledge Based Businesses*	*Businesses*		*Skills Base (NVQ 4 + above)*
Town/City	**Est Town Pop. 2011**	**District Pop. Growth 2001-11**	**No.**	**Type**	**Offer**	**No. (out of 5 leading department stores)**	**National Rank**	**No. (incl. under const)**	**Yes/No**	**Growth 2001-11 (%)**	**£ (2013)**	**% (2010)**	**Births per 10,000 pop. (2010)**	**1 year business survival rate (2010)**	**% of 16+ Population**
Milton Keynes	226,000	17.5%	2	Yes, with A&E	University Satellite (HE), College (FE)	5	30	25 (36)	Yes	8.6%	£40,339	28.9%	54.4	88.8%	28.2%
Northampton	212,000	9.3%	3	Yes, with A&E	University (HE), College (FE)	4	43	21	Yes	7.1%	£39,149	19.5%	40.0	87.6%	23.7%
Luton	204,000	9.5%	2	Yes, with A&E	University (HE), College (FE)	3	82	11	Yes	2.6%	£44,601	18.9%	35.4	85.2%	22.3%
Peterborough	184,000	17.2%	2	Yes, with A&E	University Satellite (HE), College (FE)	3	43	13	Yes	8.0%	£37,870	21.1%	35.2	88.9%	20.2%
Basildon	175,000	5.5%	0	Yes, with A&E	College (FE)	3	79	12 (20)	Yes	14.0%	£37,123	19.8%	47.7	87.9%	18.6%
Reading	155,000	7.3%	3	Yes, with A&E	University (HE), College (FE)	5	12	25	Yes	-10.5%	£49,186	31.5%	58.0	89.5%	34.8%
Oxford	150,000	10.8%	2.5	Yes, with A&E	University (HE), College (FE)	4	45	20	Yes	21.3%	£41,560	23.5%	35.0	83.7%	42.6%
Cambridge	123,000	11.6%	3.5	Yes, with A&E	University (HE), College (FE)	4	74	20	Yes	0.0%	£40,549	30.0%	42.8	87.8%	47.3%
Welwyn Hatfield	111,000	13.4%	4	Yes, with A&E	University (HE), College (FE)	3	163	9	Yes	17.0%	£44,163	26.7%	50.6	87.6%	30.0%
Crawley	107,000	6.7%	2	Yes, No A&E	College (FE)	3	56	16	Yes	0.3%	£46,383	22.9%	36.4	86.5%	21.5%
Basingstoke	105,000	10.3%	2	Yes, with A&E	College (FE)	3	76	20	Yes	10.2%	£37,123	31.4%	47.7	88.5%	30.5%
Watford	91,000	12.8%	3.5	Yes, with A&E	College (FE)	3	31	8	Yes	-11.7%	£41,660	26.3%	57.9	67.6%	32.2%
Stevenage	84,000	5.5%	2	Yes, with A&E	College (FE)	2	103	16	Yes	8.6%	£41,511	24.5%	31.5	92.2%	22.1%
Harlow	82,000	4.3%	1	Yes, with A&E	University Satellite (HE), College (FE)	2	218	6 (12)	Yes	-6.1%	£38,487	16.9%	34.7	91.4%	17.6%

Source: NLP Analysis (See Appendix 4)

Key Themes

5.42 Considering these benchmarks and the baseline position in Harlow, tipping points have been identified for each of the key themes and regeneration objectives within Harlow. A full review of these is included in Appendix 4 and 5 and summarised as follows.

Town Centre Retail and Leisure Offer

5.43 The analysis suggests that to deliver comprehensive regeneration of the town centre, akin to that previously proposed in as part of the Harlow Town Centre North scheme, **an increase in retail expenditure commensurate to a population increase of 45,000 people would be required** (see Appendix 3). This would place the total population of Harlow to 130,000 people, meaning the town would be similar in size to Cambridge or Chelmsford, both regional centres in terms of their retail offer. This would require a growth scenario similar to Scenario E.

5.44 Short of this level of growth, the comparator towns show that settlements with populations between 110,000 and 115,000 people could encourage investment in the town centre and support the case for new retailers to locate in the town, equivalent to Scenario D. Towns of this size (110,000 people) generally have three of the main department store anchors, whereas Harlow currently has only two (Marks & Spencer and BHS), suggesting there is a tipping point around this size of settlement that encourages additional retailers to locate within a town centre. By way of example Debenhams is not currently represented in Harlow, but does have presence in an arc around the London commuter belt with stores in Hemel Hempstead, Luton, Welwyn Garden City, Chelmsford and Basildon. This leaves a spatial gap in that particular retailer's presence on the M11 corridor. It would not be unreasonable to assume that a 'growing centre' of Harlow might have a sufficient customer base of the right socio-economic characteristics to be able to attract such a retailer. Growth beyond Scenario D could help support a transformed retail centre, underpinning the investment rationale for a developer to seek to comprehensively regenerate the town centre to provide a retail and evening economy destination.

5.45 Looking at the evening economy, Harlow already sustains a theatre (as do comparator towns) and currently has the 6 screen Cineworld at the Queensgate Centre Retail Park, with a further 6 screen Cineworld due to open in the Town Centre by 2014. These would be further underpinned by population growth generating more trips for evening economy uses in Harlow town centre. A growing town centre supported by a population of around 110,000 (equivalent to Scenario C) would similarly appear to support a larger cinema offer as well as a greater range of restaurants and bars for the town.

Road Infrastructure

5.46 Looking particularly at the objective to achieve better access to the M11 motorway through a new Junction 7a, in order to relieve existing traffic through the town, there are currently two identified solutions. A new Junction 7a to the North East of Harlow along with a link road joining it to the B183 is estimated to cost c.£45m whilst a more comprehensive scheme delivering a northern by-pass to Harlow linking a new motorway junction to the A414 at Eastwick Road/Fifth Avenue is estimated to cost c.£200m[20]. Funding for this could come forward through an, as yet, undefined combination of planning obligations and central funding to make up any gap. Harlow Council are yet to define its approach to CIL and the scale of any potential funding gap, nor what funding may be available. However, using some broad metrics the scale of funding hurdle to be overcome can be considered. If it is assumed 50% of funding is to be raised through planning obligations linked to development (i.e. £22.5m for the smaller scheme), and that Essex County Council's required transport contributions continue (£2,714 per dwelling) with c.50% of this being pooled within Harlow to deliver the scheme (£1,357 per dwelling) **over 16,500 new dwellings would need to be delivered to ensure sufficient funding.**[21] This level of growth is equivalent to that set out in Scenario D. This is further supported by benchmarking against other towns, with Harlow the only comparator town, (excepting Basildon which is off of the motorway network), which only benefits from a single motorway junction.

Jobs Growth

5.47 Meeting potential job growth will be dependent on a range of factors flowing from attracting investment, providing opportunities for business growth and, importantly, ensuring there is a sufficient labour force of suitably skilled workers to support the employment growth in Harlow. The Harlow Employment Land Review (January 2013) draws upon forecast job growth from the East of England Forecasting Model (EEFM) and combines it with aspirational policy objectives to deliver economic growth in Harlow to arrive at a policy scenario which seeks to deliver 8,050 new jobs over the period to 2031. This can be utilised as a benchmark for 'ambient' job growth for Harlow in order to consider how much housing and population growth would be necessary to align with these economic priorities. This concludes that to achieve ambient jobs growth approximately 11,500 dwellings would be required to balance this. This is akin to Scenario C.

[20] The costs presented are high level estimates for the purpose of this study and based upon historic work and forecast costs by Essex County Council (ECC). Further, more detailed, scoping work may indicate different costs and as such these are subject to change. NLP understand ECC are undertaking further work in this regard during 2013.

[21] This is a broad estimate based on the stated assumptions. It should be reviewed in the context of any future evidence underpinning CIL for Harlow Council, including the viability of potential contributions and the degree to which there may be a greater proportion of central funding available (e.g. through DfT or Highways Agency funding, or other sources).

Meeting Housing Needs

5.48 This comprises meeting a range of potential indicators of housing required within Harlow (and excluding meeting unmet needs associated with neighbouring authorities, which may be a factor of any alternative strategy). As set out by the EPOA demographic forecasts, a scale of housing delivery totalling almost 7,500 dwellings over the period 2011 to 2031 would meet needs associated projected demographic change within Harlow District. In addition to meeting the needs from population it is important to consider how many people cannot afford to access market housing, how many people are currently on the housing waiting list and how much affordable housing (and housing overall) would need to be delivered in order to address this. In this regard, the London Commuter Belt (East Sub-Region) SHMA Update (2013) identified affordable housing needs between 2011 and 2033 of 3,600 affordable homes (163 dwellings per annum). The need for 3,600 affordable dwellings over the period 2011 to 2031 would mean, if delivered at 30% of total housing delivery, as per Harlow's existing policies, a total housing figure of 12,500 dwellings would be required. However, given that the deliverability of affordable housing on site varies substantially depending on other contributions and the constraints of the site it is anticipated that the total number of housing would need to be at least 13,000 dwellings to minimise risks further. This is consistent with the Viability Assessment[22] for the Harlow area which concluded that on-site delivery is likely to be around 15-20% given expected values in Harlow. This provides a broad benchmark for how much housing might need to be delivered to meet affordable housing needs in Harlow and deliver a significantly improved dwelling stock to address both future needs and the backlog of existing housing needs. This level of development is equivalent to at least that set out in Scenario C.

Delivering Skills Support and Higher Education

5.49 This is linked both to the needs and tie-ins with industry but also with the scale of the town and the perception of Harlow as a place which can attract and retain skilled people. In this respect Harlow already 'punches above its weight' in respect of attracting the University Centre Harlow satellite campus of Anglia Ruskin University. Currently this only offers a small selection of higher education courses, but population and business growth within Harlow, particularly where there is alignment with courses to match the Information Technology, Advanced Manufacturing and Health sectors that are the focus of the Harlow Enterprise Zone. Looking at comparator towns, the next largest which support a higher education function are Welwyn Hatfield, Cambridge, Oxford and Reading, suggesting a critical mass of between 111,000 to 155,000 population is required to sustain a wider higher education function. Even though Oxford and Cambridge are clearly special cases and would not necessarily be comparable to the offer Harlow might seek to provide, this does suggest a settlement scale within this range could support an expansion in higher education, whilst also supporting a wider range of skills support and spin-offs from supporting the delivery of industry within Harlow (as set out under

[22] Viability Assessment For London Commuter Belt (East)/M11 Sub Region (Levvel, 2010)

the job growth theme). At the lower end, this is broadly comparative to the scale of Harlow that would be seen under growth commensurate to Scenario D (a projected population of around 115,000 people), which would continue to underpin the development of University Centre Harlow, particularly given the increased support to achieving economic and employment objectives at this scale of growth. Beyond this a level of growth equivalent to that set out in Scenario E would be required.

Existing School Provision

5.50 Essex County Council[23] identify that there is currently a surplus of 857 primary schools places within the District (10.8%). There is also currently capacity within secondary schools for 762 pupil places within the District (13.1%). Although it is desirable to maintain some level of surplus capacity in school provision, this illustrates that existing provision could accommodate some growth in housing, but that there will be a tipping point. Any population growth greater than c.11,000 people would result in existing schools capacity being exceeded (both at Primary and Secondary stages) meaning a tipping point for needing new/expanded schools to be built. Conversely, if pupil rolls fell beyond current levels, it would mean risks around school closures, a position Harlow found itself during the population stagnation in the 1980's when Latton Bush and Nettleswell Secondary Schools closed. Looking at projected changes in likely pupil numbers, changes in the age structure of the population would mean that any population growth lower than c.3,000 people would result in pupil rolls falling and would risk schools closures/rationalisation. Schools would risk closure under Scenario A (given forecast reduction in 0-17 years). However, more school places would be required under Scenario B.

Existing Health Provision

5.51 The current position in Harlow is also relatively good, particularly in terms of the range of services and their existing capacity. The majority of the original health centres within the neighbourhood centres have been rebuilt, and currently there are a total of 62 GP's within the 10 surgeries within the District. These have a total patient list of 90,400 people. Using a benchmark standard of provision, the current 62 GP's could theoretically support a population in Harlow Town of 103,000 before additional provision would be necessary (slightly short of meeting the needs of Scenario C). In addition Harlow currently sustains the Princess Alexandra Hospital which serves a much wider catchment than just Harlow and has a 24 hour accident and emergency (A&E). Evidence from comparator towns, as illustrated in Table 5.5 shows there is a strong correlation that settlements of Harlow's current size or greater tend to warrant a hospital with accident and emergency, suggesting that, providing Harlow's population does not decline, it will be able to sustain its existing health services. Harlow's A&E services also serve a wider geographic catchment, covering the area between other A&E facilities at Welwyn Garden City and Chelmsford, which further supports the conclusion that, unless there is

[23] Commissioning School Places in Essex 2012/17 (November 2012), Essex County Council

population decline, it will remain viable and necessary to sustain provision within the town.

Other

5.52 Protection of Harlow's historic masterplan form, including the '**Green Wedges**' is a matter of the form and spatial distribution of growth, and could, theoretically be achieved at any scale of growth, provided that the town developed in a way sympathetic to that legacy. Similarly, there does not appear to be a particular point of critical mass associated with delivering the **priority estates regeneration programme**, which is continuing irrespective of wider growth plans. Notwithstanding this, what is apparent is that the fiscal implications of higher levels of growth could be used in part to cross fund estate renewal and regeneration, for example through recycling New Homes Bonus, which are funding options open to Harlow District Council at higher levels of growth.

6.0 Overview of Harlow's Prospects

6.1 This section combines the benchmarks identified with the outcomes of the different scenarios and sets these against the objectives and priorities in Harlow to consider the extent to which varying levels of growth can deliver different objectives.

Delivering Objectives

6.2 The extent to which different levels of growth could deliver the strategic objectives which Harlow has defined is dependent on a wide range of variables, not all of which it is possible to capture within this study as they are dependent upon outside influences (e.g. investment decisions by businesses, government or other agencies). Notwithstanding this the analysis undertaken does provide a picture on the likely future prospects for Harlow under different development scenarios. Moreover, this enables conclusions to be drawn on the potential for certain objectives to be delivered.

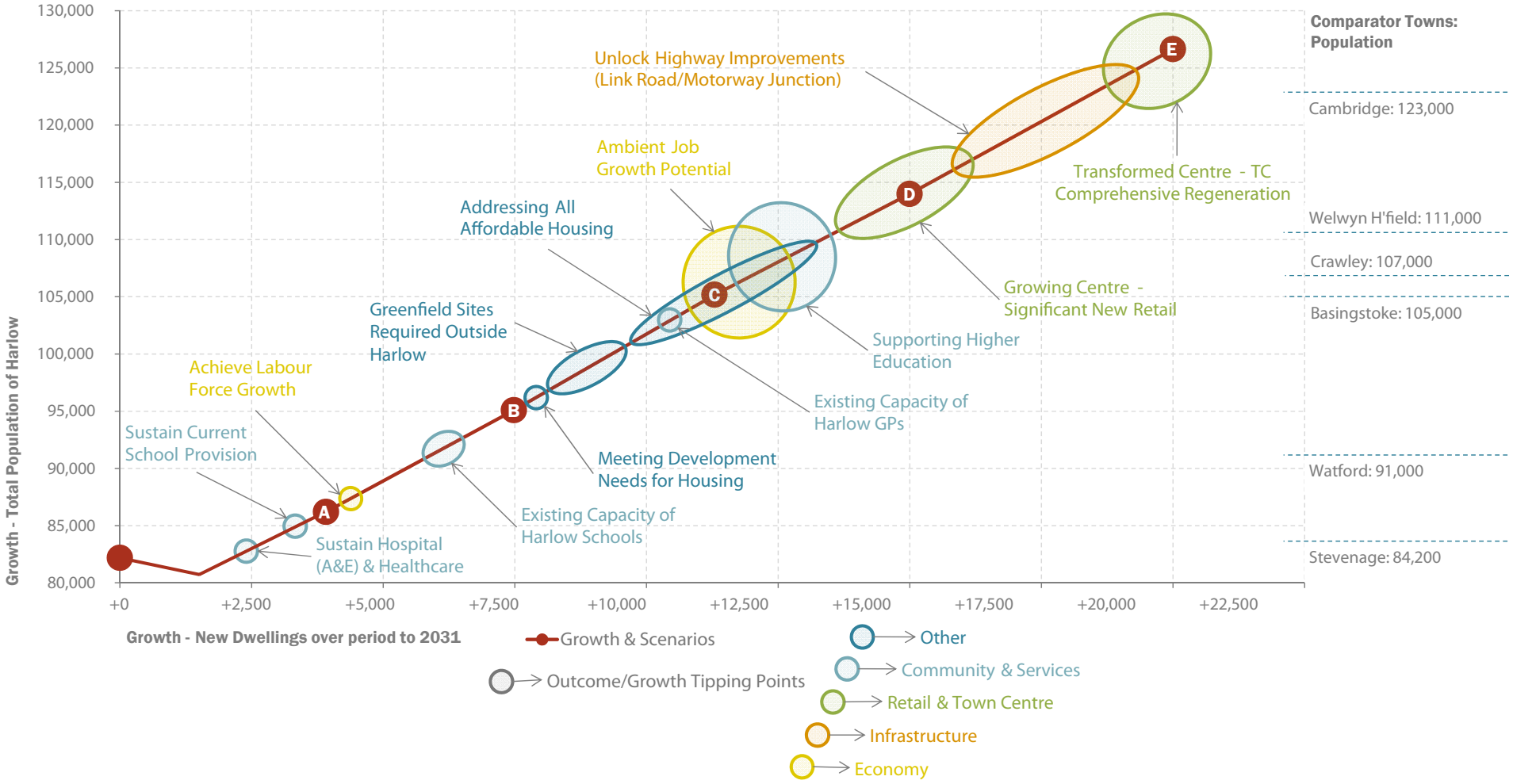
6.3 Figure 6.1 plots the benchmarks and tipping points for different themes along a graph showing potential population and housing growth for Harlow. It illustrates at what point along the potential future growth trajectory for Harlow different outcomes and benefits are likely to be triggered and linked to that where it is most likely that objectives could be met.

6.4 The analysis shows that even to just sustain the provision of existing services within the town there will need to be at least some growth. A 'do nothing' approach does not mean that Harlow will stand still but means the town faces the real prospect of decline with rationalisation in existing services and potential closures, as experienced during the 1970's and 80's. Growth in excess of Scenario A would ensure all existing services are underpinned in the period up to 2031.

6.5 Growth beyond Scenario A would involve expanding Harlow, with more houses built and a greater critical mass of population. Scenario B would achieve some labour force and job growth, whilst Scenario C could meet the ambient economic potential of the town, being that job growth which Harlow could achieve from maximising its existing economic base. Greater levels of economic growth may even be achievable at a higher growth trajectory if provided alongside an appropriate strategy for economic development.

6.6 At Scenario D, Harlow would be a town larger than the Welwyn Hatfield area and could sustain a substantially improved retail and leisure offer within the town centre whilst also supporting an enhanced higher education offer. At growth commensurate to Scenario E, Harlow would be a town larger than present day Cambridge and could potentially generate funds to deliver holistic improvements to the road network with a new motorway junction, as well as transform create a critical mass of population and spending to support comprehensive regenerations of the town centre. This is shown in Figure 6.1.

Figure 6.1 Tipping Points and Critical Mass for Delivering Objectives



Source: NLP analysis (See Appendix 4)

Meeting Harlow's Strategic Objectives

6.7 This section looks at the extent to which the growth scenarios can achieve and deliver the objectives of Harlow. Table 6.1 uses a 'traffic light' system to illustrate the outcomes that a scenario could deliver. The traffic light system is adopted as follows:

- Red representing scenario for growth that would be unlikely to be able to support the delivery of the objective;
- Orange representing a scenario for growth that may partly support, or begin to support, the delivery of the objective; and
- Green representing a scenario for growth that would likely support the delivery of the objective.

Table 6.1 Traffic Lighting Deliverability of Regeneration Outcomes at Different Levels of Growth

Scenario/Dwelling Growth: / Objective/Infrastructure:	Scenario A. +3,920	Scenario B. +7,483	Scenario C. +11,490	Scenario D. +15,000	Scenario E. +20,000
Delivery of **new M11 Junction** (7a) alongside link-road or northern by-pass					
Priority **Estates Regeneration** & improving neighbourhood centres					
More and better quality **housing** stock (meeting housing needs)					
An excellent place to do business, with more **jobs** and a thriving economy					
Skills support & delivery, including further education (FE) institutions					
Enhanced and transformed **town centre** with new retail & leisure offer					
Supporting and underpinning viability of existing **facilities and services**					
Protection & enhancement of **Green Wedges**. Provision of open spaces					

Source: NLP Analysis

6.8 It is clear that at greater levels of growth, greater benefits can accumulate, helping to better deliver against the objectives. Notwithstanding this, the delivery of the above benefits will also need to be considered against any potential negative impacts of the growth associated. For example, there may be particular environmental capacity or sustainability factors for which higher levels of growth may be detrimental. This study has not sought to quantify

these, focussing upon the benefits that can be accrued, and objectives that can be delivered.

Scenario Commentary

6.9 The analysis of demographic change, alongside the metric and comparator town analysis of what change could mean for different themes in Harlow, provides a comprehensive overview of the implications and outcomes of each scenario. Bringing together this analysis provides an understanding of what Harlow will be like under each different scenario of growth. The below commentary provides an overview of what each scenario would mean for the town, with benefits and outcomes achieved in a cumulative manner.

Scenario A

6.10 'Doing nothing more' beyond building out the 3,920 dwellings already in the pipeline would mean Harlow would not be substantially different from the present day town. Limited growth in population will mean the vitality and viability of existing community facilities and services in the town could be threatened, including schools and educational facilities if in the future enrolments fall. Harlow's current economy would also face decline, as an ageing population, combined with migration out of Harlow due to households not being able to access housing, would mean fewer workers in the town to support businesses recruiting.

Scenario B

6.11 'Meeting development needs' by building 7,483 dwellings by 2031 would mean that all households that will require a house in Harlow will be able to access one, helping to maintain relative affordability. Growth in the labour force alongside business growth would mean Harlow could achieve a moderate level of job growth. Existing services and facilities, such as schools, health services, libraries, leisure destinations and sports facilities, wouldn't be under threat of closure and, in some cases, increased provision may be needed. However, in other aspects Harlow would remain unchanged; the town still would not be of a sufficient size to create a catalyst for widespread investment in regenerating the town centre and growth wouldn't be sufficient to trigger delivery of important 'big ticket' infrastructure, such as a new motorway junction.

Scenario C

6.12 Achieving the prospect of a 'jobs led' economic future for Harlow by delivering growth in the number of jobs totalling 8,060, would need to be supported by 11,490 additional dwellings by 2031, meeting all housing needs and allowing for an expanded local labour force. Alongside this, such a scale of growth could provide confidence for businesses to invest in the town, with the prospect of some new shops and services locating within the town to support a larger population. Both economic changes and a larger town could support an

enhanced higher education offer in the town, benefiting from links to industries provided through the delivery of the Enterprise Zone.

Scenario D

6.13 A 'growing centre' with new town centre retail provision, including new higher order shops, such as a new department store, would be a prospect of delivering 15,000 new homes by 2031. As well as achieving the benefits of Scenario C and laying the foundations for a boost in the economy of Harlow above potential ambient job growth, growth would help to underpin both the need case and financial case (with significant income underpinning public finances) for delivering significant improvements in transport, including road access to the M11, which may be achieved at this scale of growth. Harlow would also have a new network of facilities, including new schools, new community centres, new sports provision and new health facilities, in order to support both new development as well as improve services for existing residents.

Scenario E

6.14 A 'transformed centre' would be delivered under a scenario of delivering growth of 20,000 new homes by 2031. Creating a town of an equivalent size to present day Cambridge, growth in the population would greatly increase local spending, creating a catalyst for the comprehensive redevelopment and regeneration of the town centre, with new shops, restaurants and a vibrant evening economy. Ensuring delivery of a new junction to the M11, this would reduce congestion throughout the town and open up Harlow to more business. A statement of serious intention for the future of Harlow, such a higher growth scenario would provide the necessary confidence for investors and could, if achieved, deliver real changes in the perceptions of Harlow.

Summary of Findings

6.15 Drawing together the findings of the assessment it is clear that Harlow faces a number of regeneration issues that need to be addressed. It is further the case that delivering these objectives will require a step change in the town's approach to development and change. Of particular importance for securing the long term success of Harlow is pursuit of much higher levels of development than that has been achieved in recent years. Whilst the regeneration schemes implemented in recent years have provided localised benefits, the scale of development and change required to transform the town's fortunes are significantly greater than these can deliver. Whilst targeted renewal and redevelopment will need to feature strongly in any future strategy this will need to be coupled by much larger developments in and around the town if the town's fortunes are to be transformed and Harlow is able to capitalise on future economic growth opportunities.

Appropriate Scale of Growth

6.16 Drawing together the above analysis within Figure 6.1 and Table 6.1 it is considered that **Scenarios A and B would both fail to provide sufficient growth to deliver a wide number of key objectives for Harlow. The analysis in this study identifies that Scenarios E and D, and to a lesser extent Scenario C, would provide a critical mass to deliver a wide range of objectives for Harlow**. In purely regeneration and economic benefit terms, greater levels of growth would give Harlow the best possible platform to secure prosperity and tackle deprivation across the whole range of themes. However, whilst there is a range of key economic opportunities brought through growth, there are a range of barriers and trade-offs to delivering growth. The key economic opportunities and barriers are considered as follows.

Key Economic Opportunities

6.17 As noted earlier, Harlow's economy has seen relatively limited net job growth since the 1970s, particularly in the aftermath of the decline in the traditional manufacturing base that Harlow's economy was originally built upon. The combination of slowed growth and wider economic factors has contributed to average job growth in Harlow of just 150 jobs per annum over the 40 year period since 1971, compared with average job growth of 1,750 jobs per annum over the 20 year period prior to 1971.

6.18 Unless the town pursues a 'do nothing more' approach (which would result in an overall contraction in jobs), all of the other scenarios considered imply scope for higher levels of job creation than Harlow has achieved in the recent past (between 150-910 jobs p.a. depending on the scenario). The immediate economic opportunities associated with this include broadening the town's economic base by attracting new investment, developing its business base and generating clusters around identified growth sectors such as advanced manufacturing, health and allied industries led by medical technology, and ICT (linked to the Enterprise Zone).

6.19 In this context, the scenarios analysis indicates that higher levels of growth will result in greater prospects for delivering on Harlow's economic potential and sector strategy because they directly influence a number of factors relevant to business location and investment decisions, including (but not limited to):

- **Access to housing:** housing choice and quality of life to make the area more attractive to people to want to invest live and stay, in turn supporting higher value economic sectors;
- **Expanded business base:** the ability to sustain and support a larger business base, associated with higher levels of economic activity and resident expenditure;
- **Skills mix and profile:** increased population will broaden the town's skills base, and help sustain education provision at all levels that will help address the current skills deficit;

- **Infrastructure and service delivery:** leveraging new infrastructure delivery or sustaining new service provision that will increase the town's appeal to commercial occupiers and potentially reduce barriers to investment.

6.20 It is important to emphasise that higher levels of growth will not, automatically, guarantee Harlow's future success in economic development terms. This is highly relevant in the context of increased competition for business investment between locations. However, there is clear evidence that higher levels of growth will create the conditions in which the town's economic potential (and strategy ambition) is more likely to be realised and in doing so create a genuine opportunity for a 'step change' in the town's economic base.

Barriers & Trade-offs

6.21 There are a small number of potential barriers to delivering growth, however, each of these can be significant in their own right. Although there may be a high level of aspiration for the growth and development of Harlow, such barriers could include:

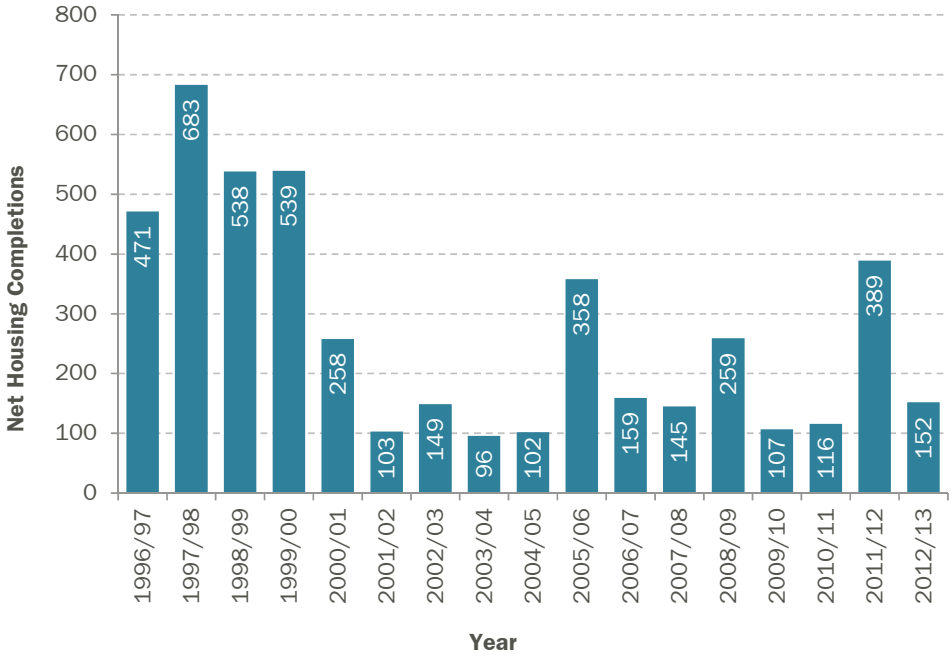
a **Infrastructure deficits:** If infrastructure cannot be secured from providers alongside growth this may present a key barrier to delivering growth. Any growth strategy will need to ensure that sufficient critical mass is delivered to most efficiently utilise existing infrastructure and effectively support the provision of new infrastructure. Such barriers will be identified through an Infrastructure Delivery Plan, which will also set out potential solutions for overcoming barriers, as well as costs and funding sources to identify whether the extent of any funding gaps;

b **Funding and delivery:** Funding is often a major barrier to delivering growth. Unlocking infrastructure or investment often faces high up-front costs, with the wider benefits of growth and further investment unable to be secured until this initial hurdle is overcome. In this regard there may be options for delivery mechanisms, including pooling funds from sources such as CIL, the New Homes Bonus and Business Rate retentions in order to deliver funding pots to unlock barriers, or alternatively to approach such barriers in a way that packages sites and schemes with infrastructure items in order to cross-fund improvements. However, if the scale of infrastructure cost is front loaded and significant, it is unlikely to be appropriate to expect it to be wholly funded by development. Rather, it is likely to need to be cash flowed, under-written and probably subsidised to at least some degree by the public sector. For example, although development in Cambridge has successfully funded much infrastructure, some of this had to be supported by a loan from Cambridgeshire Horizons, whilst the 'big ticket' infrastructure improvement (the A14) has been reliant on central Government.

Another issue that the Council will need to consider is the achievability of delivering higher levels of housing growth in and around the Harlow area. There is a clear requirement in the NPPF for plans to be positively prepared but also effective (i.e. deliverable over its period). Assuming a

20 year plan (2011 – 2031) the housing completions would need to be 1,000 dwellings per annum to deliver Scenario E. Scenario D would require 750 dwellings to be completed and Scenario C, 574 dwellings per annum. By way of comparison the following table details housing completions since 1996/7:

Figure 6.2 Housing Completions in Harlow 1996/97 to 2012/13



Source: Harlow District Council Monitoring Data

This shows that completions in Harlow have averaged 272 dwellings per annum in Harlow, ranging from a low of 96 in 2003/4 to a high of 684 in 1997/8. The latter corresponds with the building out of Church Langley.

Although these past completions are not necessarily an accurate proxy for future completions (given past policy controls and administrative boundary restrictions) it is important to recognise the significance in the difference between what has been completed and what would be expected under higher growth scenarios. If higher levels development is promoted in the Harlow area (beyond circa 7,000 dwellings) then the strategic policy framework will need to be different to that which has existed in this area in recent years. In this regard, any assessment on the deliverability of higher rates of growth needs to explore how far the relevant policy and delivery framework can be shaped to promote higher levels of development beyond what has been seen previously. There is evidence from other locations that a combination of measures (the right infrastructure, portfolio of land, balance of obligations etc) can together see significant boosts in housing supply in a location, so securing the optimum framework will be important if the highest rates of growth are to be achieved.

c **Land and ownership:** Where land is in private ownership, it may be beyond the Council's scope to ensure the delivery of growth.

Notwithstanding, both planning strategies and other powers can influence other parties to bring forward growth. Ensuring there is sufficient quantity, quality and breadth in land earmarked to support growth can help to incentivise the delivery of development and competition with land markets. Similarly, where the Council does have stake, partnership approaches or use of powers such as Compulsory Purchase Orders (CPO) may be options.

d **Perception:** Harlow may suffer from problems of perception, which can be as much of a barrier to growth and investment as other physical issues. The legacy of new towns means that many may be viewed with scepticism as a place to live or a place to invest. In this respect, delivering regeneration and changing attitudes will be an on-going barrier that can be overcome through ensuring that the problems Harlow faces are tackled holistically, and also by presenting a clear growth-orientated outlook, as has been the case with Milton Keynes, widely recognised as an economic success story.

6.22 As well as barriers, there are clear trade-offs in delivering higher levels of growth against lower levels of growth. Given the relatively limited land capacity within Harlow's current boundaries and a clear commitment to preserve the green wedges which is the alternative to Harlow growing outward, greater growth will necessitate greater development on greenfield sites beyond the town's current boundaries. This will bring with it a range of environmental implications which, whilst they may be able to be mitigated or may on balance be acceptable, will still represent a trade-off. This will need to be fully explored within a Strategic Environmental Assessment/Sustainability Appraisal of the reasonable alternatives for growth.

6.23 There may also be trade-offs between particular objectives, particularly where funding constraints mean that different schemes may be competing for the same funding source. In such cases if priority is given to the scheme which would generate most subsequent benefit (e.g. unlocks further growth) then this may generate future revenues to unlock a series of smaller spin-off benefits. Such trade-offs will need to be evaluated as and when they present themselves.

Capturing Benefits

6.24 One of the perceived weaknesses of so-called 'trickle down' is that the benefits of growth are not sufficiently captured by the communities in which growth takes place, with exogenous investment being attracted but not, for example, employing sufficient numbers of local people, creating local supply-chain benefits or helping to overcome wider barriers to investment. This challenge is not uncommon, particularly in the New Town context. For example, Stevenage contains a number of high value, knowledge-based employers, but many of the higher skilled jobs are not taken by residents of the town.[24] Similarly, there is widespread concern that the uplift in land value (i.e. betterment) associated

[24] Nathaniel Lichfield & Partners (2013) Stevenage Employment & Economy Baseline Study

with permission for (generally) residential development is not always allocated effectively between landowner, developer, and local community, often leading to funding gaps for infrastructure that might be essential or desirable.

6.25 A final factor, particularly relevant in Harlow (along with many New Towns and other settlements in the orbit of London) is the tight administrative boundary around the urban area, meaning that anything more than limited peripheral growth will need to take place at least in part, within contiguous local authority areas. At the same time, the economic costs and benefits may not be shared proportionately to the location of development. This creates practical challenges around decision making, as well as capturing and allocating the benefits and ensuring that infrastructure is delivered.

6.26 In practical terms, there are a number of issues to consider for Harlow depending on the level of growth it chooses to pursue:

a Because many of the benefits of growth are likely to be 'off-site' (i.e. in the form of funding for infrastructure improvements, estate regeneration, town centre regeneration, employment initiatives etc.), some form of pooling of uplift is likely to be required, and this is likely to have a cross boundary dimension (i.e. across the two or three authorities, depending on the spatial plan). Creating a Harlow 'growth fund' and working out how to invest it with working capital, creates delivery, governance, and accountability issues, but these are not insurmountable, as demonstrated by the approach of the Cambridge Sub-Region and other local growth areas.

b 'Big ticket' infrastructure and up-front costs will likely need some form of public sector funding support (be it in the form of grant or loan, e,g. prudential borrowing, LEP, Growing Places Fund) to address absolute funding gaps or cash flow issues that might otherwise make such schemes impossible to deliver. It will however, be necessary to ensure that revenue generated by the developments unlocked by infrastructure are able to deliver payback.

c It will therefore be necessary to look at how much and what kind of monetary gain it will be appropriate to 'capture' for the purposes of i) unlocking development; and ii) delivering regeneration in Harlow. For example, setting CIL at an appropriate level, looking at New Homes Bonus, business rates, and the like.

d In order to ensure that the growth fund is effective, it will need two interlinked strategies/investment plans:

i An Infrastructure delivery plan prioritising what is needed to unlock development and relating it to the developments that can best generate resources to support both infrastructure delivery and regeneration outcomes;

ii A Regeneration delivery plan that targets available resources on critical objectives, such as around employment, skills, estate renewal, town centre development. This might include, for example, investment in schools and training programmes to

maximise the prospects of local people accessing employment generated by development.

Tying this together will be an investment plan that assesses, and monitors the growth fund so that it has sufficient resources (taking account of expenditure on infrastructure/regeneration, and income from development) to continue to fund infrastructure but also support a 'regeneration topslice' that allows regeneration benefits to be delivered and continue to show a regeneration dividend for local residents. Communicating and branding the relationship between growth (i.e. development) and regeneration benefits will be crucial to maintain confidence in the strategy.

e Some commentators advocate that high growth areas will fundamentally rely upon some form of Development Corporation vehicle that can acquire land and deliver/underwrite infrastructure and take a long term view. This is likely to be the case for delivering new New Town Models and/or in areas where there is a fundamental infrastructure challenge. The extent to which these circumstances exist for the levels of growth in Harlow tested in this study is not clear.

Partnership Working

6.27 A key consideration for Harlow District will be implementing the higher levels of growth that have been recommended in this study. Harlow is a tightly bound, principally urban, authority with limited scope to expand within its own administrative area. As such, Harlow Council will need to work with its adjoining authorities of East Hertfordshire and Epping Forest districts, under the Duty to Cooperate, to deliver the levels of growth considered in this study to be required to secure wider regeneration objectives.

6.28 The Councils will be aware of the newly formed **London Stansted Cambridge Corridor Consortium (LSCC)** which has been set up to drive economic development and enhance quality of life in the corridor. The group seeks to drive job growth through productivity and investment and increasing economic activity by ensuring local communities access employment opportunities. The LSCC has published a jobs and growth agenda which includes details on the potential for new homes and jobs to be created in the area.

6.29 Harlow Council will also need to work closely with **the South East Local Enterprise Partnership (SELEP)** as these organisations evolve and have an ever increasing role in allocating Government funding to drive forward economic growth. The current Growth Deals and Strategic Economic Plans process for all LEPs launched by the Government and that will take place in 2013/14 is an opportunity to crystallise the potential role of Harlow in meeting wider growth needs and identify what financial and other support from Government and other sources it may be necessary. This is important given the renewed emphasis given to LEPs as agents for prioritising and focusing investment.

Spatial Implications

6.30 Although this analysis has focused upon the scale of growth and its implications for regeneration, there is also a spatial dimension to growth and its implications for regeneration. Although Harlow is currently a modestly sized town, with factors such as household spending and economic growth likely to contribute to the prosperity of Harlow overall, there may be specific benefits which would be best unlocked through a particular spatial pattern of growth. In particular this is a consideration where development can be physically linked to the delivery of something that will provide wider benefits.

6.31 A particular issue in Harlow is the form that growth could take, with options for intensification within the existing town boundaries through developing on urban open space or the Green Wedges or alternative options around expanding the limits of Harlow into the surrounding countryside. These options are unlikely to be mutually exclusive - there are merits for regeneration of both:

- Intensification brings closer spatial integration between growth and regeneration. For example developments close to the town and neighbourhood centres would bring additional spending to these areas, helping to underpin regeneration, whilst also making best use of existing infrastructure capacity (e.g. school places and space on current GP patient lists); however
- Outwards growth would protect the Green Wedges of Harlow, which themselves have social, economic and environmental benefits through their provision of open space for recreation, their support for biodiversity and their importance as a valued characteristic for residents and businesses.

6.32 Given the diverse issues facing the town (including population and economic stagnation, together with physical regeneration issues) it is equally important that sufficient growth is provided and that this is accommodated in appropriate locations. As well as form of growth, the actual spatial direction of growth could have implications for delivering benefits, however, the Council will need to balance many factors in determining where such growth should take place. For example, certain items of infrastructure may be delivered as part of developments rather than through planning obligation or other means. By way of example, a northern by-pass to Harlow to alleviate traffic through the town might logically be best achieved through linking its delivery to development north of Harlow, and would similarly generate most benefit to that unlocked growth. A spatial strategy that delivered a northern by-pass through contributions from sites elsewhere may equally deliver that piece of infrastructure, but may not alleviate traffic through the town and may not directly benefit from the new by-pass.

6.33 Equally, development on a number of different ‘fronts’ may support higher deliverability by providing more options for multiple developers to operate in the market, and for more valuable or unconstrained sites to generate higher values to help pay for infrastructure. There is also a case that some development is

targeted to priority areas within the existing town, utilising underused spaces, to deliver targeted renewal.

6.34 In addition, the alternative spatial strategies will need to be considered against environmental considerations as well as the practicalities of working with adjoining authorities on securing growth.

6.35 The most appropriate spatial strategy will be one that responds best to the priorities set out through the Councils plans and strategies, and provides the most appropriate strategy when considered against wider sustainability and environmental considerations.

7.0 Conclusions

7.1 The review of previous evidence demonstrates that there is a **clear link between growth and regeneration**. The development of housing, particularly affordable housing, aids social mobility and is directly linked to the ability of local employers to recruit and expand which in turn benefits the wider local economy. The delivery of new housing at the right scale can also enable a critical mass to be reached to warrant the development of new infrastructure. It is clear that Harlow has not achieved the kind of critical mass that it requires to sustain the infrastructure, economy, and vitality that it seeks and indeed needs. As a good environment and infrastructure are important for the location of firms, this can bring wider local economic benefits, generating cumulative and multiplier effects, whereby benefits become greater than simply the sum of their parts.

7.2 In respect of applying this to Harlow, it is clear that in the **past development and growth has delivered significant benefits to Harlow** particularly during Harlow's boom years during the 1950's and 1960's when Harlow delivered significant economic growth, but also more recently in the 2000's when development and regeneration schemes in Harlow have delivered jobs, homes, infrastructure investment as well as new facilities such as the Harlow Leisure Zone.

7.3 The current juncture in the development of Harlow as a place, and in the strategic planning of Harlow, means that there is an **opportunity for Harlow to deliver regeneration objectives through growth in the future** in order to achieve its aspirations and promote the economic and social prosperity of the town. A range of objectives have been identified and defined through the Council's Corporate Plan.

7.4 There a significantly different demographic and economic outcomes for different scales of growth in Harlow. The findings indicate that at lower levels of growth (Scenario A) the town's population is likely to continue to stagnate, in relative terms, and the population of children and those of working age will decline. This has implications for the viability of services and the ability of local firms to recruit residents into roles. Even under modest growth (Scenario B) the town would only experience a modest increase in the number of children and the working age of the town. The population of the town would increase and provide support for local services and facilities. Beyond this the prospects for Harlow, in economic and regeneration terms, are better. Overall, **higher levels of development and growth will mean a larger population base in Harlow and a larger employment base**, meaning that there would be more people to sustain services and facilities and also a larger economic base for the town with more money flowing through the local economy.

7.5 Assessing the degree to which different levels of growth in Harlow will accrue different scales of benefits, it is clear that **at greater levels of growth from 11,500 new homes (2011-2031) upwards, greater benefits can accumulate,**

helping to better deliver key policy and corporate objectives. Scenarios for growth involving greater levels of development (beyond Scenario C) will deliver better outcomes for public finances through factors such as New Homes Bonus, CIL, Council Tax receipts and business rates. In turn these, combined with greater population, can be utilised as the basis for unlocking key infrastructure schemes, such as a new motorway junction, as well as generating sufficient critical mass to support key objectives such as the transformation of Harlow Town Centre. Higher levels of growth will also help create the conditions in which the town's economic potential, and strategy ambitions, will be more effectively realised.

7.6 The quantitative benefits that could be delivered by each scenario are summarised in Table 7.1.

Table 7.1 Summary of Scenario Outcomes by 2031

Scenario: / Receptor:	Scenario A. 'Do Nothing More'	Scenario B. 'Meeting Housing Needs'	Scenario C. 'Jobs Led'	Scenario D. 'Growing Centre'	Scenario E. 'Transformed Centre'
Demographic Outcomes					
Dwelling Change	+3,920	+7,483	+11,490	+15,000	+20,000
Dwellings p.a.	***+196***	***+374***	***+575***	***+750***	***+1,000***
Population Change	+4,022	+12,908	+22,997	+31,812	+44,455
of which Natural Change	+12,341	+14,155	+15,582	+18,155	+20,917
of which Net Migration	-8,319	-1,246	+7,415	+13,656	+23,538
Household Change	+3,853	+7,356	+11,295	+14,749	+19,659
Labour Force	-575	+3,938	+9,230	+13,504	+19,876
Jobs, Spending and Economic Outcomes					
Jobs	-1,207	+3,057	+8,060	+12,099	+18,121
Jobs per annum	***-60***	***+153***	***+403***	***+605***	***+906***
Total GVA (p.a.)	£2.0bn	£2.2bn	£2.5bn	£2.7bn	£3.0bn
Business Starts (p.a.)	300	330	473	395	483
H'hold Spending (p.a.)	£1.9bn	£2.1bn	£2.3bn	£2.5bn	£2.7bn
Public Finances					
Council Tax Base (p.a.)	£49.2m	£53.6m	£58.6m	£62.9m	£69.1m
New Homes Bonus	£33.2m	£63.4m	£97.4m	£127.2m	£169.5m
Business Rates (p.a.)	£42.7m	£47.6m	£53.3m	£57.9m	£64.8m
CIL/s106 Receipts	£46.8m	£89.5m	£137.5m	£179.4m	£239.3m
Community & Environment					
New Primary Sch. Places	0	+366	+1,566	+2,858	+4,600
New Secondary Sch. Pl.	0	+152	+659	+1,476	+2,384
New GP Needs	0	0	+1	+6	+13
New Open Space Needs	+11.6 ha	+22.1 ha	+27.7 ha	+44.2 ha	+59.0 ha
Land Take of New Devt.	196 ha	374 ha	575 ha	750 ha	1,000 ha
J7a funding gap (£45m option / £200m option)	£39.7m / £194.7m	£34.8m / £189.8m	£29.4m / £184.4m	£24.6m / £179.6m	£17.9m / £172.9m
New Affordable Housing	+1,174	+2,246	+3,447	+4,500	+6,000

Source: NLP

7.7 However, in determining the level of growth to provide the Council (and its partner authorities where appropriate) **will need to ensure they firstly meet objectively assessed development needs and beyond that balance the potential benefits of development with wider environmental and infrastructure constraints**. Furthermore, the achievability of higher levels of growth (Scenario D and E) will also need to be considered given past completion rates

7.8 Notwithstanding these issues, and to achieve the most benefit, Harlow should seek to optimise the amount of growth within the envelope of what is realistically deliverable and consistent with the NPPF. For this to be achieved the Council will need to work with adjoining authorities through the Duty to Cooperate as set out in the Localism Act and in the NPPF.

1.0 # Appendix 1: Demographic Modelling Inputs and Assumptions

Demographic Inputs

Baseline Population

1.1 The baseline population adopted is for 2011 and is drawn across from the Census 2011 based Mid-Year estimates as the most up to date population data. This 2011 population is split by single year of age and gender.

1.2 A 2010 population is also included in the modelling taken from the ONS Mid-Year Estimates series, as revised following the Census 2011 and published on 30 April 2013.

1.3 These population baselines differ from earlier stages of the EPOA modelling, which utilise the historical Mid-Year Estimates series (built up from the Census 2001) as the population baseline. This data series is now superseded.

Fertility Rates

1.4 Fertility rates are applied to the population forecast using projected fertility rates and differentials for Harlow from the ONS 2010-based Sub-National Population Projections (SNPP). These are the same fertility rates as used to also underpin the ONS 2011-based Interim SNPP.

Mortality Rates

1.5 A mortality rate is applied to the population forecast using projected mortality rates and differentials for Harlow from the ONS 2010-based Sub-National Population Projections (SNPP). These are the same mortality rates as used to also underpin the ONS 2011-based Interim SNPP.

Internal and International Migration

1.6 Gross domestic in and out migration flows and gross international in and out migration flows are not adopted as an input to the modelling, but are flexed as the outcome of different levels of growth in Harlow. These migration flows are therefore derived by the starting point under each scenario (i.e. how much migration would be accommodated within the dwellings identified in Scenarios A, B, D and E, and how much migration would be necessary to underpin the economic and employment growth under Scenario C).

1.7 The profile of migration is based on projected migration rates and differentials for Harlow (i.e. the propensity for different sex/age groups to move to or from the District) from the ONS 2010-based Sub-National Population Projections (SNPP).

Household and Housing Inputs

Headship Rates (CLG 2011-based Interim Household Projections and Household Formation)

1.8 The CLG 2011-based interim household projections, published 9 April 2013, provide estimates of future household growth in Harlow, averaging 321 households per annum over the period 2011 to 2021. The household formation rates within these projections are applied to the projected population in Harlow to arrive at an estimate of likely growth in households at the local level. They fully account for trends in age specific household composition, rather than simply applying an average household size to population.

1.9 The CLG 2011-based interim household projections cover the period 2011 to 2021. They are more recent than the previous 2008-based household projections which were used within the EPOA demographic modelling and covered the period 2008 to 2033 but were built up from a 2001 Census base.

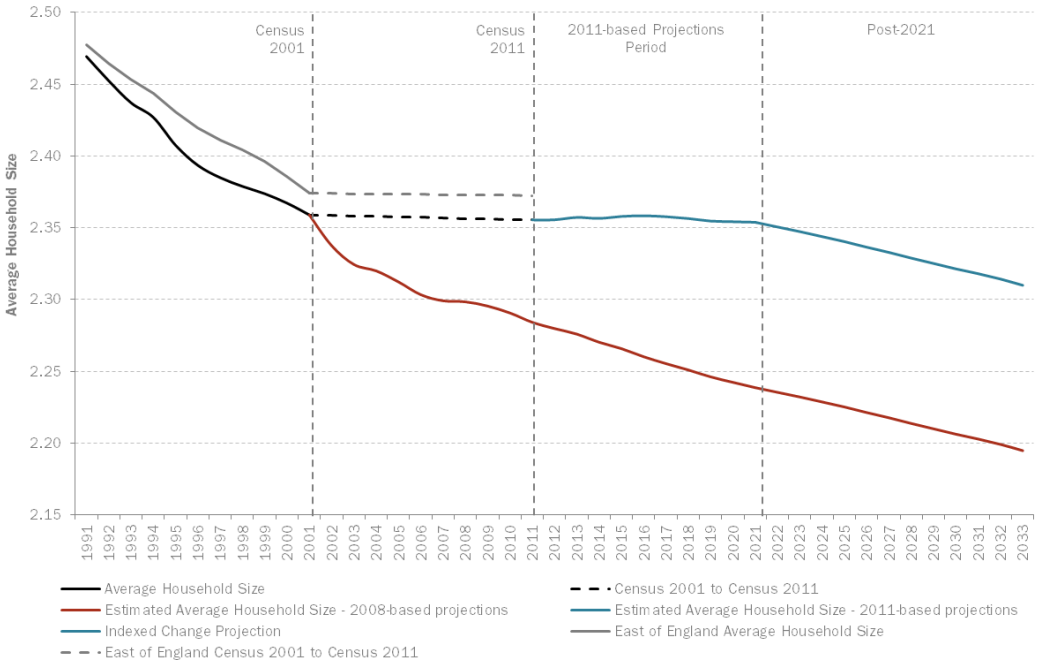
1.10 There is a marked difference between the household formation rates underpinning the two sets of projections. At the national level, the new 2011-based projections strongly reflect recently observed trends in supressed household formation which are associated, at least in part, with the impacts of the recession and past housing under-supply. However, these new 2011-based projections only cover the period to 2021 and CLG, in the accompanying Quality Report, caution against simply rolling forward household formation rates beyond that period:

"There are also particular limitations in the use of the 2011-based interim household projections. The projections only span for a 10-year period so users that require a longer time span would need to judge whether recent household formation trends are likely to continue."

1.11 Past trends in overall household formation in Harlow shows a trend towards higher rates of formation and smaller household sizes up until 2001, with more recent trends highlighting a relatively static formation rate. This broadly mirrors the picture at the regional level.

1.12 Recent household formation rates between 2001 and 2011 are likely to reflect recent constraints on housing availability and affordability (both through supply-side factors such as house building and demand-side factors such as mortgage availability and household incomes). This will have placed constraints on new households forming in the same manner as observed in previous trends, potentially leading to higher rates of concealed households, higher rates of household sharing and factors such as young adults staying at their parental home for longer. The 2011-based projections expect this constant average household size to continue in the short term up to 2021. Conversely, the previous 2008-based household projections projected forward the trends in Harlow experienced pre-2001. This is illustrated in Figure 1.1.

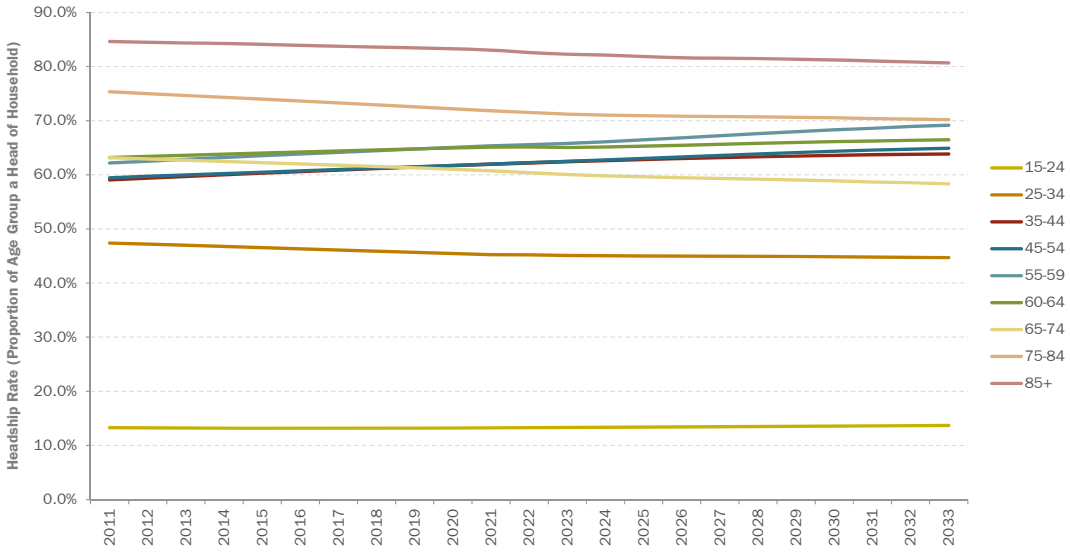
Figure 1.1 Trends in Household Formation (Average Household Size) in Harlow (1991-2033)



Source: Census 2001, Census 2011 and ONS/CLG Population and Household Estimates and Projections

1.13 For the purposes of an objective assessment of needs in line with the NPPF, it is reasonable to assume that beyond 2021 rates of household formation (and therefore trends in average household size) will reflect a change in line with long term trends. This is likely to occur in particular as the wider economy returns to growth and peoples' circumstances improve, with more confidence and ability to form a new household. Therefore, beyond 2021 NLP has applied the rate of annual change in household formation from the 2008-based household projections, to reflect such long term trends and in the absence of other long-term projections of household formation. This is illustrated for individual age cohorts in Figure 1.2, which shows increasing headship rates (the proportion of a population that will form a head of household) within Harlow among 35 to 64 year olds, whilst a decreasing headship rate among 25-34 year olds and 65+ year olds.

Figure 1.2 Projected Household Headship Rates for Harlow District



Source: CLG 2011-based Interim Household Projections, NLP

1.14 These age specific projections of household headship are applied through each of the scenarios modelled through POPGROUP. They differ from those applied in the EPOA modelling, and would explain why equivalent scenarios within the EPOA work may arrive at different levels of household growth (and population change) despite the same delivery of dwellings.

Population not in Households

1.15 The number of population not in households (e.g. those in institutional care) is taken from the assumptions used to underpin the CLG 2011-based Interim Household Projections. No change is assumed in the rate of this from the CLG identified rate.

Vacancy / Second Home Rate

1.16 A vacancy and second homes rate is applied to the number of households, representing the natural vacancies/not permanently occupied homes which occur within the housing market and mean that more dwellings than households are required to meet needs. The vacancy rate in Harlow totals 1.54% (estimated using HSSA Vacant Dwellings Data over the previous 5 years). The second home rate in the District is estimated at 0.14% (Census 2001 Table S048), meaning a combined rate of 1.68%. This is relatively low and therefore is held constant over the forecast period.

1.17 This input differs slightly from that utilised in the EPOA modelling (which was wholly sourced to the Census 2001 vacancy rate and did not appear to make any allowance for Second Homes) Notwithstanding, once the above combined rate is rounded to one decimal place in the modelling, this figure is the same as utilised within the EPOA modelling.

Economic Inputs

Economic Activity Rate

1.18 Age and gender specific economic activity rates are used. The basis for this is ONS 2006-based National Labour Force Projections. The economic activity annual growth rates for each age cohort from these national projections are applied to the Census 2001 economic activity profile for Harlow across the forecast period. At 2011 these have been rebased from their 2011 estimate using a uniform adjustment to all age cohorts to meet current total economic activity from the Annual Population Survey (APS). These are assumed to remain the same as the projection with the exception of an adjustment to take account of changing pension ages beyond that already taken into account in the ONS 2006-based projections (i.e. to account for pension age increases for both men and women above age 65).

1.19 These economic activity rates differ from those utilised within the EPOA modelling, the rates for which are not made explicit, but are sourced to the East of England Regional Assembly (EERA). It is not clear what input figures are utilised in the EPOA modelling, however, based upon a review of the outputs, it would appear NLP's projected economic activity rates using the 2006-based National Labour Force Projections estimate slightly lower growth in economic activity up to 2033 than the EPOA equivalent. This will, alongside different population base assumptions, explain any differences between economic outcomes of equivalent scenarios.

Commuting Rate

1.20 The commuting rate between 2010 and 2033 highlighted in Figure 12 of the Greater Essex Demographic Forecasts Phase 3 Further Scenario Development (July 2012) document is used. The data inputs were derived from EEFM data and NLP consider this to be an appropriate data source. The commuting ratio measures the balance between the size of the labour force living in an area against the number of jobs in an area. The commuting ratio slowly increases from 0.99 in 2011 to 1.02 in 2033 so Harlow starts by experiencing a marginal net in commute and by 2033 has a marginal net out commute.

Unemployment

1.21 The unemployment rate between 2010 and 2033 highlighted in Figure 11 of the Greater Essex Demographic Forecasts Phase 3 Further Scenario Development (July 2012) document is also used in the NLP study. These factors were drawn directly from the output of the EEFM and this is considered an appropriate up to date data source. The general trend in the unemployment rates suggest a peak in unemployment in 2012 at 4.8%, declining thereafter to 3% in 2020 and rising steadily to 3.6% in 2033.

2.0 Appendix 2: Demographic Modelling Outputs

Scenario A: 'Do nothing more'

Population Estimates and Forecasts — **Nathaniel Lichfield & Partners**

Components of Population Change — **Harlow Council**

Year beginning July 1st .....

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
Births																										
Male	657	682	694	692	678	664	649	633	620	610	600	592	581	570	559	550	541	534	530	525	523	522	522	521		
Female	626	649	661	659	646	633	618	602	591	581	572	563	553	543	533	523	515	509	504	500	499	497	497	497		
All Births	1,283	1,331	1,354	1,350	1,325	1,297	1,267	1,235	1,211	1,190	1,172	1,155	1,134	1,113	1,092	1,073	1,056	1,043	1,034	1,025	1,022	1,020	1,019	1,018		
TFR	2.24	2.30	2.34	2.32	2.27	2.22	2.17	2.12	2.08	2.05	2.03	2.01	1.99	1.97	1.95	1.93	1.91	1.90	1.90	1.90	1.90	1.90	1.90	1.90		
Births input																										
Deaths																										
Male	334	330	323	311	307	295	288	284	278	273	269	264	262	259	257	256	254	253	253	253	254	255	256	257		
Female	331	331	320	319	313	304	297	291	287	282	278	273	269	265	262	259	256	254	252	251	251	250	249	249		
All deaths	664	660	643	630	620	599	586	576	565	555	546	537	530	525	519	515	510	506	506	504	505	505	505	506		
SMR: males	109.6	104.6	100.4	94.9	91.6	86.2	82.3	79.2	75.4	72.3	69.1	66.1	63.7	61.3	59.1	57.2	55.1	53.1	51.6	50.0	48.8	47.4	46.2	45.0		
SMR: females	98.7	96.4	90.5	87.4	83.5	78.8	75.0	71.4	68.5	65.4	62.5	59.6	56.9	54.6	52.5	50.3	48.3	46.6	45.0	43.5	42.2	40.9	39.7	38.5		
SMR: male & female	103.9	100.3	95.2	91.0	87.3	82.3	78.4	75.1	71.7	68.6	65.6	62.6	60.0	57.7	55.5	53.5	51.5	49.6	48.1	46.6	45.3	44.0	42.7	41.5		
Expectation of life	80.1	80.3	80.7	81.1	81.4	81.8	82.1	82.4	82.7	82.9	83.2	83.4	83.7	83.9	84.1	84.3	84.5	84.6	84.8	85.0	85.1	85.3	85.4	85.6		
Deaths input																										
In-migration from the UK																										
Male	1,678	1,543	1,579	1,525	1,576	1,542	1,524	1,532	1,482	1,535	1,530	1,492	1,492	1,478	1,483	1,482	1,462	1,465	1,442	1,486	1,486	1,503	1,461	1,502		
Female	1,799	1,651	1,700	1,641	1,692	1,647	1,624	1,631	1,570	1,618	1,607	1,564	1,563	1,542	1,542	1,540	1,515	1,519	1,496	1,546	1,543	1,563	1,524	1,572		
All	3,478	3,194	3,279	3,166	3,269	3,188	3,148	3,163	3,052	3,153	3,137	3,056	3,055	3,020	3,025	3,022	2,977	2,984	2,939	3,032	3,029	3,066	2,986	3,075		
SMigR: males	38.8	35.4	35.9	34.5	35.5	34.6	34.1	34.3	33.2	34.5	34.5	33.7	33.8	33.6	33.8	33.8	33.3	33.4	32.9	33.9	33.9	34.2	33.1	34.0		
SMigR: females	39.7	36.3	37.1	35.6	36.6	35.5	35.0	35.3	34.0	35.2	35.2	34.4	34.5	34.2	34.3	34.3	33.7	33.8	33.4	34.5	34.3	34.6	33.7	34.7		
Migrants input																										
Out-migration to the UK																										
Male	1,802	1,832	1,850	1,857	1,859	1,865	1,872	1,870	1,866	1,855	1,856	1,854	1,858	1,853	1,853	1,855	1,857	1,854	1,851	1,841	1,845	1,849	1,849	1,844		
Female	1,849	1,888	1,901	1,912	1,922	1,929	1,926	1,927	1,927	1,919	1,913	1,908	1,904	1,900	1,893	1,888	1,896	1,888	1,880	1,879	1,880	1,882	1,887	1,882		
All	3,651	3,720	3,751	3,769	3,782	3,794	3,797	3,797	3,793	3,774	3,769	3,761	3,762	3,752	3,746	3,743	3,752	3,741	3,732	3,720	3,725	3,730	3,736	3,727		
SMigR: males	41.7	42.0	42.1	42.0	41.9	41.8	41.9	41.8	41.8	41.8	41.8	41.9	42.1	42.1	42.2	42.3	42.3	42.3	42.2	42.0	42.1	42.0	41.9	41.8		
SMigR: females	40.8	41.4	41.5	41.5	41.6	41.6	41.5	41.7	41.7	41.8	41.9	41.9	42.0	42.1	42.1	42.1	42.2	42.1	41.9	41.9	41.8	41.7	41.7	41.5		
Migrants input																										
In-migration from Overseas																										
Male	267	316	315	315	314	314	314	314	314	313	312	312	311	309	306	303	301	299	296	292	291	289	288	285		
Female	233	276	276	277	278	278	276	275	273	270	268	265	262	259	256	253	250	247	244	241	240	238	237	235		
All	499	592	591	592	591	592	590	589	587	583	580	577	573	568	562	556	551	545	539	533	531	527	524	520		
SMigR: males	88.7	104.3	103.2	102.6	101.9	101.5	101.1	101.1	101.2	101.2	101.3	101.5	101.9	101.7	101.3	100.8	100.5	99.9	99.0	97.9	97.3	96.3	95.5	94.5		
SMigR: females	74.0	87.3	87.0	86.8	86.8	86.4	86.0	85.8	85.4	85.2	85.0	84.7	84.6	84.3	84.0	83.7	83.1	82.4	81.7	81.1	80.5	79.9	79.2	78.6		
Migrants input																										
Out-migration to Overseas																										
Male	141	174	175	176	178	181	183	183	182	181	180	180	179	177	175	174	173	172	170	169	168	167	166	164		
Female	117	145	146	148	150	152	154	153	152	151	150	148	147	146	144	143	141	139	138	136	135	134	133	132		
All	258	319	321	324	328	333	337	336	334	332	330	328	326	323	320	317	314	311	308	305	303	301	299	297		
SMigR: males	47.0	57.3	57.2	57.5	57.8	58.5	59.1	58.9	58.7	58.7	58.5	58.6	58.5	58.3	58.1	58.0	57.8	57.5	57.0	56.6	56.1	55.6	55.0	54.5		
SMigR: females	37.2	45.9	46.2	46.4	46.8	47.4	48.0	47.9	47.7	47.6	47.6	47.5	47.5	47.4	47.3	47.2	46.9	46.5	46.2	45.9	45.4	45.0	44.6	44.2		
Migrants input																										
Migration - Net Flows																										
UK	-173	-526	-471	-603	-513	-606	-649	-634	-740	-621	-631	-705	-707	-732	-721	-721	-776	-758	-793	-688	-695	-664	-750	-652		
Overseas	+241	+273	+270	+268	+264	+258	+253	+252	+252	+251	+250	+248	+248	+245	+242	+239	+237	+234	+231	+228	+227	+226	+225	+223		
Summary of population change																									***2010-2033***	***2011-2031***
Natural change	+619	+670	+711	+720	+705	+699	+681	+659	+646	+635	+626	+618	+604	+588	+572	+558	+546	+536	+528	+521	+517	+515	+513	+512	+13,881	+12,341
Net migration	+68	-253	-201	-335	-249	-347	-396	-381	-488	-370	-382	-457	-459	-487	-479	-482	-539	-524	-562	-459	-468	-438	-525	-429	-9,710	-8,319
Net change	+687	+418	+510	+385	+456	+351	+285	+278	+158	+265	+244	+161	+145	+101	+94	+76	+7	+13	-33	+61	+49	+77	-12	+83	+4,775	+4,022

Summary of Population estimates/forecasts

Population at mid-year

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034		
0-4	5,994	6,091	6,243	6,275	6,349	6,380	6,430	6,359	6,239	6,094	5,967	5,852	5,743	5,647	5,552	5,458	5,364	5,268	5,180	5,101	5,041	4,995	4,965	4,939	4,926		
5-10	5,812	5,876	6,010	6,279	6,500	6,662	6,791	6,954	7,111	7,117	7,164	7,159	7,172	7,077	6,940	6,794	6,657	6,529	6,411	6,300	6,198	6,096	5,996	5,896	5,811		
11-15	5,061	5,033	4,877	4,795	4,662	4,642	4,637	4,728	4,831	5,089	5,207	5,378	5,448	5,575	5,590	5,656	5,676	5,719	5,657	5,548	5,429	5,316	5,215	5,121	5,041		
16-17	2,115	2,131	2,068	2,068	2,028	2,029	1,959	1,859	1,821	1,806	1,868	1,923	1,936	2,005	2,160	2,234	2,199	2,171	2,200	2,297	2,311	2,284	2,238	2,187	2,136		
18-59Female, 64Male	48,242	48,600	48,716	48,727	48,821	48,887	48,892	48,823	48,710	48,463	48,248	47,996	47,824	47,524	47,323	47,089	46,970	46,765	46,573	46,334	46,245	46,217	46,141	46,077	46,114		
60/65 -74	7,959	8,042	8,187	8,380	8,474	8,635	8,873	9,056	9,216	9,371	9,612	9,835	9,846	9,990	10,178	10,367	10,595	10,794	10,970	11,129	11,244	11,295	11,434	11,414	11,371		
75-84	4,770	4,783	4,785	4,768	4,740	4,669	4,540	4,502	4,525	4,547	4,602	4,681	4,905	5,092	5,166	5,311	5,471	5,584	5,710	5,810	5,970	6,129	6,144	6,251	6,423		
85+	1,537	1,621	1,709	1,813	1,915	2,042	2,176	2,301	2,406	2,529	2,614	2,702	2,813	2,922	3,025	3,118	3,171	3,282	3,421	3,570	3,712	3,869	4,144	4,381	4,526		
Total	81,490	82,177	82,595	83,104	83,490	83,945	84,297	84,582	84,860	85,017	85,282	85,526	85,688	85,833	85,934	86,027	86,103	86,110	86,123	86,089	86,151	86,199	86,277	86,265	86,348	+4,775	+4,022
Population impact of constraint																											
Number of persons		+98	-265	-213	-363	-282	-383	-431	-420	-525	-414	-424	-495	-484	-501	-484	-477	-514	-496	-537	-441	-447	-411	-498	-413		
Households																											
Number of Households	34,397	34,716	34,909	35,102	35,295	35,488	35,681	35,874	36,067	36,259	36,452	36,645	36,837	37,029	37,222	37,414	37,606	37,799	37,991	38,184	38,377	38,569	38,762	38,954	39,147	+4,557	+3,853
Change over previous year		+319	+193	+193	+193	+193	+193	+193	+193	+192	+193	+192	+192	+192	+192	+192	+192	+193	+193	+193	+192	+193	+192	+193	+193	+198	+193
Number of supply units	34,992	35,316	35,513	35,709	35,905	36,101	36,298	36,494	36,691	36,886	37,083	37,278	37,474	37,670	37,865	38,061	38,257	38,453	38,649	38,844	39,040	39,236	39,432	39,628	39,824	+4,636	+3,920
Change over previous year		+324	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+196	+202	+196
Labour Force																											
Number of Labour Force	39,867	40,200	40,304	40,426	40,568	40,667	40,701	40,678	40,641	40,633	40,614	40,523	40,417	40,332	40,255	40,146	40,023	39,912	39,829	39,752	39,694	39,625	39,581	39,499	39,481	-369	-575
Change over previous year		+333	+104	+122	+141	+99	+34	-23	-37	-8	-19	-91	-105	-85	-77	-109	-124	-111	-83	-77	-58	-69	-44	-83	-17	-16	-29
Number of supply units	37,994	38,657	38,757	38,956	38,864	39,081	39,277	38,987	39,032	39,024	39,006	38,918	38,777	38,695	38,581	38,477	38,319	38,212	38,094	38,020	37,554	37,450	37,408	37,330	37,314	-664	-1,207
Change over previous year		+663	+100	+199	-93	+217	+196	-290	+45	-8	-18	-88	-141	-81	-114	-104	-158	-106	-119	-74	-467	-104	-42	-78	-16	-29	-60

Scenario B: Meeting development Needs

Population Estimates and Forecasts — **Nathaniel Lichfield & Partners**

Components of Population Change — **Harlow Council**

Year beginning July 1st .....

	2010	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*	*2024*	*2025*	*2026*	*2027*	*2028*	*2029*	*2030*	*2031*	*2032*	*2033*			
Births																											
Male	657	682	702	708	703	696	687	676	670	664	660	655	648	639	631	622	614	608	604	600	599	599	599	600			
Female	626	649	669	675	670	663	654	644	638	633	628	624	617	609	600	593	585	579	576	572	571	570	571	572			
All Births	1,283	1,331	1,371	1,383	1,373	1,359	1,341	1,321	1,307	1,297	1,288	1,279	1,265	1,248	1,231	1,215	1,199	1,187	1,180	1,172	1,170	1,169	1,170	1,172			
TFR	2.24	2.30	2.34	2.32	2.27	2.22	2.17	2.12	2.08	2.05	2.03	2.01	1.99	1.97	1.95	1.93	1.91	1.90	1.90	1.90	1.90	1.90	1.90	1.90			
Births input																											
Deaths																											
Male	334	330	324	313	309	298	292	288	282	278	274	270	268	266	264	264	263	262	263	263	265	266	268	270			
Female	331	331	321	320	315	307	301	296	292	287	284	279	275	272	270	267	264	262	261	261	261	260	260	260			
All deaths	664	660	645	633	624	604	593	584	574	565	558	549	543	539	534	531	527	524	524	524	526	526	528	530			
SMR: males	109.6	104.6	100.4	94.9	91.6	86.2	82.3	79.3	75.4	72.3	69.2	66.2	63.8	61.4	59.2	57.4	55.3	53.3	51.8	50.2	48.9	47.6	46.3	45.2			
SMR: females	98.7	96.4	90.5	87.4	83.5	78.8	75.0	71.4	68.5	65.4	62.5	59.6	56.9	54.6	52.5	50.3	48.3	46.6	45.0	43.6	42.3	41.0	39.7	38.5			
SMR: male & female	103.9	100.3	95.2	90.9	87.3	82.3	78.4	75.1	71.7	68.6	65.6	62.6	60.1	57.8	55.6	53.6	51.6	49.7	48.2	46.7	45.4	44.1	42.8	41.7			
Expectation of life	80.1	80.3	80.7	81.1	81.4	81.8	82.1	82.4	82.7	82.9	83.2	83.4	83.7	83.9	84.1	84.3	84.5	84.6	84.8	85.0	85.1	85.3	85.4	85.6			
Deaths input																											
In-migration from the UK																											
Male	1,678	1,775	1,815	1,762	1,814	1,778	1,768	1,784	1,740	1,802	1,805	1,771	1,778	1,767	1,775	1,775	1,761	1,771	1,748	1,802	1,805	1,831	1,787	1,838			
Female	1,799	1,900	1,958	1,903	1,957	1,911	1,896	1,913	1,857	1,914	1,910	1,869	1,875	1,856	1,858	1,854	1,835	1,845	1,822	1,883	1,882	1,912	1,872	1,932			
All	3,478	3,675	3,773	3,666	3,771	3,689	3,664	3,697	3,596	3,716	3,715	3,640	3,653	3,622	3,632	3,629	3,596	3,616	3,570	3,685	3,687	3,743	3,659	3,770			
SMigR: males	38.8	40.7	41.0	39.2	40.0	38.7	38.2	38.3	37.2	38.4	38.4	37.5	37.6	37.3	37.4	37.3	36.8	36.9	36.3	37.3	37.2	37.5	36.4	37.2			
SMigR: females	39.7	41.7	42.4	40.6	41.2	39.8	39.2	39.4	38.1	39.3	39.1	38.2	38.3	37.9	37.9	37.8	37.2	37.3	36.8	37.9	37.6	37.9	36.9	37.9			
Migrants input																											
Out-migration to the UK																											
Male	1,802	1,832	1,864	1,884	1,900	1,918	1,937	1,947	1,955	1,956	1,968	1,977	1,992	1,997	2,007	2,018	2,029	2,034	2,040	2,036	2,048	2,060	2,069	2,071			
Female	1,849	1,888	1,916	1,943	1,969	1,990	2,000	2,015	2,028	2,032	2,039	2,044	2,051	2,057	2,060	2,064	2,080	2,079	2,080	2,086	2,094	2,104	2,118	2,121			
All	3,651	3,720	3,780	3,827	3,869	3,908	3,937	3,962	3,983	3,988	4,006	4,021	4,043	4,054	4,067	4,082	4,109	4,113	4,119	4,122	4,142	4,164	4,187	4,193			
SMigR: males	41.7	42.0	42.1	41.9	41.8	41.8	41.8	41.8	41.8	41.7	41.8	41.9	42.1	42.2	42.3	42.4	42.4	42.4	42.3	42.2	42.2	42.2	42.1	41.9			
SMigR: females	40.8	41.4	41.5	41.4	41.5	41.4	41.4	41.5	41.6	41.7	41.8	41.8	41.9	42.0	42.1	42.1	42.2	42.1	42.0	41.9	41.8	41.7	41.7	41.6			
Migrants input																											
In-migration from Overseas																											
Male	267	316	318	321	323	326	327	330	332	332	333	334	335	333	331	329	328	326	324	322	321	320	320	318			
Female	233	276	279	284	288	291	292	292	292	291	290	288	286	284	282	280	277	274	271	269	269	268	267	267			
All	499	592	597	605	611	617	619	622	624	623	623	622	621	617	613	608	605	600	596	591	590	588	587	585			
SMigR: males	88.7	104.3	103.3	102.8	102.2	101.8	101.4	101.4	101.4	101.5	101.5	101.6	101.9	101.6	101.2	100.6	100.3	99.6	98.7	97.6	96.9	95.9	95.1	94.1			
SMigR: females	74.0	87.3	87.2	87.1	87.2	87.0	86.6	86.2	85.8	85.5	85.3	84.9	84.7	84.3	84.0	83.5	82.9	82.1	81.4	80.8	80.2	79.6	78.9	78.3			
Migrants input																											
Out-migration to Overseas																											
Male	141	174	176	179	182	187	190	191	191	192	192	192	192	191	190	189	189	188	187	186	186	185	185	184			
Female	117	145	148	151	155	159	162	162	162	162	162	161	161	160	159	158	157	155	154	153	152	152	151	151			
All	258	319	324	331	337	345	352	354	354	354	354	353	352	351	349	348	346	343	341	339	338	337	336	335			
SMigR: males	47.0	57.3	57.2	57.4	57.7	58.4	59.0	58.8	58.6	58.5	58.4	58.4	58.3	58.2	58.0	57.9	57.7	57.4	57.0	56.6	56.2	55.6	55.0	54.5			
SMigR: females	37.2	45.9	46.2	46.4	46.8	47.4	48.0	47.9	47.7	47.6	47.6	47.5	47.5	47.4	47.3	47.3	46.9	46.5	46.2	45.9	45.4	45.0	44.6	44.2			
Migrants input																											
Migration - Net Flows																											
UK	-173	-44	-6	-161	-98	-219	-273	-265	-387	-272	-292	-381	-391	-432	-435	-453	-512	-497	-550	-437	-456	-421	-528	-423			
Overseas	+241	+273	+273	+275	+274	+271	+267	+268	+270	+269	+270	+269	+269	+267	+264	+261	+259	+257	+255	+252	+252	+251	+251	+250			
Summary of population change																										***2010-2033***	***2011-2031***
Natural change	+619	+670	+726	+750	+748	+754	+749	+737	+733	+731	+730	+730	+721	+710	+697	+684	+673	+663	+656	+648	+645	+643	+643	+642		+16,082	+14,155
Net migration	+68	+229	+267	+113	+176	+52	-6	+3	-117	-3	-22	-112	-122	-165	-171	-192	-253	-240	-295	-185	-204	-170	-277	-173		-1,866	-1,246
Net change	+687	+899	+993	+863	+924	+807	+742	+740	+616	+729	+708	+618	+599	+544	+526	+493	+420	+423	+361	+463	+441	+473	+366	+469		+14,434	+12,908

Summary of Population estimates/forecasts

Population at mid-year

	2010	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*	*2024*	*2025*	*2026*	*2027*	*2028*	*2029*	*2030*	*2031*	*2032*	*2033*	*2034*		
0-4	5,994	6,091	6,288	6,371	6,503	6,595	6,710	6,705	6,646	6,558	6,484	6,418	6,354	6,299	6,240	6,174	6,102	6,022	5,946	5,874	5,821	5,779	5,755	5,733	5,727		
5-10	5,812	5,876	6,036	6,334	6,587	6,782	6,948	7,153	7,362	7,425	7,535	7,596	7,680	7,653	7,579	7,491	7,407	7,329	7,256	7,184	7,115	7,039	6,960	6,873	6,797		
11-15	5,061	5,033	4,894	4,829	4,712	4,707	4,717	4,825	4,946	5,228	5,369	5,570	5,670	5,834	5,890	6,004	6,076	6,176	6,169	6,109	6,036	5,966	5,905	5,848	5,801		
16-17	2,115	2,131	2,077	2,084	2,050	2,057	1,991	1,896	1,862	1,853	1,922	1,984	2,004	2,081	2,250	2,337	2,313	2,297	2,341	2,463	2,503	2,498	2,472	2,439	2,405		
18-59Female, 64Male	48,242	48,600	49,072	49,432	49,866	50,255	50,568	50,798	50,982	51,021	51,088	51,112	51,207	51,166	51,215	51,220	51,334	51,358	51,397	51,379	51,524	51,735	51,906	52,086	52,382		
60/65 -74	7,959	8,042	8,203	8,413	8,523	8,701	8,956	9,156	9,334	9,507	9,769	10,014	10,044	10,211	10,424	10,640	10,897	11,127	11,337	11,528	11,678	11,761	11,940	11,953	11,942		
75-84	4,770	4,783	4,792	4,782	4,760	4,695	4,571	4,541	4,571	4,599	4,662	4,749	4,984	5,182	5,265	5,421	5,591	5,713	5,850	5,960	6,132	6,304	6,328	6,449	6,638		
85+	1,537	1,621	1,715	1,824	1,932	2,063	2,202	2,332	2,443	2,571	2,661	2,755	2,872	2,988	3,098	3,198	3,257	3,376	3,525	3,683	3,834	4,002	4,292	4,543	4,700		
Total	81,490	82,177	83,076	84,069	84,932	85,856	86,663	87,405	88,145	88,761	89,490	90,198	90,816	91,415	91,960	92,486	92,978	93,398	93,821	94,182	94,644	95,085	95,558	95,924	96,393	+14,434	+12,908
Population impact of constraint																											
Number of persons		+98	+216	+249	+73	+127	-3	-63	-58	-176	-68	-84	-169	-162	-192	-186	-194	-232	-214	-270	-165	-180	-139	-244	-152		
Households																											
Number of Households	34,397	34,716	35,083	35,451	35,818	36,186	36,554	36,921	37,289	37,657	38,024	38,392	38,760	39,128	39,496	39,864	40,232	40,600	40,968	41,336	41,704	42,072	42,439	42,808	43,175	+8,410	+7,356
Change over previous year		+319	+367	+367	+368	+368	+368	+368	+368	+368	+368	+368	+368	+368	+368	+368	+368	+368	+368	+368	+368	+368	+368	+368	+368	+366	+368
Number of supply units	34,992	35,316	35,690	36,064	36,438	36,812	37,186	37,560	37,934	38,308	38,682	39,056	39,430	39,805	40,179	40,553	40,927	41,302	41,676	42,051	42,425	42,799	43,173	43,548	43,922	+8,556	+7,483
Change over previous year		+324	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+374	+372	+374
Labour Force																											
Number of Labour Force	39,867	40,200	40,586	40,985	41,395	41,751	42,029	42,245	42,446	42,669	42,878	43,011	43,121	43,251	43,380	43,473	43,540	43,623	43,739	43,858	44,004	44,138	44,304	44,427	44,625	+4,559	+3,938
Change over previous year		+333	+386	+399	+410	+356	+278	+216	+200	+223	+210	+132	+110	+129	+130	+92	+68	+83	+116	+119	+146	+134	+166	+123	+199	+198	+197
Number of supply units	37,994	38,657	39,028	39,494	39,656	40,123	40,558	40,489	40,765	40,979	41,180	41,307	41,371	41,495	41,577	41,665	41,687	41,766	41,834	41,947	41,631	41,714	41,872	41,988	42,175	+3,994	+3,057
Change over previous year		+663	+371	+466	+162	+467	+435	-70	+276	+214	+201	+127	+63	+124	+82	+88	+22	+79	+68	+114	-316	+83	+157	+116	+188	+174	+153

Scenario C: Jobs led scenario

Population Estimates and Forecasts — **Nathaniel Lichfield & Partners**

Components of Population Change — **Harlow**

Year beginning July 1st .....

	2010	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*	*2024*	*2025*	*2026*	*2027*	*2028*	*2029*	*2030*	*2031*	*2032*	*2033*
Births																								
Male	657	682	703	707	709	700	691	693	690	690	691	693	695	693	691	689	689	689	691	690	705	709	712	715
Female	626	649	669	674	676	667	658	660	657	657	658	660	662	660	658	656	656	656	658	658	672	675	678	681
All Births	1,283	1,331	1,372	1,381	1,385	1,368	1,348	1,354	1,347	1,347	1,349	1,354	1,356	1,352	1,349	1,346	1,345	1,344	1,348	1,348	1,377	1,385	1,389	1,396
TFR	2.21	2.28	2.32	2.30	2.26	2.20	2.15	2.10	2.06	2.03	2.01	1.98	1.96	1.93	1.91	1.89	1.87	1.86	1.86	1.86	1.87	1.87	1.87	1.88
Births input																								
Deaths																								
Male	334	330	324	313	310	298	292	290	284	280	277	273	272	271	270	270	270	270	271	272	276	278	280	283
Female	331	331	321	320	316	307	301	297	294	290	286	283	280	278	276	273	271	270	270	270	272	272	272	273
All deaths	664	660	645	633	626	605	593	587	578	570	563	556	552	548	546	544	541	540	542	542	548	550	552	556
SMR: males	109.6	104.6	100.4	94.9	91.6	86.2	82.3	79.3	75.4	72.3	69.2	66.2	63.8	61.5	59.2	57.4	55.3	53.4	51.9	50.3	49.1	47.7	46.5	45.3
SMR: females	98.7	96.4	90.5	87.4	83.5	78.8	75.0	71.4	68.5	65.4	62.5	59.6	56.9	54.6	52.5	50.3	48.3	46.6	45.0	43.6	42.3	41.0	39.8	38.6
SMR: male & female	103.9	100.3	95.2	90.9	87.3	82.3	78.4	75.1	71.7	68.6	65.6	62.6	60.1	57.8	55.6	53.6	51.6	49.8	48.2	46.7	45.4	44.2	42.9	41.7
Expectation of life	80.1	80.3	80.7	81.1	81.4	81.8	82.1	82.4	82.7	82.9	83.2	83.4	83.7	83.9	84.1	84.3	84.5	84.6	84.8	85.0	85.1	85.3	85.4	85.6
Deaths input																								
In-migration from the UK																								
Male	1,678	1,803	1,762	1,969	1,764	1,755	2,181	1,911	1,927	2,008	2,085	2,120	2,086	2,127	2,142	2,219	2,167	2,202	2,150	2,640	2,277	2,246	2,243	2,237
Female	1,799	1,930	1,901	2,126	1,906	1,888	2,340	2,055	2,064	2,141	2,216	2,249	2,213	2,249	2,257	2,334	2,274	2,311	2,256	2,777	2,394	2,363	2,365	2,366
All	3,478	3,732	3,663	4,095	3,671	3,643	4,521	3,967	3,991	4,149	4,301	4,369	4,298	4,376	4,399	4,553	4,441	4,513	4,405	5,416	4,671	4,609	4,608	4,603
SMigR: males	38.8	41.3	39.7	43.9	38.6	38.1	46.9	40.3	40.4	41.8	43.1	43.3	42.2	42.7	42.5	43.6	42.1	42.3	40.9	49.8	42.0	41.0	40.5	40.1
SMigR: females	39.7	42.4	41.1	45.4	39.9	39.1	48.3	41.6	41.4	42.7	43.9	44.2	43.0	43.4	43.2	44.3	42.5	42.8	41.4	50.5	42.5	41.4	41.0	40.6
Migrants input																								
Out-migration to the UK																								
Male	1,802	1,832	1,865	1,882	1,910	1,926	1,943	1,977	1,992	2,001	2,024	2,048	2,081	2,100	2,127	2,154	2,185	2,206	2,229	2,239	2,289	2,317	2,337	2,352
Female	1,849	1,888	1,918	1,942	1,981	1,998	2,007	2,049	2,069	2,085	2,103	2,124	2,151	2,172	2,192	2,213	2,250	2,266	2,284	2,304	2,353	2,379	2,404	2,420
All	3,651	3,720	3,783	3,824	3,892	3,924	3,950	4,026	4,061	4,086	4,127	4,172	4,231	4,272	4,319	4,367	4,435	4,472	4,513	4,543	4,642	4,696	4,741	4,772
SMigR: males	41.7	42.0	42.1	41.9	41.8	41.8	41.8	41.7	41.7	41.7	41.8	41.9	42.1	42.1	42.3	42.4	42.4	42.4	42.4	42.3	42.3	42.3	42.2	42.1
SMigR: females	40.8	41.4	41.5	41.4	41.4	41.4	41.4	41.4	41.5	41.6	41.7	41.7	41.8	41.9	42.0	42.0	42.1	42.0	41.9	41.9	41.7	41.7	41.7	41.6
Migrants input																								
In-migration from Overseas																								
Male	267	316	318	321	325	327	329	336	340	342	345	348	352	353	354	354	356	356	357	355	361	362	362	361
Female	233	276	280	284	291	293	293	300	301	302	303	304	305	306	306	306	306	305	304	303	309	309	309	309
All	499	592	598	604	616	620	622	636	641	644	648	652	658	659	660	659	662	661	660	658	670	671	671	670
SMigR: males	88.7	104.3	103.3	102.8	102.2	101.9	101.4	101.6	101.6	101.7	101.7	101.9	102.2	101.9	101.5	100.9	100.6	99.8	98.9	97.7	97.1	96.1	95.1	94.1
SMigR: females	74.0	87.3	87.2	87.1	87.4	87.1	86.6	86.6	86.2	85.9	85.7	85.3	85.2	84.8	84.4	84.0	83.3	82.5	81.7	81.0	80.5	79.8	78.9	78.2
Migrants input																								
Out-migration to Overseas																								
Male	141	174	176	179	184	188	191	195	196	197	198	200	201	201	202	203	204	205	205	205	209	209	210	209
Female	117	145	148	151	156	160	163	166	167	167	169	169	171	171	172	172	173	172	172	172	175	175	175	175
All	258	319	324	330	339	347	354	361	362	364	366	369	371	373	374	375	377	377	378	378	384	384	385	384
SMigR: males	47.0	57.3	57.2	57.4	57.7	58.4	58.9	58.8	58.5	58.5	58.3	58.4	58.3	58.1	58.0	57.8	57.7	57.4	57.0	56.6	56.2	55.6	55.1	54.6
SMigR: females	37.2	45.9	46.2	46.4	46.8	47.4	48.0	47.9	47.7	47.7	47.7	47.6	47.6	47.5	47.4	47.4	47.1	46.7	46.3	46.0	45.6	45.1	44.7	44.3
Migrants input																								
Migration - Net Flows																								
UK	-173	+12	-120	+271	-221	-281	+571	-60	-70	+63	+175	+197	+67	+104	+80	+186	+6	+41	-107	+874	+28	-87	-133	-169
Overseas	+241	+273	+274	+274	+277	+273	+268	+276	+278	+280	+282	+283	+286	+286	+286	+284	+285	+284	+283	+280	+286	+287	+286	+285
Summary of population change																							***2010-2033***	***2011-2031***
Natural change	+619	+670	+728	+748	+760	+762	+755	+767	+769	+777	+785	+798	+804	+804	+803	+802	+804	+804	+807	+806	+829	+835	+837	+840	+18,094	+15,582
Net migration	+68	+286	+154	+545	+56	-8	+839	+216	+208	+343	+456	+480	+354	+390	+366	+470	+291	+324	+175	+1,154	+315	+200	+153	+116	+7,884	+7,415
Net change	+687	+956	+881	+1,294	+815	+754	+1,594	+983	+977	+1,119	+1,242	+1,278	+1,158	+1,194	+1,169	+1,272	+1,095	+1,129	+982	+1,959	+1,144	+1,034	+990	+956	+25,708	+22,997

Summary of Population estimates/forecasts

Population at mid-year

	2010	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*	*2024*	*2025*	*2026*	*2027*	*2028*	*2029*	*2030*	*2031*	*2032*	*2033*	*2034*		
0-4	5,994	6,091	6,293	6,367	6,538	6,625	6,739	6,815	6,789	6,747	6,719	6,715	6,730	6,740	6,754	6,758	6,766	6,753	6,741	6,723	6,791	6,808	6,826	6,844	6,863		
5-10	5,812	5,876	6,039	6,331	6,607	6,799	6,963	7,219	7,448	7,538	7,686	7,793	7,934	7,965	7,957	7,940	7,934	7,934	7,949	7,955	8,014	8,020	8,012	7,998	7,982		
11-15	5,061	5,033	4,896	4,827	4,725	4,716	4,724	4,861	4,991	5,287	5,444	5,667	5,793	5,984	6,071	6,221	6,340	6,486	6,524	6,512	6,525	6,509	6,503	6,512	6,523		
16-17	2,115	2,131	2,078	2,083	2,056	2,060	1,994	1,911	1,879	1,874	1,948	2,017	2,046	2,131	2,312	2,411	2,398	2,391	2,449	2,591	2,662	2,675	2,667	2,644	2,629		
18-59Female, 64Male	48,242	48,600	49,114	49,391	50,143	50,448	50,717	51,571	51,921	52,205	52,535	52,918	53,459	53,778	54,246	54,656	55,270	55,709	56,181	56,527	57,667	58,299	58,779	59,325	59,891		
60/65 -74	7,959	8,042	8,205	8,411	8,536	8,710	8,963	9,193	9,379	9,565	9,842	10,107	10,160	10,350	10,590	10,835	11,129	11,393	11,640	11,869	12,091	12,215	12,435	12,488	12,509		
75-84	4,770	4,783	4,793	4,781	4,765	4,699	4,574	4,555	4,588	4,621	4,690	4,785	5,032	5,241	5,334	5,501	5,687	5,822	5,972	6,093	6,294	6,481	6,514	6,650	6,855		
85+	1,537	1,621	1,715	1,823	1,936	2,066	2,204	2,346	2,460	2,593	2,688	2,789	2,916	3,039	3,159	3,269	3,341	3,471	3,632	3,802	3,986	4,167	4,471	4,738	4,904		
Total	81,490	82,177	83,133	84,014	85,308	86,123	86,877	88,472	89,454	90,432	91,551	92,793	94,071	95,229	96,423	97,592	98,864	99,960	101,088	102,071	104,030	105,174	106,208	107,198	108,154	+25,708	+22,997
Population impact of constraint																											
Number of persons		+98	+273	+135	+506	+2	-67	+781	+142	+134	+262	+378	+404	+291	+341	+329	+447	+291	+331	+184	+1,161	+319	+215	+177	+131		
Labour Force																											
Number of Labour Force	39,867	40,200	40,619	40,952	41,614	41,904	42,147	42,858	43,189	43,609	44,028	44,448	44,913	45,334	45,801	46,221	46,690	47,110	47,580	48,002	48,953	49,430	49,857	50,283	50,710	+10,416	+9,230
Change over previous year		+333	+419	+333	+662	+289	+244	+710	+331	+420	+420	+420	+466	+420	+467	+420	+468	+421	+470	+421	+952	+477	+426	+426	+426	+453	+462
Number of supply units	37,994	38,657	39,060	39,463	39,866	40,269	40,672	41,075	41,478	41,881	42,284	42,687	43,090	43,493	43,896	44,299	44,702	45,105	45,508	45,911	46,314	46,717	47,120	47,523	47,926	+9,529	+8,060
Change over previous year		+663	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+403	+414	+403
Households																											
Number of Households	34,397	34,716	35,104	35,431	35,954	36,283	36,633	37,312	37,770	38,274	38,793	39,363	39,982	40,565	41,184	41,804	42,477	43,115	43,765	44,391	45,348	46,011	46,617	47,261	47,845	+12,864	+11,295
Change over previous year		+319	+388	+327	+523	+329	+350	+679	+458	+504	+519	+571	+619	+583	+619	+620	+673	+638	+650	+626	+957	+662	+606	+644	+584	+559	+565
Number of supply units	34,992	35,316	35,711	36,044	36,576	36,911	37,266	37,957	38,423	38,936	39,463	40,044	40,674	41,266	41,896	42,527	43,212	43,861	44,522	45,159	46,133	46,806	47,423	48,079	48,673	+13,087	+11,490
Change over previous year		+324	+395	+333	+532	+335	+356	+691	+466	+513	+528	+581	+630	+593	+629	+631	+685	+649	+661	+637	+974	+674	+617	+655	+594	+569	+575

Scenario D: Growing centre

Population Estimates and Forecasts — **Nathaniel Lichfield & Partners**

Components of Population Change — **Harlow**

Year beginning July 1st .....

	2010	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*	*2024*	*2025*	*2026*	*2027*	*2028*	*2029*	*2030*	*2031*	*2032*	*2033*			
Births																											
Male	657	682	720	744	756	765	770	772	778	784	791	796	796	793	788	782	775	769	766	761	761	761	763	765			
Female	626	649	686	709	720	728	733	736	741	747	753	758	758	755	750	745	738	733	729	725	725	725	726	729			
All Births	1,283	1,331	1,405	1,453	1,476	1,493	1,503	1,508	1,519	1,532	1,544	1,553	1,554	1,548	1,538	1,527	1,513	1,502	1,495	1,486	1,486	1,486	1,489	1,494			
TFR	2.21	2.28	2.32	2.31	2.26	2.21	2.16	2.11	2.06	2.04	2.01	1.98	1.95	1.92	1.90	1.88	1.86	1.85	1.85	1.85	1.86	1.86	1.87	1.87			
Births input																											
Deaths																											
Male	334	330	325	316	314	303	299	297	291	288	285	282	281	280	279	280	280	280	282	283	286	288	291	294			
Female	331	331	323	324	320	313	309	304	302	298	295	292	288	286	285	282	280	279	279	279	280	280	281	282			
All deaths	664	660	648	640	634	617	607	601	593	586	580	574	569	566	564	562	559	559	561	562	566	568	572	576			
SMR: males	109.6	104.6	100.4	94.9	91.6	86.2	82.4	79.3	75.5	72.4	69.3	66.3	64.0	61.6	59.4	57.6	55.5	53.5	52.1	50.5	49.2	47.9	46.6	45.5			
SMR: females	98.7	96.4	90.5	87.4	83.5	78.8	75.0	71.4	68.5	65.4	62.5	59.6	57.0	54.7	52.6	50.4	48.4	46.7	45.2	43.7	42.4	41.2	39.9	38.7			
SMR: male & female	103.9	100.3	95.2	90.9	87.3	82.3	78.4	75.1	71.8	68.7	65.7	62.7	60.2	57.9	55.7	53.8	51.7	49.9	48.4	46.9	45.6	44.3	43.1	41.9			
Expectation of life	80.1	80.3	80.7	81.1	81.4	81.8	82.1	82.4	82.7	82.9	83.2	83.4	83.7	83.9	84.1	84.3	84.5	84.6	84.8	85.0	85.1	85.3	85.4	85.6			
Deaths input																											
In-migration from the UK																											
Male	1,678	2,268	2,316	2,265	2,314	2,275	2,278	2,313	2,279	2,364	2,382	2,358	2,380	2,375	2,388	2,387	2,389	2,415	2,391	2,469	2,478	2,524	2,477	2,548			
Female	1,799	2,427	2,507	2,463	2,522	2,474	2,476	2,516	2,469	2,550	2,559	2,525	2,545	2,529	2,532	2,523	2,515	2,541	2,514	2,601	2,604	2,656	2,614	2,698			
All	3,478	4,695	4,823	4,728	4,836	4,749	4,754	4,829	4,747	4,914	4,941	4,883	4,925	4,904	4,920	4,911	4,905	4,956	4,905	5,070	5,082	5,180	5,090	5,246			
SMigR: males	38.8	52.0	51.4	48.8	48.6	46.6	45.7	45.6	44.3	45.4	45.2	44.2	44.1	43.6	43.4	43.0	42.6	42.6	41.8	42.8	42.5	42.8	41.5	42.2			
SMigR: females	39.7	53.3	53.2	50.6	50.3	48.0	47.1	47.1	45.5	46.5	46.1	45.0	44.9	44.3	44.0	43.5	42.9	43.0	42.2	43.3	42.8	43.1	41.9	42.8			
Migrants input																											
Out-migration to the UK																											
Male	1,802	1,832	1,892	1,941	1,985	2,031	2,076	2,111	2,145	2,170	2,206	2,240	2,278	2,305	2,336	2,365	2,394	2,416	2,438	2,449	2,478	2,506	2,531	2,549			
Female	1,849	1,888	1,950	2,010	2,068	2,121	2,161	2,204	2,246	2,278	2,310	2,340	2,371	2,399	2,421	2,443	2,477	2,491	2,507	2,527	2,551	2,577	2,610	2,630			
All	3,651	3,720	3,842	3,951	4,054	4,152	4,236	4,316	4,391	4,447	4,516	4,580	4,649	4,704	4,757	4,808	4,870	4,907	4,945	4,977	5,028	5,083	5,142	5,179			
SMigR: males	41.7	42.0	42.0	41.8	41.7	41.6	41.7	41.7	41.7	41.7	41.8	42.0	42.2	42.3	42.4	42.6	42.6	42.6	42.6	42.5	42.5	42.5	42.4	42.2			
SMigR: females	40.8	41.4	41.4	41.3	41.2	41.2	41.1	41.2	41.4	41.5	41.6	41.7	41.9	42.0	42.1	42.1	42.2	42.2	42.1	42.0	41.9	41.8	41.8	41.7			
Migrants input																											
In-migration from Overseas																											
Male	267	316	325	334	342	350	357	363	369	373	377	380	384	384	384	383	384	384	383	381	383	384	385	386			
Female	233	276	287	299	311	320	326	331	334	336	338	339	339	338	337	336	333	331	329	328	329	330	331	332			
All	499	592	612	634	653	670	683	694	703	709	715	719	722	722	721	719	718	715	712	710	712	713	716	717			
SMigR: males	88.7	104.3	103.5	103.2	102.7	102.4	102.0	102.0	101.9	101.8	101.7	101.7	101.8	101.4	100.8	100.1	99.6	98.9	97.9	96.8	96.1	95.1	94.3	93.3			
SMigR: females	74.0	87.3	87.6	87.8	88.2	88.1	87.6	87.1	86.6	86.1	85.7	85.1	84.7	84.2	83.7	83.1	82.3	81.5	80.7	80.0	79.4	78.8	78.1	77.6			
Migrants input																											
Out-migration to Overseas																											
Male	141	174	179	186	192	199	205	209	211	213	215	218	219	220	220	221	222	222	223	223	224	224	225	225			
Female	117	145	151	158	165	172	179	182	184	186	188	189	190	191	191	191	190	189	189	188	188	188	188	189			
All	258	319	331	344	357	372	384	391	396	400	404	407	409	410	411	412	412	412	411	411	412	412	414	414			
SMigR: males	47.0	57.3	57.1	57.3	57.6	58.3	58.8	58.6	58.4	58.3	58.1	58.2	58.1	58.0	57.9	57.7	57.6	57.3	56.9	56.5	56.1	55.6	55.1	54.6			
SMigR: females	37.2	45.9	46.2	46.4	46.9	47.5	48.1	48.0	47.8	47.7	47.7	47.6	47.5	47.5	47.4	47.3	47.0	46.6	46.2	45.9	45.4	45.0	44.5	44.1			
Migrants input																											
Migration - Net Flows																											
UK	-173	+975	+981	+777	+783	+597	+518	+513	+356	+467	+425	+303	+277	+200	+163	+102	+34	+49	-40	+94	+53	+97	-51	+67			
Overseas	+241	+273	+281	+290	+296	+298	+298	+303	+308	+309	+311	+312	+313	+312	+310	+307	+305	+303	+301	+299	+300	+301	+302	+303			
Summary of population change																										***2010-2033***	***2011-2031***
Natural change	+619	+670	+757	+813	+841	+876	+896	+907	+926	+945	+964	+980	+984	+981	+974	+965	+953	+943	+934	+924	+920	+918	+917	+918		+20,908	+18,155
Net migration	+68	+1,249	+1,262	+1,067	+1,078	+896	+816	+816	+664	+777	+736	+615	+590	+512	+473	+409	+340	+352	+261	+392	+353	+398	+251	+370		+14,676	+13,656
Net change	+687	+1,919	+2,019	+1,880	+1,920	+1,772	+1,712	+1,723	+1,590	+1,722	+1,700	+1,595	+1,574	+1,493	+1,447	+1,374	+1,293	+1,295	+1,195	+1,316	+1,273	+1,316	+1,169	+1,288		+34,983	+31,812

Summary of Population estimates/forecasts

Population at mid-year

	2010	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*	*2024*	*2025*	*2026*	*2027*	*2028*	*2029*	*2030*	*2031*	*2032*	*2033*	*2034*		
0-4	5,994	6,091	6,382	6,575	6,830	7,055	7,311	7,451	7,530	7,569	7,618	7,667	7,709	7,749	7,770	7,769	7,743	7,694	7,637	7,574	7,525	7,483	7,459	7,436	7,434		
5-10	5,812	5,876	6,091	6,450	6,768	7,034	7,276	7,569	7,888	8,071	8,319	8,527	8,769	8,899	8,971	9,021	9,064	9,103	9,137	9,156	9,165	9,149	9,111	9,049	8,986		
11-15	5,061	5,033	4,932	4,901	4,815	4,842	4,882	5,024	5,180	5,510	5,698	5,959	6,122	6,363	6,505	6,727	6,913	7,142	7,265	7,322	7,360	7,395	7,433	7,466	7,501		
16-17	2,115	2,131	2,096	2,118	2,096	2,115	2,058	1,969	1,946	1,947	2,030	2,107	2,138	2,232	2,428	2,543	2,542	2,552	2,629	2,806	2,905	2,952	2,975	2,987	2,995		
18-59Female, 64Male	48,242	48,600	49,824	50,931	52,091	53,175	54,142	55,013	55,831	56,478	57,152	57,764	58,431	58,943	59,522	60,030	60,627	61,129	61,655	62,101	62,742	63,463	64,166	64,875	65,735		
60/65 -74	7,959	8,042	8,238	8,482	8,626	8,837	9,125	9,359	9,570	9,779	10,082	10,369	10,434	10,646	10,905	11,173	11,487	11,775	12,047	12,302	12,517	12,664	12,917	12,995	13,047		
75-84	4,770	4,783	4,807	4,811	4,802	4,750	4,637	4,618	4,661	4,703	4,780	4,883	5,139	5,358	5,457	5,632	5,821	5,961	6,116	6,244	6,439	6,634	6,677	6,823	7,043		
85+	1,537	1,621	1,726	1,847	1,965	2,107	2,255	2,395	2,516	2,654	2,754	2,859	2,986	3,114	3,236	3,349	3,420	3,553	3,718	3,894	4,063	4,250	4,566	4,842	5,021		
Total	81,490	82,177	84,096	86,115	87,995	89,914	91,686	93,398	95,121	96,711	98,433	100,134	101,728	103,302	104,796	106,243	107,617	108,910	110,204	111,400	112,716	113,989	115,304	116,473	117,761	+34,983	+31,812
Population impact of constraint																											
Number of persons		+98	+1,236	+1,232	+1,001	+992	+796	+712	+705	+556	+666	+633	+522	+519	+463	+442	+397	+359	+382	+295	+425	+391	+447	+305	+411		
Households																											
Number of Households	34,397	34,716	35,453	36,190	36,928	37,665	38,402	39,140	39,877	40,615	41,353	42,090	42,828	43,565	44,303	45,041	45,779	46,515	47,253	47,990	48,727	49,465	50,203	50,940	51,678	+16,543	+14,749
Change over previous year		+319	+737	+737	+737	+737	+737	+738	+738	+738	+738	+738	+738	+738	+738	+738	+738	+737	+738	+737	+738	+738	+738	+738	+738	+719	+737
Number of supply units	34,992	35,316	36,066	36,816	37,566	38,316	39,066	39,817	40,567	41,317	42,068	42,818	43,569	44,319	45,069	45,820	46,570	47,320	48,070	48,820	49,570	50,321	51,071	51,821	52,572	+16,829	+15,004
Change over previous year		+324	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+750	+732	+750
Labour Force																											
Number of Labour Force	39,867	40,200	41,182	42,171	43,155	44,061	44,858	45,583	46,289	47,003	47,701	48,309	48,877	49,461	50,029	50,542	51,008	51,493	52,027	52,557	53,137	53,704	54,325	54,895	55,567	+15,028	+13,504
Change over previous year		+333	+982	+989	+985	+905	+797	+725	+706	+714	+698	+608	+569	+584	+568	+513	+466	+486	+533	+530	+579	+567	+621	+570	+672	+653	+675
Number of supply units	37,994	38,657	39,601	40,637	41,343	42,343	43,288	43,688	44,456	45,142	45,812	46,395	46,893	47,453	47,949	48,440	48,836	49,301	49,760	50,268	50,271	50,756	51,342	51,881	52,516	+13,888	+12,099
Change over previous year		+663	+944	+1,036	+706	+1,000	+946	+400	+768	+686	+670	+583	+498	+560	+495	+492	+396	+465	+459	+507	+4	+484	+587	+539	+635	+604	+605

Scenario E: Transformed Centre

Population Estimates and Forecasts

Nathaniel Lichfield & Partners

Components of Population Change

Harlow

Year beginning July 1st ……..

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Births																								
Male	657	682	732	768	792	811	827	838	853	868	882	893	898	899	897	892	885	878	874	869	868	868	870	873
Female	626	649	697	732	754	773	787	798	812	826	840	851	856	856	854	850	842	837	833	828	827	827	828	831
All Births	1,283	1,331	1,429	1,500	1,545	1,584	1,614	1,637	1,665	1,694	1,722	1,744	1,754	1,755	1,750	1,742	1,727	1,715	1,707	1,697	1,696	1,695	1,698	1,704
TFR	2.21	2.28	2.32	2.31	2.27	2.21	2.16	2.11	2.07	2.04	2.01	1.98	1.95	1.92	1.89	1.87	1.85	1.85	1.85	1.84	1.85	1.85	1.86	1.86
Births input																								
Deaths																								
Male	334	330	326	318	317	307	303	302	297	295	292	290	289	289	289	290	290	291	293	295	299	302	305	309
Female	331	331	324	326	324	318	314	310	308	305	302	299	296	295	294	292	290	289	290	290	292	292	294	295
All deaths	664	660	651	645	641	625	617	611	605	599	594	589	586	584	582	582	580	580	583	586	591	594	599	604
SMR: males	109.6	104.6	100.4	94.9	91.7	86.2	82.4	79.4	75.6	72.5	69.4	66.4	64.1	61.8	59.5	57.8	55.7	53.7	52.3	50.7	49.4	48.1	46.8	45.7
SMR: females	98.7	96.4	90.5	87.3	83.4	78.7	75.0	71.4	68.5	65.4	62.5	59.6	57.0	54.7	52.6	50.5	48.5	46.8	45.2	43.8	42.5	41.3	40.0	38.8
SMR: male & female	103.9	100.3	95.2	90.9	87.3	82.3	78.4	75.1	71.8	68.7	65.7	62.8	60.3	58.0	55.8	53.9	51.9	50.0	48.5	47.0	45.8	44.5	43.2	42.0
Expectation of life	80.1	80.3	80.7	81.1	81.4	81.8	82.1	82.4	82.7	82.9	83.2	83.4	83.7	83.9	84.1	84.3	84.5	84.6	84.8	85.0	85.1	85.3	85.4	85.6
Deaths input																								
In-migration from the UK																								
Male	1,678	2,596	2,649	2,598	2,644	2,600	2,612	2,660	2,633	2,735	2,764	2,747	2,780	2,779	2,794	2,790	2,806	2,841	2,820	2,912	2,925	2,985	2,936	3,019
Female	1,799	2,778	2,875	2,838	2,900	2,851	2,865	2,920	2,881	2,979	2,998	2,968	2,998	2,983	2,984	2,970	2,973	3,007	2,980	3,083	3,087	3,155	3,111	3,212
All	3,478	5,374	5,524	5,436	5,544	5,451	5,477	5,580	5,514	5,714	5,762	5,715	5,778	5,761	5,778	5,760	5,778	5,848	5,799	5,995	6,012	6,140	6,047	6,231
SMigR: males	38.8	59.5	58.2	54.8	53.9	51.3	50.1	49.8	48.3	49.3	48.9	47.8	47.6	46.9	46.5	45.9	45.5	45.5	44.6	45.6	45.2	45.5	44.0	44.7
SMigR: females	39.7	61.0	60.2	56.8	55.8	52.9	51.7	51.4	49.6	50.4	49.9	48.7	48.5	47.6	47.1	46.4	45.8	45.9	45.0	46.0	45.4	45.7	44.4	45.2
Migrants input																								
Out-migration to the UK																								
Male	1,802	1,832	1,911	1,979	2,042	2,106	2,168	2,221	2,272	2,312	2,366	2,415	2,469	2,510	2,555	2,597	2,637	2,670	2,703	2,723	2,762	2,801	2,837	2,864
Female	1,849	1,888	1,972	2,055	2,135	2,209	2,269	2,333	2,394	2,444	2,494	2,542	2,588	2,631	2,666	2,700	2,745	2,769	2,794	2,824	2,857	2,894	2,939	2,969
All	3,651	3,720	3,883	4,034	4,177	4,315	4,437	4,553	4,665	4,756	4,860	4,957	5,057	5,141	5,221	5,297	5,381	5,439	5,497	5,547	5,618	5,694	5,776	5,833
SMigR: males	41.7	42.0	42.0	41.8	41.6	41.6	41.6	41.6	41.7	41.7	41.9	42.0	42.3	42.4	42.6	42.7	42.8	42.8	42.8	42.7	42.7	42.6	42.5	42.4
SMigR: females	40.8	41.4	41.3	41.1	41.1	41.0	41.0	41.1	41.2	41.4	41.5	41.7	41.8	42.0	42.1	42.1	42.3	42.2	42.2	42.1	42.0	41.9	41.9	41.8
Migrants input																								
In-migration from Overseas																								
Male	267	316	329	343	355	366	376	385	394	399	405	411	416	417	418	418	420	420	421	420	422	424	427	429
Female	233	276	292	309	326	340	350	357	363	367	371	372	374	374	373	373	371	369	367	367	368	370	372	374
All	499	592	621	653	681	706	726	742	757	766	776	783	789	791	792	791	791	789	788	786	790	794	799	803
SMigR: males	88.7	104.3	103.6	103.4	103.0	102.8	102.4	102.3	102.2	102.0	101.8	101.7	101.7	101.2	100.5	99.7	99.2	98.3	97.4	96.2	95.5	94.5	93.7	92.8
SMigR: females	74.0	87.3	87.8	88.3	88.8	88.7	88.2	87.6	86.9	86.4	85.9	85.2	84.7	84.0	83.4	82.8	81.9	81.0	80.1	79.4	78.8	78.3	77.6	77.2
Migrants input																								
Out-migration to Overseas																								
Male	141	174	181	190	198	207	215	220	224	228	231	235	237	239	240	242	244	245	246	246	248	250	251	252
Female	117	145	153	162	172	182	191	196	200	203	206	208	210	211	212	213	213	212	212	212	212	212	213	214
All	258	319	335	353	370	389	406	416	424	431	437	443	447	450	452	455	456	457	457	458	460	462	464	466
SMigR: males	47.0	57.3	57.1	57.3	57.5	58.2	58.6	58.5	58.2	58.2	58.0	58.1	58.0	57.9	57.7	57.6	57.5	57.3	56.9	56.5	56.1	55.6	55.1	54.6
SMigR: females	37.2	45.9	46.2	46.4	46.9	47.5	48.1	48.0	47.8	47.7	47.8	47.6	47.6	47.5	47.4	47.3	47.0	46.6	46.2	45.8	45.4	45.0	44.5	44.1
Migrants input																								
Migration - Net Flows																								
UK	-173	+1,654	+1,640	+1,401	+1,367	+1,136	+1,040	+1,026	+848	+958	+902	+758	+721	+620	+557	+463	+397	+409	+302	+448	+394	+446	+271	+398
Overseas	+241	+273	+286	+300	+311	+317	+319	+327	+333	+336	+339	+340	+342	+341	+339	+336	+335	+332	+331	+328	+330	+332	+335	+337

Summary of population change																									***2010-2033***	***2011-2031***
Natural change	+619	+670	+778	+856	+905	+959	+997	+1,025	+1,060	+1,095	+1,127	+1,155	+1,168	+1,171	+1,168	+1,160	+1,147	+1,135	+1,124	+1,111	+1,105	+1,101	+1,100	+1,100	+24,218	+20,917
Net migration	+68	+1,927	+1,927	+1,702	+1,677	+1,453	+1,359	+1,353	+1,181	+1,294	+1,241	+1,098	+1,064	+961	+896	+799	+731	+741	+633	+776	+724	+778	+606	+735	+25,657	+23,538
Net change	+687	+2,598	+2,704	+2,557	+2,582	+2,412	+2,356	+2,378	+2,242	+2,389	+2,368	+2,253	+2,232	+2,133	+2,064	+1,960	+1,879	+1,876	+1,757	+1,887	+1,829	+1,879	+1,706	+1,835	+48,726	+44,455

Summary of Population estimates/forecasts

Population at mid-year

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034		
0-4	5,994	6,091	6,445	6,710	7,049	7,362	7,716	7,957	8,132	8,262	8,399	8,531	8,649	8,757	8,836	8,879	8,884	8,853	8,806	8,743	8,690	8,640	8,610	8,578	8,571		
5-10	5,812	5,876	6,128	6,527	6,887	7,200	7,490	7,840	8,231	8,496	8,839	9,148	9,502	9,745	9,924	10,074	10,211	10,337	10,450	10,536	10,601	10,626	10,616	10,566	10,506		
11-15	5,061	5,033	4,957	4,949	4,883	4,930	4,989	5,152	5,330	5,689	5,908	6,207	6,410	6,702	6,903	7,198	7,464	7,786	8,002	8,147	8,268	8,383	8,496	8,598	8,695		
16-17	2,115	2,131	2,109	2,141	2,126	2,152	2,100	2,017	1,999	2,006	2,099	2,184	2,222	2,326	2,540	2,673	2,687	2,715	2,813	3,028	3,168	3,255	3,315	3,361	3,402		
18-59Female, 64Male	48,242	48,600	50,326	51,933	53,581	55,129	56,533	57,832	59,074	60,129	61,210	62,218	63,268	64,150	65,084	65,923	66,836	67,655	68,502	69,258	70,230	71,291	72,353	73,423	74,669		
60/65 -74	7,959	8,042	8,260	8,528	8,693	8,924	9,233	9,487	9,719	9,949	10,276	10,588	10,675	10,913	11,200	11,499	11,846	12,170	12,479	12,773	13,028	13,212	13,511	13,629	13,719		
75-84	4,770	4,783	4,817	4,830	4,830	4,785	4,678	4,667	4,718	4,768	4,853	4,965	5,234	5,465	5,574	5,759	5,959	6,109	6,275	6,413	6,621	6,831	6,883	7,044	7,284		
85+	1,537	1,621	1,734	1,862	1,987	2,135	2,289	2,435	2,561	2,706	2,811	2,922	3,056	3,190	3,319	3,439	3,516	3,658	3,832	4,017	4,197	4,394	4,726	5,017	5,207		
Total	81,490	82,177	84,775	87,479	90,036	92,618	95,030	97,386	99,764	102,006	104,394	106,763	109,016	111,248	113,381	115,444	117,404	119,283	121,159	122,916	124,803	126,632	128,510	130,216	132,051	+48,726	+44,455

Population impact of constraint																											
Number of persons		+98	+1,915	+1,888	+1,618	+1,566	+1,323	+1,222	+1,208	+1,040	+1,152	+1,110	+982	+975	+899	+857	+785	+754	+779	+678	+822	+777	+844	+680	+794		
Households																											
Number of Households	34,397	34,716	35,699	36,682	37,665	38,648	39,630	40,613	41,596	42,579	43,562	44,545	45,528	46,511	47,494	48,477	49,460	50,443	51,426	52,409	53,392	54,375	55,357	56,340	57,323	+21,943	+19,659
Change over previous year		+319	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+983	+954	+983
Number of supply units	34,992	35,316	36,317	37,317	38,316	39,316	40,316	41,316	42,315	43,315	44,315	45,315	46,315	47,315	48,315	49,315	50,315	51,315	52,315	53,315	54,315	55,315	56,315	57,315	58,314	+22,322	+19,999
Change over previous year		+324	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000	+971	+1,000
Labour Force																											
Number of Labour Force	39,867	40,200	41,579	42,963	44,333	45,605	46,748	47,812	48,855	49,897	50,921	51,846	52,721	53,608	54,466	55,256	55,981	56,733	57,541	58,347	59,216	60,076	61,005	61,881	62,878	+22,014	+19,876
Change over previous year		+333	+1,379	+1,385	+1,369	+1,273	+1,143	+1,064	+1,043	+1,042	+1,024	+925	+874	+887	+859	+790	+725	+752	+808	+806	+869	+859	+929	+876	+997	+957	+994
Number of supply units	37,994	38,657	39,983	41,401	42,471	43,827	45,112	45,824	46,920	47,921	48,904	49,793	50,581	51,432	52,202	52,958	53,597	54,317	55,034	55,805	56,023	56,778	57,656	58,484	59,426	+20,490	+18,121
Change over previous year		+663	+1,326	+1,418	+1,070	+1,356	+1,285	+712	+1,097	+1,001	+983	+889	+788	+851	+770	+757	+639	+720	+717	+771	+218	+754	+878	+828	+942	+891	+906

3.0 Appendix 3: A Transformed Town Centre

Introduction

3.1 This appendix sets out commentary on the existing retail provision in Harlow town centre in comparison with other nearby and competing centres.

3.2 The assessment considers whether a significant increase in residential development over the period to 2031 would lead to the desired step change in the town centre retail offer.

Harlow Town Centre

3.3 The Harlow District Council Retail Study Update (November 2010) undertook a health check of Harlow Town Centre. As set out in Table 2.1 below, this demonstrates that Harlow Town Centre has an above average vacancy level, both in terms of the number of units and the amount of floorspace. The high vacancy rate suggests the supply of units currently exceeds demand and/or the quality of vacant units does not meet operator's requirements.

Table 2.1 Harlow Retail Composition

Retail Category	Units		UK Average	Floorspace		UK Average
	No.	%	%	sq.m (gross)	%	%
Convenience	23	7.8	8.8	10,749	11.2	14.5
Comparison	106	36.1	34.0	45,541	47.5	37.4
Service	110	37.4	45.9	25,836	27.0	38.6
Vacant	55	18.7	11.3	13,750	14.3	9.5
Total	**294**	**100.0**	**100.0**	**95,876**	**100.0**	**100.0**

Source: Harlow District Council Retail Study Update November 2010

3.4 The Harlow Retail Study Update Addendum identifies the capacity for additional retail floorspace in the district over the period to 2031. The calculations are based on the forecast growth in population and expenditure within the study area, and assuming a constant market share. If this level (or more) of retail floorspace is not provided within the town centre, it will fail to maintain its market share, and lose out further to other competing centres.

Table 2.2: Harlow District Retail Floorspace Capacity

Floorspace Capacity, 2031	sq.m net
Convenience Goods (large store format)	2,992
Convenience Goods (discount operator)	7,479
Comparison Goods (without Harvey Centre extension)	65,019
Comparison Goods (with Harvey Centre extension)	58,257

Source:

Harlow District Council Retail Study Update Addendum, October 2011

3.5 The Retail Study Addendum does not apportion the retail floorspace projections to specific locations and how much should be directed to Harlow town centre. Only the global district-wide capacity is provided. However, the figures within the 2010 Retail Study imply that around 50% of the comparison goods floorspace capacity should be accommodated within the town centre. Clearly, if there is an increase in the population within the study area, assuming all other factors remain constant, this would generate capacity for additional retail floorspace.

Comparison with Competing Centres

3.6 We have undertaken a comparison with competing centres using different indicators to establish Harlow's position. As identified in the Harlow District Council Retail Study Update, Harlow currently competes with a number of centres in the sub-region, particularly in terms of comparison goods trade draw. In order to retain a higher proportion of expenditure within Harlow, it will be necessary to improve the retail offer of the town centre.

3.7 We have assessed the following centres for comparison:

a Bishops Stortford;

b Cambridge;

c Chelmsford;

d Milton Keynes;

e Stevenage; and

f Watford.

Population and Retail Floorspace Provision

3.8 A review of the competing centres in terms of their urban area population and the amount of town centre floorspace reveals that there is generally a correlation between the size of the urban area population and the amount of retail floorspace.

Table 3.1: Competing Centres Urban Area Population and Town Centre Floorspace

Centre	Urban Area Population [3]	Town Centre Floorspace (sq.m gross)
Bishops Stortford [1]	32,325	65,580
Stevenage [2]	81,482	64,000
Harlow [1]	**88,296**	**95,876**
Chelmsford [1]	99,962	134,003
Watford [2]	120,960	127,000
Cambridge [2]	131,465	139,000
Milton Keynes [2]	184,506	156,000

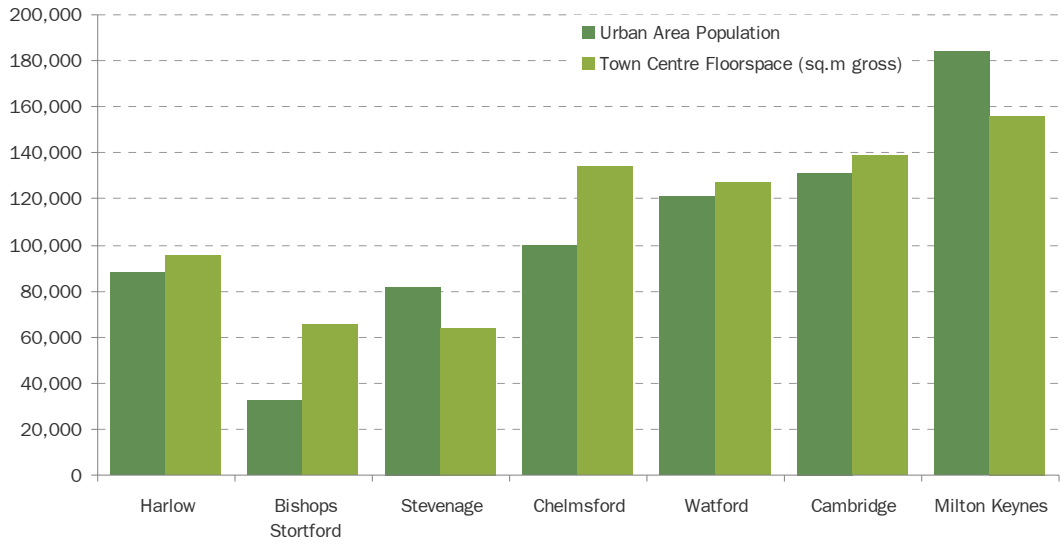
Source:

[1] Harlow District Council Retail Study Update, November 2010

[2] Stevenage Borough Retail Capacity Assessment, January 2010

[3] Census 2001

Figure 3.1: Competing Centres Urban Area Population and Town Centre Floorspace



3.9 Using these centres for comparison, it implies that an increase in population of around 40,000 could assist in Harlow achieving a step change in its retail offer to match centres such as Chelmsford, Watford and Cambridge.

Centre Floorspace and Ranking

3.10 In addition to the amount of retail floorspace within the centres, the ranking of centres gives an indication of the strength of the retail offer. Management Horizon Europe's (MHE) UK Shopping Index 2008 ranked retail centres across the country. While this data is now somewhat dated, it remains the most up to date national ranking of centres available. This data will not take into account recent changes that may affect rankings.

3.11 The MHE score does not necessarily reflect the overall size of the town centre or the number of shops, but the presence of national multiples and the relative draw and importance that stores have. Each centre is given a weighted score which takes account of its provision of multiple retailers and anchor store strengths. For example, anchor department stores such as John Lewis or Debenhams receive a higher score (10) than other multiple operators such as H&M (3) in order to reflect their major influence on non-food shopping patterns. The Index also provides appropriate weight to individual flagship stores, leading to stores such as the House of Fraser in Birmingham obtaining a higher score than the same store in Nottingham.

3.12 Therefore, a location which has stronger retailers which attract more visitors to the centre and have a greater influence on shopping patterns will receive a higher score than those that do not. Towns with a higher number of independent shops may have a low MHE score in relation to their overall size because of the weight that is given to national multiple retailers and their influence on shopping patterns.

3.13 In 2008 the MHE Index for the first time includes restaurants, coffee shops and high street food outlets (e.g. McDonalds) due the effect that they are having on the retail landscape.

3.14 Table 3.2 and Figure 3.2 below provide a comparison between the town centre floorspace within Harlow and competing centres against the centre's MHE score.

Table 3.2: Town Centre Floorspace and MHE Score/Classification

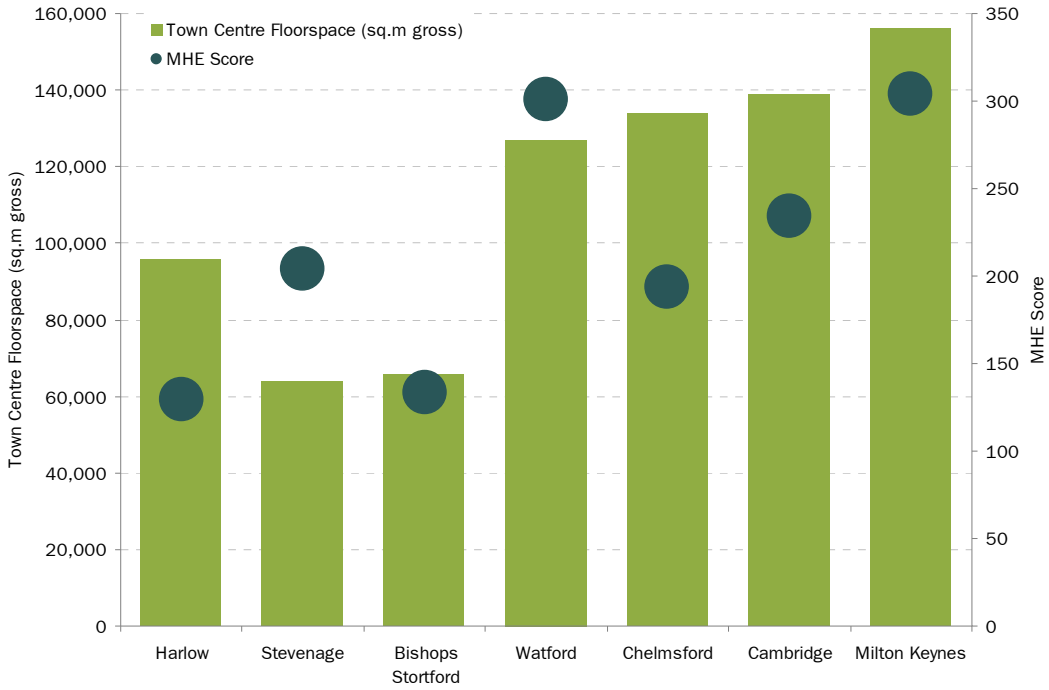
Centre	Town Centre Floorspace (sq.m gross)	MHE Score	Centre Classification
Stevenage [2]	64,000	204	Regional
Bishops Stortford [1]	65,580	133	Sub-Regional
Harlow [1]	**95,876**	**129**	**Major District**
Watford [2]	127,000	301	Major Regional
Chelmsford [1]	134,003	194	Regional
Cambridge [2]	139,000	234	Regional
Milton Keynes [2]	156,000	304	Major Regional

Source:

[1] Harlow District Council Retail Study Update, November 2010

[2] Stevenage Borough Retail Capacity Assessment, January 2010

Figure 3.2: Town Centre Floorspace and MHE Score



3.15 The above figure demonstrates that while Harlow has a reasonable provision of retail floorspace, its MHE score and classification is closest to Bishops Stortford, which has around a third less floorspace than Harlow. Stevenage also has a third less floorspace than Harlow but achieves a much higher MHE score, reflecting the fact that the centre offers better quality retail than Harlow. For Harlow to improve its retail offer, it will therefore be necessary not only to increase the amount of floorspace but also the quality of the offer, for example through attracting more department stores.

3.16 In this respect, Harlow currently only has two traditional department stores; Marks & Spencer and BHS. Although it does have other 'anchor' type stores from the lower value end of the retail offer (e.g. TK Maxx and Primark) which perform an important function, in order to retain expenditure and increase Harlow Town Centre's market share, higher value major retailers such as Debenhams, House of Fraser or John Lewis would help underpin Harlow as a transformed centre.

3.17 By way of example, Debenhams is not currently represented in Harlow, but does have presence in an arc around the London commuter belt with stores in Hemel Hempstead, Luton, Welwyn Garden City, Chelmsford and Basildon. It is conceivable that Debenhams may chose in future to look at Harlow as a potential location for a store given a spatial gap in their presence on the M11 corridor. However, these comparator locations all have populations and catchments in excess of Harlow's ranging from 110,000 in Welwyn Hatfield up to over 200,000 in Luton. Growth in Harlow's population to such a comparable level would conceivable help to deliver a better quality retail offer and attract such retailers.

Retail Requirements from Residential Development

3.18 We have also considered the retail capacity that would be generated from significant additional residential developments over the period to 2031. The calculations set out in Annex 1 apply the same assumptions as the Harlow Retail Study Update and Addendum to the potential new population that would be generated by 20,000 new dwellings by 2031. Table 3.3 below summarises the floorspace requirements of this additional population in 2031.

Table 3.3: Floorspace Requirements, 2031

Floorspace Requirements	sq.m net	sq.m gross
Convenience Goods	7,515	11,561
Comparison Goods	27,604	36,806
Sevice Uses	15,051	20,729
Total	**50,170**	**69,096**

3.19 Assuming that the same market share is achieved from the new population, this level of population growth would generate a need for an increase in the town centre retail floorspace of around 70% of the existing provision.

3.20 This additional floorspace requirement is considered to be of a sufficient scale to deliver improvements to the town centre retail offer and help Harlow to compete more effectively with other centres, such as Chelmsford.

Supporting an Evening and Leisure Economy

3.21 Looking at the evening economy, Harlow Town Centre already sustains a theatre, a small range of restaurants at the Water Gardens and also further leisure provision in the form of a Bowling Alley and a 'Quasar' laser tag facility. Harlow currently has a 6 screen Cineworld at the Queensgate Centre Retail Park, with a further 6 screen Cineworld due to open in the Town Centre by 2014.

3.22 There is, however, significant scope to increase the scale of evening and leisure economy within Harlow Town Centre to underpin vitality and increase expenditure within the town. By way of comparison, Stevenage, a town only slightly larger than Harlow, supports 16 cinema screens, whilst Crawley and Basingstoke at c.105,000 to 107,000 population supports 16 and 20 screens respectively. Cambridge is a similar size to what Harlow could become at 20,000 dwellings growth, and successfully sustains 20 cinema screens as well as an exceptionally wide range of pubs, bars and restaurants, as reflected in its Retail Ranking from MHE.

3.23 The evening and leisure economy is directly affected by spending within an area by catchment populations. Improvement in the evening economy could be further underpinned by population growth generating more trips for evening economy uses in Harlow town centre. A town centre supported by a population of between 110,000 up to 125,000 would, using similar settlements as a

benchmark, successfully support a larger cinema offer as well as a greater range of restaurants and bars for the town.

Annex 1: Retail Requirements Calculations

Table A.1: Population, 2031

Additional Population, 2031	
Dwellings	20,000
Population	44,455

Table A.2: Expenditure per Capita, 2031

Expenditure per capita, 2031 (£)	
Convenience Goods	£2,014
Comparison Goods	£5,669

Source:

Average Figure for Zones 1 and 2
Convenience Goods: Table 2, Appendix 3
Comparison Goods: Table 2, Appendix 4
Harlow District Council Retail Study Update November 2010
Note: 2008 prices, SFT removed

Table A.3: Total Expenditure, 2031

Total Expenditure, 2031 (£m)	
Convenience Goods	£89.53
Comparison Goods	£252.02

Table A.4: Harlow Market Share

Harlow Market Share	
Convenience Goods	88.5%
Comparison Goods	80.3%

Source:

Market Shares for Harlow - Averages for Zones 1 and 2
Convenience Goods: Tables 4, 6 and 8, Appendix 3
Comparison Goods: Table 1, Appendix 1B
Harlow District Council Retail Study Update November 2010

Table A.5: Retained Expenditure

Harlow Retained Expenditure, 2031 (£m)	
Convenience Goods	£79.24
Comparison Goods	£202.37

Table A.6: Floorspace Turnover

Sales per sq.m, 2031 (£)	
Convenience Goods	£10,544
Comparison Goods	£7,331

Source:

Convenience Goods: Table 1, Appendix II (large store format)
Comparison Goods: Table 3, Appendix II
Harlow District Council Retail Study Update Addendum October 2011

Table A.7: Floorspace Requirements (sq.m net)

Floorspace Reqirements (sq.m net)	
Convenience Goods	7,515
Comparison Goods	27,604
Total	**35,119**

Table A.8: Floorspace Requirements (sq.m gross)

Floorspace Requirements (sq.m gross)	
Convenience Goods	11,561
Comparison Goods	36,806
Sevice Uses	20,729
Total	**69,096**

Note:

Service Uses (non-retail Class A1 plus Class A2, A3, A4 and A4)
Assumed to equate to 30% of floorspace requirements

4.0 Appendix 4: Baseline, Quantifying Benefits & Benchmarks

Introduction

4.1 This appendix sets out the approach to assessing each regeneration 'receptor' in terms of its baseline position (e.g. how suitable current provision is and whether there are current shortfall/surpluses or particular characteristics associated with the receptor) and the approach to identifying impacts, quantifying benefits and considering how growth could change the position. This is split into four thematic areas:

a Demographic Change;

b Jobs, Spending & Local Economic Growth;

c Public Finances; and

d Social, Community & Environment (including infrastructure).

4.2 The approach set out in this appendix is then used to generate and benchmark the outcomes for each scenario outlined in Appendix 5.

'Harlow Study Area'

4.3 The 'Harlow Study Area' is assumed to be the contiguous urban area of Harlow and its immediate environs. All assessments are undertaken on the assumption that benefits are accrued to 'Harlow' as an urban area rather than 'Harlow' as a Local Authority area. The assessment is therefore undertaken without explicit regard to, and unconstrained by, administrative boundaries.

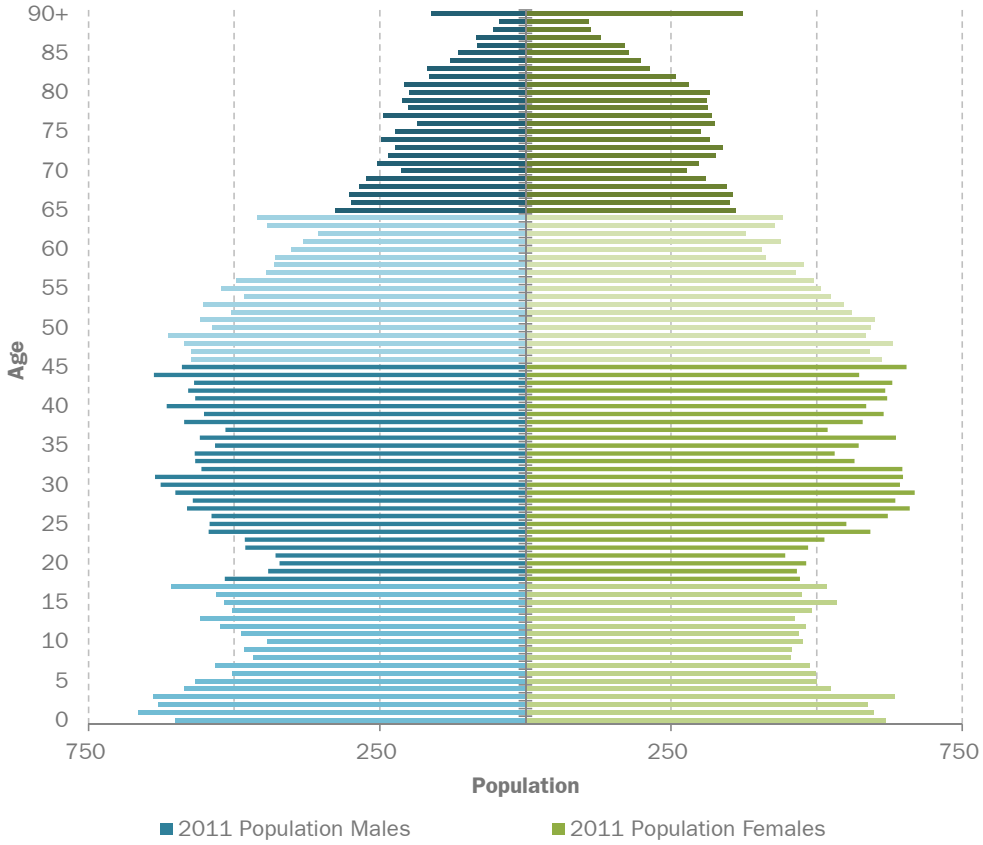
Demographic Change

4.4 Demographic change for each scenario has been projected using the POPGROUP demographic model as set out in Appendix 1. This projects how the structure of the population and the structure of households will change over time within Harlow. It also projects how much of the population will be economically active, and, how many jobs locally they will support.

Population & Age Structure

4.5 The population of Harlow at mid-year 2011 was 82,177 people, which is used as the 'current' population of Harlow and the baseline against which any future change is measured. The current age profile of Harlow is illustrated in Figure 4.1.

Figure 4.1 Age Profile of Harlow District 2011



Source: ONS Mid-Year Estimates (2011)

Households

4.6 There number of households within Harlow at mid-year 2011 was 34,716, which is used as the 'current' number of households resident in Harlow and the baseline against which any change is measured.

Jobs, Spending and Local Economic Growth

4.7 Jobs, spending and local economic growth factors cover the full range of outcomes that could occur for Harlow's economy. This particularly focusses on monetary outcomes, in terms of the scale of money flowing through the Harlow economy.

Local Labour Force

4.8 In 2011 there were 40,200 economically active residents within Harlow. This local labour force formed 75.9% of the working age population 16-64 within the District. This is used as the baseline position for considering local labour force growth, with projected rates of economic activity used to project future labour force changes, as set out in Appendix 1.

Employment

4.9 Employment within Harlow was estimated at c.38,700 workplace jobs within the town in 2011. This is utilised a baseline, with future job growth estimated based upon the Labour Force Ratio (i.e. the ratio of local working residents to local workplace jobs - drawing upon data from the East of England Forecasting Model (EEFM) on the Labour Force Ratio and how it is projected to change in future) and the projections of local labour force from the POPGROUP demographic model.

4.10 It should therefore be noted that these employment projections associated with each scenario, with the exception of the jobs led scenario, are not forecasts of how the local economy could perform, but are labour force led estimates of how much employment Harlow could realistic sustain under each scenario. Notwithstanding, there is a certain degree of cross reliance between labour force and jobs, as with a sufficient labour force, job opportunities will not be occupied and thus would not be a 'job' or employment.

4.11 The jobs-led scenario, however, does provide a forecast of how many jobs Harlow could achieve if it performs in line with expectations. This is based upon evidence within the Harlow's Employment Land Review (January 2013) which draws upon job forecasts from the East of England Forecasting Model (EEFM). The EEFM uses a 'shift-share' model approach which reflects unconstrained and unfettered estimates of how much employment growth is predicted for Harlow, based upon recent trends in sectoral growth combined with projections of GVA at a regional level and how such economic sectors in Harlow District have fared relative to the region's growth in the past. The EEFM projects jobs growth of c.7,000 jobs over 2011-2031, albeit there is a further aspiration from Harlow District Council to 'make-up' some of the jobs lost during the recession, with a jobs target of c.8,000.

4.12 Broadly this scale of growth represents the ambient economic potential of Harlow; growth that Harlow could expect to achieve if it performs in line with how it has performed previously and how it could be expected to perform in the future. This is, however, independent of wider policies on the growth of Harlow, and lower levels of development could lead to this potential being constrained, whilst equally higher levels of growth could help exceed current potential. 8,000 jobs can therefore be used a broad benchmark of what employment Harlow could be anticipated to achieve under 'normal' conditions.

Gross Value Added (GVA)

4.13 Gross Value Added (GVA) provides a measure of economic output generated by employees. Average ratios of GVA generated per worker can be used as a basis to estimate the total level of GVA generated by Harlow's workforce under various scenarios of growth.

4.14 Based on Experian data, the workforce in Harlow generated an average GVA per worker in 2011 of £38,130.[1] Experian projections indicate that this average figure would increase to £53,010 per year in 2031 (also based on 2009 prices). Applying these averages to the total employment base under each scenario provides an estimate of total GVA generated per year to the Harlow economy. It should be noted that not all of this will necessarily be retained locally.

Company Births & Survival

4.15 BIS business demography data indicates that in 2011, there were 34.7 business births per 10,000 of the population in Harlow. This ratio can be applied to the total population estimate under each scenario in both 2011 and 2031 to estimate the number of new business start-ups per year.

4.16 Under the 'Jobs Led' scenario, the business birth rate has been increased to 45 births per 10,000 population to reflect a higher level of job growth in 2031 implied by the scenario (which is closely linked to business growth). This higher rate represents the average business birth rate across a number of comparator locations to Harlow (as outlined in Section 4). Similarly, the business birth rate by 2031 has been increased by 10% under the 'Transformed Centre' scenario to reflect a higher than average business start-up rate within the retail sector.

4.17 BIS business demography data also shows that in 2010, there were 35.9 business deaths per 10,000 of the population in Harlow. This ratio has been applied to the total population estimate under each scenario in both 2011 and 2031 to estimate the number of business deaths per year.

4.18 Under the 'Jobs Led' scenario, the business death rate has been decreased by 10% in 2031 to reflect higher levels of employment and business growth. The business death rate has also been reduced by 10% under the 'Transformed Centre' scenario to reflect the below average business closure rate within the retail sector.

4.19 According to BIS business demography statistics, the proportion of businesses surviving at least one year in Harlow was 91.4% in 2010. This rate has been applied to the number of business births in the town in both 2011 and 2031 under each scenario, to estimate the number of businesses surviving at least one year. Under both the 'Jobs Led' and 'Transformed Centre' scenarios, this one year survival rate has been increased to 95% in 2031 to reflect below average levels of business deaths implied (as outlined above).

Household Spending Growth

4.20 An increasing population in Harlow offers an opportunity to increase local expenditure as new residents spend money on local goods and services.

4.21 The 2012 ONS Family Expenditure Survey provides summary data on typical household spending. This indicates average spending levels of £413.9 per

[1] Based on 2009 prices

week across all household groups in the UK. Spending by East of England households is 3.8% higher on average, which results in an average household expenditure figure of £429.6 per week. This figure has been applied to the total number of households in Harlow in 2011 for each scenario to estimate total household spending per annum.

4.22 Projections from Experian Retail Planner indicate that total consumer spending across the UK is expected to increase by 123% over the 20 year period 2009 to 2029. Applying this increase to the £429.6 weekly expenditure figure (used for the 2011 scenario) results in weekly expenditure of £958.6 per household by 2031. This figure has then been applied to the total number of households in Harlow in 2031 for each scenario. It should be noted that not all of this expenditure will necessarily be retained locally.

Public Finances

4.23 Public finance factors cover the range of outcomes that would accrue as benefits to the public purse. Such streams of income to public bodies (be it the Council(s), County Council, Central Government or Government Agencies) come from a range of taxes, central government funding streams as well as planning obligations. Such income streams will enable those agencies to re-invest money back into the regeneration of Harlow through provision of infrastructure or provision of services and as such are an important consideration to the successful regeneration of Harlow.

Council Tax Base

4.24 The Council Tax Base for Harlow in 2011/12 totalled £44.3m as set out in CLG's Council Tax Base statistics. This was drawn from a total stock of 35,909 dwellings in 2011, of which 88.2% were dwellings upon which Council Tax was payable. This is illustrated in Table 4.1.

Table 4.1 Council Tax Base for Harlow

Tax Band:	A	B	C	D	E	F	G	H	Total
Harlow Council Tax (2011/12)	£1,024	£1,195	£1,366	£1,536	£1,878	£2,219	£2,561	£3,037	~
Total Dwellings (2011)	2,304	7,566	18,586	4,082	2,104	869	383	15	35,909
Equivalent Dwellings (applying CTB discounts)	1,823	6,294	16,689	3,743	1,961	818	349	10	31,689
Equivalent Dwellings (%)	5.1%	17.5%	46.5%	10.4%	5.5%	2.3%	1.0%	0.0%	88.2%
Council Tax Base	*£1.868m*	*£7.524m*	*£22.798m*	*£5.752m*	*£3.683m*	*£1.816m*	*£0.895m*	*£0.031m*	***£44,366m***

Source: CLG Council Tax Base Statistics; Harlow District Council Tax Rates for 2011/12 (Note: may not sum due to rounding)

4.25 Estimates of the future Council Tax base is presented at 2011/12 Council Tax prices, and assumes the same profile of tax bandings as currently exists in Harlow, with also the same profile of Council Tax discounts assumed. This is

then applied to the dwelling increase under each scenario to estimate impacts upon the available Council Tax Base per annum.

New Homes Bonus

4.26 The New Homes Bonus is a bonus payable to the local Council from Central Government, which matches Council Tax payments for 6 years for each new home built (albeit uses a national average of Council Tax for purposes of calculating the bonus). New Homes Bonus receipts have been calculated using the CLG New Homes Bonus Calculator, and is calculated on the basis of 30% of all dwellings being affordable dwellings (where there is an additional bonus in the payment). This calculation also assumes the stock of new dwellings matches the Council Tax banding profile that exists currently.

4.27 Funds from the New Homes Bonus are not currently ring-fenced and as such are available as a general funding pot for the Council to use as it deems most appropriate.

Business Rates

4.28 Businesses and other non-domestic occupiers of property pay non-domestic rates (also known as business rates) to contribute towards the cost of local authority services.

4.29 According to the Essex Federation of Small Businesses, Harlow Council collected approximately £44.1 million of business rates from its business base in 2010, equating to circa £1,140 worth of business rates per worker in the town[2]. This figure has been applied to the total employment base in Harlow in both 2011 and 2031 under each scenario to estimate total business rate revenue.

4.30 The Local Government Finance Act 2012 allows local councils to potentially retain 50% of additional business rates payable within their local area, supported by an additional share redistributed by central government. On this basis, it has been assumed that approximately 50% of total business rate revenue generated within Harlow is retained directly by the Council.

CIL/s106 Receipts

4.31 Receipts from planning obligations are calculated on the basis of using current standards for Section 106 agreement set out by the relevant collecting authorities (Harlow District Council and Essex County Council). These standards are set out Table 4.2 and Table 4.3 , and where they are broken down into dwelling types/size, NLP has used the current profile of dwelling stock as identified in the Census 2011 as a proxy for considering the likely profile of new provision.

4.32 Total planning obligations payable has been estimated by NLP to total an average of £11,963 per dwelling in contributions.

[2] Based on total employment of approximately 38,660 in Harlow in 2010

Table 4.2 Essex County Council Planning Obligations

	Census 2011 Dwelling Split	Education Contribution	Transport	Libraries	Waste	Adult Learning
Flats:	25%	£3,852	~	~	~	~
Houses:	75%	£8,085	~	~	~	~
Per Dwelling		**£7,027**	**£2,714**	**£235**	**£288**	**£127**

Source: London Commuter Belt Sub-region Strategic Housing Market Analysis: Viability Assessment - 2010 (Appendix 6)

Table 4.3 Harlow District Council Planning Obligations - Open Space

	Census 2011 Dwelling Split	Contribution	Weighted
1 Bed	14.7%	£788	£116
2 Bed	33.0%	£1,313	£433
3 Bed	40.6%	£1,836	£746
4 Bed	9.6%	£2,363	£226
5 Bed	2.2%	£2,363	£51
Per Dwelling		**~**	**£1,572**

Source: Harlow District Council Planning Obligations SPD

4.33 It should be noted that Harlow District Council will in the future begin work to determine an appropriate rate at which to set their Community Infrastructure Levy (CIL). Once this work has commenced it will provide both an Infrastructure Delivery Schedule to consider what infrastructure is need to support the growth of the District, but also what funding can be obtained through CIL receipts and what funding can be obtained through other means.

Social, Community and Environment

4.34 Social, community and environmental factors cover the outcomes that could occur in terms of changes to provision of infrastructure, services and facilities, as well as benefits that could accrue to the community more widely. Whilst a full environmental assessment has not been undertaken for the scenarios (and is not part of the scope of this assessment) the environmental implications in terms of the impact upon the physical footprint of the Harlow urban area is considered.

Meeting Housing Needs

4.35 Meeting the housing needs of the population is a key requirement of the NPPF, which identifies that objectively assessed housing needs should be met across housing market areas. The benefits that can be accrued from meeting housing needs include a range of social benefits such as improving housing affordability, improving well-being and ensuring that basic needs for a home are satisfied.

4.36 Objectively assessed housing needs represent a level of housing that would meet the projected change in households and population, taking account of

migration and other demographic change. The EPOA demographic forecasts identify that a scale of housing delivery totalling almost 7,500 dwellings over the period 2011 to 2031 would meet needs associated projected demographic change within Harlow District. This has been adopted by Harlow District Council as the basis for the 'meeting housing needs' scenario within this study. 7,500 dwellings, therefore, represents one benchmark for meeting needs.

4.37 A further way of looking at housing needs is considering how many people cannot afford to access market housing, how many people are currently on the housing waiting list and how much affordable housing (and housing overall) would need to be delivered in order to address this. The London Commuter Belt (West) SHMA (2010) identified affordable housing needs between 2007 and 2026 totalling between 2,500 and 3,800 affordable homes (132 to 200 dwellings per annum). Adopting this annual rate of affordable housing need as a benchmark for affordable needs over the period 2011 to 2031 would mean total affordable needs of 2,640 and 4,000. If affordable housing is delivered at 30% of total housing delivery, as per Harlow's existing policies, this would necessitate delivery between 8,800 and 13,300 dwellings in total. This provides a broad benchmark for how much housing might need to be delivered to meet affordable housing needs in Harlow and deliver a significantly improved dwelling stock to address both future needs and the backlog of existing housing needs.

Addressing Housing Stock Quality

4.38 As well as meeting housing needs, addressing housing stock quality is a key objective in Harlow. Some of Harlow's neighbourhoods face problems with poor quality of housing stock, a legacy factor which presents itself in many new towns where housing estates were built using unconventional designs or, in some cases, on the intention that they would only have a shorter life span. In Harlow addressing poor quality housing stock is being achieved through the Priority Estates Regeneration Programme. Delivery of this Programme is not predicated on a specific level of growth in Harlow and the programme is already underway with the intention that it will be completed in stages, and will deliver some growth itself through redevelopment of existing estates. However, funding is one potential barrier to the programme, which could be overcome through the improved public finances of higher levels of growth.

4.39 Although defining a scale of growth that would ultimately address the existing problems of housing stock quality would be purely based upon judgement, it is logical to assume that a greater increase in the housing stock (assuming that new housing stock is of a good quality) would commensurately reduce the prominence and proportion of poor quality stock within Harlow.

4.40 There were an estimated 35,720 dwellings in Harlow in 2011 and proportional change over and above this baseline has been used to consider overall change in the housing stock.

Education

4.41 Implications for the need for additional school places for Primary and Secondary schools has been identified based upon the outputs of the demographic modelling, which identify the population within Primary School (aged 4-10) and Secondary School (aged 11-17) age bands. This has been compared with the current provision of school place in Harlow to consider whether there would be a surplus (i.e. change could be accommodated within existing provision) or whether there would be a shortfall (i.e. new provision would need to be delivered).

4.42 Table 4.4 shows current school capacities, pupil rolls and residents of pupil age in Harlow for 2011/12. School capacity data is taken from Essex County Council's 'Commissioning School Places in Essex 2012/17' report and presents a baseline of overall school provision in Harlow with a surplus capacity of c.850 places in primary schools (10.8%) and c.760 places in secondary schools (13.1%). These are above the recommended surplus that schools should maintain for allowing choice in the schools system and providing future capacity (suggested by the audit commission to be c.7-8%).

Table 4.4 School Rolls/Capacity and Pupil Age Population

	Net Capacity 2011/12	Number on Roll 2011/12	Surplus/ Deficit 2011/12	Pupil Age (2011)	% of Pupil Age as Pupils in Maintained Schools
Primary Schools	7,918	7,061	+857	6,987	101%
Secondary Schools	5,800	5,038	+762	7,164	70%

Source: Essex County Council 'Commissioning School Places in Essex 2012/17' and ONS

4.43 This also shows that currently pupil rolls in maintained primary schools are 101% of the current primary school age population (i.e. some pupils from outside of Harlow attend primary schools in Harlow) whilst at secondary school level this is only 70% (i.e. some secondary school aged population either attend schools outside the town, attend private schools, or do not attend secondary schools – e.g. post-16 college/apprenticeships). To estimate future impacts on school provision, outputs from the demographic modelling on school age population has been used, with the above ratio of population to pupils used to convert this into need for school places.

4.44 Harlow currently has several institutions for post-18 education. Harlow College offers further education courses including A-levels, BTEC Diplomas, vocational programmes and apprenticeships across a range of disciplines for school leavers. Additionally Harlow boasts the University Centre Harlow satellite campus of Anglia Ruskin University. Currently this only offers a small selection of higher education courses since its official opening in 2012, although this does include biosciences and engineering, linking to the skills required for some of Harlow's main business sectors and the focus of the Enterprise Zone. In assessing how growth will influence and underpin the continue provision of higher education, consideration has been given to benchmark comparator

towns, as to how their links to industry and settlement size has successfully supported such provision.

Health

4.45 NHS data shows there are currently 10 health centres/GP surgeries in Harlow, providing access to a total of 62 GPs. These centres have a combined patient list of 90,400 people, over 8,000 more than Harlow's current population, suggesting such centres serve a wider catchment than just Harlow. The current provision is very good, with the majority of the original health centres within Harlow's neighbourhood centres having been rebuilt since their original construction in Harlow's growth years. Using a benchmark standard of provision of 1 GP per 1,800 patients (which has been identified in preliminary work undertaken by Harlow District Council on their infrastructure baseline assessment and is a typical standard used for assessing provision) Harlow's current network of GP's could support a patient list of 111,600 people. This is equivalent to a Harlow population of 103,000 people, assuming c.8,000 places continue to be taken by people from outside the town. Beyond that population, additional GPs would need to be provided, in line with the benchmark standard of provision.

Revitalised Town Centre

4.46 Appendix 3.0 looks in detail at the role that growth could have in triggering a transformed town centre. Using a benchmarking approach (outlined below), most comparator towns have additional department stores at a population of 105,000 to 110,000 people, and although these comparator towns may have a different socio-economic profile of consumers, this suggests growth of Harlow to at least the upper end of such a critical mass could successfully attract new retail provision within the town centre. A transformation of the town centre on a significant scale, and as previously envisaged by the Town Centre North regeneration proposals, would likely require a larger scale of growth in order to deliver sufficient local expenditure in the catchment area to support such an expansion in retail and leisure floorspace.

Open Space and Recreation

4.47 The Harlow District Open Space, Sport and Recreation SPD (2007) sets out an open space standard of 3ha per 1,000 population. This requirement is split between playing fields, children's play space, allotments and amenity open space. This benchmark standard of provision is applied to future growth to identify how much new open space could be delivered through development of new housing.

4.48 The existing 'Green Wedges' of Harlow are an important feature of the character of Harlow. Their preservation is a key local aspiration, and is an objective that is compatible with any scale of growth. However, the appropriate form of any scale of development that does take place in Harlow will need to be

carefully considered in order to reflect aims and objectives and how they link to the 'Green Wedges'.

Road Network

4.49 There is an identified need to achieve better access to the M11 motorway in Harlow and to relieve existing traffic through the town. In this respect previous studies have pointed to the requirement for a new Junction 7a to the M11 north east of Harlow. There are currently two identified solutions which may be feasible:

- A new Junction 7a to the North East of Harlow along with a link road joining it to the B183 which is estimated to cost c.£45m; or
- A more comprehensive scheme delivering a northern by-pass to Harlow linking a new motorway junction to the A414 at Eastwick Road/Fifth Avenue which is estimated to cost c.£200m.[3]

4.50 Funding for this has not yet been considered, and no detailed feasibility work has been undertaken as to how this could be delivered. Therefore, for the purposes of considering the extent to which growth could deliver the road network improvements, two approaches have been considered.

4.51 Firstly, a simple benchmarking exercise has been undertaken with comparator towns, which shows that all but one of the 13 comparator towns to Harlow are served by more than 1 motorway junction, suggesting that in simple terms, a population in excess of Harlow's current population could warrant a new motorway junction.

4.52 Secondly, a high level estimate of how much revenue from section 106/CIL contributions would be necessary to successfully part fund a new junction has been undertaken. Funding for the new junction could come forward through an, as yet, undefined combination of planning obligations and central funding to make up any gap. Harlow District Council are yet to define an approach to CIL and the scale of any potential funding gap for a motorway junction scheme, nor what funding may be available. However, using some broad metrics the scale of funding hurdle to be overcome can be considered. If it is assumed 50% of funding is to be raised through planning obligations linked to development (i.e. £22.5m for the smaller scheme), and that Essex County Council's required transport contributions continue (£2,714 per dwelling) with c.50% of this being pooled within Harlow to deliver the scheme (£1,357 per dwelling) over 16,500 new dwellings would need to be delivered to ensure sufficient funding. This scale of growth is therefore used as the benchmark for considering what a trigger point for deliverability could be.

[3] The costs presented are high level estimates for the purpose of this study and based upon historic work and forecast costs by Essex County Council (ECC). Further, more detailed, scoping work may indicate different costs and as such these are subject to change. NLP understand ECC are undertaking further work in this regard during 2013.

Environmental Implications and Land Requirements

4.53 The environmental implications of different scales of growth are considered using the land requirements as a proxy. At most scales of growth, Harlow will need to grow outward beyond its existing urban boundaries in order to meet housing needs and deliver growth aspirations.

4.54 Currently Harlow town comprises 2,240 hectares of land, which includes all uses within the current boundary, such as houses, industrial, the town centre as well as open space, roads and community uses. Harlow has c.36,100 dwellings (2012) which represents a gross housing density for the whole town of 16 dwellings per hectare. For the purposes of assessing future land take of different growth scenarios, an assumed gross density of 20 dwellings per hectare is applied to the overall level of growth. This is a marginal increase on gross densities to reflect current masterplanning principles for developments and potential for efficient use of land. This provides an indicative land requirement for each scenario, illustrating how much, in proportional terms, Harlow's physical size, or 'footprint' could increase.

Benchmarks

4.55 Linking into the above analysis, NLP has also looked at 13 comparator towns that are of a similar size or larger than Harlow. These have been chosen due to their geographic similarities to Harlow (being based a similar distance from London and within the wider South/East area) as well as their similar characteristics (with a number of other post-war New Towns chosen). Looking at a range of statistics for these areas, and comparing that to their scale in terms of population, we can draw broad conclusions as to what characteristics (be it provision of services or socio-economic indicators) towns of different sizes have. The factors looked at across these comparator towns are as follows:

a Population;
   i Current population (ONS); and
   ii Population growth in last ten years (ONS);

b Road Network;
   i Number of motorway junctions serving town (from a review by NLP using 0.5 for single direction access, or a junction shared with another distinct urban area)

c Health;
   i Hospital provision including whether it sustains an A&E facility (NHS);

d Education;
   i Further education and higher education provision (UCAS/NLP review);

e Town Centre / Evening Economy;
   i Number of department store anchors (NLP review based upon presence of a Marks & Spencer, BHS, House of Fraser, Debenhams, John Lewis or other independent major department store);

ii National retail ranking from Management Horizons (based upon comparative representation of national multiple shops and restaurants);

iii Number of cinema screens (NLP review); and

iv Presence of a professional theatre showing national touring shows or equivalent (NLP review);

f Jobs, Spending & Local Economic Growth;

i Employment growth in last ten years (Experian/ONS);

ii GVA per worker in 2013 (Experian);

iii Proportion of knowledge based businesses (UK Competitiveness Index);

iv Business births per 10,000 population (BIS business population estimates);

v Business 1 year survival rate (BIS business population estimates); and

vi Skills base measured by proportion of 16+ population with a NVQ level 4 equivalent qualification or above (ONS Census 2011)

4.56 Table 4.5 illustrates the outcomes of this analysis highlighting what Harlow could anticipate as characteristics at different scales of growth.

4.57 By way of example as to how this analysis has been used; there is a reasonably clear positive correlation between a settlements population and how many cinema screens it has. Harlow, Stevenage and Watford are all similar sized towns and sustain 8 to 16 cinema screens. Slightly larger settlements of c.105,000 population, such as Crawley and Basingstoke sustain 16 to 20 cinema screens. Even larger settlements of c.125,000 to 175,000 people sustain 20 to 25 cinema screens, whilst the largest comparator town, Milton Keynes, at 226,000 people is due to total 36 cinema screens in the near future. Using these comparator town populations as a benchmark, we can consider how many Cinema Screens Harlow may sustain in the future if it grew to a given population.

Table 4.5 Comparison of Harlow with Benchmark Towns across range of Themes and Receptors

Theme:	**Population**		**Road Network**	**Health**	**Education**	**Town Centre / Evening Economy**				**Jobs, Spending & Local Economic Growth**					
Receptor:	*Population*		*Motorway Junction*	*Hospital*	*Further/Higher Education*	*Department Anchors*	*Retail Ranking*	*Cinema Screens*	*Professional Theatre*	*Employment*	*GVA Per Worker*	*Knowledge Based Businesses*	*Businesses*		*Skills Base (NVQ 4 + above)*
Town/City	**Est Town Pop. 2011**	**District Pop. Growth 2001-11**	**No.**	**Type**	**Offer**	**No. (out of 5 leading department stores)**	**National Rank**	**No. (incl. under const)**	**Yes/No**	**Growth 2001-11 (%)**	**£ (2013)**	**% (2010)**	**Births per 10,000 pop. (2010)**	**1 year business survival rate (2010)**	**% of 16+ Population**
Milton Keynes	226,000	17.5%	2	Yes, with A&E	University Satellite (HE), College (FE)	5	30	25 (36)	Yes	8.6%	£40,339	28.9%	54.4	88.8%	28.2%
Northampton	212,000	9.3%	3	Yes, with A&E	University (HE), College (FE)	4	43	21	Yes	7.1%	£39,149	19.5%	40.0	87.6%	23.7%
Luton	204,000	9.5%	2	Yes, with A&E	University (HE), College (FE)	3	82	11	Yes	2.6%	£44,601	18.9%	35.4	85.2%	22.3%
Peterborough	184,000	17.2%	2	Yes, with A&E	University Satellite (HE), College (FE)	3	43	13	Yes	8.0%	£37,870	21.1%	35.2	88.9%	20.2%
Basildon	175,000	5.5%	0	Yes, with A&E	College (FE)	3	79	12 (20)	Yes	14.0%	£37,123	19.8%	47.7	87.9%	18.6%
Reading	155,000	7.3%	3	Yes, with A&E	University (HE), College (FE)	5	12	25	Yes	-10.5%	£49,186	31.5%	58.0	89.5%	34.8%
Oxford	150,000	10.8%	2.5	Yes, with A&E	University (HE), College (FE)	4	45	20	Yes	21.3%	£41,560	23.5%	35.0	83.7%	42.6%
Cambridge	123,000	11.6%	3.5	Yes, with A&E	University (HE), College (FE)	4	74	20	Yes	0.0%	£40,549	30.0%	42.8	87.8%	47.3%
Welwyn Hatfield	111,000	13.4%	4	Yes, with A&E	University (HE), College (FE)	3	163	9	Yes	17.0%	£44,163	26.7%	50.6	87.6%	30.0%
Crawley	107,000	6.7%	2	Yes, No A&E	College (FE)	3	56	16	Yes	0.3%	£46,383	22.9%	36.4	86.5%	21.5%
Basingstoke	105,000	10.3%	2	Yes, with A&E	College (FE)	3	76	20	Yes	10.2%	£37,123	31.4%	47.7	88.5%	30.5%
Watford	91,000	12.8%	3.5	Yes, with A&E	College (FE)	3	31	8	Yes	-11.7%	£41,660	26.3%	57.9	67.6%	32.2%
Stevenage	84,000	5.5%	2	Yes, with A&E	College (FE)	2	103	16	Yes	8.6%	£41,511	24.5%	31.5	92.2%	22.1%
Harlow	82,000	4.3%	1	Yes, with A&E	University Satellite (HE), College (FE)	2	218	6 (12)	Yes	-6.1%	£38,487	16.9%	34.7	91.4%	17.6%

5.0 Appendix 5: Scenario Regeneration Outcomes Pro-Forma

5.1 The tables over the following pages provide a comprehensive snapshot of the headline outcomes for each of the five growth scenarios tested.

Table 5.1 Scenario A – 'Do Nothing More'

Scenario:		**A. 'Do Nothing More'**			
Growth of Harlow under Scenario					
Description of Scenario:		This scenario is based upon the assumption that only currently committed housing development in the Annual Monitoring Report (AMR) as of April 2011 will come forward over the period 2011 to 2031 and nothing in addition to this.			
Housing Growth:		3,913 dwellings 2011-2031 (196 per annum) 1,174 of which affordable (at 30% delivery)			
Key Demographic Outcomes:			2011	2031	Change
		Population Change:	82,177	86,199	+4,022
		Children 0-4:	6,091	4,995	-1,096
		School Age 5-18:	13,040	13,696	+656
		Working Age: 19-65:	50,693	48,758	-1,935
		Elderly: 65+:	12,353	18,750	+6,397
		Household Change:	34,716	38,569	+3,853
Receptor		**Outcome for Harlow**			
Jobs, Spending & Local Economic Growth					
Local Economic Outcomes:			2011	2031	Change
		Local Labour Force:	40,200	39,625	-575
		Employment Base:	38,657	37,450	-1,207
		GVA:	£1.5bn	£2.0bn	+£0.5bn
		Economic Summary:	A scenario characterised by a reduced indigenous labour force leading to a contracted employment base.		
Company Births, Deaths & Survival:		285 business births per year in 2011 (260 surviving at least 1 year), increasing to 300 births by 2031 (274 surviving at least 1 year) 295 business deaths in 2011, increasing to 310 business deaths per year by 2031			
Household Spending Growth:		Increase in household spending from £775m per annum in 2011 to £1.9bn in 2031			
Public Finances					
Council Tax Base:		Increase in CTB of £4.8m per annum to £49.2m per annum by 2031			
New Homes Bonus:		£33.2m (£26.6m to Harlow DC, £6.6m to Essex CC)			
Business Rates:		Decrease in business rate revenue from £44.1m per annum in 2011 to £42.7m per annum by 2031 (£20.1m retained by Harlow DC)			
CIL/s106 Receipts:		£46.8m (£40.7m to Essex CC for Education, Health, Transport & Waste - £6.1m to Harlow DC for Open Space/Recreation)			
Social, Community & Environment					
Meeting Housing Needs:		Would be unlikely to meet housing needs arising from population growth or meet needs identified by the housing waiting list.			
Housing Stock Quality:		Would deliver 11% increase in housing stock, generating limited opportunity to diversify existing base.			
Viability/ Need for Services:	Education:	Primary Schools: +106 pupils, 751 place (9.5%) surplus on existing capacity. Secondary Schools: +307 pupils, 455 place (7.9%) surplus on existing capacity. Higher Education/Skills Support: Unlikely to provide critical mass to support substantial expansion in further/higher education in town.			
	Health:	Population growth would be within existing GP capacity (surplus of 10 GPs)			
	Revitalised Town Centre:	Would not be of a sufficient scale to substantially increase expenditure in the area and support change and increase in town centre retail and leisure offer.			

Scenario:	A. 'Do Nothing More'
Open Space/ Recreation:	Would generate need and provision for 11.6ha of additional open space. Depending on spatial strategy, could successfully protect 'green wedges'.
Road Network:	Estimated £10.6m s106/CIL for transport. Assuming 50% is pooled for motorway access (£5.3m) it is unlikely to be of a scale able to deliver £45m junction 7a and Link Road Option, without significant gap funding.
Environmental/Land Take:	Would necessitate land take of c.196ha a 9% increase in Harlow Town's existing physical footprint.

Source: NLP Analysis

Table 5.2 Scenario B – 'Meeting Development Needs'

Scenario:	**B. Meeting Development Needs**			
Growth of Harlow under Scenario				
Description of Scenario:	This scenario is based upon the number of dwellings required to meet the development needs identified by 2010-based Sub-National Population Projections as tested within the EPOA demographic forecasts.			
Housing Growth:	7,485 dwellings 2011-2031 (374 per annum) 2,246 of which affordable (at 30% delivery)			
Key Demographic Outcomes:		2011	2031	Change
	Population Change:	82,177	95,085	+12,908
	Children 0-4:	6,091	5,779	-312
	School Age 5-18:	13,040	15,503	+2,463
	Working Age: 19-65:	50,693	54,398	+3,705
	Elderly: 65+:	12,353	19,404	+7,051
	Household Change:	34,716	42,072	+7,356
Receptor	**Outcome for Harlow**			
Jobs, Spending & Local Economic Growth				
Local Economic Outcomes:		2011	2031	Change
	Local Labour Force:	40,200	44,138	+3,938
	Employment Base:	38,657	41,714	+3,057
	GVA:	£1.5bn	£2.2bn	+£0.7bn
	Economic Summary:	A growing labour force and employment base (albeit dwelling constrained)		
Company Births, Deaths & Survival:	285 business births per year in 2011 (260 surviving at least 1 year), increasing to 330 births by 2031 (300 surviving for 1 year or more) 295 business deaths in 2011, increasing to 340 business deaths per year by 2031			
Household Spending Growth:	Increase in household spending from £775m per annum in 2011 to £2.1bn in 2031			
Public Finances				
Council Tax Base:	Increase in CTB of £9.2m per annum to £53.6m per annum by 2031			
New Homes Bonus:	£63.4m (£50.7m to Harlow DC, £12.7m to Essex CC)			
Business Rates:	Increase in business rate revenue from £44.1m per annum in 2011 to £47.6m per annum by 2031 (£22.4m retained by Harlow DC)			
CIL/s106 Receipts:	£89.5m (£77.7m to Essex CC for Education, Health, Transport & Waste - £11.8m to Harlow DC for Open Space/Recreation)			
Social, Community & Environment				
Meeting Housing Needs:	Would be unlikely to meet housing needs arising from population growth or meet needs identified by the housing waiting list.			
Housing Stock Quality:	Would deliver 21% increase in housing stock, generating limited opportunity to diversify existing base.			
Viability/ Need for Services: Education:	Primary Schools: +1,223 pupils, 366 place (4.6%) deficit on existing capacity. Secondary Schools: +914 pupils, 152 place (2.6%) deficit on existing capacity. Higher Education/Skills Support: Unlikely to provide critical mass to support substantial expansion in further/higher education in town.			
Health:	Population growth would be within existing GP capacity (surplus of 5 GPs)			
Revitalised Town Centre:	Would not be of a sufficient scale to substantially increase expenditure in the area and support change and increase in town centre retail and leisure offer.			
Open Space/ Recreation:	Would generate need and provision for 22.1ha of additional open space. Depending on spatial strategy, could successfully protect 'green wedges'.			

Scenario:	B. Meeting Development Needs
Road Network:	Estimated £20.3m s106/CIL for transport. Assuming 50% is pooled for motorway access (£10.2m) it is unlikely to be of a scale able to deliver £45m junction 7a and Link Road Option, without significant gap funding.
Environmental/Land Take:	Would necessitate land take of c.374ha a 17% increase in Harlow Town's existing physical footprint.

Source: NLP Analysis

Table 5.3 Scenario C – 'Jobs Led'

Scenario:	**C. Jobs Led**			
Growth of Harlow under Scenario				
Description of Scenario:	This scenario uses the job projections from the EEFM Forecast used in the EPOA study, but also assumes that jobs lost during the recession are regained, to ascertain the demographic change and housing growth required to meet this economic potential.			
Housing Growth:	11,490 dwellings 2011-2031 (575 per annum) 3,447 of which affordable (at 30% delivery)			
Key Demographic Outcomes:		2011	2031	Change
	Population Change:	82,177	105,174	+22,997
	Children 0-4:	6,091	6,808	+717
	School Age 5-18:	13,040	17,204	+4,164
	Working Age: 19-65:	50,693	61,084	+10,391
	Elderly: 65+:	12,353	20,077	+7,724
	Household Change:	34,716	46,011	+11,295
Receptor	**Outcome for Harlow**			
Jobs, Spending & Local Economic Growth				
Local Economic Outcomes:		2011	2031	Change
	Local Labour Force:	40,200	49,430	+9,230
	Employment Base:	38,657	46,717	+8,060
	GVA:	£1.5bn	£2.5bn	+£1.0bn
	Economic Summary:	A scenario of strong economic growth, with an increasing local labour force driving employment and GVA growth		
Company Births, Deaths & Survival:	285 business births per year in 2011 (260 surviving at least 1 year), increasing to 473 business births by 2031 (with 450 surviving at least 1 year) 295 business deaths in 2011, increasing to 340 business deaths per year by 2031			
Household Spending Growth:	Increase in household spending from £775m per annum in 2011 to £2.3bn in 2031			
Public Finances				
Council Tax Base:	Increase in CTB of £14.2m per annum to £58.6m per annum by 2031			
New Homes Bonus:	£97.4m (£77.9m to Harlow DC, £19.5m to Essex CC)			
Business Rates:	Increase in business rate revenue from £44.1m per annum in 2011 to £53.3m per annum by 2031 (£25.1m retained by Harlow DC)			
CIL/s106 Receipts:	£137.4m (£119.4m to Essex CC for Education, Health, Transport & Waste - £18.0m to Harlow DC for Open Space/Recreation)			
Social, Community & Environment				
Meeting Housing Needs:	Would meet housing needs arising from population growth and meet needs identified by the housing waiting list.			
Housing Stock Quality:	Would deliver 32% increase in housing stock, generating some opportunity to diversify existing base.			
Viability/ Need for Services: Education:	Primary Schools: +2,413 pupils, 1,556 place (19.7%) deficit on existing capacity. Secondary Schools: +1,421 pupils, 659 place (11.4%) deficit on existing capacity. Higher Education/Skills Support: Unlikely to provide critical mass to support substantial expansion in further/higher education in town.			
Health:	Population growth would exceed existing GP capacity (deficit of 1 GP) requiring new provision of GP services			

Scenario:		C. Jobs Led
	Revitalised Town Centre:	Would not be of a sufficient scale to substantially increase expenditure in the area and support change and increase in town centre retail and leisure offer.
Open Space/ Recreation:		Would generate need and provision for 27.7ha of additional open space. Depending on spatial strategy, could successfully protect 'green wedges'.
Road Network:		Estimated £31.2m s106/CIL for transport. Assuming 50% is pooled for motorway access (£15.6m) it is unlikely to be of a scale able to deliver £45m junction 7a and Link Road Option, without significant gap funding.
Environmental/Land Take:		Would necessitate land take of c.575ha a 26% increase in Harlow Town's existing physical footprint.

Source: NLP Analysis

Table 5.4 Scenario D – 'Growing Centre'

Scenario:		**D. Growing Centre**			
Growth of Harlow under Scenario					
Description of Scenario:		This scenario uses the mid-point of the housing growth targets from the deposit draft and final adopted Regional Strategy and constrains development to this scale of housing to 2031 to ascertain the demographic and economic implications of this level of growth.			
Housing Growth:		15,000 dwellings 2011-2031 (750 per annum) 4,500 of which affordable (at 30% delivery)			
Key Demographic Outcomes:			2011	2031	Change
		Population Change:	82,177	113,989	+31,812
		Children 0-4:	6,091	7,483	+1,392
		School Age 5-18:	13,040	19,495	+6,455
		Working Age: 19-65:	50,693	66,362	+15,669
		Elderly: 65+:	12,353	20,648	+8,295
		Household Change:	34,716	49,465	+14,749
Receptor		**Outcome for Harlow**			
Jobs, Spending & Local Economic Growth					
Local Economic Outcomes:			2011	2031	Change
		Local Labour Force:	40,200	53,704	+13,504
		Employment Base:	38,657	50,756	+12,099
		GVA:	£1.5bn	£2.7bn	+£1.2bn
		Economic Summary:	An ambitious scenario of future economic growth, characterised by a growing labour force and employment growth of over 30% by 2031		
Company Births, Deaths & Survival:		285 business births per year in 2011 (260 surviving at least 1 year), increasing to 395 births by 2031 (360 surviving at least 1 year) 295 business deaths in 2011, increasing to 410 business deaths per year by 2031			
Household Spending Growth:		Increase in household spending from £775m per annum in 2011 to £2.5bn in 2031			
Public Finances					
Council Tax Base:		Increase in CTB of £18.5m per annum to £62.9m per annum by 2031			
New Homes Bonus:		£127.2m (£101.7m to Harlow DC, £25.4m to Essex CC)			
Business Rates:		Increase in business rate revenue from £44.1m per annum in 2011 to £57.9m per annum by 2031 (£27.3m retained by Harlow DC)			
CIL/s106 Receipts:		£179.4m (£155.8m to Essex CC for Education, Health, Transport & Waste - £23.6m to Harlow DC for Open Space/Recreation)			
Social, Community & Environment					
Meeting Housing Needs:		Would meet housing needs arising from population growth and meet needs identified by the housing waiting list.			
Housing Stock Quality:		Would deliver 42% increase in housing stock, generating an opportunity to diversify existing base.			
Viability/ Need for Services:	Education:	Primary Schools: +3,715 pupils, 2,858 place (36.1%) deficit on existing capacity. Secondary Schools: +2,238 pupils, 1,476 place (25.5%) deficit on existing capacity. Higher Education/Skills Support: Would provide critical mass to support an enhanced further/higher education offer in the town.			
	Health:	Population growth would exceed existing GP capacity (deficit of 6 GPs) requiring new provision of GP services			
	Revitalised Town Centre:	Would be able to sustain increased expenditure in the area and sustain a substantially improved town centre with regards to its retail and leisure offer.			

Scenario:	D. Growing Centre
Open Space/ Recreation:	Would generate need and provision for 44.2ha of additional open space. Depending on spatial strategy, could successfully protect 'green wedges'.
Road Network:	Estimated £40.7m s106/CIL for transport. Assuming 50% is pooled for motorway access (£20.4m) it may be of a scale able to attract gap funding in order to deliver a £45m junction 7a and Link Road Option. Would also increase need/demand case and business case for improvements.
Environmental/Land Take:	Would necessitate land take of c.750ha a 33% increase in Harlow Town's existing physical footprint.

Source: NLP Analysis

Table 5.5 Scenario E – 'Transformed Centre'

Scenario:	**E. Transformed Centre**			
Growth of Harlow under Scenario				
Description of Scenario:	This scenario is based upon delivering sufficient growth in Harlow to create a catalyst for the transformation of the town centre having used a retail benchmarking exercise looking at urban population and the amount of town centre floorspace of competing centres.			
Housing Growth:	20,000 dwellings 2011-2031 (1,000 per annum) 6,000 of which affordable (at 30% delivery)			
Key Demographic Outcomes:		2011	2031	Change
	Population Change:	82,177	126,632	+44,455
	Children 0-4:	6,091	8,640	+2,549
	School Age 5-18:	13,040	22,264	+9,224
	Working Age: 19-65:	50,693	74,334	+23,641
	Elderly: 65+:	12,353	21,394	+9,041
	Household Change:	34,716	54,375	+19,659
Receptor	**Outcome for Harlow**			
Jobs, Spending & Local Economic Growth				
Local Economic Outcomes:		2011	2031	Change
	Local Labour Force:	40,200	60,076	+19,876
	Employment Base:	38,657	56,778	+18,121
	GVA:	£1.5bn	£3.0bn	+£1.5bn
	Economic Summary:	A town centre and retail driven scenario of economic growth, with strong labour force, employment and GVA growth		
Company Births, Deaths & Survival:	285 business births per year in 2011 (260 surviving at least 1 year), increasing to 483 births by 2031 (460 surviving at least 1 year) 295 business deaths in 2011, increasing to 410 business deaths per year by 2031			
Household Spending Growth:	Increase in household spending from £775m per annum in 2011 to £2.7bn in 2031			
Public Finances				
Council Tax Base:	Increase in CTB of £24.7m per annum to £69.1m per annum by 2031			
New Homes Bonus:	£169.5m (£135.6m to Harlow DC, £33.9m to Essex CC)			
Business Rates:	Increase in business rate revenue from £44.1m per annum in 2011 to £64.8m per annum by 2031 (£30.5m retained by Harlow DC)			
CIL/s106 Receipts:	£239.3m (£207.8m to Essex CC for Education, Health, Transport & Waste - £31.5m to Harlow DC for Open Space/Recreation)			
Social, Community & Environment				
Meeting Housing Needs:	Would meet housing needs arising from population growth and meet needs identified by the housing waiting list.			
Housing Stock Quality:	Would deliver 56% increase in housing stock, generating an opportunity to diversify existing base.			
Viability/ Need for Services: Education:	Primary Schools: +5,457 pupils, 4,600 place (58.1%) deficit on existing capacity. Secondary Schools: +3,146 pupils, 2,384 place (41.1%) deficit on existing capacity. Higher Education/Skills Support: Would provide critical mass to support an enhanced further/higher education offer in the town.			
Health:	Population growth would exceed existing GP capacity (deficit of 13 GPs) requiring new provision of GP services			
Revitalised Town Centre:	Would be able to sustain increased expenditure in the area and sustain a substantially improved town centre with regards to its retail and leisure offer.			

Scenario:	E. Transformed Centre
Open Space/ Recreation:	Would generate need and provision for 59.0ha of additional open space. Depending on spatial strategy, could successfully protect 'green wedges'.
Road Network:	Estimated £54.3m s106/CIL for transport. Assuming 50% is pooled for motorway access (£27.1m) it may be of a scale able to attract gap funding in order to deliver a £45m junction 7a and Link Road Option or even begin to justify a case for Harlow North by-pass option. Would also substantially increase need/demand case and business case for improvements.
Environmental/Land Take:	Would necessitate land take of c.1,000ha a 45% increase in Harlow Town's existing physical footprint.

Source: NLP Analysis

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