

Dacorum, Three Rivers and Watford Councils SOUTH WEST HERTFORDSHIRE EMPLOYMENT SPACE STUDY



Final Report
January 2005

ROYAL TYM & PARTNERS
Planners and Development Economists

 **King Sturge**

ROGER TYM & PARTNERS

Fairfax House
15 Fulwood Place
London WC1V 6HU

t 020 7831 2711
f 020 7831 7653
e london@tymconsult.com
w www.tymconsult.com

CONTENTS

1	INTRODUCTION.....	1
	The Study	1
	The Report.....	3
2	POLICY CONTEXT	5
	Spatial Planning.....	5
	Economic Development Strategies.....	8
3	THE SUB-REGIONAL ECONOMY	11
	Overview.....	11
	The Workplace Economy.....	11
	The Residents.....	22
	The Labour Market.....	25
	Conclusions	34
4	LAND AND PROPERTY MARKETS.....	37
	Introduction	37
	The Office Market	37
	The Industrial Market.....	42
5	THE QUANTITY OF EMPLOYMENT LAND	48
	Introduction	48
	Future Employment and the Demand for Space	49
	The Planned Supply of Space	57
	Market Balance.....	60
6	THE QUALITY OF EMPLOYMENT LAND	67
	Introduction.....	67
	Dacorum	68
	Three Rivers	77
	Watford	84
7	LIVE/WORK SPACE	91
	Live/work Space in the UK.....	91
	Live/work in Hertfordshire	92
	Planning Policy	92
	Options for Dacorum.....	93
8	CONCLUSIONS.....	95
	Policy Objectives	95
	Offices v Industry	95
	The Quantity of Employment Land.....	96
	Specific Sites and Areas	97
	Value Capture.....	100
	A Sub-Regional Approach	102
	Plan, Monitor and Manage.....	102
APPENDIX 1	Economic Sectors And Business Space	
APPENDIX 2	Stakeholder Seminar Notes	
APPENDIX 3	Travel to Work	
APPENDIX 4	Examples of Live/Work Policies	
APPENDIX 5	Planned Supply	
APPENDIX 6	Future Employment and Demand for Space: 2011 and 2016	

1 INTRODUCTION

The Study

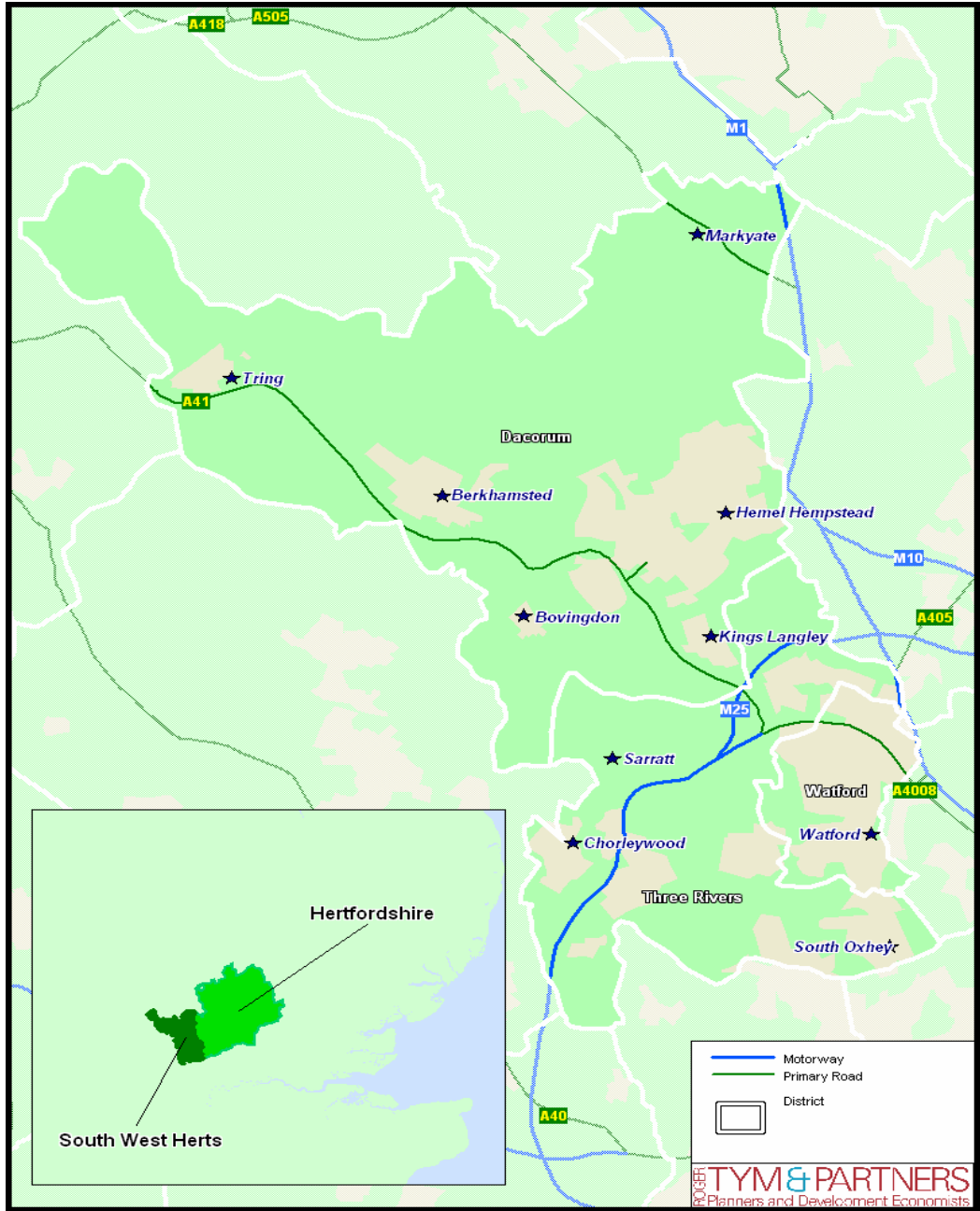
- 1.1 This study was commissioned in April 2004 by the three local authorities in South West Hertfordshire ('SW Herts'), comprising Dacorum Borough Council, Watford Borough Council and Three Rivers District Council, to inform the employment land¹ policies in their forthcoming Local Development Frameworks.
- 1.2 The broad objectives of the study, as set out in the brief², are to:
- i) Forecast the requirement for employment land over the Plan period across the three local authority areas;
 - ii) Audit the currently identified supply against this requirement, both in terms of quantity and quality;
 - iii) Draw the policy implications, showing where more or different employment land is needed, and alternatively where there is scope for transferring existing and proposed employment sites to other uses.
- 1.3 The potential release of employment land for housing is a key issue for the study, due both to central government priorities and to local circumstances. Proposed Planning Policy Statement (PPS)³ indicates that employment land should be considered for re-allocation to housing, except for sites which are shown by an up-to-date review to be still suitable and needed for employment. In SW Herts, there are exceptionally strong pressures for such re-allocation, because the Green Belt and other designations severely restrict development capacity, the excess of residential over commercial land values is especially great, and much employment land has already been lost to other uses - in some cases provoking strong local protest. One objective of this employment land study has been to make inputs into the Urban Capacity Study which is proceeding in parallel, aiming to identify sites which could be developed for housing.
- 1.4 In considering the three local authority areas, in SW Herts, the study adopts a sub-regional perspective, aiming to balance demand and supply within a realistic market area rather than an administrative boundary. At the same time, as required by the brief, we set out to consider many area-specific and site-specific questions, including:
- In Dacorum, the concentration of employment land in north-east Hemel Hempstead, the corresponding lack of sites in other towns, the current oversupply of offices and under-supply of low-cost, small-scale space, some congestion and environmental problems; specific questions on a number of key sites, beginning with Hemel Gateway, and the likely demand for live/work units and where it might be accommodated.
 - In Three Rivers, the response to a flood of applications for transfer to housing; and the current mismatch between the demand for small-scale, low-cost space and the concentration of supply at Leavesden, a prestige business park site.
 - In Watford, the role and needs of bad neighbour employment uses and the appropriateness, quantity and quality of employment uses in particular areas,

¹ Employment space (property and land) in this study refers to the Business Use Classes, B1, B2 and B8 and sui generis uses which occupy similar space. It covers offices and industrial and distribution space. It excludes many activities which do provide employment, but operate in other kinds of space, such as retail, leisure, education and health.

² Study brief issued by Dacorum Borough Council, March 2004, supplemented by notes on requirements/key issues (Watford 2 April 2004, Dacorum 11 May 2004)

comprising Watford Junction, Cardiff Road, Watford Business Park, Imperial Way Industrial Estate, the Sun Chemicals site and older industrial estates generally.

Map 1.1: South West Hertfordshire



The Report

1.5 Following this Introduction:

- Chapter 2 sets out the background of existing policy, showing the wider objectives the three local authorities need to consider, and the strategic guidance they need to follow, in deciding on their employment land policies.
- Chapters 3 and 4 analyse the present condition of the sub-region's economies and property markets, establishing the baseline for future change.
- The next two chapters consider this future change. Chapter 5 deals with the quantity of employment land, forecasting demand and comparing it with supply. Chapter 6 audits the supply in qualitative terms, making recommendations on specific sites and areas.
- Chapter 7 briefly discusses live/work units - a specialist subject which does not fit easily into the wider discussion.
- Conclusions are in Chapter 8.

1.6 The Hemel Gateway site in Dacorum, on which we were required to make especially detailed recommendation, is considered in a separate report.

2 POLICY CONTEXT

Spatial Planning

The Regional Spatial Strategy

- 2.1 The East of England Plan, RSS14 (2001-21) is currently in draft, and on 5 November 2004 was approved by the East of England Regional Assembly for submission to Government. Following public consultation and an Examination in Public, it is likely to be issued in its final form in 2006.
- 2.2 The draft RSS's approach to the regional economy is set out in Policy SS10, which reads in part:
- 'The regional economy will be supported and developed to ensure that it contributes fully to national, regional and local prosperity in order to improve quality of life for those who live and work in the Region...
- Local development documents will take account of, and facilitate the delivery of, the Regional Economic Strategy in line with the statement of synergy between RES and RSS, included within the RES. This will include promoting those key sectors identified in the Regional Economic Strategy and developing complementary sustainable land use policies and proposals.'
- 2.3 Three main policies in the draft RSS deal with qualitative aspects of employment land. Policy E3 describes locations where sites for industry and commerce will be provided, including 'locations that minimise commuting and promote more sustainable communities and a closer relationship between jobs and existing or proposed labour supply' and 'locations where the maximum use of (sustainable) public transport can be made'. Policy E4 requires provision of strategic employment sites, including 'some in Hertfordshire' to support key clusters and regeneration in the Lea Valley Corridor and Stevenage. Policy E5 requires that local development documents encourage 'economic diversity and business development... to facilitate small and medium enterprises together with local economic strengths' and policy E7 that they support clusters.
- 2.4 Referring to both the quality and quantity of employment land, Policy E3 states:
- 'Land in employment use will be considered for alternative uses only where a completed employment land assessment demonstrates that sufficient land is available, of an appropriate type, range, quality and quantity, to ensure that the Regional Economic Strategy's objectives are achievable.'
- 2.5 The RSS provides employment growth targets to show how many new jobs are needed to meet these objectives, though it stops short of translating this employment growth into a land requirement. At regional level, Policy SS10 states that 'In the East of England as a whole provision will be made for 421,500 additional jobs.'
- 2.6 This regional target of 421,500 net new jobs is shared by the draft RSS and RES. It is derived from the RES's headline objective that the East of England by 2021 should be one of the top 20 regions in the EU in terms of GVA (output) per head. Economic forecasts commissioned by the authors of the two strategies suggested that this growth was required to meet this economic objective.
- 2.7 Policy E2 of the emerging RSS deals with the spatial distribution of employment growth across the region, setting out targets for counties and sub-regions. It indicates that local development documents will include policies to secure these targets, which for Hertfordshire requires 64,700 net new jobs in 2001-21.
- 2.8 The county and sub-regional targets in the emerging RSS are derived from the same forecasts as the regional figure of 421,500 jobs. The initial forecasts, which were based

on economic considerations, were amended to improve their fit with emerging spatial priorities, specifically the regeneration of the Thames Gateway and the Community Plan Growth Areas including the Stansted/M11 corridor (as explained in Chapter 5, these amendments have no significant effect on South West Hertfordshire).

- 2.9 Policy SS13 of the draft RSS indicates that, in the East of England as a whole, provision will be made for 478,000 net additional dwellings in 2001-21³. Policy H1 shows the spatial distribution of this housing provision. The total requirement for Hertfordshire is for 79,600 dwellings, of which 14,500 are in South West Herts (Table 2.1). The county's housing provision is heavily concentrated in two Districts outside our study area, East Herts (part of the Stansted/M11 growth corridor) and North Herts (comprising proposed urban extensions to the north and west of Stevenage).

Table 2.1 Planned Housing Provision, 2001-21

	Net additional dwellings
Dacorum	6,300
Three Rivers	3,600
Watford	4,600
SW Herts	14,500
Broxbourne	5,100
East Herts	20,800
Hertsmere	4,200
North Herts	15,800
St Albans	7,000
Stevenage	6,400
Welwyn Hatfield	5,800
Hertfordshire	79,600

Source: RSS14

- 2.10 As shown in supporting text, the employment and housing targets in the draft RSS were calculated separately. While employment targets were derived from the RES as explained earlier, the housing targets for the region are based on consideration of need and capacity. The targets for much of Hertfordshire, including the SW Herts Districts, are based only on urban capacity as identified by studies plus greenfield sites already identified. Although the two sets of targets were produced without direct reference to each other, the supporting text notes that they are 'broadly aligned at regional level and create a more sustainable policy between housing and jobs; [however] it is more difficult to assess alignment at the sub-regional level'⁴.
- 2.11 Given that local development documents in future are to conform to Regional Spatial Strategies, the employment targets at Policies SS10 and E2 of the draft RSS seem the most suitable basis on which to estimate future employment land requirements. Accordingly, and with the agreement of the study steering group, we have used these targets in Chapter 5 below as the starting point in estimating future employment land requirements.
- 2.12 It may be that the targets change as RSS 14 goes through the process over the next year or so. If targets in the final version of the Strategy were significantly different, the calculations and recommendations in this report would have to be amended accordingly. The alternative scenario that we provide in Chapter 5 should help make these changes if they become necessary in future.

³ Excluding areas in Bedfordshire and Luton which are part of the MKSM sub-region.

⁴ These statements are based on a recent study for EERA and EEDA: RPG Housing and Employment Alignment, Roger Tym & Partners, Final Report, August 2004

The Structure Plan

- 2.13 The current Hertfordshire Structure Plan was adopted in April 1998 and covers the period 1991-2011. Policy 1 of the Structure Plan provides a framework for sustainable development in Hertfordshire. This policy has eight general aims, the first of which is to:
- ‘Encourage economic growth consistent with environmental constraints, with the main emphasis on promoting the knowledge economy rather than mass industrial production’.
- 2.14 The Structure Plan’s employment land policies are based on the Bright Green Vision for Hertfordshire, which was created in the mid-1990s to guide the development of a competitive, knowledge-based economy in a green environment. The Vision is defined by the key principles of Knowledge, Innovation, Skills and Service. Policy 14 lists criteria to be taken into account in considering industrial and commercial development proposals, including labour market balance, economic development strategies, promotion of the knowledge economy and ‘planned regeneration, particularly the need to protect sites best suited to housing or mixed use’.
- 2.15 Policy E15 identifies six Key Employment Sites whose development is to play a major role in the long-term development of the Hertfordshire economy and which require coordinated action if their potential is to be realised. Two of these key sites are in the SW Herts area, comprising Leavesden and Three Cherry Trees Lane, Hemel Hempstead - where ‘priority is to be given to specialised technological activities or other activities in the national or regional interest’.
- 2.16 With regard to the quantity of employment land, the adopted Structure Plan in Policy 14 says that supply should be planned ‘on the basis of joint monitoring and periodic forecasting by the county and District Councils’, but it does not give any figures.
- 2.17 The quantity of land was discussed at more length in the Deposit Draft Structure Plan Alternations (February 2003), which aimed to update the Plan and roll it forward to 2016. This document in its employment land policy followed a labour-supply-based approach, stating that ‘the scale of net growth in provision [of land for Business Class development] should be approximately that required to make full use of the growth in available labour, on the assumption that net commuting flows will not change significantly’. Based on this approach, the draft estimated that in Hertfordshire as a whole employment land with a capacity of about 0.9m sq m could be released for other uses, such as housing.
- 2.18 However, the 2003 Structure Plan Alterations will not come forward under the new planning system. Consequently, future Local Development Frameworks in Hertfordshire are required to look for strategic guidance to the Regional Spatial Strategy, discussed in the last section.

Local Plans

- 2.19 All three authority areas in SW Herts have adopted Local Plans that run to 2011. The plans were adopted within the last three years, and so all postdate the adopted Structure Plan.
- 2.20 The plans share the common aim of protecting and making the best use of existing employment sites. But there is subtle difference between the general approach adopted in the plans and we highlight these below.
- 2.21 **The Dacorum Borough Local Plan (2004)** focuses on maintaining a balance between labour supply and jobs. The Local Plan identifies a minimum supply of employment land to be ring fenced and protected (and which is specifically identified in the Plan) (Policy 29). This minimum supply is to be reviewed if the relationship between jobs potentially available and ‘jobs needed in the borough, become seriously out of

balance'. The Plan then identifies a number of employment areas where 'housing development is to be encouraged' (Policy 33) and several of these sites have already come forward for redevelopment. For the remaining employment sites in the borough, again the Plan (if certain tests are met) allows for a switch to a non-employment use (Policy 34).

- 2.22 **Three Rivers Local Plan (2001)** also focuses on maintaining a balance between housing supply and jobs. The Plan protects specific established employment areas (Policy E3) but allows the re-use of other sites if they are part of a planned regeneration in accordance with the Structure Plan approach set out in Policy 14.
- 2.23 **The Watford Borough Plan (2000)** is based on the assumption that there are adequate opportunities in the existing employment areas but identifies a proposed extension to the Fishers/Wiggenhall Road site. Policy E1 lists those employment areas which the Council will seek to protect, although, by exception, land within these areas may be released for housing or mixed use development if it can be demonstrated that the site is no longer required. For other employment areas, the Council has a criteria-based policy (E6) which allows change of use if certain tests are met. These tests are about future prospects as an employment site and the impact of a change of use on the neighbourhood.
- 2.24 All three authorities are currently embarking on Local Development Frameworks. As requested by the study steering group, our analysis will focus on the time horizon of the Regional Spatial Strategy, which runs to 2021.

Economic Development Strategies

- 2.25 Below, we briefly discuss regional, county and local economic development policies, looking for objectives and priorities which should inform employment land policies. We look especially for priority sectors, clusters, or types of businesses which the different authorities aim to encourage and develop. Employment land policies need to support these priorities, aiming to provide the right physical conditions for these businesses.

Regional Strategy

- 2.26 The current Regional Economic Strategy for the East of England to 2010, Prosperity and Opportunity for All, does not refer explicitly to the key sectors within the region. However, the East of England Development Agency (EEDA) Corporate Plan 2003-2006 identifies them as:
- agriculture and food processing
 - the automotive sector
 - financial and business services
 - high-tech manufacturing and advanced engineering
 - information and communications technology (ICT)
 - life sciences
 - media and cultural industries
 - tourism, leisure and heritage
 - transport gateways
- 2.27 The new Regional Economic Strategy, Progressing a Shared Vision, is currently in draft form. The draft confirms the above as the key sectors in the region, which include 'cluster elements' (although the media and cultural industries sector is redefined, with less emphasis on media and more on creative and cultural sectors). Geographical concentrations of activity identified in SW Herts comprise:

- Financial and business services, especially in Watford;
 - Information and Communications Technology (ICT), centred on Hemel Hempstead.
 - Creative and cultural industries - a small but fast growing sector with strengths in film, animation and multimedia, computer games and software and the visual, performing and literary arts. Leavesden in Three Rivers is likely to be major driver for media clusters in Hertfordshire. Fifty per cent of the UK's studio space is located in the East of England and key stakeholders are now working together to develop a regional initiative known as 'Space for Creativity'.
- 2.28 Progressing a Shared Vision also identifies three 'spatially identifiable clusters of regional significance', comprising energy, environmental industries and motor sports, but none of these is associated with the South West Herts area.

Hertfordshire

- 2.29 The Hertfordshire Economic Development Strategy 2000-05 states three primary priority areas for business sectors in the county.
- 2.30 The first priority area is creating a knowledge economy within a sustainable environment according to the 'Bright Green' industrial strategy. To deliver this priority, the strategy aims to encourage and promote a culture of entrepreneurship and supporting knowledge-based business clusters. A new science park/high-tech business park is proposed at the Key Employment Site at Cherry Trees Lane. The strategy also resolves to support local networks amongst businesses, academia and the community as well as greater support for high-tech/R&D businesses
- 2.31 The second county-wide priority is enhancing business competitiveness to maximise employment potential. This is to be done by promoting and supporting Small and Medium Enterprises (SMEs) through the establishment of management development centres, promotion of skills for the ICT and pharmaceutical sectors; business support; increased funding for business start-ups and greater support for tourism and cultural sectors.
- 2.32 The final priority is to develop environmentally responsible businesses.

Local Policies

- 2.33 The economic development objectives of the SW Herts local authorities are found in the Dacorum Community Plan 2003 and Economic Development Strategy 2003-08, the Watford Community Plan 2003 and draft Economic Development Strategy 2003-06 and the Three Rivers Community Development Strategy 2003-08 and Economic Development Strategy 2002-04. These different documents share very similar themes. All include broad objectives to encourage business and jobs: thus, Dacorum's Community Plan identifies accessible local employment as one of its key themes, and Watford's Community Plan aims to 'provide a better place to do work and business'. All aim to support and develop entrepreneurship the creation and growth of small businesses, through measures which in Watford include support for additional managed workspace units, and Watford aims to encourage social enterprises and black and ethnic minority businesses.
- 2.34 But, with few exceptions (which generally do not relate to business space sectors), the local authority strategies do not prioritise particular economic sectors or clusters. Rather, their main emphasis is on training and labour market initiatives, to ensure that local people, especially the disadvantaged, benefit fully from the available job opportunities.

3 THE SUB-REGIONAL ECONOMY

Overview

- 3.1 In this chapter, we profile the sub-regional and local economies of SW Herts under three main headings:
- The workplace economy, comprising the businesses and jobs located in SW Herts;
 - The residents, comprising population and workforce that live in SW Herts; and
 - The labour market, which brings together the labour demand generated by the workplace economy with the labour supply provided by the resident population.
- 3.2 Most of this chapter considers the whole economy. From the next chapter onwards, we will narrow the focus to activities which use employment space - defined here as industrial space, warehouses and offices.
- 3.3 The analysis throughout is shaped by two broad questions. Firstly, we aim to assess the economic well-being of the area's residents and workers - how well off they are and may be expected to be in the future and why. This diagnostic will help set objectives for employment land policy, and it may support claims for public expenditure where intervention is required to bring sites forward for development.
- 3.4 Secondly, we examine the economy for clues about the demand for employment (business) space - which, as noted earlier, is broadly defined here to cover the Business Use Classes. The analysis in this chapter serves as background and reality check on the quantitative demand forecasts provided later in this report. More importantly, it begins to describe demand qualitatively, profiling what the area offers to industrial and commercial businesses, what kinds of businesses operate there, what they do, and hence what kinds of space they need. This qualitative analysis will be continued in the property market profile in the next chapter.
- 3.5 Throughout, we aim to benchmark the local economy against norms or expectations based on the performance of larger areas like the county and Region and comparable or competing areas like neighbouring districts. For obvious reasons, we use as benchmarks other Hertfordshire districts, the East of England region and the national economy. Where data are available, we have added another regional benchmark: the Rest of the South East (RoSE)⁵. RoSE lost its official identity when the previous Standard Statistical Regions were replaced with Government Office Regions. But we have brought it back for this and other studies on Hertfordshire, because as we shall see the county, despite now being part of the Eastern region, has much in common with this 'old South East'.

The Workplace Economy

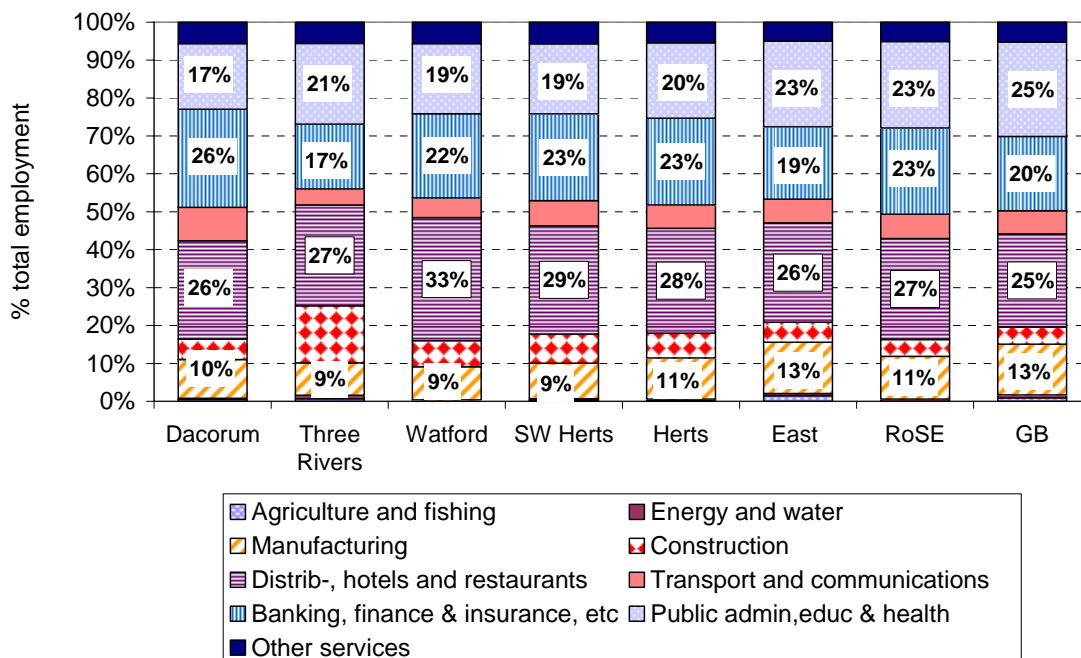
Industrial Structure

- 3.6 Official statistics for 2002 - the latest date for which an employment count is available - show that there are approximately 148,000 employee jobs⁶ located in SW Herts (workplace jobs). Dacorum and Watford have by far the most jobs, around 64,000 and 58,000 respectively. In Three Rivers there are some 26,000 jobs.
- 3.7 Figure 3.1 breaks down these jobs into broad activity sectors.

⁵ In some cases, where there are no data for RoSE, we have substituted the South East Government Office region, which differs from RoSE in that it excludes Hertfordshire, Bedfordshire and Essex.

⁶ Employee jobs, which are counted by the Annual Business Inquiry (ABI), exclude the self-employed.

Figure 3.1 Employment by Broad Sector, 2002



Source: Annual Business Inquiry (ABI) 2002

3.8 Of the broad sectors shown, we focus particularly on manufacturing and Banking, Finance & Insurance etc (more informally known as finance and business services, or FBS) - which, as discussed later, are the main occupiers of business space. With regard to these sectors:

- Hertfordshire as a whole is different from both the Eastern region and Great Britain in having proportionally fewer manufacturing jobs and more jobs in the FBS sector. This broad structure is conducive to employment growth, since in the long-term manufacturing has been losing jobs and FBS has grown, and forecasters agree that the same pattern will continue in the future.
- In both respects, the county is very similar to the Rest of the South East (RoSE) region to which it previously belonged.
- SW Herts in turn is similar to Hertfordshire, except that it has an even lower share of manufacturing - 9% of total employment, against 13% in GB and the East of England and 11% in Hertfordshire.
- Within SW Herts, the three authorities have virtually the same share of manufacturing. But there is variation in the representation of FBS jobs, which is especially high in Dacorum and low in Three Rivers.

3.9 Table 3.1 below looks at industrial structure⁷ in more detail, aiming to identify particular specialist strengths of SW Herts. The table lists those industries which are significantly over-represented in the sub-region compared to the national economy, measured by a location quotient⁸ of 1.3 or more and employment in SW Herts of 500 or more.

⁷ Employment statistics at this level of detail should be treated with caution, because the ABI is based on a sample survey and subject to sampling and other errors.

⁸ The location quotient (LQ) is a sector's share of total employment in the study area (in this case, East Hertfordshire) divided by that sector's share of total employment in Great Britain. Sectors with an LQ greater than 1 are over-represented in the area against the national norm and those with an LQ below 1 are under-represented. An LQ of 1 indicates that a sector accounts for the same share of total employment in the study area as in the national economy.

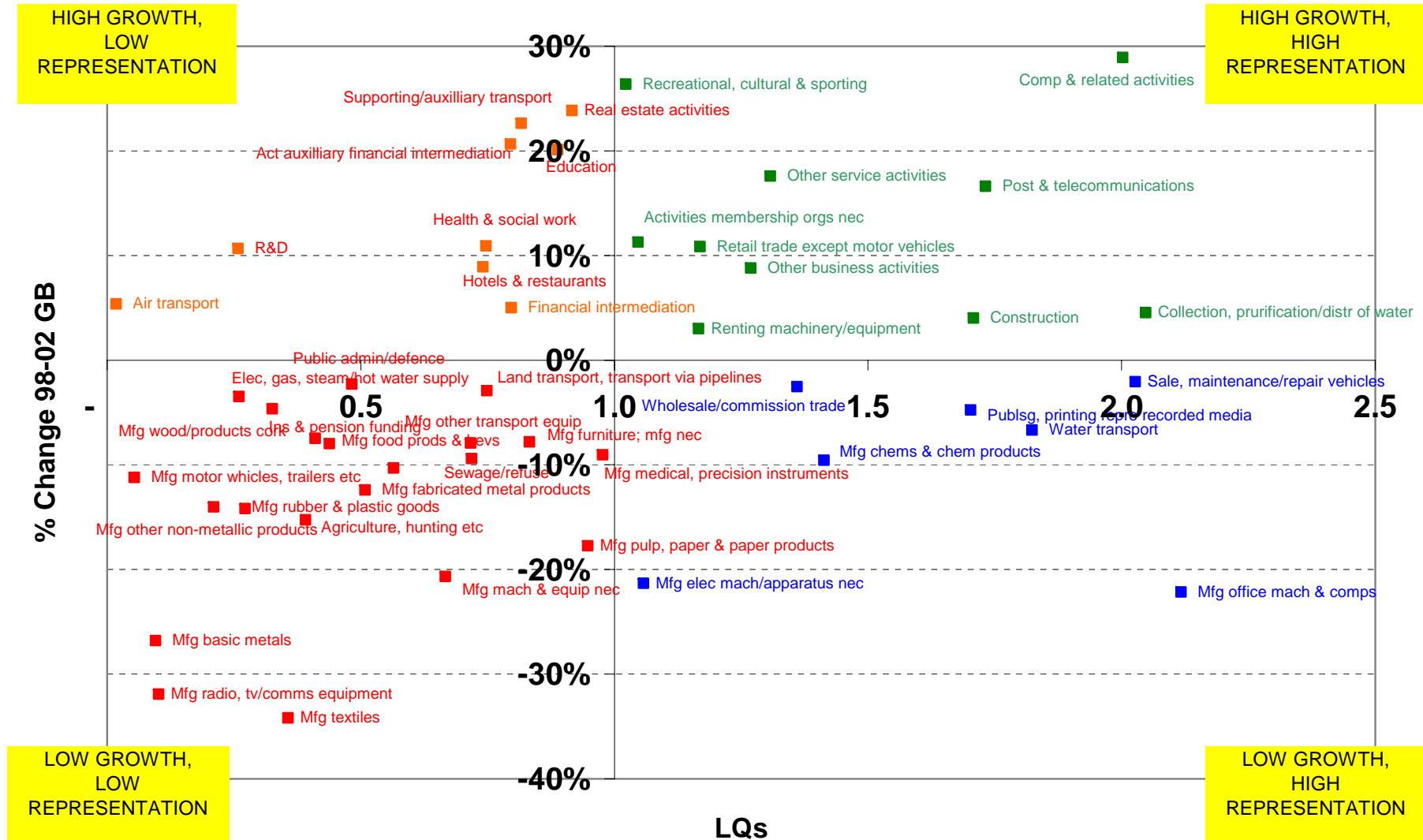
Table 3.1 Over-Represented Employment Sectors in SW Herts, 2002

	Jobs, 2002	LQ
50 : Sale, maintenance/repair motor vehicles	6,521	2.0
72 : Computing and related activities	5,616	2.0
64 : Post and telecommunications	5,554	1.7
45 : Construction	11,424	1.7
22 : Publishing, printing, repro recorded media	3,362	1.7
24 : Manuf chemicals and chemical products	1,887	1.4
51 : Wholesale trade/commission trade, etc	8,838	1.4
93 : Other service activities	2,438	1.3

Source: Annual Business Inquiry 2002, RTP

- 3.10 Except for chemicals manufacture, all the significant over-represented industries are service industries. At the top of the list are motor vehicle sale/maintenance/repair, computing, post and telecoms, construction and printing and publishing. The only manufacturing industry on the list is chemicals, whose over-representation reflects the presence of large pharmaceutical firms in particular.
- 3.11 Conversely, of the least represented activities, with the lowest LQs, many are manufacturing industries, for example motor vehicles, rubber and plastics and radio/TV equipment (see Figure 3.2).
- 3.12 Figure 3.2 below plots location quotients against the recent national growth rates of different industries. Sectors in the right-hand half of the table account for a higher share of jobs in South West Herts than nationally. Sectors in the top half of the table saw growing employment in the four years to 2002 - the latest date for which data are available.
- 3.13 The sectors in the right-hand quadrant are those which are over-represented in South West Hertfordshire and also have grown in Great Britain in recent years. These may be key sectors, which hold out the greatest opportunity for delivering employment growth in SW Herts in the future. All these sectors are service rather than manufacturing industries. Many of them, such as retail, mainly occupy space outside the Business class. But the key opportunity sectors also include activities that do occupy business space, most notably Computing and Related Activities - which has grown especially fast in recent years - and Other Business Activities, more commonly known as business services - a large and diverse sector which covers the main office-based services outside finance and insurance, including professional services, advertising and consultancy.

Figure 3.2 Employment Change against LQs by Sector, 1998-2002



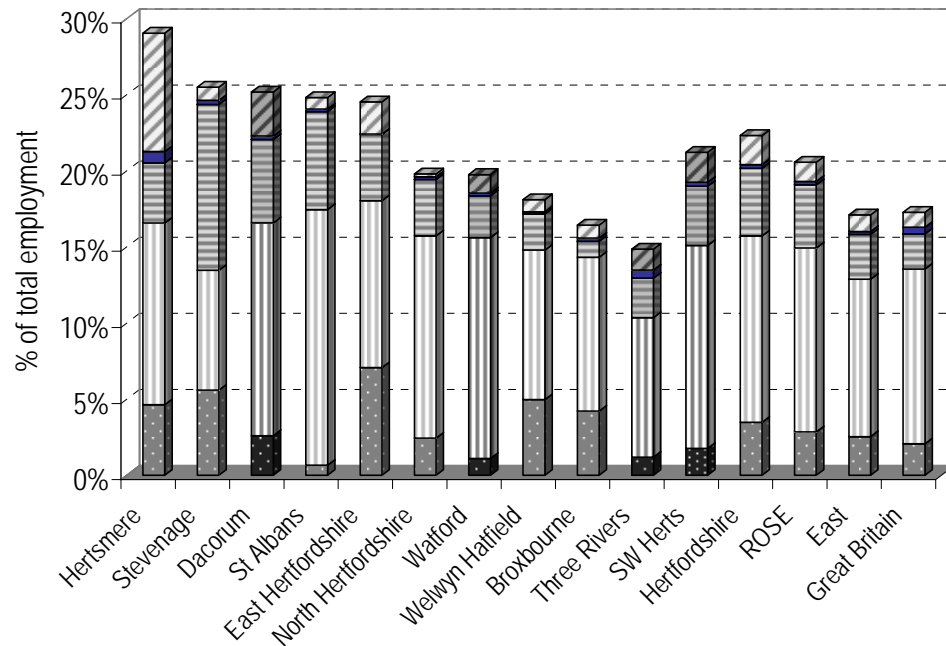
Source: Annual Business Inquiry, 1998-2002

Knowledge-Based Industries

- 3.14 Employment in knowledge-based industries is currently recognised as a key measure of economic competitiveness, which in turn is a determinant of current and future prosperity. The thinking behind this view is best summarised in a quote from the Government White Paper *Our Competitive Future: Building the Knowledge Based Economy*:
- 3.15 'In a knowledge-driven economy... the generation and the exploitation of knowledge has come to play the predominant part in the creation of wealth. Companies in countries with higher labour costs, such as the UK, therefore have to innovate and adapt continuously to retain their competitive edge.'
- 3.16 Figure 3.3 shows employment in knowledge-based sectors as defined by the Organisation for Economic Co-operation and Development (OECD)⁹:
- In Hertfordshire as a whole, some 22% of jobs are in knowledge-based industries - a figure similar to the Rest of the South East (RoSE), but well above GB and the Eastern region, where the proportion is some 16%. SW Herts is similar to Hertfordshire.
 - Dacorum has 25% of jobs in knowledge-based industries, an even higher proportion than Hertfordshire as a whole;
 - Watford has 20% of jobs in knowledge-based industries - close to the Hertfordshire average.
 - The figure for Three Rivers is 15%, significantly less than Herts, Dacorum and Watford and close to the national benchmark.
- 3.17 To look at knowledge-based industries in more detail, Figure 3.3 groups them into four categories as follows:
- i) High-tech manufacturing;
 - ii) Finance and business services (FBS),
 - iii) Computing and R&D,
 - iv) Communications and media industries.

⁹ This definition comprises: publishing and sound recordings, reproduction of recorded media, manufacture of pharmaceuticals etc, manufacture of office machinery/computers, manufacture of electric motors/generators etc, manufacture of electricity distribution etc, manufacture of accumulators etc, manufacture of electrical equipment nec, manufacture of electronic valves, manufacture of TV/radio transmitters etc, manufacture of TV/radio receivers etc, manufacture of medical/surgical equipment etc, manufacture of instruments for measuring, manufacture of optical instruments etc, manufacture of watches and clocks, manufacture of aircraft and spacecraft, telecommunications, accounting/bookkeeping activities etc, architectural/engineering activities etc, technical testing and analysis, advertising, labour recruitment etc, motion picture and video activities, radio and television activities, financial intermediation etc, insurance and pension funding etc, act auxiliary financial intermediation, computing and related activities, and research and development.

Figure 3.3 Knowledge-Based Industries, 2002



■ Hi Tech Manufacturing ■ Business, Finance and Insurance ■ Computing ■ Media ■ Communication

Source: Annual Business Inquiry 2002, OECD RTP

- 3.18 The largest of these categories is FBS, which we have already discussed earlier. A close look at the remaining three groups, which broadly may be described as high-technology activities, shows that:
- Hertfordshire as a whole has more jobs than the UK in all three categories.
 - In Dacorum, high-technology activities are even more over-represented than in Hertfordshire. For all three categories, it has slightly more jobs proportionally than the county and significantly more than GB.
 - In contrast, Watford and Three Rivers are close to the national benchmark, with fewer high-technology jobs than the county.

Business Space Sectors

- 3.19 In this study, we are particularly interested in the jobs that occupy business space, comprising office jobs and industrial/warehousing jobs, and sometimes jointly referred to as Business or B space jobs.
- 3.20 To identify these jobs, we use a range of economic sectors based on the Standard Industrial Classification (1992) which is set out at Appendix 1. Broadly, our analysis assumes that offices (which in this definition included R&D) are occupied by financial and business services, parts of public administration and publishing. Industrial space is occupied by manufacturing industry plus certain parts of the construction industry, motor repairs/maintenance and sewage and refuse disposal. Warehousing is occupied by a variety of transport and distribution activities which are widely spread across the Standard Industrial Classification.
- 3.21 The correspondence between sectors and types of space is not perfect, and hence our definitions of office and industrial/warehousing jobs are no more than approximations. But they are the best possible approximations, which we have developed through a series of employment space studies, most recently the Industrial and Warehousing Land Demand study we produced for the Greater London Authority.

3.22 Table 3.2 shows the different categories of business space employment in SW Hertfordshire, expressed first as absolute numbers and second as shares of total employment. To reduce the impact of possible errors in the Annual Business Inquiry, we have averaged job numbers over four years:

Table 3.2 Employees in Business Space Sectors, Average Between 1998-2002¹⁰

	Dacorum		Three Rivers		Watford		SW Herts		GB
Office	15,626	24%	5,541	21%	15,001	26%	36,167	25%	23%
Industrial	8,098	13%	3,257	12%	5,824	10%	17,179	12%	17%
Warehousing	7,790	12%	2,369	9%	5,200	9%	15,359	10%	7%
Total B Space	31,514	49%	11,167	42%	26,025	46%	68,705	47%	47%
All Jobs	63,961	100%	26,569		56,699	100%	146,562		100%

Source: Annual Business Inquiry 1998-2002, RTP

- Office jobs in Watford and Dacorum account for around one quarter of all jobs, slightly above the national average of 23%. In Three Rivers, the share of office jobs is 21%, slightly below the national average.
- Industrial jobs in all three SW Herts Districts are 12-13% of the total, well below the national benchmark of 17%.
- The share of warehousing jobs is 9% in Three Rivers, 10% in Watford and 12% in Dacorum. All three figures, but especially Dacorum, are above the national benchmark of 7%.
- In all three Districts, as in Great Britain as a whole, just under half of all employee jobs are business space jobs.
- Thus, slightly more than half of all jobs operate in space outside the Business Use Class - which includes leisure and retail premises, schools, hospitals, and many other kinds of space.

Unit Size

3.23 Table 3.3 analyses the size of business establishments (units), measured in number of employees.

Table 3.3 Size of Business Units, 2002

Size Band - Number of Employees	Business Units in:							GB
	Dacorum	Three Rivers	Watford	SW Herts	Herts	East	RoSE	
1-10	87%	90%	81%	86%	87%	85%	85%	83%
11-49	10%	7%	14%	10%	10%	12%	11%	13%
50-199	2.8%	1.9%	3.8%	2.9%	2.7%	2.7%	2.7%	3.1%
200 +	0.6%	0.4%	1.0%	0.6%	0.6%	0.6%	0.6%	0.7%

Source: Annual Business Inquiry 2002

- In all areas, the great majority of business units (establishments) are small, with over 80% employing 10 people or less and less than 5% employing 50 people or more.
- The East and RoSE regions, the county of Hertfordshire, and the SW Herts sub-region have very similar size structures, in which the dominance of small units is

¹⁰ To account for anomalies in the Annual Business Inquiry data, we have averaged the data between 1998 and 2002 to give a better reflection of jobs (this does not include self-employment) in the different sectors during this period.

slightly more marked than in GB, with proportionally more units in the smallest size band, employing 1-10 people, and fewer units in all the size bands employing more than 10.

- Of the individual SW Herts authorities, Dacorum shows the same pattern as the sub-region, county and region and Three Rivers is even more dominated by small firms. Watford, in contrast, has fewer units with 10 employees or less, and more units in each of the three larger size bands, than any of the areas shown in the table.

Entrepreneurship

- 3.24 The stock of VAT-registered enterprises (Table 3.4) and the change in that stock over time (Table 3.5) are recognised indicators of entrepreneurship.

Table 3.4 VAT-Registered Firms per 10,000 Population, 2002

Firms per 10,000 population	
North Hertfordshire	434
St Albans	426
East Hertfordshire	425
Hertsmere	392
Dacorum	385
Three Rivers	382
Watford	362
Welwyn Hatfield	324
Broxbourne	296
Stevenage	220
Hertfordshire	374
SW Herts	376
East	328
South East	347
Great Britain	297

Source: Office for National Statistics 2002

- 3.25 Hertfordshire county has 374 enterprises per 10,000 population, more than the Eastern and South East regions, which in turn exceed the national benchmark of 297 firms per 10,000 population (the South East yet again ranks above the East). SW Herts and its three authorities are close to the county average, and in a middling position among the Hertfordshire districts.

Table 3.5 Change in VAT-Registered Firms per 10,000 Population, 1994-2002

	Dacorum	Three Rivers	Watford	Herts	East	South East	GB
1994-2002	16%	12%	5%	12%	6%	10%	6%

Source: Office for National Statistics

- 3.26 In Between 1994-2002, VAT-registered firms per head of population grew in GB and the East of England by 6%, in the South East by 10% and in Hertfordshire by 12%. SW Herts, Dacorum and Three Rivers did as well as the county or better, but Watford's figure is just 5%.

SW Herts as a Business Location

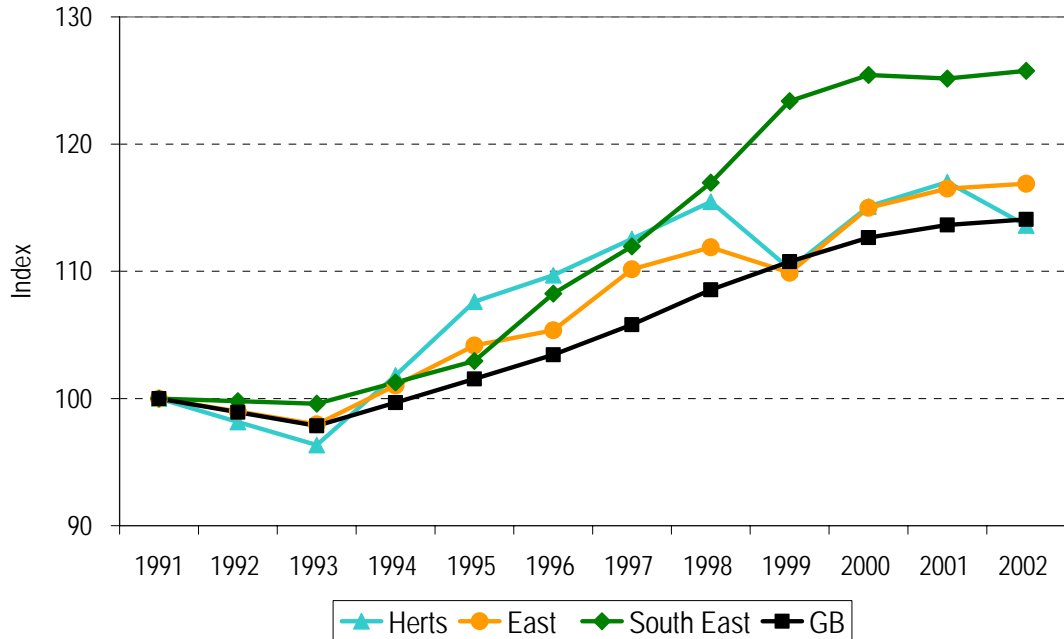
- 3.27 Consultations carried out for this study included an informal survey of 20 business occupiers¹¹ who had recently taken up space in the area, a stakeholder seminar (notes from this meeting are shown in appendix 2) and discussions with economic development departments and agencies. We asked these respondents what kinds of businesses tend to locate in SW Herts, why, and how far they could find what they were looking for. The consultations suggested that:
- Businesses in the area, including small businesses, often serve large, national or international market areas. In our small (and statistically unrepresentative) business survey, just two of the 20 firms we interviewed said all or most of their customers were in Hertfordshire.
 - The main source of incoming businesses from outside the area is Greater London.
 - In looking for new premises, typical areas of search are SW Herts or parts thereof that straddle authority boundaries, occasionally extending into the neighbouring districts of Hertsmere and St Albans. This tends to support the sub-regional approach to planning for employment land.
 - Business occupiers in the area seem acutely price-aware and price-sensitive: survey respondents repeatedly referred to value for money as a key factor in location choices, both past and future.
 - But the survey does not suggest that large numbers of businesses are being forced out or priced out of the area by competing land uses. Most of the businesses we spoke to had found it reasonably easy to locate the property they needed at a price they could afford and thought the same would apply if they were to relocate in future. The few businesses that had had trouble generally seemed affected by unusual circumstances, such as specialist requirements or environmentally sensitive locations.
 - However, both the survey and consultation point to one specialist area where supply falls short of demand: start-up accommodation.

¹¹ All firms contacted were relatively new firms. 60% were office occupiers, 35% were industrial unit occupiers and the rest were located in factories. Three quarters of responding businesses were located within Hemel Hempstead and Watford, while the remainder were positioned in the smaller localities of Rickmansworth, Tring and Kings Langley. An overwhelming majority of those who responded were directors, partners or managers from small local businesses employing fewer than 10 people.

Employment Change

3.28 Figure 3.4 shows employment change in GB, the two benchmarks regions and Hertfordshire from 1991-2002. In all these areas, employment fell in the first two years of the period and grew almost without interruption for the following nine years.

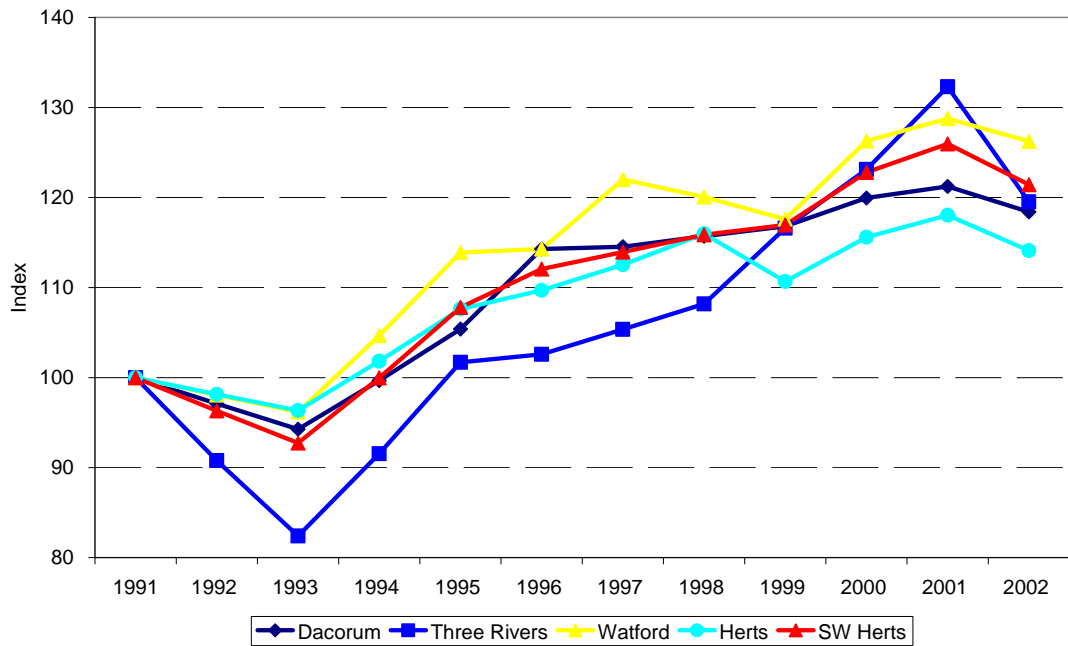
Figure 3.4 Employment Change 1991-2002 - National and Regional Index 1991=100



Source: Annual Business Inquiry, 1998-2002, Annual Employment Survey 1991-1998, RTP

3.29 Between 1991 and 2002, Hertfordshire's employment increased by 14%. The county's growth closely paralleled that of GB and in the Eastern region, but fell far behind that of the South East, which rose by 26%, mainly due to a dramatic growth spurt in the second half of the 1990s.

Figure 3.5 Employment Change 1991-2002 , Sub-Regional and Local Index, 1991=100



Source: Annual Business Inquiry 1998-2002, Annual Employment Survey 1991-1998

3.30 Within the county, employment in SW Herts and its constituent authority areas followed similar growth paths. But in the long upswing that started in 1993 SW Herts and its authorities on the whole have done rather better than the county. This is especially true of Watford, which was ahead of the county and the other districts in most years and over the period as a whole grew as fast as the South East region.

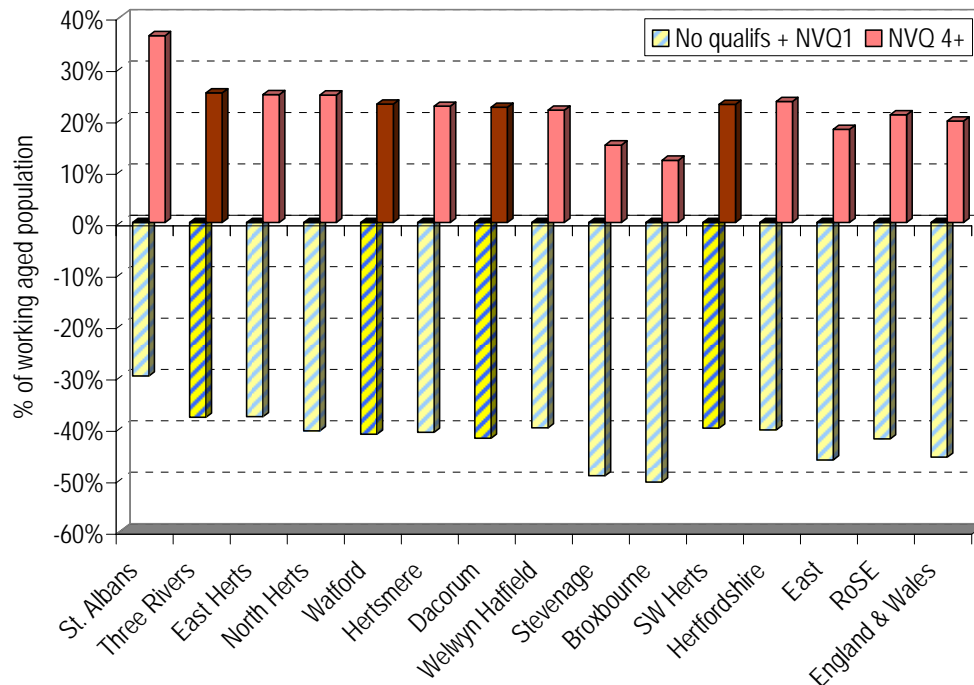
The Residents

- 3.31 The analysis so far has been about the workplace economy, considering the activities of the people who work in SW Herts, regardless of where they live. In this section, we turn our attention to the resident workforce of South West Herts, analyzing the attributes and activities of the economically active people, regardless of where they work. The next section, The Labour Market, will bring together these separate analyses.

Qualifications

- 3.32 In Figure 3.6 below, the positive bars measure the proportion of the resident working age population which has the highest qualifications, NVQ 4 and 5, equivalent to degree and higher level qualifications. The negative bars show the share of the least well-qualified, with either no qualifications or NVQ 1 entry level qualifications.

Figure 3.6 Qualifications of the Working Age Population¹², 2001



Source: Census 2001, RTP

- 3.33 On both indicators:
- The East of England is close to the national benchmark (in this case England and Wales, because data for GB are not available), RoSE does better than both, and Hertfordshire does better than RoSE.
 - SW Herts and its authority areas are virtually equal to the county average.

Housing Affordability

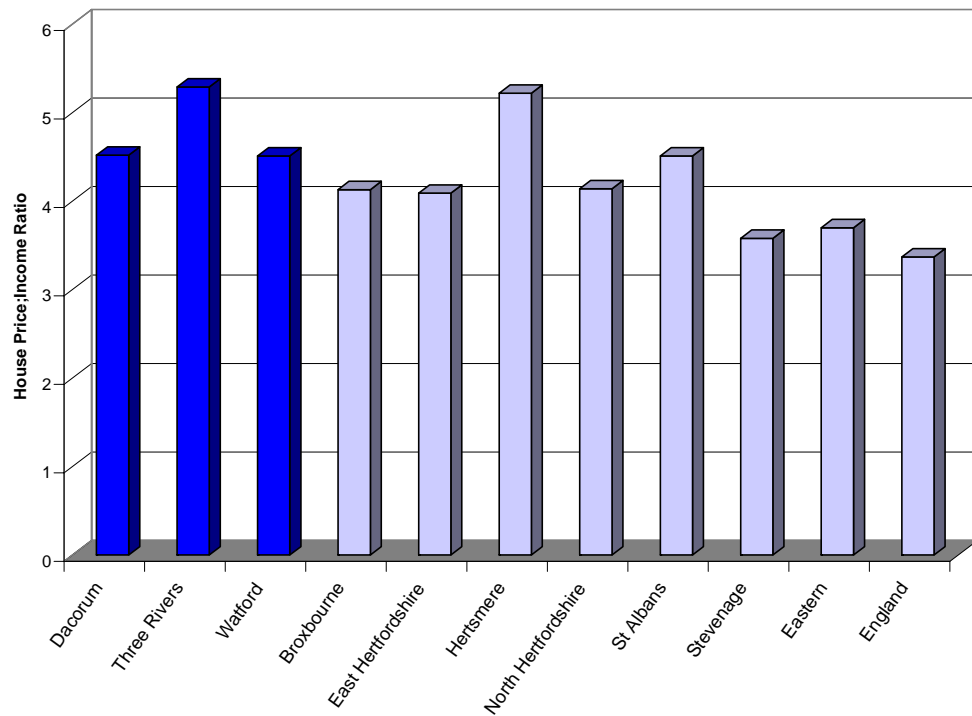
- 3.34 One factor that affects both the quality of life and competitiveness is provision of affordable houses for its residents. If houses are expensive, lower paid employees will struggle to buy and will seek residence elsewhere (unless they can get affordable

¹² Males and Females aged 16-74

housing or key worker housing) and employers may have difficulty recruiting for lower-paid jobs.

- 3.35 Research for the Rowntree Foundation in 2002 provided an indicator of affordability, the ratio of house prices to residents' incomes, across local authority areas. This indicator is shown at Figure 3.7 below¹³. The lower the ratio, the more affordable is housing on average.

Figure 3.7 House Price to Income Ratio, 2002



Source: Can Work - Can't Buy, Joseph Rowntree Foundation 2002

- 3.36 Except for Stevenage, housing in all Hertfordshire districts is less affordable than in England and the Eastern region - whose ratios are similar. In SW Herts, affordability is even worse. Three Rivers, jointly with Hertsmere, has the least affordable housing in the county. Dacorum and Watford are in equal third place, a position they share with St Albans.

¹³ Affordability is shown for local authority areas and England only. Regional and sub-regional data are not readily available.

Population Change

Table 3.6 Population Change 1992-2002

	1992	2002	Growth %
Watford	75,422	80,361	7%
Dacorum	133,696	138,053	3%
Three Rivers	80,487	82,532	3%
SW Herts	289,605	300,946	4%
East Hertfordshire	117,655	130,094	11%
Broxbourne	82,242	87,469	6%
Stevenage	75,303	79,659	6%
North Hertfordshire	112,940	118,292	5%
Welwyn Hatfield	94,202	97,352	3%
Hertsmere	90,712	93,443	3%
St Albans	125,822	128,899	2%
Hertfordshire	988,541	1,036,144	5%
RoSE	10,431,735	10,963,769	5%
East of England	5,141,514	5,420,360	5%
Great Britain	55,039,800	57,535,274	5%

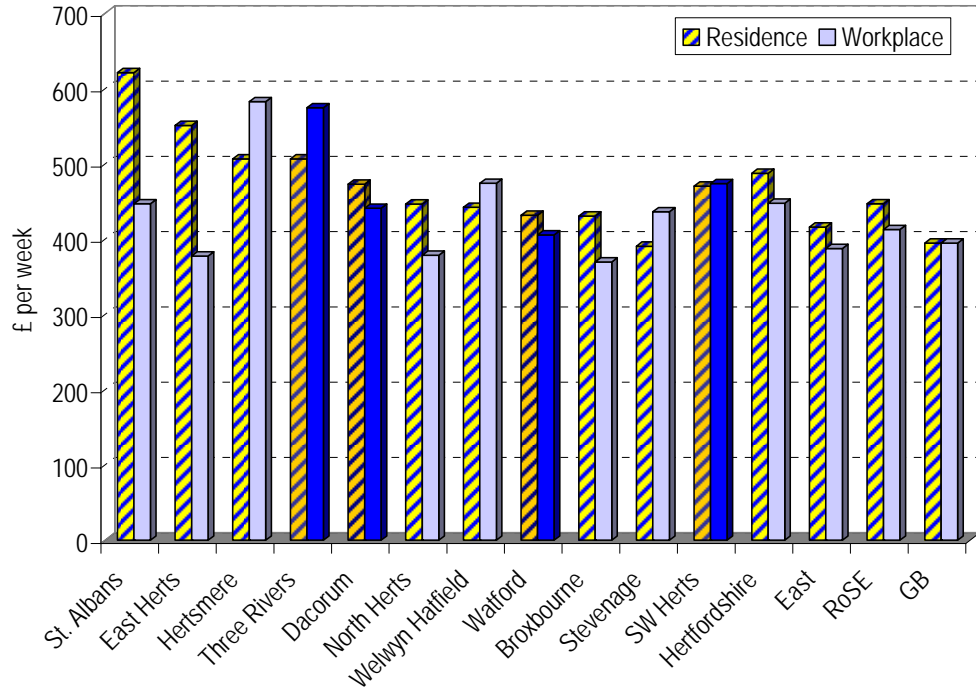
Source: Mid Year Population Estimates, 1992-2002

- 3.37 The Eastern region, RoSE, England and Hertfordshire in the 10 years to 1992 had the same population growth, 5%, SW Herts and its local authority areas were close to this benchmark, though Watford grew a little faster and Three Rivers and Dacorum a little more slowly.

The Labour Market

Earnings

Figure 3.8 Gross Weekly Earnings, 2003¹⁴



Source: New Earnings Survey 2003

3.38 Both SW Herts' working residents and its workplace workers on average are relatively well paid (Figure 3.8):

- Both sets of earnings are slightly higher in RoSE than GB and the Eastern region and slightly higher in Hertfordshire than RoSE.
- Compared to Hertfordshire, earnings in Watford are slightly lower, in Dacorum slightly higher, and in Three Rivers substantially higher, than the county average.
- In Dacorum and Watford, residents' earnings are slightly higher than workplace earnings. But the differences are insignificant (unlike in St Albans and East Herts, where residents' earnings are £100-200 a week more than workplace earnings - suggesting that local residents have to commute out to access better-paid jobs, and/or that the lower-paid jobs in these Districts are taken by in-commuters).
- By contrast, in Three Rivers, workplace earnings exceed residents' earnings by around £60 per week, more than 10%. This suggests that local residents who work locally on average earn more than those commuting out, and/or in-commuters earn more than local residents working locally.

¹⁴ Resident workers are residents of the stated area that are employed - either in the same stated area or elsewhere. Workplace workers are people who work in the stated area, but can live anywhere - in the same stated area or not.

Unemployment

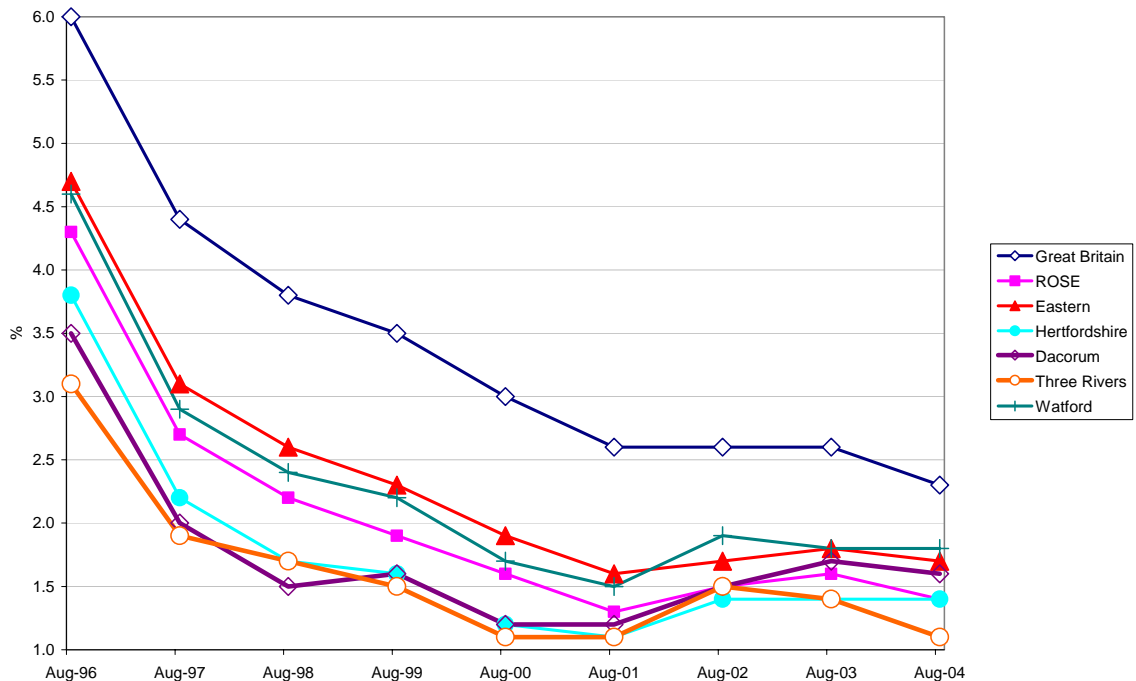
Table 3.7 ILO Unemployment, 2001

	Unemployment Rate %
Dacorum	3.1%
Three Rivers	3.0%
Watford	3.3%
SW Hertfordshire	3.1%
Hertfordshire	3.0%
East of England	3.8%
South East	3.3%
England and Wales	5.0%

Source: Census 2001

- 3.39 On the ILO measure¹⁵, unemployment at the time of the Census was considerably lower in the Eastern region than England and Wales, slightly lower in the South East than in the Eastern region, and slightly lower in Hertfordshire than the South East. SW Herts' unemployment, at 3.1%, was fractionally lower than the county average and varied slightly across districts, from 3.0% in Three Rivers to 3.3% in Watford.
- 3.40 Figure 3.9 shows unemployment measured by a different yardstick, the claimant count. On this alternative indicator, the unemployment rate is lower in absolute terms, but the relativities described above are unchanged. Furthermore, the graph shows that these relativities have been well established for many years.

Figure 3.9 Claimant Count Unemployment, 1995-2004



Source: Office For National Statistics

¹⁵ Unemployment here, based on the International Labour Organisation (ILO) definition and taken from the Census 2001, measures the number of people that cite they are economically active, currently not working and actively seeking work. This is the 'official' definition of unemployment used by the Government.

Travel to Work¹⁶

3.41 This section analyses recently published travel-to-work data from the 2001 Census and change since the previous Census in 1991. We describe travel-to-work patterns for each District, compare the Districts with each other and wider benchmarks and end with a summary of salient features across the sub-region.

Dacorum

3.42 Table 3.8 below analyses travel to work to and from Dacorum, comparing 2001 with 1991. According to the 2001 Census:

- 42,100 residents of Dacorum, 61% of the borough's total working residents, also work in Dacorum.
- The figure of 61% - the number of people who both live and work in the local authority area, as a proportion of all the area's working residents - is known as the self-containment rate and is commonly used as a measure of the sustainability of journeys to work.
- 27,100 Dacorum residents out-commute to work in other Districts. 26,300 residents of other Districts in-commute to work in Dacorum, equating to 39% of the borough's total workplace jobs.
- The net result is a negative commuting balance of 800, or 1% of working residents. In effect, net commuting is nil.

Table 3.8 Travel to Work, Dacorum

		Live in Dacorum			
		2001		1991	
Work in	Total	69,108	100%	64,170	100%
	Dacorum	42,089	61%	39,350	61%
	Three Rivers	2,041	3%	1,980	3%
	Watford	2,949	4%	3,080	5%
	Rest of Herts	5,289	8%	4,190	7%
	London	8,257	12%	9,040	14%
	Beds	1,716	2%	1,660	3%
	Bucks	3,422	5%	3,230	5%
	Essex	208	0%	150	0%
	Other	3,137	5%	1,490	2%
		Work in Dacorum			
		2001		1991	
Live in	Total	68,453	100%	56,010	100%
	Dacorum	42,089	61%	39,350	70%
	Three Rivers	1,481	2%	1,130	2%
	Watford	1,410	2%	990	2%
	Rest of Herts	4,919	7%	2,900	5%
	London	3,502	5%	1,900	3%
	Beds	5,216	8%	3,670	7%
	Bucks	5,682	8%	3,800	7%
	Essex	476	1%	270	0%
	Other	3,678	5%	2,000	4%

¹⁶ Our analysis of travel-to-work flows, based on the 2001 Census, shows different numbers of jobs from the ABI numbers quoted earlier. This is because the Census and the ABI relate to different dates and use different definitions and methods.

Appendix 3 provides more detailed travel-to-work data, at the level of individual towns,

Source: Census 2001, 1991

- 3.43 Turning to the origins and destinations of commuters, the top section of Table 3.8 shows the workplaces of people who live in Dacorum. 61% of working residents work in the borough as noted earlier, 15% elsewhere in Hertfordshire (including 4% in Three Rivers and 3% in Watford), 12% in London (mainly in the Central sub-region) and 5% in Bucks (mainly in Aylesbury).
- 3.44 Dacorum saw little change in out-commuting between 1991-2001. The self-containment rate of 61% did not change. Changes in the destinations of out-commuters were fractional: the proportion travelling to London rose by two percentage points, that travelling to 'other' (widely spread) destinations fell by three percentage points, and that travelling to the rest of Hertfordshire, beyond SW Herts, fell by 1%.
- 3.45 The bottom section of Table 3.8 shows the place of residence of people who work in Dacorum. 61% of these workers live in the borough and 11% elsewhere in Herts (including 2% each in Three Rivers and Watford). The remainder are more or less evenly distributed across Bedfordshire, Buckinghamshire, London and thinly spread 'other' counties. There was virtually no change between 1991 and 2001.

Three Rivers

- 3.46 The 2001 Census figures (Table 3.9) show that:
- Of the 40,700 working resident of Three Rivers, 13,800 also work in the District - a self-containment rate of 34%.
 - 26,900 people commute from Three Rivers to work elsewhere and 16,900 commute from other Districts to work in Three Rivers, representing 55% of the District's workplace jobs.
 - The net result is a negative commuting balance of 10,000 people, 25% of working residents.

Table 3.9 Travel to Work, Three Rivers

		Live in Three Rivers			
		2001		1991	
Work in	Total	40,662	100%	36,360	100%
	Dacorum	1,481	4%	1,130	3%
	Three Rivers	13,751	34%	12,740	35%
	Watford	6,829	17%	6,710	18%
	Rest of Herts	2,973	7%	2,530	7%
	London	12,182	30%	10,860	30%
	Beds	274	1%	180	0%
	Bucks	1,340	3%	1,130	3%
	Essex	135	0%	0	0%
	Other	1,697	4%	1,080	3%
		Work in Three Rivers			
		2001		1991	
Live in	Total	30,839	100%	25,030	100%
	Dacorum	2,041	7%	1,980	8%
	Three Rivers	13,751	45%	12,740	51%
	Watford	3,112	10%	3,100	12%
	Rest of Herts	2,137	7%	1,240	5%
	London	4,294	14%	2,310	9%
	Beds	627	2%	570	2%
	Bucks	1,741	6%	1,330	5%
	Essex	243	1%	90	0%
	Other	2,893	9%	1,670	7%

Source: Census 2001, 1991

- 3.47 The top section of Table 3.9 analyses the workplaces of people who live in Three Rivers. 34% of Three Rivers' working residents work in the District, 30% in London (mainly the Western and Central sub-regions) and 28% in Hertfordshire beyond Three Rivers (including 24% to Watford but only 4% in Dacorum). There was no significant change from 1991 to 2001.
- 3.48 As shown in the bottom part of Table 3.9, 45% of the people who work in Three Rivers also live there, 24% live elsewhere in Hertfordshire (including 10% in Watford and 7% in Dacorum) and 14% in London (mostly West London). In 1991-2001, the proportions commuting from London and the rest of Herts increased by five percentage points (perhaps reflecting development at Leavesden), with compensating reductions in those living in Three Rivers itself and Watford.

Watford

- 3.49 Key results from the Census are at Table 3.10:
- Of the 41,600 working resident of Watford, 20,700 also work in the borough - a self-containment rate of 50%.
 - 20,900 people out-commute from Watford to work elsewhere. 28,600 in-commute from other Districts to work in Watford, representing 58 % of the District's workplace jobs.
 - The net result is a positive commuting balance of 7,700 people, 19% of working residents.

Table 3.10 Travel to Work, Watford

		Live in Watford			
		2001		1991	
Work in	Total	41,609	100%	36,540	100%
	Dacorum	1,410	3%	990	3%
	Three Rivers	3,112	7%	3,100	8%
	Watford	20,747	50%	19,310	53%
	Rest of Herts	4,587	11%	3,420	9%
	London	8,758	21%	8,270	23%
	Beds	356	1%	210	1%
	Bucks	730	2%	560	2%
	Essex	111	0%	0	0%
	Other	1,798	4%	680	2%
		Work in Watford			
		2001		1991	
Live in	Total	49,254	100%	43,960	100%
	Dacorum	2,949	6%	3,080	7%
	Three Rivers	6,829	14%	6,710	15%
	Watford	20,747	42%	19,310	44%
	Rest of Herts	5,802	12%	5,090	12%
	London	6,849	14%	2,310	5%
	Beds	1,510	3%	570	1%
	Bucks	1,740	4%	1,330	3%
	Essex	408	1%	90	0%
	Other	2,420	5%	5,470	12%

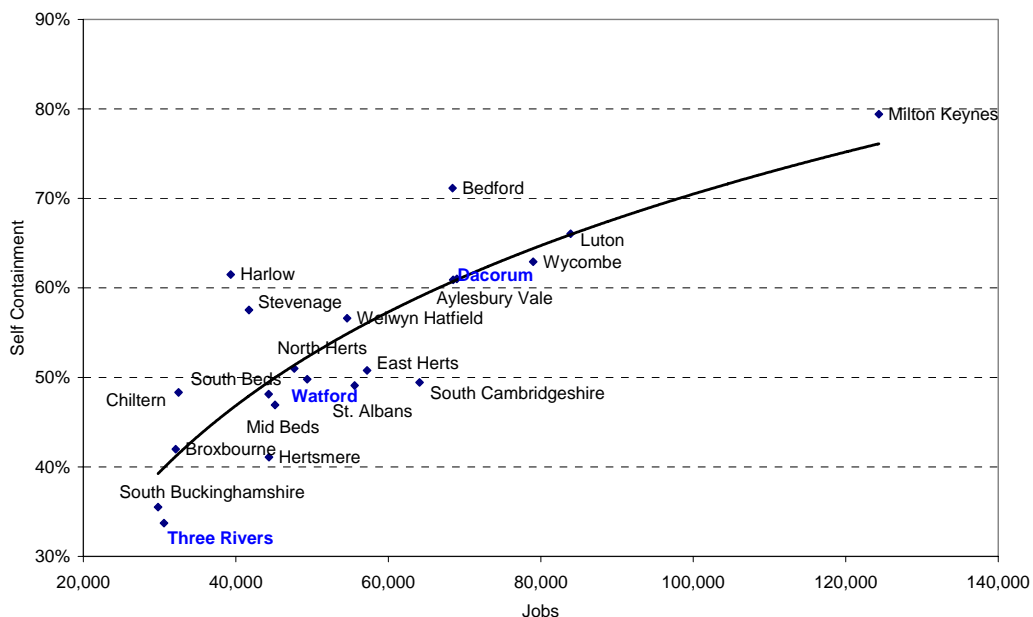
Source: Census 2001, 1991

- 3.50 The origin and destination figures show that 50% of Watford's working residents work in Watford, 21% elsewhere in Hertfordshire (including 7% in Three Rivers and 3% in Dacorum) and 21% in London (mainly in the Northern and Western sub-regions). Since 1991, the self-containment rate fell marginally from 53% to 50% and the geographical pattern changed fractionally, with slightly fewer people commuting to London and slightly more to widely spread 'other' destinations. None of these small changes seem significant.
- 3.51 Of the people who work in Watford, 42% also live there. 32% live elsewhere in Hertfordshire (including 14% in Three Rivers and 6% in Dacorum) and 14% in London. Since 1991, the proportion of in-commuters from outside the borough has only changed by an insignificant 2%, but there has been one marked change in the geographical pattern of in-commuters' origin: the proportion travelling from London has fallen by nine percentage points, while that from 'other' (widely dispersed and relatively remote) places has risen by eight percentage points.

Commuting between Districts: Comparisons

- 3.52 Figure 3.10 shows self-containment rates in SW Herts and neighbouring Districts and plots them against the number of workplace jobs in each District:
- Compared to other Districts in and around Hertfordshire, Dacorum has a high self-containment rate, Watford a middle-ranking rate, and Three Rivers a particularly low rate.
 - There is a consistent relationship between the two variables: on average, the more jobs a district provides, the greater its level of self-containment.

Figure 3.10 Self Containment Rates against Number of Workplace Jobs



Source: Census 2001

3.53 Watford’s self-containment rate at 50% is middling in absolute terms; it is also close to the regression line, suggesting that self-containment is much as one would expect given the borough’s number of jobs. Dacorum’s rate in absolute terms is high, and exactly what one would expect given the absolute number of jobs in the borough. Conversely, Three Rivers’ self-containment rate of 34% is exceptionally low and falls short of its expected value by some seven percentage points (7% of the District’s working residents)

3.54 Table 3.11 takes a closer look differences in self-containment within SW Herts. The table compares the three Districts with regard to the workplaces of working residents:

- As we have already noted, the self-containment rate - the proportion of District residents who work in the District - is 61% in Dacorum, 50% in Watford, and 34% in Three Rivers.
- The difference between Watford and Dacorum is almost perfectly counterbalanced by out-commuting to London, which accounts for 21% of working residents in Watford and just 12% in Dacorum. For all other commuting destinations, Watford and Dacorum show similar figures.

Table 3.11 Travel to Work of SW Herts Working Residents

Live in	Dacorum		3 Rivers		Watford		Watford and 3 Rs	
Work in Total	69,108	100%	40,662	100%	41,609	100%	82,271	100%
Dacorum	42,089	61%	1,481	4%	1,410	3%	2,891	4%
Three Rivers	2,041	3%	13,751	34%	3,112	7%	44,439	54%
Watford	2,949	4%	6,829	17%	20,747	50%		
Rest of Herts	5,289	8%	2,973	7%	4,587	11%	7,560	9%
London	8,257	12%	12,182	30%	8,758	21%	20,940	25%
Beds	1,716	2%	274	1%	356	1%	630	1%
Bucks	3,422	5%	1,340	3%	730	2%	2,070	3%
Essex	208	0%	135	0%	111	0%	246	0%
Other	3,137	5%	1,697	4%	1,798	4%	3,495	4%

Source: Census 2001

- Three Rivers has even more out-commuters to London, 30%, and also to Watford - to which it exports 17% of its working residents, while from Dacorum only 4% of working residents commute to Watford, and from Watford to Three Rivers the figure is just 7%. For commuting destinations other than London and Watford, Three Rivers is similar to the other two SW Herts Districts.

3.55 Thus, Three Rivers' unusually high out-commuting is due to two destinations: London - where most journeys are probably by public transport - and Watford - which is geographically very close.

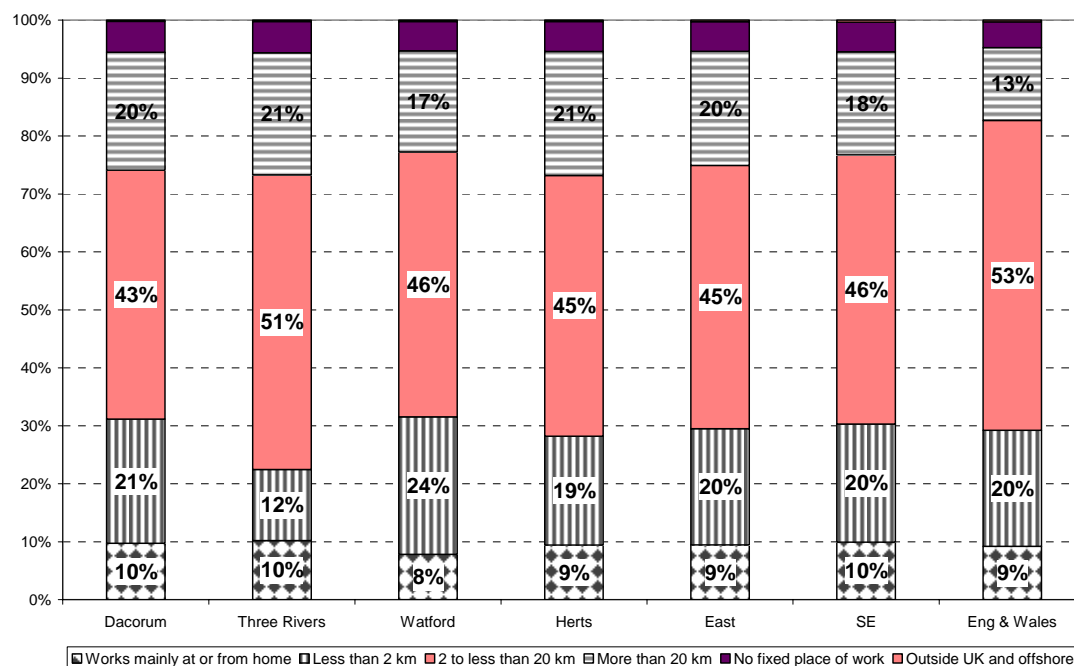
3.56 It is important to note that, despite its high out-commuting and negative net balance, Three Rivers is also a significant destination for in-commuters. Of Three Rivers' workplace jobs, 55% are held by in-commuters from other Districts - a share much higher than Dacorum's and very nearly as high as Watford's.

Distance and Travel Mode

3.57 Long journeys to work have a variety of potential adverse impacts. They may affect the quality of life and real incomes, put pressure on infrastructure, and - especially if made by car - they may cause traffic congestion and environmental damage. The figures on commuting flows which we analysed earlier do not tell us much about these adverse effects, because they are based on local authority areas; a journey which crosses a local authority boundary is not necessarily longer or more undesirable than one that does not.

3.58 To provide an alternative measure of the possible adverse impact of commuting, the graphs below analyse residents' travel to work by distance and mode. In both cases, we benchmark the SW Districts against national, regional and county averages.

Figure 3.11 Distances Travelled to Work, 2001



Source: Census 2001

3.59 The distribution of distances travelled (Figure 3.11) shows two interesting features:

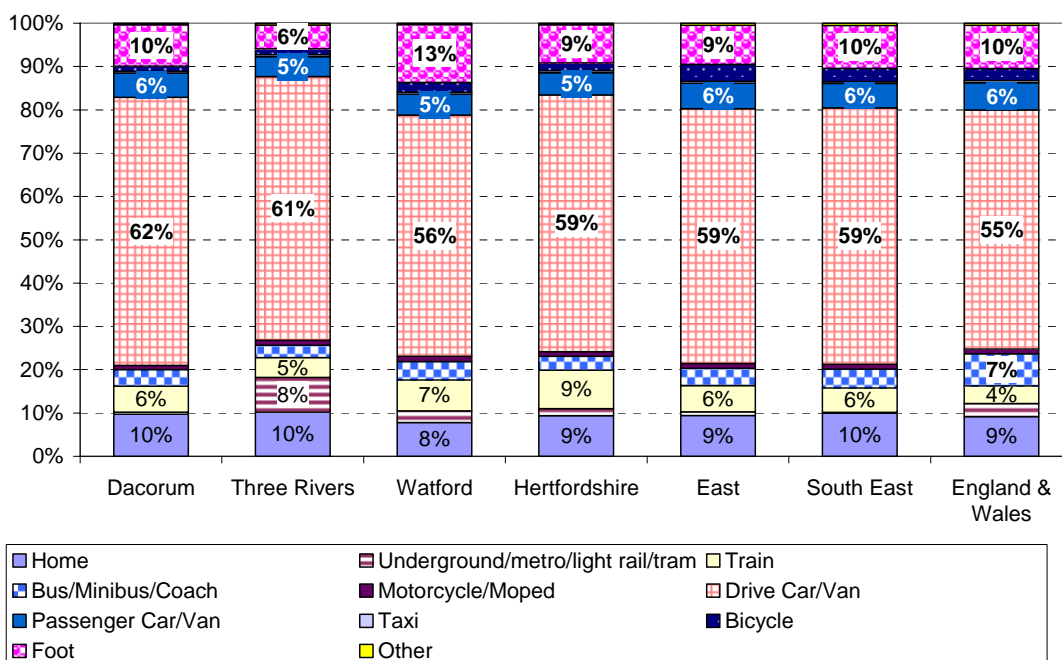
- The first is a difference between regions. In the South East and East of England, around 20% of trips to work are of 20 km or more - a considerably greater share of all trips than in England and Wales, where 13% are of 20 km or more. Hertfordshire in this respect is similar to the East and South East, as are the SW Herts Districts.

- Second, at local level, Three Rivers has comparatively few very short trips, of less than 2 km. Just 12% of Three Rivers' trips are in this category. In the other areas shown the proportion is around 20%, except in Watford, where it is highest at 24%.

3.60 Modest of travel to work vary little across areas:

- Driving cars and vans account for 55% of journeys to work nationally. For residents of the East and South East regions and Hertfordshire county, as in the Districts of Dacorum and Three Rivers, this proportion is higher, at around 60%. In Watford, it is 56%, below regional and local benchmarks and close to the national average.
- Public transport accounts for 13% of journeys to work nationally. For residents of the South East and East regions, the share of public transport is lower at some 10%. Hertfordshire, Dacorum and Watford are close to this regional benchmark. But for residents of Three Rivers the share of public transport is noticeably higher, at 17%, largely because of trips on the Underground - which account for 8% of the total, much more than in any of the areas shown.
- Three Rivers is also unusual in that comparatively few of its residents go to work on foot - 6%, against 13% in Watford and around 10% in all the other areas shown on the graph.

Figure 3.12 Mode of Travel to Work, 2001



Source: Census 2001

Conclusion

3.61 To summarise the salient features of each District as regards travel to work in 2001:

- Dacorum's is characterised by a high self-containment rate (61% of working residents work in the borough) and comparatively low in-commuting (just 39% of the borough's workplace jobs are held by residents of other local authority areas). In absolute numbers, in-commuters and out-commuters are equal, so that the borough neither imports nor exports labour. As regards the length and mode of residents' journeys to work, Dacorum is close to regional and county benchmarks, with more long-distance trips, more use of private cars and less use of public transport than the nation as a whole.

- Watford has middling self-containment - half its working residents work in the borough - and much more in-commuting than Dacorum, with 58% of workplace jobs held by residents of other local authority areas. Overall, it is a net importer of labour. Compared to the regional and Hertfordshire norms, slightly fewer of its residents' work trips are made by car, more are made on foot, and more are very short.
 - Three Rivers differs markedly from its neighbours:
 - It has exceptionally low self-containment, providing jobs for just 34% of its working residents, a negative commuting balance, relatively few very short trips and relatively few trips on foot.
 - But this does not necessarily imply a relative sustainability deficit. Three Rivers' low self-containment is accounted for by commuting to Watford, which is geographically close, and to London, where many trips are probably made by public transport. Indeed, Three Rivers' comparatively low share of trips on foot is offset by a high share of trips by public transport. The proportion of residents who drive their cars to work in Three Rivers is close to the regional and Hertfordshire norms.
 - Although Three Rivers has many fewer in-commuters than out-commuters, as a proportion of its (small) workplace employment it provides a relatively high number of jobs for in-commuters: 55% of its workplace jobs are held by residents of other Districts, a much higher proportion than in Dacorum and nearly as high as in Watford.
- 3.62 Within the scope of this study, we are unable to translate these findings into policy recommendations. Long journeys to work may adversely affect the quality of life of those who make them, the vitality of the areas in which they live, and - especially if made by car - environmental sustainability. On the other hand, they may contribute to prosperity by enabling people to access higher-earning and more productive jobs. It is for each planning authority, in the light of local circumstances, to consider if it will aim to reduce commuting in its area and if so how.

Conclusions

Well-being and Competitiveness

- 3.63 By national and regional standards, our analysis (largely based on data for 2002 and earlier) suggests that both SW Herts' workplace economy and its working residents are prosperous and productive, and the indications are that they will remain so. On most measures of economic well-being and competitiveness:
- The Eastern Region is close to, or slightly ahead of, the national average;
 - The South East (RoSE) does better than either;
 - Hertfordshire does better than the South East;
 - SW Herts and its constituent authorities are either similar to Hertfordshire or slightly ahead of it.
- 3.64 Thus, SW Herts has a healthy industrial structure, biased towards the higher-value, higher-growth sectors - although, except for the concentration of ICT industries in Dacorum, it is not an especially high-tech economy. In terms of entrepreneurship and workforce skills, it matches the (good) performance of the county as a whole. Both the area's working residents and its workplace workers enjoy earnings close to or above the (high) county average. In Three Rivers, both groups of workers are exceptionally highly paid. Unemployment rates are close to the (low) county average and have been so for many years. Employment, since growth resumed after the early 90s recession,

has been increasing slightly faster than the Hertfordshire total, though neither the county nor SW Herts expanded as fast as the South East.

- 3.65 Among the SW Herts authorities, there is some variation. Watford rates lower than the others in terms of earnings and unemployment, but by national and regional standards is still a healthy economy, and has shown the most employment growth.
- 3.66 There are two dimensions of economic well-being on which SW Herts' performance appears less good. First, the area's housing is expensive, not only in absolute terms, but also when measured against the (high) earnings of the residents. Second, travel to work may be considered excessive: in Dacorum and Watford residents' trips are long by national standards; though they are normal by the standards of the East and South East regions; while Three Rivers has exceptionally high out-commuting and even longer journeys, though there are mitigating factors.

SW Herts as a Business Location

- 3.67 The different local authority areas of SW Herts are similar in being largely service economies, with little manufacturing. But in some ways, the authorities occupy different market niches. Three Rivers seems particularly attractive to small business, much of it in non-business space sectors: though in all areas the great majority of business units are small, in Three Rivers this dominance is unusually marked; and conversely in Watford there are more large establishments. Dacorum and Watford historically have been well-represented in finance and business services, though as we shall see Dacorum in recent years has lost ground to its competitors in this market. ICT industries in Dacorum are one concentration of high-tech industry which could have considerable growth potential for the future, as do the film and media activities at Leavesden in Three Rivers, though this will depend on the further development of Leavesden Park and redevelopment of Leavesden Studios.
- 3.68 Turning to the key features of SW Hertfordshire as a business location, strategic communications, both by road and (especially for Watford) by public transport are of course a key advantage. This high accessibility is the likely reason why SW Herts appears to attract much footloose business, whose customers are national or international rather than local. An advantage which is perhaps less obvious is the inward investment still being generated by Greater London, which seems still an important source of in-moving industrial and office employers.

Policy Implications

- 3.69 Measured against national and regional standards, the sub-regional and local economies of SW Herts have no major disadvantages or deficiencies that employment land policy should aim to rectify.
- 3.70 One possible exception is commuting, which you may consider excessive. Within the limitations of this study, we cannot make recommendations on this. It is for each authority to decide whether it should aim to reduce journeys to work or alter their geography in the interests of sustainability, local vitality or the commuters' quality of life.
- 3.71 Overall, the analysis suggests that the objectives of employment land policy should focus on preserving and enhancing existing advantages, and making the most of future opportunities, rather than solving problems.
- 3.72 The analysis has identified activities and types of firm in which are especially well represented in SW Herts:
- Throughout SW Herts, service industries generally;
 - In Watford and (especially) Dacorum, financial and business services;
 - In Dacorum, high-technology services, especially computing;

- Especially in Dacorum, warehouse distribution (logistics)
- Throughout SW Herts, small and micro-firms (especially in Three Rivers), new openings and footloose businesses, often relocating from London.

3.73 These are the activities and businesses for which SW Herts historically has provided an especially good location. If the area is to maintain its economic advantages, it needs to ensure that it continues to provide them with the right space in the right places in the future

4 LAND AND PROPERTY MARKETS

Introduction

- 4.1 This chapter considers the markets for employment floorspace and land within South West Hertfordshire. The next two sections deal with the office and industrial/warehousing sectors in turn.
- 4.2 The property market profile is guided by two main questions. First, continuing the analysis in the last chapter, we look at qualitative aspects of the demand for land and property, considering for what kinds of businesses SW Herts is an attractive location and what kinds of land and property these businesses will require.
- 4.3 The second issue for this chapter is the balance of demand and supply. We consider the availability and cost of property and land against the requirements of occupiers and developers, both to provide a baseline for the quantitative forecasts that follow and to add the qualitative dimension, considering what kinds of property and land are under or over-supplied.

The Office Market

Market Size and Geography

- 4.4 South West Hertfordshire has a total built office stock of 831,000 sq m, just over a third of the total office floorspace in Hertfordshire. Dacorum has the largest office stock in SW Herts and in the county overall. Between 2000 and 2003, SW Herts recorded a net increase in its office floorspace of around 11% compared with 18% for Hertfordshire.

Table 4.1 Total Built Office Stock in South West Hertfordshire, 000 sq m

	2000	2003	Total change, 2000-2003	% change, 2000-2003
Dacorum	363	393	30	8.3
Watford	232	240	8	3.4
Three Rivers	154	198	44	28.6
South West Hertfordshire	749	831	82	10.9
Hertfordshire	2,037	2,406	369	18.1

Source: ODPM 2003

- 4.5 The main office markets in SW Herts are Hemel Hempstead and Watford but these are quite different in their character. Hemel Hempstead's office market is relatively dispersed. In particular, while the main location is along Maylands Avenue, there are also significant amounts of office accommodation along Boundary Way and other roads, in what is a largely industrial/distribution employment area. Moreover, Hemel Hempstead town centre does not have a clearly defined core office area and the town does not have an out of town business park. Major office occupiers in the town include electronic retailer Dixon's to the north of the town on The Campus business park, and printer manufacturer Epson.
- 4.6 In contrast, Watford has a clearly defined town centre office market, and a number of established out of town business parks. The town centre market is concentrated along Clarendon Road, where major occupiers include the Inland Revenue Enquiry Centre, Total Oil, TK Maxx, Cadbury Schweppes and KPMG. The town's main business parks

are Croxley Business Park¹⁷ and Watford Business Park, to the south west of the town centre, and Central Park to the east of the town centre.

- 4.7 Three Rivers is the smallest office market in SW Herts. Its main town centre market is Rickmansworth, which includes some modern office buildings around the station. Otherwise the main office locations in this borough are out of town, namely the business parks at Leavesden, Maple Cross and Wolsey Business Park.

Property Take-Up

- 4.8 The demand for office floorspace in SW Herts has been relatively subdued over the past two to three years, in line with wider regional and national market trends. However, the market is now showing tentative signs of improvement both nationally and regionally.
- 4.9 In Hemel Hempstead, annual office take-up in each of the past two years, 2002 and 2003, was only around half the level recorded in 2001, according to Property Market Analysis (PMA). In the Watford and Three Rivers markets, take-up increased significantly in 2003 compared with 2002, but was still under half the peak level recorded in 2000.
- 4.10 Take-up figures are not available separately for Watford and Three Rivers and the only data that are available from PMA consider the two districts as a single market. In the Watford and Three Rivers markets the level of take-up increased significantly in 2003 compared with 2002, but was still under half the peak level recorded in 2000.

Table 4.2 Office Take-Up, 1999-2003, 000 sq m

	1999	2000	2001	2002	2003	Average 1999-2003
Hemel Hempstead	N/A	9	11	6	5.5	8
Watford (inc. Three Rivers)	17	43	20	12	21	23
Rest of South East (ROSE) average	153	256	246	188	172	209
Total	17	52	31	18	26.5	31

Source: PMA

- 4.11 For comparative purposes, the level of take-up in ROSE (rest of the South East, outside Greater London) overall peaked in 2000/2001 as did take-up in SW Herts. However, the slowdown in the markets has been more pronounced in the SW Herts office market, see Table 4.2. But the demand for office property in locations around the M25 is showing tentative signs of recovery, and according to Knight Frank's M25 Offices - Quarter 2 2004 report, has picked up since its recent trough in Quarter 3 2003.
- 4.12 Most demand over the past few years has been for small to medium-sized units, with some 60% of all floorspace transacted in Hemel Hempstead between 1999-2003 being in units below 2,320 sq m (25,000 sq ft) and 48% in Watford and Three Rivers, according to PMA data.

¹⁷ In this property market profile, we use the geography of towns and local market areas rather than administrative boundaries. This is why Croxley Park, which is part of Three Rivers District, is discussed under the Watford heading.

Table 4.3 Office Take-Up by Size Band, 1999-2003, %

	Size band (sq m)			
	0-2,323	2,324-4,645	4,646-9,290	Over 9,290
Hemel Hempstead	60	21	19	0
Watford and Three Rivers	48	12	23	17

Source: PMA

4.13 Recent evidence of prime office lettings confirms this picture. For example, in Watford:

- Sanyo pre-purchased a 2,230 sq m HQ building on Colonial Way for £5.885 million.
- Central Trust Ltd leased 723 sq m in the Edward Hyde Building on Clarendon Road from Legal and General on a 10-year lease at £23.50 per sq ft.
- Citicorp Vendor Finance leased 2,250 sq m at Frogmore/RREE's Lucidus development on Clarendon Road on a 15-year lease at £25.00 per sq ft. Taylor Woodrow also leased 2,861 sq m on a 10-year lease in this building.
- Coface UK Holdings leased 1,068 sq m at Anglo Lamron and Standard Life's Egale building on St Albans Road on a 15-year lease at £22.50 per sq ft.
- Newsquest Media Group acquired the freehold of a 1,626 sq m building from Gazeley at Watford Business Park, paying a price in excess of £3 million.

4.14 Over the past 18 months Three Rivers has seen a couple of relatively large deals, bucking the trend towards the demand from small to medium occupiers. In particular:

- Skanska leased the 7,990 sq m Zammatt Building at the Maple Cross Industrial Estate, Maple Cross, in June 2003 at a rent of £25.00 per sq ft on a 20-year lease. The developer, Welbeck Land, purchased Skanska's adjacent former premises from Prudential.
- OOT BACS leased 3,642 sq m in Drake House, Homestead Road, in April 2003 at £20.00 per sq ft on a 20-year lease with 12 months rent free.

4.15 However, demand in Dacorum has been more subdued, with the only evidence of any significant transactions over the past 18 months being Toshiba's 2,137 sq m (23,000 sq ft) requirement for space. This was being satisfied at The Campus in September 2004 at a reported rent believed to be around £17.50 per sq ft. The lack of demand for good quality office space in Dacorum reflects a difficult market, particularly in light of Kodak's reported plans to move from their 16,260 sq m (175,000 sq ft) office in the town centre.

4.16 In general, there are some tentative signs of a recovery in office demand. The north west sector of the M25 (which includes SW Herts) recorded a higher level of take-up in the first two quarters of 2004 than any other M25 sector, according to published research by Knight Frank. This research also shows that the overall level of vacancy fell for the first time in almost three years in Quarter 1 2004 and continued to fall in Quarter 2 2004. According to Knight Frank, the M25 north west sector has a relatively high vacancy rate at 11.1% compared with 9.0% for the whole M25. However, developers appear to have adjusted to the market conditions with no additional space under construction in north west M25 sector in Q2 2004. Coupled with the continued increase in demand from occupiers, we expect to see a reduction in availability levels in South West Herts over the next 18 months.

Market Balance: Available Space, Vacancy Rates and Rents

- 4.17 In May 2004 the total level of available office floorspace within SW Herts stood at around 138,215 sq m, according to data from the Hertfordshire Future Property Register and King Sturge records. Watford accounted for 39% of this total, followed by Dacorum at 37% and Three Rivers at 23%.

Table 4.4 Office Availability, May 2004, sq m

	Below 1,000	1,001-2,500	2,501-5,000	5,001+	Total
Dacorum	14,271	10,557	12,661	14,341	51,830
Three Rivers	12,370	3,018	10,731	6,339	32,459
Watford	13,936	23,516	10,478	5,996	53,926
Total	40,577	37,091	33,870	26,676	138,215

Source: Hertfordshire Future Property Register and King Sturge

- 4.18 Watford has the highest office vacancy rate among the three boroughs, with some 22.5% of its total stock currently vacant, compared with 16% for Three Rivers and 13% for Dacorum.
- 4.19 Within Watford, King Sturge estimates that at end June 2004 there was around 22,200 sq m of vacant office space along Clarendon Road alone, including a number of newly developed properties. These include Lucidus, where 1,792 sq m remains available, Terrace Hill, where 2,325 sq m remains, Meridien House, where the entire building comprising 5,749 sq m is available, and Six4y where 3,606 sq m remains available.
- 4.20 Responding to this overhang of vacant space, developers have turned off the speculative development pipeline, and there is currently no new office space under construction in Watford on a speculative basis. However, there are proposals for substantial further developments, including two proposals of 7,618 sq m and 4,041 sq m respectively on Clarendon Road, and one proposal of 5,110 sq m on Exchange Road.
- 4.21 In Dacorum, The Peoplebuilding on Maylands Avenue in Hemel Hempstead is the largest new unit immediately available, offering 9,144 sq m of floorspace. This building has been vacant since completion in early 2003.
- 4.22 In Three Rivers, available space in Three Rivers includes three brand new buildings at Leavesden Park, comprising 4,106 sq m, 4,024 sq m and 6,339 sq m respectively.
- 4.23 Against this demand and supply background, achievable headline rents for prime office accommodation have settled at about £19.50 per sq ft for Hemel Hempstead, £21.50 per sq ft for Watford and £21.50 per sq ft for Rickmansworth. By comparison, rents for the main competing locations are around £22.50 per sq ft in St Albans, and between £17.50 and £18.50 per sq ft in Hatfield (Hatfield Business Park) and Welwyn Garden City. These levels are sufficient to support development.
- 4.24 Rental levels in SW Herts are below those achieved in 2000/2001, and tenants are still able to secure relatively attractive incentive packages, which will limit the potential for rents to increase in the short to medium term. However, given the tentative recovery in demand, we believe rents are now likely to stabilise and incentives, such as rent-free periods, may reduce.
- 4.25 Looking forward, model based projections of rental value growth, which are largely driven by employment growth projections indicate a modest recovery in the office sector over the medium term. For example projections from Real Estate Forecasting Ltd (REFL) show rental values in the South East, outside London, increasing by 2.4% in 2005, 1.4% in 2006, 1.6% in 2007 and 2.3% in 2008.

The Land Market

- 4.26 Demand for land has been relatively strong for office development in SW Herts historically. However, more recently the high levels of vacant floorspace have seen demand for land level out, with developers looking to wait a further two or three years before starting any further speculative development.
- 4.27 On the supply side there is a relatively plentiful amount of land is available for office development in Hemel Hempstead, including:
- The Lucas Aeronautical site on Maylands Avenue, where the first phase of 7,618 sq m has received full planning permission, and a further two phases could provide up to 30,480 sq m subject to a section 106 agreement;
 - Phase three at 3 Com on Boundary Way, which has full planning permission for a development of 7,358 sq m.
 - Spencers Park (Three Cherry Trees Lane), the largest site available for future development, where potential exists for the development of B1, B2 and B8 uses of around 66,000 sq m, according to data produced by Hertfordshire County Council. This site is currently allocated for high technology uses, which will be discussed in a later section, and thus not available for general office development.
- 4.28 In Three Rivers, key development opportunities include the Leavesden site, which has outline planning permission to develop a further 69,675 sq m of office space. Welbeck is offering a five-acre plot of land at Maple Cross for a potential headquarter office development, and Beeson Investments has a site, which it is marketed as a design and build opportunity for headquarter office accommodation of up to 7,729 sq m.
- 4.29 In Watford town centre, the largest developments with permission are located on Clarendon Road and Exchange Road. Apsley has plans to develop a 7,618 sq m building at 77 Clarendon Road, while London and Regional Properties intend to develop a 4,041 sq m office at 53 Clarendon Road. On Exchange Road, PMB Holdings and Gleeson Properties plan to develop a 6,039 sq m office block. However, it is unlikely that many of the speculative schemes in the development pipeline will be developed in the short term, given current market conditions and general economic sentiment.

Conclusion

- 4.30 In summary, SW Herts represents an important office market for Hertfordshire as whole. Of the three main centres, Watford is the more established and attractive office market, followed by Three Rivers (which includes Leavesden Studios). The market perception of Hemel Hempstead as an office location is poorer by comparison, partly because the town does not have a clearly defined office area.
- 4.31 SW Herts competes with a number of established and attractive office locations, including St Albans, Hatfield and Welwyn Garden City.
- 4.32 Over the past few years, the national and regional office markets have been characterised by modest levels of demand, with most take-up involving relatively small to medium-sized units and with larger units struggling to attract occupiers. As a result, levels of vacancy are relatively high, especially in Watford, where around 22% of the borough's floorspace is vacant. Furthermore, there is a relatively plentiful of supply of land for office development, which is unlikely to be absorbed in the short term given current market conditions. However, both market evidence and formal property forecasts suggest that the market is in the early stages of a modest recovery.
- 4.33 While the above market conditions largely reflect cyclical factors, there may also be more significant structural changes taking place. For example, companies may be becoming more reluctant to commit to taking larger conventional units on relatively long leases because of a desire to retain as much flexibility as possible. As a result, it is possible that more demand in the future could emerge for 'managed office

accommodation', occupying a middle market position between the short-term serviced office accommodation, provided by companies such as Regus, and more conventional office accommodation available on longer leases. In the past such managed accommodation has traditionally been associated with start-ups and SMEs, but there are now providers that are targeting larger occupiers with this type of product. The potential growth in demand for managed office accommodation is a wider trend, but it does suggest there could be a mismatch between the supply of space in large units and the demand for smaller to medium sized units on more flexible terms.

The Industrial Market

Market Size and Geography

- 4.34 SW Herts has a total built industrial stock of almost 1.4 million sq m, 22% of Hertfordshire's overall industrial floorspace. All three local authorities in the sub-region experienced a net decline in industrial floorspace over the past three years, 2000-2003 inclusive, in contrast to the county, the Region and nationally, which all registered net increases of 7%, 4% and 2% respectively. Watford recorded the biggest loss of industrial floorspace in Hertfordshire as a whole, with a decline of 10%, followed by Three Rivers (7%) and Dacorum (1%).
- 4.35 The loss of industrial stock in all three boroughs in SW Herts is due to the substantial loss of factory space. Three Rivers lost 18.5%, Dacorum lost 20.3% and Watford 26.5% between 2000 and 2003. These large losses reflect the strength of the manufacturing base in the SW Herts towns. Because the area had so much manufacturing, it has suffered more severely than most from the sector's national decline. Watford has traditionally had a strong manufacturing base in printing and engineering, although this has contracted significantly over the last two decades, with The Print Factory ceasing production in the town and transferring its operations to Northampton, whilst Sun Chemicals and Boxes Edson have announced that they are to close their factories in Watford. Dacorum has a number of firms related to the paper industry, upon which the town's economy was traditionally based, with recent losses including Aquaprint and John Dickinson Stationery (Apsley).

Table 4.5 Built Industrial/Warehouse Stock in South West Hertfordshire, 000 sq m

	2003			Total change, 2000-2003	% change, 2000-2003
	Factories	Warehouses	All Industrial	All industrial	All industrial
Dacorum	263	466	729	-8	-1.1
Three Rivers	97	97	194	-14	-6.7
Watford	205	249	454	-52	-10.3
Hertfordshire	2,520	3,667	6,187	412	7.1
Eastern Region	20,123	15,726	35,849	1,358	3.9
England & Wales	229,567	151,744	381,311	8,351	2.2

Source: ODPM November 2003

- 4.36 Dacorum has the largest built warehouse stock in SW Herts and in Hertfordshire as a whole. This stock is mainly concentrated in Hemel Hempstead, which is the only location among the three boroughs that caters for large-scale (over 10,000 sq m) industrial and distribution occupiers.
- 4.37 Hemel Hempstead's core industrial area is concentrated to the north east of the town centre, close to junction 8 of the M1 around the Maylands Industrial Estate. While parts of the Maylands Industrial Area dates back to the 1960s, much of the older accommodation has been redeveloped to provide purpose-built facilities and modern

industrial units. The industrial area comprises both large complexes for major employers, and estates catering for smaller local employers.

- 4.38 The majority of Watford's industrial market is concentrated in two key locations, firstly on and around Watford Business Park and secondly in the Colonial Way/Imperial Way area just north of Watford Junction train station. This area provides a mixture of old and modern industrial accommodation, including Helios' Properties Imperial Park scheme, which was built speculatively in 2001.
- 4.39 In Three Rivers, the main industrial area is located off Tolpits Lane, where a number of industrial estates are situated, namely Dwight Road Industrial Estate, Moor Park Industrial Estate, Olds Approach and Vale Industrial Park. The Tolpits Lane area caters for a mix of both industrial and office occupiers, and provides both large and small premises, although there is a lack of new space.

Property Take-Up

- 4.40 According to Property Market Analysis (PMA), which specialises in providing information on the major commercial property markets across the UK, the take-up of industrial/distribution floorspace in Hemel Hempstead fell to around 227,000 sq m in 2003 from a peak of 648,000 sq m in 2002. In Watford and Three Rivers take-up fell to 112,000 sq m in 2003 compared with 202,000 sq m in 2002.

Table 4.6 Industrial/Warehousing Take-Up, 1999-2003, sq m

	1999	2000	2001	2002	2003	Average 1999-2003
Hemel Hempstead	399	247	233	648	227	351
Watford and Three Rivers	212	140	235	202	112	180
Total	611	387	468	850	339	531

Source: PMA

- 4.41 In the industrial/distribution sector the bulk of demand has come from companies with requirements for warehousing and distribution uses rather than manufacturing, which reflects the structure of the economy both locally and nationally.
- 4.42 Over the past few years, there has been a polarisation in demand for industrial/distribution space. On the one hand, there been quite strong levels of demand for freehold accommodation up to about 3,000 sq m, partly driven by low interest rates (although these have been on an upward trend since November 2003). On the other hand, there has also been quite strong demand for relatively large-scale distribution facilities, upwards of 10,000 sq m in size. Demand for unit sizes in the middle has been modest.

Table 4.7 Industrial Take-Up 1999-2003, by Size Band, %

	0-929	930- 2,323	2,324- 4,645	4,646- 9,290	9,290 +	Total
Hemel Hempstead	5	16	14	13	52	100
Watford and Three Rivers	30	37	27	6	0	100

Source: PMA

- 4.43 The take-up of industrial/distribution floorspace by size band varies between the three boroughs. Over the five years 1999-2003:
- Some 65% of all take-up in Dacorum was in units over 4,645 sq m (50,000 sq ft) compared with just 6% of total take-up in Watford and Three Rivers.

- By contrast, the take-up of units below 929 sq m (10,000 sq ft) represented just 5% of total take-up in Dacorum compared with 30% in Watford and Three Rivers.
- 4.44 Recent industrial take-up involving new industrial buildings in SW Herts includes:
- Maximate, Hemel Hempstead, where Wickes - the UK's second largest DIY retailer - pre-leased a 12,000 sq m distribution facility from the Co-operate Insurance Society (CIS) on a 10-year lease for £7.00 per sq ft in November 2003.
 - Maylands Avenue Industrial Estate, Hemel Hempstead, where timber merchants James Latham signed a 15-year lease on a 4,040 sq m unit from Frontier Estates for £8.00 per sq ft in December 2002.
 - Porcelanosa purchased a 19,509 sq m showroom and distribution centre for its tile and bathroom business from Gazeley on Otterspool Way, Watford, for £20 million at the start of 2004.
 - Big Yellow Self Storage, which leased 5,574 sq m from Gazeley at Ascot Road, Watford.
 - Caxton Court, Watford, a speculative development by Gazeley where:
 - The DDD Group, which specialises in building Pharmaceutical, Toiletries and Household brands, leased a 3,031 sq m warehouse at £8.50 per sq ft on a 15-year lease.
 - The Vehicle Inspectorate leased 592 sq m at £9.00 per sq ft on a 10-year lease.
 - Relocation specialists, 360° Relocations, leased 605 sq m at £9.00 per sq ft on a 10-year lease.
 - News International, which publishes The Times, The Sunday Times, The Sun, News of the World and other UK newspapers, leased 1,624 sq m.
 - Imperial Park, Watford, a speculative development by Helios where:
 - Edmundson Electrical, which specialises in the distribution of electrical products, leased 1,490 sq m at £8.25 per sq ft on a 20-year lease;
 - And e-business IT services and telecommunications solutions provider Energis, leased two units totalling 4,427 sq m.
- 4.45 The above data and market evidence highlight Hemel Hempstead's position as a prime location for large distribution operators. Major occupiers of distribution facilities in Hemel Hempstead include Wickes, Next, Waverley Vinters, Tempo and Gillette, although the latter is due to close its facility by mid-2005.
- 4.46 The lack of sizeable sites with close proximity to the motorway network is limited both in Watford (with the exception of land on Otterspool Way) and Three Rivers. As such the boroughs are generally unable to attract large B8 operators in the same way that Hemel Hempstead does.
- 4.47 When companies identify an appropriate distribution location, they generally start by identifying a relatively broad area, which minimises their transport costs. Subsequently, they will look at a number of locations and sites within this broad area. If the requirement is for a very large facility or the company has other special requirements, e.g. it needs a building quickly, it may have to look at sites over a wider geographical area. In this respect, whilst the most obvious locations that compete with Hemel Hempstead include Welwyn Hatfield, companies may look further a field up the M1 to locations such as Milton Keynes, Northampton or even up to Daventry where there is a more plentiful supply of land, and where rents and land values are cheaper.

Market Balance

Available Space and Vacancy Rates

- 4.48 At June 2004, available industrial floorspace in Dacorum stood at around 80,200 sq m, according to data from the Hertfordshire Property Register, supplemented by buildings known to be available by King Sturge. This represents a vacancy rate of 11%, which is relatively high compared with our estimates of 7.9% for the South East as a whole. However, there is a shortage of new good quality industrial accommodation, with just 8,578 sq m immediately available to the market. On the other hand, much of the second hand floorspace also offers good quality accommodation, including relatively large units such as Century House on Maylands Avenue, which provides 6,549 sq m.

Table 4.8 Dacorum Industrial/Warehousing Availability, June 2004, sq m

	Below 1,000	1,001-2,500	2,500-5,000	5,000+	Total
New*	0	2,130	6,448	0	8,578
2nd-hand	11,558	19,047	14,241	26,803	71,649
Total	11,558	21,177	20,689	26,803	80,227

*Speculatively developed industrial units, which have never been occupied.

Source: King Sturge and Hertfordshire Future Property Register

- 4.49 In Watford, immediately available industrial floorspace stood at 29,600 sq m in June 2004, representing a vacancy rate of 6.5%. Most of the space available was in small to medium sized units, reflecting the tone of Watford's industrial market, where there is generally limited demand from large industrial occupiers. New premises account for 14.1% of total industrial availability in Watford.

Table 4.9 Watford Industrial/Warehousing Availability, June 2004, sq m

	Below 1,000	1,001-2,500	2,500-5,000	5,000+	Total
New*	2,170	2,007	0	0	4,177
2nd-hand	11,923	13,485	0	0	25,408
Total	13,570	15,492	0	0	29,585

*Speculatively developed industrial units, which have never been occupied.

Source: King Sturge and Hertfordshire Future Property Register

- 4.50 Available industrial floorspace in Three Rivers at June 2004 totalled just under 28,000 sq m at June 2004 - an estimated vacancy rate of some 14%. This high rate was largely due to two large units, namely the former Kenwood distribution centre and the former AstraZeneca site, one of which was under offer at the time. These units are by far the largest on the market in Three Rivers, at over 8,000 sq m each; the next largest unit available only provides some 1,500 sq m. If the unit under offer is excluded from the total, the Three Rivers vacancy rate reduces to 10.0%. If both of the largest units are excluded, the vacancy rate is just 5.5%.
- 4.51 Other than Kenwood House and AstraZeneca, virtually all the available floorspace in Three Rivers is for units below 1,000 sq m, reflecting the nature of the local market for industrial space, which is limited to small end users. All premises currently available in the District provide second hand floorspace.

Table 4.10 Three Rivers Industrial/Warehousing Availability, June 2004, sq m

	500-1,000	1,001-2,500	2,500-5,000	5,000+	Total
New*	0	0	0	0	0
2nd-hand	7,708	2,976	0	17,063	27,747
Total	7,708	2,976	0	17,063	27,747

*Speculatively developed industrial units, which have never been occupied. some
Source: King Sturge and Hertfordshire Future Property Register Dacorum

4.52 The only scheme under construction on a speculative basis in SW Herts is at Harvington Park near Tring, where nine units totalling 7,949 (85,568 sq m) are being developed in sizes from 603 sq m to 2,164 sq m (6,4094 sq ft to 23,295 sq ft), with completion in July 2004. In addition there are a number of significant proposals including:

- Gazeley's intention to speculatively develop two units of 23,225 sq m (250,000 sq ft) and 14,864 sq m (160,000 sq ft) at the former Dexion site in Hemel Hempstead. The development is due to start on site summer 2004, with quoting rents at £8.25 per sq ft.
- A joint venture between Astral Developments and the Blackstone Group, in which it is proposed 42,734 sq m (460,000 sq ft) will be developed either on a speculative basis or will be offered on a design and build basis. The unit to be known as Mammoth, will be on Boundary Way in Hemel Hempstead.
- ProLogis has 7 acres at Hemel Hempstead, which it is offering on a build to suit basis. The site can accommodate units of up to 14,493 (156,006 sq ft), and is known as Azimuth.
- Otterspool Way, Watford, where Green Property Developments has been granted full planning permission for 7,934 sq m (85,400 sq ft).
- Insight Investment has outline planning consent to develop the second phase of Imperial Park, Watford, where 80,000 sq ft of B1(c), B2 and B8 space is proposed.
- The former 1.8 ha (4.5-acre) Ovaltine site on Station Road, Kings Langley, where Fairview New Homes is offering up to 6,735 sq m (72,500 sq ft) on a build to suit basis, but will be developed speculatively if no deals are achieved on this basis.

Property Values

4.53 Prime industrial rents in SW Herts are typically between £7.75 per sq ft and £8.00 per sq ft with industrial land values up to around £1 million per acre.

Table 4.11 Industrial /Warehousing Rents and Land Values

	£ per sq ft	£ per acre
Hemel Hempstead	7.75	1,000,000
Rickmansworth	7.75	850,000-900,000
Watford	8.00	1,000,000

Source: King Sturge, June 2004.

Rents based on a new 1,000 sq m warehouse

4.54 These values, along with evidence of both recent and proposed speculative industrial developments in the boroughs, as outlined above, suggest that speculative development in SW Herts is still financially viable.

4.55 Looking forward, model-based forecasts from Real Estate Forecasting Ltd indicate that, after a fall in industrial rental values this year in Hemel Hempstead and Watford

(the only two markets within SW Herts for which data are available), rental levels will see a slight increase next year, with improved growth from 2006.

Table 4.12 Industrial/warehousing Rental Value Growth Forecasts (% pa)

	2004	2005	2006	2007	2008	2004-08
Hemel Hempstead	-1.4	0.5	1.5	2.3	2.0	1.0
Watford	-0.4	0.7	1.3	2.0	1.8	1.1
Eastern	1.8	1.9	2.2	2.6	2.3	2.1
UK	0.7	1.4	1.9	2.4	2.6	1.8

Source: Real Estate Forecasting Ltd (REFL)

The Land Market

- 4.56 In general, there is strong demand for land in SW Herts. Developers, who are more aware of opportunities and more able to 'snap up' land than companies looking to acquire sites for owner occupation, mostly drive this demand.
- 4.57 There have been a number of land purchases by developers in the past year or so. For example, early in 2004 the developer Gazeley reportedly paid £1.1 million per acre for the 9.3 ha (a 23-acre) Dexion site in Hemel Hempstead. This followed earlier land purchases in Hemel Hempstead by Astral Developments/Blackstone for its Mammoth site and ProLogis for the Azimuth site at similar values. In Watford, Gazeley also purchased a 3.8 ha (9.5 acre) site on Otterspool Way from Green Property in September 2003 for a reported figure of £11 million.
- 4.58 In general, the opportunities to acquire land are very limited and, therefore, such opportunities are highly competitive. For example, the 2-hectare (5-acre) former Dupont industrial site on Maylands Avenue in Hemel Hempstead is about to go to best bids and a price of c. £3 million per hectare (£1.25 million per acre) is anticipated.

Conclusion

- 4.59 In summary, Dacorum is the largest industrial market in SW Herts, accounting for more than half the area's industrial stock, with Hemel Hempstead being the main industrial market. Although Watford has attracted some sizeable occupiers recently, in general Hemel Hempstead is the main location in SW Herts catering for large-scale users and indeed one of the main distribution locations around the M25 and southern end of the M1. By comparison Three Rivers is a minor industrial location.
- 4.60 All the local authority areas in SW Herts have seen a net decline in their built industrial stock over the past three years. Given that occupier demand remains relatively strong (although take-up levels are below their recent peak) and floorspace vacancy rates relatively low (certainly compared with the office sector), the market for industrial/distribution floorspace is relatively well balanced. The market for industrial *land* is tight, given that developer demand is generally strong, while the corresponding supply is very limited.
- 4.61 Outside of clearly defined industrial areas, there are pressures on industrial land from alternative uses, notably housing. However, there is also pressure within some of the designated General Employment Areas (GEAs) to redevelop land for non-employment uses, due to perceived high vacancy levels and lack of land for higher value uses, particularly residential development, within the borough.

5 THE QUANTITY OF EMPLOYMENT LAND

Introduction

- 5.1 In this chapter, we forecast the *market requirement* for industrial/warehousing and office space, based on employment forecasts, and compare it with *planned supply* - comprising the land currently identified by the planning system for B-class development (including redevelopment), together with any existing vacant space surplus to requirements.
- 5.2 The analysis in this chapter relates purely to the quantitative balance of demand and supply. In the next chapter, we will provide a qualitative assessment of employment sites and areas, covering land currently in use as well as development and redevelopment sites.
- 5.3 The analysis is in four stages. First, we construct employment change scenarios and reality-check them against past trends. Second, we translate employment change into a space requirement. Third, we calculate planned supply, and finally we assess market balance - the relationship between forecast demand and planned supply.
- 5.4 Following the District Councils' instructions, the analysis in this chapter focuses on 2001-2021, which is the period of the emerging Regional Spatial Strategy. The 2021 time horizon extends beyond the likely end dates of forthcoming Local Development Frameworks (LDFs). Government Guidance on LDFs reads:

'The time horizon of the core strategy should be for a period of at least 10 years from the date of adoption. However the core strategy should aim to look ahead to any longer-term time horizon which is set out in the relevant regional spatial strategy. The core strategy should be kept under review and the horizon rolled forward in subsequent reviews of the document.'¹⁸
- 5.5 Appendix 6 forecasts the employment floorspace required for the period to 2011 and 2016.
- 5.6 As a final technical point, it is important to note that all calculations refer to net change. Net change in employment (the stock of jobs) is the difference between jobs lost and jobs gained. The corresponding net change in the floorspace stock is the difference between floorspace gained, mostly from new development, and floorspace lost, for example where industrial sites are cleared and redeveloped for housing and other uses.

¹⁸ Planning Policy Guidance (PPS)12, paragraph 2.14

Future Employment and the Demand for Space

Method

- 5.7 Our demand forecasts are based on regional economic and employment forecasts prepared for the Regional Assembly as part of the RSS process. There are three main sets of such forecasts, as listed in the table below, which also show predicted employment growth for Hertfordshire (Table 5.1)¹⁹.

**Table 5.1 Employment Forecasts for Hertfordshire
Employment Change, 2001-2021**

Forecast	Scenario	Jobs
Draft RSS14	E2	65,000
EBS02	Business as Usual	32,500
	EG21 02	60,000
EBS03	Business as Usual	77,000
	EG21 03	97,000
	Unconstrained	130,000

Source: RSS14; EBS

- 5.8 Current draft regional guidance (Policy E2) sets out a growth target of 421,500 for the region between 2001 and 2021. The policy breaks down this total by county and sub-region - showing 65,000 net new jobs in Hertfordshire - but not by district.
- 5.9 There are two sets of forecasts dated 2002 (EBS02) and 2003 (EBS03), produced by Experian Business Strategies (EBS) for Bone Wells²⁰. The two forecasts are based on the same approach but produced at different dates. Each comprises the following alternative scenarios:
- i) The EBS Business as Usual (Baseline) scenario is EBS's standard sub-regional forecast. Future population and labour supply, which is a key assumption in the EBS model, is taken from ONS population projections, which in turn are based on known demographics plus continuation of past trends in migration.
 - ii) The EG21 scenario is derived from the target in the then Regional Economy Development Strategy that the Eastern Region should be one of the top 20 regions in the EU by 2021. The ranking of regions is based on GDP per head, which equals:
 - Workplace GDP - the output of people working in the region *divided by*
 - Resident population - the number of people living in the region.
 EG21 is based on the same population as Business as Usual. To extract higher GDP (output) from this fixed population, the scenario assumes both:
 - Higher productivity (output per head of worker working in the region); and
 - A higher participation rate (the ratio of workers working in the region to people living in the region), which in turn implies higher economic activity rates and/or lower net out-commuting.

¹⁹ In this section, for simplicity figures are rounded to the nearest 500. The detailed calculations in later sections will use unrounded numbers.

²⁰ Bone Wells Associates, RES Sub-Regional Studies, Stage 1 (July 2002) and Stage 2 (October 2002).

- iii) Finally, the unconstrained scenario is a third scenario only produced for the EBS03 set, which removes assumptions on future supply-side factors, including future population. It is based on a pure shift-share model.
- 5.10 The E2 target in draft RSS14 reflects a forecast scenario known as EG21 Plus, which is based on EG2102 and shows the same regional total, but a different distribution across counties and sub-regions. The purpose of this redistribution was to align the target more closely with policy priorities, including the Government's Sustainable Communities Plan. For Hertfordshire as a whole, the redistribution raised the target by 5,000 jobs at 2021, of which virtually all are in the districts of East Herts and Broxbourne, which form part of the Communities Plan Stansted/M11 growth corridor²¹.
- 5.11 Some time after EBS02 was built into the emerging RSS, EBS produced an updated set of forecasts, EBS03, incorporating new data that had become available since EBS02. There are two main reasons for the differences between EBS03 and EBS02:
- The first is that, between the two rounds of forecasting, the ranking of the East of England against other EU regions fell from 26th to 36th. Accordingly, the latest analysis showed that, to join the top 20 by 2021, the East of England would have to progress faster than previously believed.
 - Secondly, employment statistics for 2001, which became available in between the two forecasting exercises, showed that the Hertfordshire's industrial structure was more favourable than previously estimated, with a greater share of the faster-growing office-based sectors such as business services. Consequently, for Hertfordshire though not for other parts of the regions, EBS03 shows dramatically higher employment growth than EBS02. Thus in the Business as Usual scenario, EBS03 shows 77,000 extra jobs, against 32,500 in EBS02. We consider that the higher figure is the more credible version of a Business as Usual future for Hertfordshire, because the lower figure of 32,500 was based on data that proved to be misleading.
- 5.12 Bearing in mind the above, we have built three forecast scenarios of demand for business space for the three SW Herts authorities:
- *Low scenario* based on EBS02 Business as Usual - 32,500 extra jobs county-wide 2001-21. This in our view is the lower limit of any reasonable possibilities or expectations. It is virtually equal to the Deposit Structure Plan target of 31,000 extra jobs.
 - **Central (RSS) scenario, based on Draft Policy E2 - 65,000 extra jobs county-wide.**
 - *High scenario* based on EBS03 EG21 - 97,000 extra jobs. This in our view is at the top of the range of reasonable expectation. The even higher Unconstrained scenario in our opinion is not helpful.
- 5.13 To construct these scenarios, in addition to published forecasts and targets we have additional breakdowns provided by Experian Business Strategies.
- 5.14 The Central Scenario is our preferred scenario, for two main reasons. First, it is the target in the draft RSS. Second, in relation to Hertfordshire it seems to be a realistic or even modest target, given that it is lower than the EBS03 Business as Usual Scenario, which in turn is based on the best available data.
- 5.15 Because the Low scenario in our view is an unlikely outcome, we only show it in some of the tables that follow and make little mention of it in the text below. Our analysis focuses on the Central (RSS) and High scenarios.

²¹ Economic Development Task Group - Working Paper: RES and RPG14 - Employment, Labour, Population and Housing to 2021

- 5.16 To translate these employment forecasts into demand for space, we use the standard employment densities based on a 1997 study by Roger Tym & Partners for SERPLAN²²:
- Offices: 18 square metres per worker;
 - Industrial space (manufacturing and distribution): 31 square metres per worker.
- 5.17 We merge production and distribution space (factories and warehousing) into one category, called 'industrial'. This is because our experience suggests that data on the supply of space - such as ODPM floorspace statistics and planning data on completions and commitments - do not distinguish accurately between factories and warehouses. This is not surprising, since production and distribution can generally operate in the same buildings, and furthermore, subject to size limitations, space can be transferred between production and distribution without planning permission.
- 5.18 We prefer the densities above to the available alternatives, including those put forward by PIEDA in research supporting the adopted Structure Plan²³, because they are the most recent density data supported by a large and statistically rigorous survey.
- 5.19 It is often asserted that employment densities are falling, especially in offices, because of changing working practices such as hot-desking, teleworking and homeworking, and increasing competitive pressure on corporate occupiers to use space cost-effectively. There is some evidence to support these views. Locally and anecdotally, we understand from the stakeholders' workshop that Kodak aims for a substantial reduction in space per head when they move from their Hemel Hempstead headquarters. Other examples include IBM and BP, which are seeking ratios of 10-11 sq m per person. The latest Total Occupancy Cost Survey (March 2004)²⁴, suggests that the overall average for offices across the UK is now 14 sq m per person.
- 5.20 However, the view that office employment densities are rising overall - as opposed to rising in particular businesses or groups of businesses - is not supported by statistically reliable evidence so far. Indeed a recent study by DTZ PIEDA for SEERA²⁵ concludes that employment densities have not changed significantly from those in the SERPLAN study.
- 5.21 Certainly it is possible that the average office density will increase substantially in the future. But, on the evidence available to date, it would not be right to incorporate such an increase into our forecasts. Even if we wanted to create a contingent 'worst-case' scenario to explore the impact of a possible rise in densities, from the data currently available we would not know what size of increase we should test. Therefore, our calculations below are based on constant employment densities. We suggest later that demand forecasts should be reviewed at least every five years, and more often in case of economic shocks. If convincing evidence of changing densities emerges in future, it should of course be incorporated in these reviews.
- 5.22 Below, we show forecast employment change and the resulting space requirements, first for individual districts and then for SW Herts as a whole.

²² Roger Tym & Partners for SERPLAN, The Use of business space: Employment Densities and Working Practices in South East England, 1997

²³ PIEDA, Long Term Employment Land Needs, October 1995

²⁴ Actium Consult, Total Occupancy Cost Survey, March 2004

²⁵ DTZ PIEDA, Use of Business Space and Changing Working Practices in the South East, May 2004.

Dacorum

- 5.23 For Dacorum (Table 5.2), the RSS (Central) forecast for 2001-21 shows total employment rising by 10,400 jobs²⁶ - 14% of the 2001 total. But nearly all of this growth is in those sectors that do not occupy business space. Industrial/warehousing jobs fall by 4,000 (22%), mainly due to continuing decline in manufacturing. Office jobs grow by 4,800 (29%). The net outcome is an insignificant rise of 800 (2%) in total business space jobs.
- 5.24 In the High scenario, the figures differ only slightly. Total employment growth rises fractionally to 11,400, but the extra jobs are attributable to non-business-space sectors. Industrial/warehousing jobs fall slightly more, by 4,800, and office jobs grow very slightly more, by 5,000 jobs. The overall increase in business space jobs is much as before - an insignificant 200.

Table 5.2 Employment Forecasts for Dacorum, 2001-2021

Jobs	RSS scenario		High scenario	
	# Change	% Change	# Change	% Change
Manufacturing	-3,167	-46%	-3,948	-54%
Distribution	-996	-11%	-945	-10%
Other industrial	162	10%	57	4%
Total ind/whsg	-4,001	-22%	-4,836	-27%
Total offices	4,821	29%	5,040	28%
Total B space	820	2%	203	1%
Total other	9,620	25%	10,946	28%
Total jobs	10,441	14%	11,149	15%

Source: EBS; RTP

- 5.25 Table 5.3 translates this employment change into changing floorspace requirements. In the RSS scenario, industrial demand falls by 124,000 sq m and office demand grows by 87,000 sq m, producing a total fall in the business space requirement of 37,000 sq m - a barely noticeable 3% of the floorspace stock.

Table 5.3 Forecast Floorspace Demand for Dacorum, 2001-2021, sq m

Sq m	RSS scenario		High scenario	
	Change (sq m)	% Change	Change (sq m)	% Change
Ind/whsg	-124,023	-17%	-149,931	-21%
Offices	86,775	22%	90,716	28%
Total B space	-37,248	-3%	-59,215	-5%

Source: RTP; EBS

- 5.26 There is an apparent contradiction here: why should the space required fall in future, while the number of jobs to be accommodated in that space grows? The answer is that industrial/warehousing employment, which is falling, uses nearly twice as much space per worker as office employment, which is increasing. Thus, for business space as a whole, floorspace per worker is falling - a form of spaceless growth.
- 5.27 In the High scenario, as we have seen, slightly more industrial/warehousing jobs are lost and slightly more office jobs are gained, Hence the total space requirement fall more than in the RSS scenario, by 59,000 sq m, or 5% of the stock. In relation to the size of the stock, this is still a very small change, not significantly different from the Central scenario.

²⁶ For simplicity, in the text we round numbers of jobs. The tables show unrounded figures.

Three Rivers

- 5.28 Three Rivers, like Dacorum, under both scenarios loses industrial/warehousing jobs and gains office jobs and (Table 5.4), resulting in a net gain of business space jobs. In Three Rivers, there is a considerable difference between the scenarios, attributable to the office sector. In the RSS scenario, office jobs increase by 2,600 (41%), and total business space jobs by just under 1,000 (7%). In the High scenario, the growth in offices is much greater at 4,100 jobs, and consequently total business space employment increases by 3,600 jobs (27%).

Table 5.4 Employment Forecasts for Three Rivers, 2001-2021

Jobs	RSS scenario		High scenario	
	# Change	% Change	# Change	% Change
Manufacturing	-952	-36%	-981	-35%
Distribution	-911	-32%	-347	-15%
Other industrial	257	20%	794	80%
Total ind/whsg	-1,606	-24%	-534	-9%
Total offices	2,579	41%	4,137	57%
Total B space	973	7%	3,603	27%
Total other	2,967	15%	4,338	21%
Total jobs	3,940	12%	7,941	23%

Source: EBS; RTP

- 5.29 The RSS scenario shows an insignificant reduction in business space of 3,900, or 1% of the stock. In effect, this means no change. In the High scenario, the demand is for an increase of 58,000 sq m (15% of the stock).

Table 5.5 Forecast Floorspace Demand for Three Rivers, 2001-2021, sq m

Sq m	RSS scenario		High scenario	
	Change (sq m)	% Change	Change (sq m)	% Change
Ind/whsg	-49,779	-26%	-16,566	-9%
Offices	46,423	23%	74,474	57%
Total B space	-3,356	-1%	57,908	15%

Source: RTP; EBS

Watford

- 5.30 In Watford, following what is by now a familiar pattern, in both scenarios the industrial/warehousing jobs decline and office jobs grow (Table 5.6). The net balance is growth in business space jobs, of just 1,200 (4%) in the RSS scenario, and 3,500 (12%) in the High scenario.

Table 5.6 Employment Forecasts for Watford, 2001-2021

Jobs	RSS scenario		High scenario	
	# Change	% Change	# Change	% Change
Manufacturing	-3,037	-57%	-3,105	-58%
Distribution	414	6%	1,131	18%
Other industrial	635	62%	523	59%
Total ind/whsg	-1,988	-16%	-1,451	-12%
Total offices	3,200	18%	4,982	30%
Total B-Space	1,212	4%	3,531	12%
Total other	9,228	21%	6,640	19%
Total jobs	10,441	14%	10,171	16%

Source: EBS; RTP

- 5.31 The demand for business space (Table 5.7), in the RSS scenario is virtually unchanged. In the High scenario, demand increases by 45,000 sq m, 6% of the stock,

Table 5.7 Forecast Floorspace Demand for Watford, 2001-2021, sq m

Sq m	RSS scenario		High scenario	
	Change (sq m)	% Change	Change (sq m)	% Change
Ind/whsg	-61,623	-14%	-44,969	-10%
Offices	57,599	24%	89,673	30%
Total B-Space	-4,024	-1%	44,705	6%

Source: RTP; EBS

SW Herts

- 5.32 For SW Herts - the total of Dacorum, Three Rivers and Watford - the RSS scenario forecasts a growth in total employment of 24,800 jobs from 2001-2021 (Table 5.8). Office employment grows by 10,600 jobs (26%), while industry and distribution lose 7,600 jobs (20%). The net outcome is that business space employment grows fractionally by 3,000 jobs, (4%). In contrast, employment in non-business space sectors grows by 21%.
- 5.33 In the High scenario, total employment change is virtually the same, but business space jobs do better, growing by 7,300 (9%).

Table 5.8 Employment Forecasts for SW Herts, 2001-2021

Jobs	RSS scenario		High scenario	
	# Change	% Change	# Change	% Change
Manufacturing	-7,155	-48%	-8,035	-52%
Distribution	-1,493	-8%	-161	-1%
Other industrial	1,054	27%	1,374	41%
Total ind/whsg	-7,594	-20%	-6,822	-19%
Total offices	10,600	26%	14,159	34%
Total B space jobs	3,005	4%	7,338	9%
Total other	21,816	21%	21,924	23%
Total jobs	24,821	14%	29,261	17%

Source: EBS; RTP

- 5.34 Demand for total business floorspace in the RSS scenario falls by 45,000 sq m (-2%) (Table 5.9). In the High scenario, demand grows by 43,000 sq m (also 2%). Both these changes, considered over a 20-year time horizon, are insignificant. In effect, the two scenarios are very close, predicting virtually no change in demand for business space overall, and similar shifts from industrial/warehousing to office space.

Table 5.9 Forecast Floorspace Demand for SW Herts, 2001-2021, sq m

Sq m	RSS scenario		High scenario	
	Change (sq m)	% Change	Change (sq m)	% Change
Ind/whsg	-235,426	-17%	-211,467	-15%
Offices	190,797	23%	254,864	31%
Total B space	-44,629	-2%	43,397	2%

Source: RTP; EBS

- 5.35 As a reality check, Table 5.10 compares the employment forecasts with past change, covering the period 1991-2001. Both past and future changes are expressed as annual changes:
- In industry and warehousing, employment in 1991-2001 was in effect unchanged, with insignificant growth of 0.2% pa. In contrast, both forecasts predict losses in the region of 1% per year, a distinct worsening in performance.
 - In offices, the sub-region's employment in 1991-2001 increased by 2% pa. Both forecasts show somewhat lower growth, at 1.2% pa and 1.5% pa respectively.

Table 5.10 Annual Employment Change, SW Herts, Past and Forecast

Jobs	1991-2001		2001-2021	
			RSS	High
Industrial/warehousing	#	90	-380	-341
	%	0.2%	-1.1%	-1.0%
Offices	#	695	530	708
	%	2.0%	1.2%	1.5%

Source: EBS; ABI, RTP

- 5.36 We have also compared the past with the forecast future in terms of floorspace change, on which historical data are provided by the County Council's monitoring system. From these data, we can only calculate absolute change for the whole of the Business Use Class; neither percentage change nor a breakdown between offices and industry are available. In 1991-2004, according to the county data, SW Herts lost an average of some 11,000 sq m of business floorspace per year. The forecast reduction in demand is lower, at 2,200 or 3,400 per year, depending on the scenario chosen.

Table 5.11 Annual Completions, Business Space, Past and Forecast, SW Herts, sq m

Sq m	1991-2004	2001-2021	
		RSS	High
Gross Gain	53,987		
Gross Loss	61,319		
Net Change	-10,965	-2,231	-3,413

Source: HCC; RTP

The Planned Supply of Space

Method

- 5.37 Planned supply is the net physical capacity identified by the planning system for future change in the occupied business floorspace. We need to look back in time to calculate planned supply at 2001, which has to be the base year for our demand-supply calculation because it is the start year of the Regional Spatial Strategy and forthcoming Local Development Frameworks.
- 5.38 Planned supply at 2001 is the sum of:
- Current *surplus floorspace*, which is the difference between vacant floorspace and an estimated equilibrium vacancy of 7.5% of the stock;
 - The change in floorspace (net *completions*) recorded from March 2001 to February 2004;
 - Outstanding net *planning commitments* (allocations and permissions) at 1 March 2004.
- 5.39 Any of these components of total planned supply can be either positive or negative, indicating either an increase or a fall in the occupied floorspace stock. Planning commitments and completions are taken from Hertfordshire County Council's monitoring system. Current vacancy is estimated by King Sturge from Hertfordshire Futures and in-house data.
- 5.40 The change in floorspace from 2001-04 is included in order to bridge the gap from 2001, the beginning of the planning period, to the present time. The purpose of the surplus space calculation (Table 5.12) is to incorporate in the space requirement a margin of vacant space which is required for frictional vacancy and choice; so that the market operates smoothly.
- 5.41 Table 5.12 below shows vacant floorspace and the surplus floorspace calculation by District. For industrial space in Watford, surplus space is fractionally negative, but the figure is insignificant

Table 5.12 Vacant and Surplus Floorspace, 2004

		Dacorum	Three Rivers	Watford	SW Herts
Stock (sq m)	Ind/whsg	729,000	194,000	454,000	1,377,000
	Offices	393,000	198,000	240,000	831,000
Vacant space (%)	Ind/whsg	11%	14%	7%	10%
	Offices	13%	16%	22%	16%
Surplus space (%)	Ind/whsg	4%	7%	-1%	3%
	Offices	6%	9%	15%	9%
Surplus space (sq m)	Ind/whsg	25,515	13,192	-4,540	34,167
	Offices	21,615	16,830	34,800	73,245

Source: King Sturge and Hertfordshire Future Property Register. Percentages are rounded.

Dacorum

- 5.42 Total planned supply in Dacorum is some 108,000 sq m, the outcome of a loss of 39,000 sq m of industrial space (in large part at the Lucas site) and a gain of 146,000 sq m of office space. However, nearly half the office supply is accounted for by Three Cherry Trees Lane (Spencers Park), which as noted earlier is allocated for hi-technology firms and thus not available for general offices.

Table 5.13 Planned Supply of Business Space, Dacorum, 2001 sq m

Sq m	Ind/Whsg	Office	All B Space
Gains 2001-04	62,379	19,742	82,121
Losses 2001-04	116,894	40,252	157,146
Net Change 2001-04	-54,515	-20,510	-75,025
Commitments - Gains	25,324	152,396	177,720
Commitments - Losses	34,978	7,226	42,204
Net Commitments 2004	-9,654	145,170	135,516
Surplus Floorspace 2004	25,515	21,615	47,130
Total Supply	-38,654	146,275	107,621

Source: Hertfordshire CC; RTP

Three Rivers

- 5.43 Three Rivers loses 33,000 sq m of industrial/warehousing space; mostly from one site, the Ovaltine site²⁷. The planned supply of offices is positive at 192,000 sq m. Around half of the space currently committed is at the Leavesden Aerodrome site, as is much of the space completed in 2001-04²⁸.

Table 5.14 Planned Supply of Business Space, Three Rivers, 2001, sq m

Sq m	Ind/Whsg	Office	All B Space
Gains 2001-04	310	62,930	63,240
Losses 2001-04	15,703	4,325	20,028
Net Change 2001-04	-15,393	58,605	43,212
Commitments - Gains	3,478	120,190	123,668
Commitments - Losses	33,905	3,176	37,081
Net Commitments 2004	-30,427	117,014	86,587
Surplus Floorspace 2004	13,192	16,830	30,022
Total Supply	-32,628	192,449	159,821

Source: Hertfordshire CC; RTP

Watford

- 5.44 Alone of the three authorities, the Watford supply figures show a net gain of industrial/warehousing space, but this is negligible at 4,000 sq m. In effect, Watford's net additional supply in this sector is nil. This zero balance is the outcome of large losses in 2001-04, offset by even larger positive commitments for the future, largely accounted for by former British Rail sites.
- 5.45 In the office sector, Watford has positive net supply of 113,000 sq m. Approximately one third of this supply capacity is from vacant stock. Cardiff Road and Shell House account for a third of future planning commitments. Small sites make up the rest.

²⁷ The HCC monitoring data lists a committed loss of 103,000 sq m of industrial space at Leavesden Aerodrome. We have excluded this from our calculations because it does not comprise currently occupied floorspace (the building for some years has been in use as a film studio under a temporary planning permission).

²⁸ Commitments for Three Rivers include 12,000 sq m of B1 space at Leavesden Film Studios. Some of this total may comprise studio space (eg in sound stages) rather than offices. Nevertheless, for simplicity and because details of the proposed development are unknown, we have included all of the 12,000 sq m in our total of office commitments. This does not materially affect our conclusions.

Table 5.15 Planned Supply of Business Space, Watford, 2001, sq m

Sq m	Ind/Whsg	Office	All B Space
Gains 2001-04	19,217	43,066	62,283
Losses 2001-04	73,131	23,374	96,505
Net Change 2001-04	-53,914	19,692	-34,222
Commitments - Gains	86,120	71,746	157,866
Commitments - Losses	23,362	13,279	36,641
Net Commitments 2004	62,758	58,467	121,225
Surplus Floorspace 2004	-4,540	34,800	30,260
Total Supply	4,304	112,959	117,263

Source: Hertfordshire CC; RTP

- 5.46 Chapter 6 below will look more closely and qualitatively at individual sites and employment areas in SW Herts. But first we consider the quantitative balance of planned supply and forecast demand requirements in the three local authorities before reviewing the market balance for SW Herts as a whole.

SW Herts

- 5.47 Total planned supply for SW Herts is 385,000 sq m of net additional business space (Table 5.16). Industrial/warehousing space falls by 67,000 sq m and office space increases by 452,000 sq m. The reduction in industrial/warehousing space is more than accounted for by losses which have already happened during 2001-04; net planning commitments are modestly positive.

Table 5.16 Planned Supply of Business Space, SW Herts, 2001, sq m

	Ind/Whsg	Office	All B-Space
Gains 2001-04	81,906	125,738	207,644
Losses 2001-04	205,728	67,951	273,679
Net Change 2001-04	-123,822	57,787	-66,035
Commitments - Gains	114,922	344,332	459,254
Commitments - Losses	92,245	23,681	115,926
Net Commitments 2004	22,677	320,651	343,328
Surplus Floorspace 2004	34,167	73,245	107,412
Total Supply	-66,978	451,683	384,705

Source: Hertfordshire CC; RTP

Market Balance

Method

- 5.48 In this section, we bring together earlier results to compare the forecast demand for space with the supply of land currently identified by the planning system.
- 5.49 Throughout the analysis, calculations relate to floorspace capacity, expressed in square metres. Should it be necessary to translate floorspace into site areas, as a broad guideline, likely plot ratios are in the region of 40% (4,000 sq m of floorspace per hectare of site area) for industrial/warehousing space and out-of-town office parks. But plot ratios in practice will vary widely, especially for offices, where tall buildings with reduced car parking may deliver two or three times as much floorspace per hectare. This is why, in this analysis, we consider that floorspace capacity is a more reliable currency than site areas.
- 5.50 In assessing market balance, we need to allow for a reasonably generous margin of safety between expected demand and identified supply. If the Development Framework aims to release enough land to meet demand, the land supply it identifies should be higher than the expected take-up, to provide a margin for uncertainty, choice and frictional vacancy.
- 5.51 On this basis:
- Where net new demand is positive - as it is for offices - we add 50% to the forecast net additional demand.
 - Where net additional demand is negative, as it is for industrial/warehousing space, indicating that total occupied space will fall, we reduce the forecast fall in demand by one third. Without this margin, there would be a danger that reductions in space run ahead of reductions in demand, creating land shortages which force industry out of SW Herts; and businesses or developers looking for a site for new development may find that they have little or no choice.
- 5.52 By adding these margins to the forecasts provided earlier, we translate forecast *market demand* into a 20-year *planning requirement* - the amount of land that should be provided comfortably to meet expected demand from 2001 to 2021. For the RSS scenario, these planning requirements are summarised in the table below.

Table 5.17 Forecast Floorspace Requirements, 2001-21, sq m, RSS Scenario

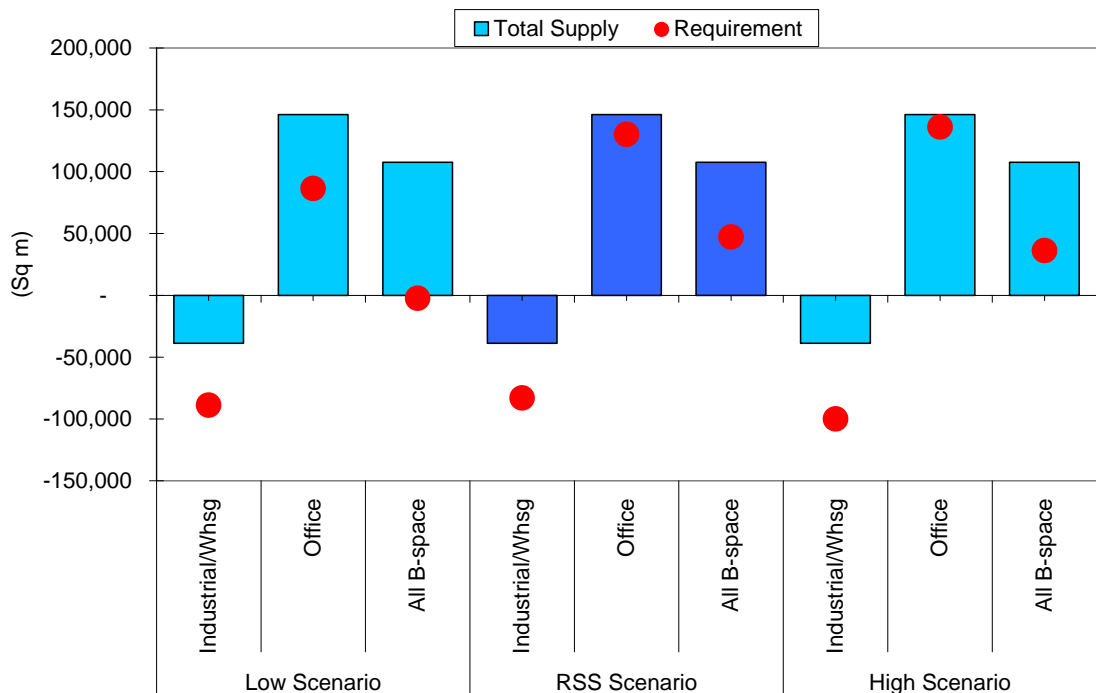
		Requirement	
Dacorum	Industrial/Whsg	-	83,000
	Office		130,162
	All Business space		47,162
Three Rivers	Industrial/Whsg	-	33,186
	Office		69,635
	All B-space		36,448
Watford	Industrial/Whsg	-	41,082
	Office		86,399
	All Business space		45,317
SW Herts	Industrial/Whsg	-	157,269
	Office		286,196
	All Business space		128,927

- 5.53 In the following charts, the circles represent the forecast future space requirement and the vertical bars represent the net floorspace capacity of the planned land supply currently identified by the planning system. Vertical distances between bars and circles measure over or under-supply.

Dacorum

- 5.54 In all three scenarios, the requirement for industrial/warehousing space falls by similar amounts. The RSS scenario, the preferred scenario, produces the lowest change, with a fall of around 83,000 sq m. Planned supply is also negative - indicating that space has been lost since 2001 and/or is committed to be lost - but the loss only amounts to only 39,000 sq m. This suggests that, if the planning system did not release any more land to other uses, the industrial land market in future would move towards oversupply, with land lying vacant as market demand shrinks faster than planned supply.
- 5.55 This industrial/warehousing oversupply - the gap between vertical bar and circle in Figure 5.1 - in the RSS scenario is in the region of 44,000 sq m - a modest 6% of Dacorum's existing industrial/warehousing floorspace stock, which over a 20-year planning period seems insignificant. The alternative scenarios produce virtually the same answer.
- 5.56 For Dacorum offices, the future requirement is positive in all scenarios and planned supply is also positive. In the RSS scenario, there is an insignificant oversupply of 16,000 sq m, 4% of the existing stock (the High scenario in this case is almost identical).
- 5.57 However, we need to bear in mind that almost half of this supply is accounted for by Three Cherry Trees Lane (Spencers Park), which has potential for 66,000 sq m of floorspace but under current planning policies will not be available for general office development. If Cherry Trees Lane is excluded from the supply total, then the RSS scenario produces a future undersupply of around 50,000 sq m, 13% of the existing floorspace stock (and virtually the same under the High scenario). But the planned supply excluding Three Cherry Trees Lane is enough to fulfil demand for about half the planning period; the potential shortfall would likely not be felt until the early years of the next decade.

Figure 5.1 Supply and Requirement, Dacorum, 2001-2021



Source: RTP, King Sturge

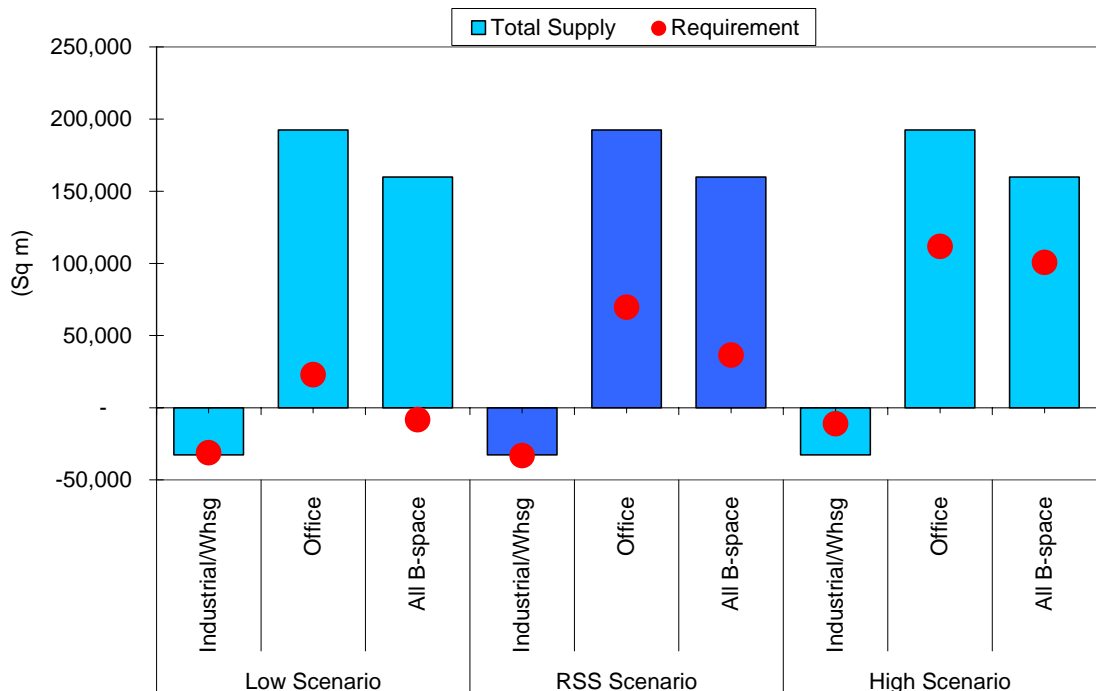
- 5.58 If Spencers Park indeed does not come forward for offices, then the resulting supply shortfall could be filled by redeveloping for offices the 44,000 sq m of

industrial/warehousing floorspace that otherwise would be surplus to requirements. This would leave both markets in near-perfect balance. It is of course a purely quantitative solution, which will only be feasible in practice if the sites left vacant by falling industrial demand are qualitatively suitable for office development. But, if the land *is* qualitatively suitable, it is likely to be a good solution, more sustainable than taking up greenfield land for offices, and more feasible than transferring sites from other uses which command higher values.

Three Rivers

- 5.59 For the industrial/warehousing sector, in both the RSS and High scenarios there is a negative requirement of some 33,000 sq m. Planned supply falls by virtually the same amount, mostly due to the loss of the Ovaltine site. The result is near-perfect market balance. On our calculations, Three Rivers, cannot afford to lose any industrial sites, over and above current planning commitments, consistent with meeting future demand to 2021.
- 5.60 For offices, Three Rivers' planned supply in the RSS scenario considerably exceeds requirements, by some 123,000 sq m, or 62% of the stock (even in the High scenario, the oversupply is 81,000 sq m, 41% of the stock). The main reason for this oversupply is Leavesden Park, which is close to the boundary with Watford and offers 82,000 sq m of potential B1 floorspace. If we were to exclude this commitment - which may not come forward in its entirety, if at all, by 2021 - then future oversupply in the RSS scenario would fall to 41,000 sq m, or 21% of the stock (in the High scenario, the market is in balance).

Figure 5.2 Supply and Requirement, Three Rivers, 2001-2021



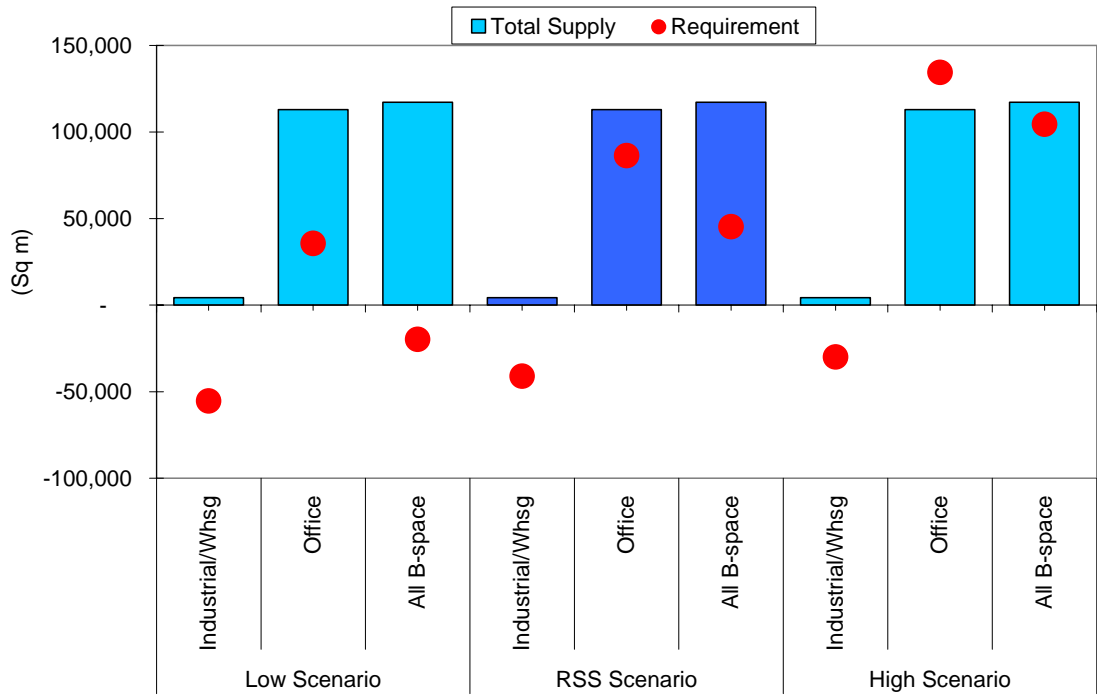
Source: RTP, King Sturge

- 5.61 Other than Leavesden Park, the other sites identified for office development in Three Rivers are small. If they were to be released for other uses, this could considerably restrict the availability of space for smaller local businesses who do not aspire to the premium product that is Leavesden Park.

Watford

5.62 Watford is the only local authority area in SW Herts with a net positive supply of industrial/warehousing capacity. Although this supply total is insignificant, it runs contrary to negative requirement for industrial/warehousing space. Consequently, Watford has modest planned oversupply of some 45,000 sq m (10% of the stock) in the RSS scenario (the High scenario is similar).

Figure 5.3 Supply and Requirement, Watford, 2001-2021



Source: RTP, King Sturge

5.63 Office capacity is also over-supplied in Watford in the RSS scenario, by a modest 27,000 sq m, 11% of the existing stock. (In the High scenario, office capacity is almost exactly in line with the forecast requirement.)

Conclusions

Results

- 5.64 Table 5.18 below summarises our calculations on market balance to 2021, based on the (preferred) RSS scenario. Below, we set out principal conclusions and policy implications by local authority area, followed by an overview of the sub-region as a whole.

Table 5.18 Over(under)supply of B Space, SW Herts, RSS Scenario, 2001-2021

	Industrial/Warehouse		Offices		All Business Space	
	000 sq m	% of stock	000 sq m	% of stock	000 sq m	% of stock
ALL SITES						
Dacorum	44	6%	16	4%	60	5%
Three Rivers	1	0%	123	62%	123	31%
Watford	45	10%	27	11%	72	10%
SW Herts	90	7%	166	20%	256	12%
EXCLUDING SPENCERS PARK AND LEAVESDEN OFFICES						
<i>Dacorum ex Spencers Park</i>	44	6%	-50	-13%	-6	0%
<i>Three Rivers ex Leavesden</i>	1	0%	41	21%	41	11%
<i>Watford</i>	45	10%	27	11%	72	10%
SW Herts	90	7%	18	2%	108	5%

A positive figure denotes oversupply and a negative figure denotes undersupply.
Source: RTP, King Sturge

Dacorum

- 5.65 As shown in the top half of the table, our calculations suggest that there are small surpluses of both industrial/warehousing and office land to 2021. If these calculations are correct, existing or allocated employment sites with a capacity of some 60,000 sq m could be released for other uses (provided of course that there is a requirement for such other uses). This surplus land amounts to just 5% of the borough's current stock of Business class floorspace. Considered over a 20-year planning period, it seems insignificant.
- 5.66 If the Spencers Park (Three Cherry Trees Lane) does not come forward for office development in the Plan period, the 2021 market balance for offices turns into a moderate deficit of 50,000 sq m, 13% of the stock. This gap would not become apparent until the later years of the planning period. In purely quantitative terms, it could be filled almost exactly by the forecast surplus of industrial land.
- 5.67 We conclude that, if it is to meet the demand for space forecast in the draft RSS, Dacorum in the years to 2021 can afford to lose little or none of its employment space capacity. If any land is to be transferred to other uses, over and above existing commitments, then if demand is to be met all or most of its development capacity will need to be replaced, either by new employment land or by intensification at existing sites.

Three Rivers

- 5.68 In the industrial/warehousing sector, we estimate that forecast demand and planned supply in Three Rivers are broadly in balance. In net terms, the District cannot afford to lose any space over and above existing planning commitments if it is to meet the forecast demand to 2021.
- 5.69 In the office sector, however, Three Rivers shows a large oversupply of 123,000 sq m, 62% of the floorspace stock. This is largely due to the office park at Leavesden, which may not come forward, either in its entirety or at all, within the Plan period. Without Leavesden, the projected office oversupply falls by two thirds to 21,000 sq m.

5.70 This suggests that a considerable proportion of the existing or allocated office sites in Three Rivers could be transferred to other uses, while still meeting the forecast demand to 2021. Whether this is to be recommended, will of course depend on the demand and need for such other uses. It also depends critically on qualitative considerations. The danger is that, if smaller-scale office sites are released, there will be a qualitative mismatch, where small firms cannot find the space they need while large, premium-quality sites remain undeveloped, though theoretically part of the supply.

Watford

5.71 In both the industrial/warehousing sectors, we estimate that Watford can afford to lose employment land equivalent to some 10% of its existing floorspace stock, over and above existing planning commitments, while still meeting the forecast demand. Considered over the planning period to 2021, this is a modest amount. Yet again, if more land is lost it should be replaced, either through identifying new sites or through intensification.

South West Hertfordshire

5.72 So far, we have considered each District in isolation, leaving aside that much of the demand for space is likely to be footloose across borough boundaries. As confirmed by our local consultations and general experience, many businesses are likely to consider different parts of SW Herts as close substitutes, and often employers will draw on the same labour catchment area regardless of which District they are in. Therefore, to draw practical conclusions from the analysis and discuss policy implications, we also need to consider the sub-region as a whole.

5.73 For industrial/warehousing space:

- In SW Herts as a whole, the RSS scenario shows a small oversupply of 90,000 sq m, 7% of the floorspace stock, to 2021. In effect, if these figures are correct, the market at sub-regional level is almost in balance over the planning period.
- As noted earlier, if each District is considered in isolation, the figures suggest that Dacorum and Watford could lose small amounts of industrial land while still meeting demand, while Three Rivers cannot afford to lose any land at all. In practice, we need to bear in mind that the three areas, and especially Watford and Three Rivers, are physically close and draw on overlapping labour catchments. Thus, losses in one District could be compensated by gains in another.
- How far gains in Watford, for example, can compensate losses in Three Rivers, will depend on the micro-location and character of individual sites. To meet footloose demand displaced from Three Rivers, Watford ideally should provide space in the west of its area, close to the borough boundary, and small-scale accommodation that suits the profile of industrial occupiers in Three Rivers.

5.74 In the office market:

- Based on the RSS scenario, we estimate a future oversupply of 166,000 sq m, 20% of the floorspace stock. This reflects oversupplies in all three Districts, of which by far the largest is in Three Rivers.
- But the sub-regional surplus is due to the major development sites at Spencers Park (Three Cherry Trees Lane) and Leavesden, which for different reasons may not come forward for offices within the planning period.
- Without Spencers Park and Leavesden, the RSS scenario shows the sub-regional office market almost in balance overall, with some undersupply in Dacorum counter-balanced by oversupply in the other two Districts.

- Some of the demand for office space is likely to be footloose across borough boundaries. Therefore, depending on the micro-location and qualitative features of sites gained and lost, these local mismatches may not make any difference to total employment and output across the sub-region.

5.75 The discussion in this chapter has been purely quantitative and has focused on net change - the difference between net gains and losses of each type of employment space. But real-life planning decisions will be about gross changes, comprising both gains and losses of employment space, and will take account of qualitative features as well as the quantity of space. Before making policy recommendations, therefore, we need to consider the qualitative profile of land supply in relation to expected demand. This is the subject of the next chapter.

6 THE QUALITY OF EMPLOYMENT LAND

Introduction

- 6.1 In this chapter, we assess how far South West Hertfordshire's employment land supply matches the market requirements of business occupiers. The assessment deals both with existing, occupied employment areas and with development sites allocated for employment.
- 6.2 The purpose of the analysis is to help the District Councils decide:
- Which areas and sites should be retained for employment uses,
 - Of these employment sites, which need infrastructure of other improvements to fulfil this function successfully;
 - Which should be considered for release to other uses?
- 6.3 It is not the aim of the exercise to comment on the quality of the built stock, but rather to provide an overview on the quality of employment areas as a whole. Nevertheless, in certain circumstances, it will be necessary to comment on particular elements of the stock, for example where age or condition provides an indication as to the ripeness of all or part of the area for redevelopment.
- 6.4 We have assessed on the basis of the following criteria:
- Strategic accessibility - this criterion takes account of the proximity of a site to the strategic highway network, principally motorways (e.g. M1, M25) and good quality A roads (e.g. A41), which is an important locational factor both for industrial and office occupiers.
 - Local accessibility - this criterion considers the quality of the area/site in terms of its local access characteristics, for example, whether it is located on unclassified roads, is constrained by congestion or other physical factors.
 - General location - here we consider the location of the area from a sustainability perspective, assessing its location relative to a major urban centre, for example whether it is in an edge of centre or out of town location, its accessibility by a choice of means of transport and the proximity of facilities that would be of benefit for existing or future occupiers.
 - External environment - this criterion takes account of the nature and extent of the area's neighbouring uses and in particular, considers the likely risk of conflict arising from existing or potential future employment uses of the area.
 - Internal environment - this criterion takes account of the shape, topography, prominence and internal layout of the employment area. It also considers whether there are potential areas of risk that are likely to influence the cost of future development, such as contamination, environmental or conservation issues (e.g. listed status, floodplain, area of landscape value etc).
 - Current vacancy - this criterion looks at the level of vacancy within the area, either in terms of vacant floorspace or land that is disused or derelict, as this gives an indication of the popularity of an area and can indicate where problems are occurring or where a site is ripe for redevelopment.
- 6.5 We scored each area on the basis of a visual inspection together with desk research and conversations with development control officers, local agents and other local stakeholders. To analyse the quantitative data in a meaningful manner an aggregate score was generated for each area, based on an average of all the assessment criteria mentioned above. These averages all fall between the rating of 1.5 and 3.7. We have

designated sites with scores between 1.5 and 2.2 as good, between 2.3 and 3 as average and 3 or higher as poor.

- 6.6 Based on these ratings, and individual local factors, we have identified the best employment sites, as well as those which are less fit for purpose and should be a low priority for retaining in employment use. But we cannot make definite recommendations on which sites, if any, should be released from employment use, because these decisions will depend on the overall quantitative balance of requirement and supply, not just the quality of individual sites.

Dacorum

Overview

- 6.7 This assessment focuses on the general employment areas that are identified in the Dacorum borough Local Plan together with the employment areas in the Green Belt and the principal town centres in the borough, namely Hemel Hempstead, Berkhamsted and Tring. This encompasses the majority of the land in the borough that is utilised for B employment uses.
- 6.8 The table below provides a summary of our qualitative assessment.

Table 6.1 Qualitative Summary of Dacorum Employment Areas

	Total Employment Land	Good		Average		Poor	
	Area (ha)	Area (ha)	% in urban area	Area (ha)	% in urban area	Area (ha)	% in urban area
Hemel Hempstead	221.6	172.2		30.8		18.6	
Berkhamsted	9.2	9.2		-		-	
Tring	7.8	6.2		1.6		-	
Markyate	2.8	2.8				-	
Rural	6.3	-		3.4		2.9	
Total	247.7	190.4		35.8		21.5	

Source: King Sturge, Herts CC

- 6.9 Dacorum borough has a large proportion of good or average quality employment areas. This is a function of the concentration of the employment land in one place (i.e. North East Hemel Hempstead), its proximity to the strategic highway network and its separation from sensitive residential areas. The poorer quality employment areas are situated in the Two Waters/Apsley area.
- 6.10 The smaller settlements in the borough, such as Berkhamsted and Markyate, also benefit from some good quality employment areas that provide a valuable source of accommodation for smaller businesses.

Hemel Hempstead

- 6.11 Hemel Hempstead is the main urban centre in the Dacorum and its most important town in employment terms. The principal employment area in the borough is to the north east of its town centre. As a New Town, and unlike other urban areas in the UK, Hemel from the beginning has grown according to a set plan. North East Hemel Hempstead, centred on Maylands Avenue/Boundary Way, was allocated for employment uses at the outset and has developed into a substantial commercial estate, accommodating a wide range of large-scale industrial, warehousing and office uses.

Table 6.2 Qualitative Summary of Hemel Hempstead Employment Areas

Principal Land Use	Hectares		
	Good	Average	Poor
Industrial/Warehouse	75.8		9.1
Office	37.25	30.8	
Mixed Office/commercial	59.1		9.5
Total	172.2	30.8	18.6

Source: King Sturge, Herts CC

- 6.12 The current Local Plan subdivides North East Hemel Hempstead into four sections, referred to as Swallowdale, Maylands, Maylands Avenue and Buncefield. Such a large concentration of employment uses is unusual and reflects the planned nature of the New Town of Hemel Hempstead. In addition, there is the Key Employment Site of Three Cherry Trees Lane to the north east of the main employment area, which has been specifically identified as a long-term opportunity site for Specialised Technological Activities (STAs). This is the only new land identified specifically for B1 development in the borough. Development opportunities for new employment floorspace therefore will arise largely from the recycling of existing employment land. Indeed, the brownfield proposals sites (E3 and E5) have been redeveloped for warehousing uses. There is other evidence of continual recycling throughout the employment area, such as the former Dexion site, which is now being redeveloped by Gazeley for distribution warehousing, and the Peoplebuilding on the former Lucas Aerospace site, Maylands Avenue.
- 6.13 In qualitative terms, the employment areas to the north east of Hemel Hempstead are all of good or average quality. The area benefits from excellent strategic accessibility, being adjacent to junction 8 of the M1, and is relatively unconstrained by sensitive neighbouring uses due to the planned nature of the town. The location of this employment area makes it particularly attractive to large distribution uses that can capitalise on its pivotal position on the strategic road network and the pressure of demand for large sites for distribution uses is likely to continue. Such land has so far arisen through the recycling of large industrial complexes, such as the former Dexion site that is now being developed by Gazeley for distribution uses. Another potential source of distribution land could arise from the Buncefield Oil Depot, should that ever come forward for development
- 6.14 The Breakspear Park Core Office Location is also in the North East Hemel Hempstead area, but is separated from the industrial and commercial area discussed above. This site accommodates a high quality headquarters style office building, which is visually prominent and has excellent highway access, being close to the M1 Junction 8. The office was purpose-built for BP approximately 15 years ago as the main centre for its UK operations. The property has been purchased by Legal and General and BP are vacating the building, but will remain in part of it. Approximately 90,000 square feet of the building is let to the consultancy firm, Hewitt Bacon & Woodrow. The owners intend to re-let the remaining floorspace and parts of the building are to be refurbished to facilitate this. The building will therefore remain as a core office location for the foreseeable future.
- 6.15 However the main problem affecting the employment site to the north east of Hemel Hempstead is that the area scores poorly in sustainability terms. It is reliant on the private car and as a result, suffers from acute congestion at peak times, with associated congestion on the main highway network approaching the estates. Maylands Avenue is particularly congested, with heavy traffic throughout the day. Also, the area currently lacks supporting services such as local shops and leisure facilities

- (other than the new Esporta at Peoplebuilding) that would improve the overall working environment.
- 6.16 The Paradise employment area is designated as a Core Office Location in the Local Plan. It is situated on the edge of Hemel Hempstead town centre and is therefore more sustainable than the town's other employment areas. Despite its central location, the site is relatively unconstrained by neighbouring uses, although there is a housing proposal site (H21) adjacent to the Royal Mail depot. Despite its core office designation in the Local Plan, the estate is currently a mixed employment area, comprising the postal sorting office, small-scale office accommodation and workshops. It provides a good source of accommodation for smaller companies, providing services for local residents and businesses (e.g. car maintenance, tool hire etc) and has good linkages with the town centre. Office uses are therefore the most suitable functions for this site, although a degree of flexibility should exist to enable other B1 uses to continue here.
- 6.17 To the south of Hemel Hempstead town centre, overlooking the 'magic roundabout', is the Corner Hall Core Office Location. This is a good quality employment site that is suitable for a range of employment uses; particularly office uses which relate well with the adjacent town centre and the residential uses on Lawn Lane.
- 6.18 The Two Waters Industrial employment area consists of two sites on either side of the A41. Both sites have good strategic and local access to the A41 and both have good commercial prominence, being situated overlooking a main junction approach to Hemel Hempstead. There is some potential for conflict with neighbouring houses (e.g. dwellings on London Road frontage), but overall the areas are relatively self-contained; the Two Waters (east) area has its own access road, Riversend Road, and is separated from the nearby housing areas by Featherbed Lane.
- 6.19 The Apsley Industrial Estate employment area, off Kents Avenue, is an average quality employment site, suitable for a range of small-scale light and general industrial uses. Strategic access to the site is poorer than the Two Waters sites, as the London Road through Apsley is rather narrow and suffers from congestion. However the site is relatively unconstrained by adjoining uses, being bordered by the railway line, open space and a community facility, and the site currently provides a valuable source of small commercial units, all of which are occupied and fit for purpose.
- 6.20 Doolittle Meadows comprises a substantial 1980's office complex comprising Meadowside House, Network House and Westside. The Westside building is occupied by BT, who originally occupied the whole site but has since moved most of its office functions to the new development of Leavesden Park, near Watford. We understand that as part of a re-gearing deal agreed with their landlords in 2003, BT have a 20 year lease on the Westside building, so are likely to remain here for the foreseeable future, but the remaining Meadowside and Network buildings are vacant and their condition is beginning to deteriorate.
- 6.21 As an office location, Doolittle Meadows is some distance from the main urban centre. Although the area suffers from congestion, it is close to the M25 and is also close to Apsley mainline railway station, which provides a direct service to London Euston. There are currently approximately 10,000 square metres of vacant office floorspace on this site. In terms of alternative employment uses, the site is in close proximity to housing and would therefore not be suitable for general industrial or warehousing uses.
- 6.22 The Frogmore employment area currently comprises a mixture of small and medium sized industrial units, however the site is constrained by poor access through Apsley town centre to the south and through a residential area to the north. Nevertheless, the area is well used and appears to be fully occupied, indicating that the site offers accommodation that is fit for purpose. The Frogmore Mill element of the employment

area has been earmarked to form part of the Paper Trail heritage proposals for the area, funded by the Council and EEDA.

- 6.23 Nash Mills is an old, established paper mill that is currently operated by high-quality paper manufacturer Sappi Europe. Sappi is likely to remain on this site; therefore the land should remain as an employment designation. However, the site is in a peripheral location and although it is close to junction 20 of the M25, it has relatively poor local access, and is adjacent to housing. Costs associated with redeveloping the site are likely to be high, owing to the historic industrial use of the site and the sensitive nature of the surrounding environment.

Berkhamsted

- 6.24 There are three employment areas in Berkhamsted, all of which are principally light or general industrial locations. We have assessed all of the employment areas in this settlement as good quality.

Table 6.3 Qualitative Summary of Berkhamsted Employment Areas

Principal Land Use	Hectares		
	Good	Average	Poor
Industrial/Warehouse	9.2	0.0	0.0
Office	0.0	0.0	0.0
Total	9.2	0.0	0.0

Source: King Sturge

- 6.25 Northbridge Road is a high-density employment site accommodating a range of small and medium sized light and general industrial units, together with some new units that have recently been developed on proposal site E1. While strategic access to Berkhamsted is not as good as Hemel Hempstead, the settlement is close to the A41 and local access to the employment site is good. This estate is relatively unconstrained by neighbouring residential uses, being sandwiched between the canal and the railway line, and is therefore suitable for the full range of employment uses.
- 6.26 Opposite Northbridge Road is the River Park industrial estate. This is also a good quality location, benefiting from similar attributes to Northbridge Road. The site is, however, rather narrow so it is only suitable for small units.
- 6.27 Billet Lane is a mixed-use employment area that has good road access and benefits from a prominent frontage onto the High Street. It is separated from the other employment areas by the canal, and the river Bulbourne runs through the site, which may impose restrictions on its future redevelopment. The site is so far unconstrained by conflict with adjoining sensitive uses, although land adjacent to it has recently been allocated for housing development in the Local Plan. The development of housing on the adjacent site should be designed sensitively so as not to impose unnecessary restriction on industrial occupiers. .

Tring

- 6.28 There are three employment areas in Tring, all of which should remain in employment uses. The best employment site is the Icknield Way industrial estate on the north western corner of the town. This estate is close to the A41 dual carriageway, and has good local access. There is some potential for conflict with neighbouring uses, with housing on the southern and eastern boundary of the estate, but its current layout has been designed in a way to minimise any disruption and otherwise the site is surrounded by open Green Belt land. It is therefore a good quality employment site, the best in Tring. There is potential for this employment site to be expanded, but as this area is primarily an industrial location, the identification of further land here may not be necessary in the longer term, bearing in mind the projected decline in

industrial/warehouse employment. Nevertheless, this is an option to consider should employment land be lost elsewhere in the settlement.

Table 6.4 Qualitative Summary of Tring Employment Areas

Principal Land Use	Hectares		
	Good	Average	Poor
Industrial/Warehouse	6.2	1.6	0.0
Office	0.0	0.0	0.0
Total	6.2	1.6	0.0

Source: King Sturge

- 6.29 The Akeman Street employment site is of average quality, but it is heavily constrained by poor road access via narrow town centre streets and is surrounded on all sides by housing. This site can function effectively as an employment site in its existing form and is currently in active use, providing a valuable source of small business floorspace in the town.
- 6.30 Likewise, the Brook Street employment site is also subject to similar issues. The site is constrained in access terms, although is more prominently situated than the Akeman Street site. The site is surrounded by housing, and is a high density, compact site with limited car parking and space for unloading. Furthermore, the buildings are listed, which will impose additional cost constraints both on their continued use and eventual redevelopment. However, as with Akeman Street, it provides a useful source of small-scale workshop floorspace and appears to be fully occupied, indicating that there is a healthy demand for this type of floorspace in Tring. The site therefore seems to function effectively as an employment site.
- 6.31 While there are deficiencies in the two smaller employment sites in Tring, in the interests of sustainability, they should remain allocated for employment uses. To lose them to other uses would leave Tring with very limited employment provision, which would be detrimental in sustainability terms and would lead to further out commuting. Tring is a settlement that is relatively isolated from other urban areas in the borough, yet is of sufficient size to require some local employment land provision. In the longer term, both Akeman and Brook Street employment areas could be suitable for live/work units. They are both small sites and the existing workshops on Brook Street may have potential for conversion to an attractive live/work environment while retaining their historic character.

Markyate

- 6.32 Markyate is a small settlement in the north of the borough and there is one designated employment area in the town.
- 6.33 The Markyate employment area is of average quality and has good strategic access being located directly on the A5. It is a relatively high density industrial area comprising of a number of dated industrial buildings. It is a secondary location, being some distance from the main settlements, but does benefit from easy access to the M1. There is potential for conflict with neighbouring uses as the site is surrounded by housing and town centre uses, although this is minimized as the main access to the site is via the A5.
- 6.34 This employment area is the only source of employment floorspace in Markyate and the settlement is relatively isolated from other towns in Dacorum and surrounding borough's and therefore provides a sustainable local employment area. Part of the site has been identified for release for housing; any resulting development should be designed in such a way that would not compromise the future employment use of the remaining employment land.

Rural Dacorum

- 6.35 There are two Green Belt employment areas; these are the Bourne End Mills site just off the A41, and Bovingdon Brickworks.
- 6.36 Bourne End Mills is designated as a Major Developed Site in the Green Belt in the Dacorum Local Plan, and is a reasonable quality employment site that is suitable for a range of industrial and warehousing uses. The site has excellent strategic and local access, being situated just off the A41 dual carriageway. Situated on the edge of Bourne End, there are some dwellings nearby, but as the link between this site and Bourne End Lane has been closed off, there is limited potential for conflict to arise between these uses. The existing buildings on the site are dated and some appear to be nearing the end of their useful lives. Being situated in the Green Belt, there is limited potential to intensify the use of this site, and the need for high quality design will impose additional costs on any redevelopment of this site. Nevertheless, the site is fully occupied and appears to be a popular location for a range of engineering, metal works and accident repair companies, and should be retained as an employment allocation.
- 6.37 The Bovingdon Brickworks is Major Developed Site in the Green Belt and its use has arisen because of the clay pit, which provided raw materials for the brickworks. The site is a low density development occupied by the brickworks, EH Building Materials and Gilbert's Motors car showroom and other associated uses. As an employment location, this area is poor quality. Access to it is via the B4505, though the site is in a remote rural part of the borough. Nevertheless, the site is in active use and provides a valuable source of local employment. The identification of this site as a major developed site in the Green Belt is sensible as it eases some of the restrictions that would otherwise hamper the existing use of this site.

Town Centres

- 6.38 In addition to the land allocated for employment purposes in the Local Plan, the principal town centres in the borough are also an important source of employment floorspace. Table 6.5 below summarises the current provision of floorspace in the town centres.

Table 6.5 Employment Floorspace in Dacorum Town Centres

Town Centre	Office/B1 Square metres	% of total stock in the borough
Hemel Hempstead	81,000	21.4
Berkhamsted	29,100	7.7
Tring	4,000	1
borough Total	378,250	100

Source: King Sturge/ODPM Floorspace Statistics, November 2003

- 6.39 Hemel Hempstead is, unsurprisingly, the most significant town centre in the borough, with 81,000 square metres of office floorspace in the central area. About a quarter of this total is contained within a number of large buildings, in particular Kodak House, and Dacorum Civic Centre offices. Further concentrations of office floorspace are located along Waterhouse Street, The Marlowes and Selden Hill. There is currently approximately 5,000 sq m of office floorspace on the market in the town centre (outside the allocated employment areas), representing 6.2% of the total stock in the town centre. This figure is lower than the vacancy rate for the overall borough, indicating that there is not an oversupply of office floorspace in central Hemel Hempstead.
- 6.40 While the level of vacancy in Hemel Hempstead town centre is relatively low, we understand Kodak is in the process of vacating its 'landmark' 16 storey office, if this

floorspace (approximately 14,000 square metres) is included in the vacancy figures, the level of vacancy rises to 23.4%. Kodak is relocating its staff from this building to other property in their portfolio, including premises elsewhere in Dacorum and to the company's facility in Harrow. Kodak House is now considered obsolete as an office building; it no longer fits the company's needs and Kodak considers it inefficient and costly to operate and maintain.

- 6.41 From a market perspective, it is unlikely that Kodak House will be re-let in its entirety, either to a single occupier or to a range of tenants, considering the quantity of floorspace in this building provides and the nature of competing buildings elsewhere in the District. Kodak House is a second hand, 1960's building that compares poorly to the more modern accommodation available elsewhere in the town, such as the Peoplebuilding and other premises on Maylands Avenue. Similarly, it is unlikely to be viable for office uses, bearing in mind the likely costs of demolishing a 16 storey concrete structure of this nature, the amount of office space that is currently on the market, and the level of rents that could be achieved for an office redevelopment on this site. It would therefore be prudent to consider the re-use of this building for other uses, ideally as part of a mixed-use development incorporating appropriate town centre uses (e.g. leisure, food and drink, retail and residential).
- 6.42 Despite this, it is important that the town has a sufficient balance of office floorspace, both in town and out of town. One of the characteristics of the current office market in Hemel Hempstead is that much of the floorspace on offer is a homogenous product, dominated by large out of town, campus style offices. Town centres make an important contribution to the overall diversity and mix of employment floorspace, particularly in the supply of small and medium sized office units. The town centre attracts a broad range of occupiers and is particularly suitable for professional services such as lawyers, accountants, surveyors and financial advisors. In sustainability terms, it is desirable that office functions be located in town centres with good access to public transport facilities. Furthermore the Riverside development will improve the retail and leisure facilities in the town centre making it an increasingly attractive place to work. The supply of office space in the town centre should be monitored to ensure that suitable sites/floorspace are not lost to other uses. Office accommodation should only be released to other uses where it is no longer suitable for employment uses and its redevelopment for such uses would not be commercially viable.

Spencers Park (Three Cherry Trees Lane)

- 6.43 As part of this employment land study, we have been asked to consider whether the Key Employment Site of Three Cherry Trees Lane is the best location for a development centred on specialised technological activities (STA). In particular, we have been asked to consider the possibility that these uses could be located at the gateway to Hemel Hempstead, which comprises the open space on either side of the A414, the former Lucas Aerospace site, the caravan park and Breakspear Park. Hertfordshire County Council has recently commissioned a study to examine the potential demand from knowledge driven businesses for accommodation on an STA development, and we do not intend to replicate this study here.
- 6.44 The supporting text to Policy 35 of the Local Plan defines STAs as firms that meet at least two of four criteria. The first criterion is that a firm should be within a 'high technology' sector, meaning that it should be classified as falling within certain categories of the Standard Industrial Classification (SIC) including pharmaceuticals, office machinery, computing, aerospace, precision engineering, telecommunications and radio/television activities. The second criterion is that the firm should have at least 15% of staff involved in R&D of technical support/consultancy functions. Thirdly at least 15% of the staff on site should be qualified scientists, engineers or IT specialists, and the fourth criterion is that the firm should have established linkages with a research facility.

- 6.45 Having regard to this definition, an STA is similar to a science park and in planning and property terms, these uses generally fall within Class B1 of the Use Classes Order.
- 6.46 The image and profile of a science park are important considerations for the occupiers when choosing whether to locate on a particular park, both for large companies and small businesses seeking incubator accommodation. The quality of the environment surrounding the park will therefore have an important bearing on the perception of the science park. Companies such as those set out in the STA definition generally seek high quality accommodation within a well-managed and visually attractive campus style environment, often with sufficient room to enable expansion of their operations. Security is also an important concern, particularly for companies working in the life-sciences sector, where much of their research and product development is sensitive in nature. Smaller occupiers seeking 'incubator' type space have similar requirements with regard to the quality of the environment, but are also interested in flexible floorspace and lease terms, with a higher level of service support (e.g. conference centre/meeting rooms, catering facilities etc) than that required by large single occupiers, who are better equipped to provide these facilities for themselves. The UK Science Park Association states that in most instances, a science park is linked with a university or other research institution; these linkages are an important source of new ideas and start-up companies spinning out of PhD and post doctoral research.
- 6.47 The current office market in Hemel Hempstead does not offer the type of product that is suitable for use as a science park. The nearest acceptable product is the Peoplebuilding scheme, which provides high quality office floorspace in what will be a campus style setting once the overall development is completed. However this is a large product, that may be too big (9,100 square metres per building) for the majority of the companies that would be attracted to a science park. Larger occupiers are more likely to require purpose built accommodation (although some this could be accommodated on the undeveloped land).
- 6.48 With regard to the Spencers Park site at Three Cherry Trees Lane, from a market perspective, the most suitable commercial land use for the site is as a warehousing/distribution centre. It is on the edge of an existing industrial area and, provided that the current site access problems can be overcome (which is essential infrastructure for any form of development on this site), has all the attributes of a strong distribution location, being a self contained site that is close to the M1.
- 6.49 The Spencers Park site has a number of drawbacks; firstly the environmental quality of the area. Although Spencers Park itself is a greenfield site with open countryside on its eastern boundary, the main approach to it will be via Boundary Way, Buncefield Lane or Green Lane, all of which pass through a largely unattractive and heavily industrialised area dominated by the Buncefield Oil Depot, warehouses and factories. Close proximity to industrial uses, and their associated noise, vibrations, odours and visual intrusion, detracts from the quality of an office environment. This can discourage occupiers, as it will have an impact both on the image of the office location (and thus the tenant/occupier) and the quality of the working environment within the development.
- 6.50 Furthermore, Spencers Park is a peripheral office location in relation to the planned land use pattern of the North East Hemel Hempstead employment area. In geographical, planning and market terms, the core out of town office location in Hemel Hempstead is the Maylands Avenue/Breakspear Way employment area. This area is centred around the BP office campus at Breakspear Park, the new Peoplebuilding development on south Maylands Avenue and the established 1980's office complexes further north on Maylands Avenue, such as The Campus (occupiers include Dixons). There is some office accommodation on Boundary Way (e.g. the 3Com office development and Catherine House) but generally this area is more mixed and is dominated by warehousing and industrial uses. The location of Spencers Park has

less commercial prominence and would not relate to the existing office uses in this part of Hemel Hempstead.

- 6.51 An option the Council could consider is to look at relocating the STA/science park to an alternative location. One possibility could be to consider the area adjoining the new office development, Peoplebuilding, off Maylands Avenue. Such a location would have a high degree of visibility and commercial prominence, enabling the science park to be developed as a high profile 'destination'. The image and profile of a science park in this location would be enhanced by its proximity good quality business developments, such as Peoplebuilding. Furthermore, the accessibility of this area is excellent, being prominently located on the A414, close to junction 8 of the M1.
- 6.52 In urban design terms, a science park development at the Hemel Gateway would relate well to the existing nearby land uses and would provide an attractive and positive entrance to Hemel Hempstead, provided that high standards of architectural and landscaping design are adhered to.
- 6.53 The Maylands Avenue area currently lacks support facilities such as local retail, catering, leisure and other supporting activities that enrich the working environment. Locating the STA/science park in this area could be used as a catalyst to encourage the development of these facilities, as well as providing a local working population that would support these facilities.

Conclusions

- 6.54 Our key conclusions and recommendations with respect to Dacorum are as follows:
- The only new land identified specifically for B1 development in the borough is the Spencers Park site at Three Cherry Trees Lane, which is allocated specifically for Specialised Technological Activities. Development opportunities for new employment uses such as distribution or general offices will arise largely from the recycling of existing employment land.
 - The North East Hemel Hempstead employment areas are good quality employment areas in accessibility terms but it will be necessary to address the congestion problems and the reliance on the private car, particularly if the usage of the area is to be intensified. There are over 60,000 square metres of office floorspace with planning permission at the Peoplebuilding site, and the Key Employment Site of Spencers Park at Three Cherry Trees Lane could add a further 66,400 square metres of floorspace to the area in the long term. It will be important to ensure that there is sufficient capacity in the local highway network to accommodate this level of development and if not, a strategy should be developed to address this. However, the Council is addressing some of these problems and the Local Plan contains a number of transport proposals (T4, T5, T6 and T7).
 - Ancillary facilities in North East Hemel Hempstead are currently inadequate for the size of the daytime population. There are no meaningful retail outlets in the area and restaurants are mainly on-site cafeterias. The leisure offer has improved recently with the opening of Esporta at Peoplebuilding but there is no centre or focus for the area and people working in the area are likely to travel elsewhere during the day for food, leisure and convenience retail. North East Hemel Hempstead is a major employment location in the South East but operates in a competitive market. Whilst the area undoubtedly has advantages particularly for the distribution sector, office occupiers will be more footloose. It is important to consider what makes North East Hemel Hempstead special as place to work and do business. At present, it lacks social amenities and this affects its overall attractiveness as an employment location.
 - The policy strategy in the current Local Plan, which seeks to differentiate the office and industrial/distribution uses, is sensible both in planning and market terms.

From an occupational perspective, office accommodation is more attractive where it is not surrounded by heavy industrial uses that generate noise, vibration, odours and visual intrusion. Furthermore, prestige office space needs a strong image and identity, and is better suited to 'gateway' locations, rather than being reached via roads that are largely industrial in character.

- Doolittle Meadows is a Core Office Location that is some distance from the main urban centre, although the site does have good public transport links, being close to Apsley Station. Its proximity to residential uses means that it is not suitable for general industrial or warehousing uses.
- The Apsley Industrial Estate is an average quality employment site, suitable for a range of small-scale light and general industrial uses. Strategic access to the site is poor. However the site is relatively unconstrained by adjoining uses.
- Nash Mills is an established employment site located alongside the River Gade for historic reasons. It is located in a sensitive environment and the costs of any future redevelopment are likely to be high.
- The Major Developed Sites in the Green Belt should be retained in their existing uses. Bourne End Mills is suitable for a range of industrial and warehousing uses; it is actively used, providing a good location for a range of engineering, metal works and accident repair companies without conflicting with neighbouring uses. The Bovingdon Brickworks is an established use in the Green Belt and should remain an allocated employment site, but this should be reviewed should this site ever become vacant.
- Hemel Hempstead town centre is a valuable source of office supply and the balance between in-town and out-of-town provision should be maintained. Office supply in Hemel Hempstead town centre needs to be monitored. Office accommodation should only be considered for release to other uses or mixed use where it is no longer suitable for employment uses and its redevelopment for such uses would not be commercially viable.
- There is the potential for the Council to consider relocating the STA/science park site from Spencer's Park to the Hemel Gateway site. Hemel Gateway has superior prominence and access, a better environment and could provide economies of scale not available at Spencers Park.

Three Rivers

- 6.55 This assessment focuses on the employment areas that are identified in the Three Rivers Local Plan, focussing particularly on those areas that are perceived to be under threat from competition with other, potentially higher value uses such as residential. Furthermore, while there are no specifically allocated employment sites in the town centre, we have also considered, more generally, the town centre of Rickmansworth, which makes an important contribution to the District's B1 employment floorspace. The allocated employment areas and Rickmansworth town centre encompass the majority of the land in the District that is utilised for B employment uses. The assessment follows the same criteria-based and grading approach as outlined for Dacorum.

Overview

Table 6.6 Qualitative Summary of Three Rivers Employment Areas

	Total Employment Land	Good		Average		Poor	
	Area (ha)	Area (ha)	% in urban area	Area (ha)	% in urban area	Area (ha)	% in urban area
Croxley/Tolpits Area	37.8	-	-	37.8	40.3	-	-
East of Kings Langley	13.85	3.9	4.1	9.95	11	-	-
Leavesden	32.	32	34	-	-	-	-
Maple Cross	7.25	7.3	7.8	-	-	-	-
South Oxhey	1.0		-	-	-	1.0	1.1
Rickmansworth Town Centre	2	2	2.1				
TOTAL	93.9	45.2	48.1	47.75	51.3	1.0	1.1

Source: King Sturge

- 6.56 Overall, the majority of the employment areas in Three Rivers are all of good or acceptable quality and suitable for continued employment use. Their geographical distribution reflects the nature of the District, being either concentrated on the outskirts of Watford urban area, or situated in rather isolated, Green Belt positions. The best employment area in the District is, unsurprisingly, the Leavesden Park site to the north of Watford urban area. Other high quality employment areas include the Home Park employment area to the east of Kings Langley, which has excellent access to the M25 and is part of a wider concentration of employment uses. The poorest quality employment area is Carpender's Park in South Oxhey, which is constrained by poor highway access and a suburban location.

Croxley/Tolpits Area

- 6.57 Because Three Rivers District itself is largely rural in character, in geographical terms much of the focus of its employment land is on the borders of the adjacent, urban borough of Watford. The District's main employment location is the Croxley Business Park and the Tolpits Lane employment areas, accounting for almost 40% of the District's employment land. There is therefore likely to be a significant interchange of labour in this area between Watford borough and Three Rivers District administrative areas.
- 6.58 With regard to the Croxley Business Park, the bulk of this employment area, centred on Hatters Lane and Marlins Meadow, is within administrative boundaries of Three Rivers, although the Woodside Meadow and Blackmoor Lane element of the Business Park falls within Watford borough. This is a good quality employment area that accommodates high quality campus style office development, although there are some industrial buildings at the entrance to the estate. The location itself is suitable for a full range of employment uses, being part of the wider concentration of employment land including the adjacent Watford Business Park. However this location is hampered by being on the 'wrong side' of Watford, particularly from a warehouse and distribution perspective. Strategic access to the site compares unfavourably with other employment locations in the area (e.g. Imperial Park Watford, or Maylands Avenue, Hemel Hempstead) because direct access to the motorways is rather convoluted and must be taken either through the congested streets of West Watford (out to the M1), or via Rickmansworth if the destination is the M25/west.

- 6.59 In terms of future development, the Croxley Business Park is a low-density campus style development that is extensively landscaped which has a high provision of car parking; there is potential for this employment area to accommodate a higher density of floorspace if planned effectively. The employment capacity of this site in could therefore be increased in the future, should this be required. However the intensification of floorspace on this site will only arise in the long term, due to the current oversupply of the type of floorspace for which this site is suitable. Currently there are a number of vacant units on the Croxley Business Park, including numerous small suites in the Courtyards complex and 8,000 square feet in The Pavilion on Blackmoor Lane. Elsewhere, there are also two large office buildings vacant on the adjacent Watford Business Park (The Chess building and Croxley Gateway) both of which have been vacant for some time. The market for new office floorspace in this part of Watford is severely depressed by the oversupply of floorspace elsewhere on the market. However, this site represents a coherent and self-contained employment area that is relatively unconstrained by neighbouring uses.
- 6.60 The other main employment location on the edge of Watford is the Tolpits Lane area. This is an extensive area of employment uses covering approximately 23 hectares and is made up of a broad range of uses, including office accommodation on Wolsey Business Park, the Metro Centre and Century Court modern warehousing on Dwight Road and a range of older, industrial units on the Moor Park Centre and the Vale Park Industrial Estate.
- 6.61 As with the Croxley Business Park and the Watford Business Park, strategic highway accessibility to this site is limited, being some distance from the motorway network making it less attractive, particularly to distribution occupiers, who will be attracted to other areas such as Hemel Hempstead, or more locally at Kings Langley. However, this site is a self-contained employment area with a significant critical mass and is widely recognised as a major centre of employment uses. It is unconstrained by neighbouring uses, being some distance from the nearest residential areas and surrounded by open space. The north eastern element (Wolsey Business Park) is adjacent to the Watford Business Centre, although there is no vehicular access.
- 6.62 The main drawback to this area is its sustainability. The area is heavily dependent on car use, although we understand that major occupiers such as Camelot operate a green travel plan to help alleviate these problems. Nevertheless, the site is congested with parked cars, and this will only worsen when the former Kenwood unit is reoccupied. The local environment of this estate would be significantly enhanced if public transport facilities in this part of Watford were improved.
- 6.63 As is the case in the wider Watford market, the main vacancies in the Tolpits Lane area are in the office sector (such as York House on the Wolsey Business Park). The industrial market in this area is currently very healthy with a low level of vacancy throughout the settlement. This employment area, therefore, represents an important element of the local industrial property market, particularly as it is some distance from residential properties, making it suitable for a broad range of uses, including some 'bad neighbour' uses, which cannot be located in the more densely populated areas.
- 6.64 Much of the industrial stock is situated in the Vale Industrial Estate and Moor Park Estate. With the exception of the 90,200 square foot former Kenwood distribution unit, the floorspace in these estates mainly consists of 20,000 square foot units and a significant proportion of smaller units; approximately one third of the area is made up of units in the 1,000 to 5,000 square foot size bracket (particularly on Olds Close/Olds Approach). This estate is a valuable source of small to medium sized accommodation of the type that is sought after in the market, and the low level of vacancy on the estates demonstrates this. Because the location of this employment area is less accessible to the Motorway than other areas, such as Imperial Way/Otterspool Way in Watford, the pressure for large shed development in this area will be less intense,

providing the opportunity for land to be reused for the development of smaller units. Indeed the only large shed in this area, the Kenwood unit, has been vacant for some time and the owners are now considering subdividing it into smaller units. Tolpits Lane should continue to be identified as one of the main employment area in the District; the market will function to provide the type of units that are in demand, and the planning system should support this.

Leavesden Park

- 6.65 The largest single employment allocation in the District is also the best employment area in qualitative terms. The Leavesden aerodrome site is identified in the Hertfordshire Structure Plan Review as one of six key employment in the county. While parts of the site are classified as 'previously developed land' the site, which covers a total of 116 hectares, lies within the Metropolitan Green Belt so its development is heavily restricted. The Development Brief for Leavesden Park established the basic development principles for the site, restricting business development to the eastern part of the site, with the remainder released for open space to form a wedge between the settlements of Abbots Langley and Watford. Development on the eastern element of the site must conform to strict parameters acceptable to the Green Belt; the total footprint of the buildings should not exceed the present total on the site, the height of new buildings must not exceed the existing buildings and the total land to be development must not exceed the present developed area (i.e. 32 hectares).
- 6.66 Leavesden Park has all the attributes of a top quality location for a business park. It has excellent highway communications with direct access to the M1 and M25; it is also situated on the edge of Watford with good access to the local labour force. Furthermore, the surrounding environment is conducive to a business park development, being largely surrounded by open space, rather than embedded within an old industrial area, which would detract from the image and profile of the resulting development. Therefore from a commercial perspective, this site is well suited to high quality business development.
- 6.67 The first phase of Leavesden Park has already been developed. The spine road providing access into the site was completed in 1999, housing has been developed on the eastern part of the site and 345,000 square feet of office space has been built, 190,000 square feet of which was pre-let to BT. Since their completion in 2002 however, buildings 400, 500 and 600 have remained un-let. These buildings offer high quality office accommodation and have remained un-let largely as a result of the current stagnation of the office market, coupled with the oversupply of office space in the local market generally
- 6.68 Overall, the Leavesden site has capacity for a further 1.3 million square feet of employment floorspace, in addition to that which has already been developed. It therefore represents a significant element of the District's employment land supply. However, this floorspace will be developed over a substantial time period, and current market conditions mean that further development will extend beyond the current plan period of 2011. It will also offer a specific type of employment floorspace, mainly B1 office/high technology accommodation. Furthermore, the site is under the control of a single owner, therefore the delivery of floorspace on this site will be dependent upon their commercial strategies and objectives. The Leavesden aerodrome should not be relied upon as the only source of employment land in the District, as it has a long-term development time horizon for a specific sector of employment floorspace.

Kings Langley

- 6.69 Kings Langley has a large concentration of employment land for the size of the settlement. The town has a resident population of approximately 5,000 people, but accommodates 13.8 hectares which accounts for 15% of the District's employment

land. The bulk of the town lies within Dacorum borough, but the employment areas are in Three Rivers and are concentrated along Primrose Hill between the West Coast Mainline railway line and the Grand Union Canal

- 6.70 The employment areas in Kings Langley are the Happy Valley Industrial Estate, Kings Park, the CCS lorry-servicing depot on Primrose Hill, Home Park Industrial Estate and Junction Park on Bridge Road.
- 6.71 In qualitative terms, the best employment area in Kings Langley is the Home Park industrial estate on Home Park Road. The northern part of this estate is occupied by Imagination Technologies. The area to the south of Home Park Road is vacant, and was formerly occupied by AstraZeneca. The site is approximately 2 hectares and accommodates 93,000 square feet of warehouse and office floorspace. Home Park is one of the best employment locations in Three Rivers, as it has good strategic and local access to the M25. It also lies on the edge of the urban area of Kings Langley and is surrounded on two sides by open space and is therefore relatively unconstrained by neighbouring uses.
- 6.72 For distribution/warehousing uses, it is less attractive than Hemel Hempstead, which is the best and most commercially desirable location in South West Herts owing to its proximity to the M1/M25 junctions, which is seen as one of the most important industrial locations around the M25. The demand for such uses will therefore be focussed in Hemel rather than Kings Langley, which will influence the values that developers will attribute to this site. In terms of office uses, this site is close to Kings Langley station as well as the main highway network, it is also a reasonably prominent. A drawback, however, is that there are no other office uses in the vicinity, as this area is mainly an industrial employment area, so it not perceived as an office location. Furthermore, the current oversupply of office space elsewhere in the market means that it is unlikely to be developed for such uses until there is sufficient demand to justify it.
- 6.73 The Happy Valley/Kings Park estates and lorry-servicing depot on Primrose Hill are more constrained, being accessed via a rather narrow streets that are residential in character. However, these estates appear to be popular locations, with only one unit currently available. They are comprised mainly of small units of between 2,000 and 5,000 square feet that are ideally suited to the small business economy that make up the majority of companies in the District. This pattern of development should therefore be retained and encouraged by the planning system.
- 6.74 The Junction Park employment area is some distance from the main urban centres of South West Hertfordshire. It is located on the outskirts of the smaller settlement of Abbots Langley and is comprised of a vacant and disused office/business park complex and the Carlsberg distribution centre.
- 6.75 In locational terms, Junction Park is a suitable site for warehouse uses, such as the existing Carlsberg distribution centre. The site is located just off the A41 and is within a mile of junction 20 of the M25, furthermore it is on the edge of the urban area and therefore relatively unconstrained by surrounding residential uses, making it an acceptable location for distribution operations. However, as discussed above, the main demand for such uses in South West Herts is in the area to the north east of Hemel Hempstead, which occupies a pivotal position on the national highway network.
- 6.76 As an office location, the site does have good access to the M25 which provides linkages with the Thames Valley area and Heathrow Airport. The main drawback is that the site is some distance from the main urban centres of the sub-region. Unlike other semi-rural employment locations such as Maple Cross, this site is relatively small and is not close to other complementary office uses. The other sites in the District generally form part of a larger employment location, are within a large settlement or have surrounding complementary uses. Maple Cross

- 6.77 Maple Cross is an established employment area that accommodates a number of high quality headquarters office buildings. Maple Cross is a high profile employment area that accommodates national and regional head quarters office functions of a number of large multinational corporations, including Cadbury Schweppes, Nissan, Renault and Skanska, the latter occupying the new Zammatt office development.
- 6.78 There is a significant amount of undeveloped or under-used land within this employment area, including the land to the rear of the Cadbury's building (approximately 0.75 hectares), and the remainder of the former Skanska site to the south of the Zammatt building (1.7 hectares). It is also adjacent to the Maple Lodge former sewage treatment works, part of which may be suitable for development under Policy GB4 of the local plan, subject to the preparation of a planning brief. This could provide additional employment land to the district's existing land supply, but is in the greenbelt and is constrained by flooding problems and is affected by wildlife and conservation designations. Development is only likely to come forward in order to facilitate broader planning and conservation objectives for the area; consequently such development will need to be of high quality and value.
- 6.79 In qualitative terms, Maple Cross is a good quality employment location. It benefits from excellent strategic and local access, being less than a mile away from junction 17 of the M25. It is also a self-contained area that is largely separated from the adjacent residential areas of Maple Cross, other than the southernmost area of undeveloped land adjacent to the Zammatt building. While the area some distance from the main urban centres of Rickmansworth and Watford, Maple Cross is a coherent employment location with its own commercial identity. There are five large office buildings at Maple Cross (c. 80,000 square feet plus each) that accommodate a number of high profile occupiers, and this gives the area a degree of critical mass.
- 6.80 Given that the office market in general is currently depressed, with an over-supply of floorspace in both the town centre and out of town markets, the undeveloped land on this site is unlikely to come forward for office development in the immediate future unless demand is sufficient to justify it. Nevertheless, in qualitative terms, this is an attractive employment location, and there is no reason why it could not be redeveloped in the future, either for offices or light industrial uses. Furthermore, other than the greenfield Key Employment Site at Leavesden Aerodrome, it is the only area in the district where a significant supply of land is available for development.

South Oxhey

- 6.81 In qualitative terms, the poorest quality employment area in the District is the Carpender's Park employment area in South Oxhey. This is a small employment site located adjacent to Carpender's Park railway station and is occupied by a mixture of office and light industrial accommodation, a third of the site is under utilised, with the northern part of it largely disused.
- 6.82 This employment area is constrained by its location, being situated within a wholly residential area. Strategic and local access to the site is poor as the only means of access to the uses on the site is via residential streets, principally Carpenders Avenue. As a result, the area is isolated from the main commercial centres of Watford and Rickmansworth and lacks commercial prominence, making it a secondary employment location. It would be inappropriate to encourage significant commercial development on this site, bearing in mind the overwhelmingly residential character of the area, and we would expect there to be a limited market for commercial development here, although it may be a potential location for live/work units. It is, however, the only employment area in this part of the District providing a potential source of employment for local people, but it is difficult to determine whether the area employs people from the immediate vicinity. Unlike the rural parts of the District, South Oxhey functions as a suburb of Watford, residents of this area are therefore within a reasonable commuting distance of other sources of employment in the Watford area.

Rickmansworth Town Centre

- 6.83 In addition to employment land that has been specifically identified in the local plan, B1 employment uses are also accommodated in town centres. Rickmansworth is the main urban area within Three Rivers District, and according to the *ODPM Floorspace Statistics, November 2003*, the town accommodates approximately 47,000 square metres office floorspace, which accounts for approximately 26% of the District's office space. Approximately a third of the floorspace in the town is accommodated in three buildings; these are Comet House and Drake House on Homestead Road by the station and the District Council's offices at Three Rivers House. Otherwise, the main office location is the High Street, or in small units above shops. As discussed earlier in this report, there is currently an over-supply of office floorspace in the SW Herts market, both for town centre office space (e.g. Clarendon Road, Watford) and out of town business park locations. Nevertheless, it is important that the District should have a sufficient balance of office floorspace, both in terms of location and the size of units.
- 6.84 In Rickmansworth, there are currently approximately 3,000 square metres of office space on the market, accounting for 6.4% of the total stock in the town centre. This is made up largely of small units of between 50 and 200 square metres. The town centre office market in Rickmansworth is therefore relatively healthy, and there is little potential to release office accommodation to other uses. As already noted in the context of Hemel Hempstead, town centres make an important contribution to the overall diversity and mix of employment floorspace, particularly in the supply of small and medium sized office units. The town centre attracts a broad range of occupiers and is particularly suitable for professional services such as lawyers, accountants, surveyors and financial advisors. In sustainability terms, it is desirable that office functions be located in town centres with good access to public transport and other town centre facilities such as retail and leisure uses. It is therefore important that the supply of office space in the town centre is monitored to ensure that suitable floorspace, is not lost to other uses. Office accommodation should only be released to other uses where it is no longer suitable for employment uses and its redevelopment for such uses would not be commercially viable.

Conclusions

- 6.85 Our key conclusions and recommendations on Three Rivers are as follows.
- Most of the employment land in Three Rivers District is good quality.
 - The poorest quality employment area is Carpenders Park, but is the only employment site in that part of the District.
 - Otherwise, sites that are embedded within residential areas should be the first to be considered for release to other uses if a surplus is identified, and a criteria-based policy should be used to do this.
 - The Leavesden Aerodrome site should not be relied upon as the only source of employment land in the District, because it has a long-term development time horizon for a specific type of employment floorspace and its development and implementation are under the control of a single entity.
 - With regard to the Tolpits Lane area, the local environment of this employment area would be significantly enhanced if public transport facilities were improved, including improving linkages with the adjacent employment areas in Watford Business Park.
 - There is a reasonable supply of small and medium sized units in Tolpits Lane and this should be encouraged. Because this area is rather congested, with poorer strategic access (particularly relative to NE Watford, Hemel and Kings Langley) this area is less attractive to big shed developers, therefore the market will function to

provide the type of units that are in demand, and the planning system should support this.

- Any release of office floorspace in Rickmansworth town centre should be treated cautiously. Office accommodation should only be released to other uses where it is no longer suitable for employment uses and its redevelopment for such uses would not be commercially viable.

Watford

- 6.86 This assessment focuses on the employment areas that are identified in the Watford District Plan 2000, focusing particularly on Watford Business Park, Imperial Way, Cardiff Road and the Watford Junction regeneration area. We have also included the former Sun Chemicals factory on Cow Lane, which is not currently allocated for employment in the District Plan. This encompasses the majority of the land in the borough that is utilised for B employment uses. The assessment follows the same criteria-based grading approach as outlined for Dacorum.

Overview

- 6.87 Watford borough is faced with different pressures to the neighbouring administrative areas and in many ways is similar to a London Borough. Unlike the neighbouring administrative areas of Dacorum and Three Rivers, Watford is a wholly urban borough that does not have the potential to expand outside the confines of its administrative boundaries. Therefore, any growth must take place either through the recycling of existing developed land, the intensification and use of under-utilised land (e.g. railway sidings at Watford Junction) or through expansion in outside the borough, namely Three Rivers, which is the administrative area responsible for most of the Green Belt that surrounds Watford.
- 6.88 It is also important to note that some of Watford borough's employment provision is located outside the borough's boundaries. Office and industrial property markets do not follow administrative boundaries, but recognise locations on the basis of the overall settlement. Therefore, elements of the Watford market are actually within Three Rivers District and vice versa. For example, the local office market for Watford includes the Croxley Business Park, the Wolsey Business Park on Tolpits Lane and Leavesden Park. With regard to industrial markets, the Moor Park and Vale Industrial Park on Tolpits Lane is in Three Rivers. There is also an element of prime warehousing that lies within Hertsmeare District, in the Otterspool Way area.

Table 6.7 Qualitative Summary of Watford Employment Areas

	Total Employment Land	Good		Average		Poor	
	Area (ha)	Area (ha)	% in urban area	Area (ha)	% in urban area	Area (ha)	% in urban area
West Watford	44.4	-	-	34.9	28.2	9.5	7.7
North Watford	29.5	-	-	30.3	24.5	3.5	2.9
Central Watford	25.2	20.8	16.8	-	-	-	-
Imperial Way	24.8	24.8	20	-	-	-	-
TOTAL	123.8	45.6	36.8	65.2	52.7	13.0	10.5

Source: King Sturge, Herts CC

- 6.89 In qualitative terms, despite its position relative to the M25 and the M1, many of the employment areas in Watford suffer from relatively poor access, being embedded within an urban area on congested streets. As a result, the best industrial locations are

in the Imperial Way/Colonial Way area. The poorest location is the Cardiff Road area, although it is recognized that this part of the borough is earmarked for significant public sector investment that is likely to improve this area substantially.

- 6.90 By contrast, there is a significant oversupply of office floorspace in the borough, with a particular emphasis on the Clarendon Road area, where there is approximately 22,200 square metres of floorspace available on the market. Despite this, the Clarendon Road is an excellent office location benefiting from a high degree of accessibility, both in highway and public transport terms.

West Watford

- 6.91 West Watford accommodates the largest amount of employment land in terms, with approximately 44.4 hectares of land reserved for employment uses in this area. The employment areas in West Watford include the Watford Business Park, Cardiff Road and the Fisher's Industrial Estate.
- 6.92 The Watford Business Park is situated in South West Watford, and is part of a wider employment designation incorporating the Woodshots Meadow and Blackmoor Lane elements of the Croxley Business Park, the bulk of which lies within the adjoining Three Rivers District. The Local Plan designation also includes land that was formerly occupied by the Sun Printers factory, this site had lain vacant and unused for 10 years but is now being redeveloped for a mix of uses including 250 houses, a hotel, leisure uses and a Big Yellow storage warehouse.
- 6.93 The remaining land in employment use in this area is that contained within the Watford Business Park. The Business Park covers approximately 32.6 hectares and is centred on Greenhill Crescent and Caxton Way. Much of the Business Park is made up of old, outworn industrial and warehouse units, many of which are more than 50 years old. The older units have a high site coverage, designed before mass car ownership, and this has resulted in a congested appearance on much of the estate. There is evidence that old units have been recycled into new employment floorspace over the years. The most recent example is the Caxton Court warehouse development, 18,000 square feet of which is still on the market. There are also modern units such as the Enterprise Centre, which offers small (1,500 - 2,500 square foot) workshop units.
- 6.94 In terms of character, the business park is predominantly industrial, but some of the more recent examples of recycling include office development, for example Croxley Gateway and the Chess Building, both of which are currently on the market. There is also some old, outworn office accommodation on Faraday Close (e.g. Faraday House), which are ripe for redevelopment. There is currently a broad range of unit sizes on the estate, ranging from the 25 - 35,000 square foot units along Greenhill Crescent, to the 10,000 square foot units along Caxton Way, and the small start up units within the Enterprise Centre. The level of vacancy on the estate is in line with the average for Watford; those on the market in this area are mainly in the 7 - 10,000 square foot size bracket, including the new units at Caxton Court.
- 6.95 The Watford Business Park is an important element of the borough's employment land supply. The location itself is suitable for a full range of employment uses, being part of the wider concentration of employment land including the adjacent Croxley Business Park. The main draw back is that the park is on the wrong side of Watford, particularly from a warehousing and distribution perspective. Strategic access to the site is relatively poor as direct access to the motorways is rather convoluted and must be taken either through the congested streets of West Watford (out to the M1) or out via Rickmansworth if the destination is the M25/west.
- 6.96 As with the adjacent Croxley Business Park and the Tolpits Lane employment areas, access to the strategic highway network is more limited than other competing locations, being some distance from the motorway network making it less attractive, particularly to distribution occupiers, who will be attracted to other areas such as

Hemel Hempstead, or more locally at Kings Langley. However, this site is a self-contained employment area with a significant critical mass and is widely recognised as a major centre of employment uses. It is relatively unconstrained by neighbouring uses, although the Holywell housing area lies to the east of the estate, but is separated from the industrial area by open land originally reserved for the West Watford relief road, but is now designated for open space or community uses, this land represents a useful buffer between the housing and employment uses and should be retained for this purpose.

- 6.97 In terms of future strategy for the business park, the age of many of the buildings on the estate indicates that parts of it are ripe for redevelopment when they become vacant, and this should be encouraged by policy. As the estate is relatively high density, it is likely that redevelopment will result in less floorspace on many sites in order to allow sufficient on site parking and servicing. This means that there is likely to be a net loss of employment floorspace arising from the regeneration of this area, but this will be compensated for by improvements to the quality of the environment and a reduction in congestion on the estate. There is also potential in the long term to create linkages between the Watford Business Centre and neighbouring employment areas, such as the business area on Dwight Road/Tolpits Lane, either by a formal vehicular link, or simply improving cycling and pedestrian access to the surrounding residential estates. This would improve the access to the estate and could also facilitate enhancements to public transport services to this area.
- 6.98 Because the location of this employment area is less accessible to the Motorway than other areas, such as Imperial Way/Otterspool Way, the pressure for large shed development in this area will be less intense, providing the opportunity for land to be reused for the development of smaller units. Indeed the only large shed in this area, the Kenwood unit on Tolpits Lane, has been vacant for some time and the owners are now considering subdividing it into smaller units. The Watford Business Park should therefore continue to be identified as one of the main employment area in the borough; the market will function to provide the type of units that are in demand, and the planning system should support this.
- 6.99 The Cardiff Road area is currently the poorest quality employment area in Watford. The site comprises a collection of poor quality workshops and industrial units which can only be accessed via a narrow and congested residential street. There is currently significant conflict between the existing industrial uses and the adjacent residential properties, resulting in a low quality local environment.
- 6.100 Proposals are currently in the pipeline for a comprehensive regeneration programme for the area, involving the creation of a Health Campus associated with the Watford General Hospital and Watford AFC football ground at Vicarage Road. The access and environmental problems affecting the land identified within the E2 allocation are such that its redevelopment for employment uses will only be feasible if the new road access proposed under Policy T20 is implemented. This proposal would create a new access to the site over the railway line, separating commercial traffic from the residential streets..
- 6.101 With regard to industrial and distribution uses, the general highway access to the Cardiff Road area not ideal. The area is south of the town centre and embedded within the urban area without direct access to the strategic highway network. This means that it is the wrong side of Watford for many distribution functions as the site can only be reached via congested urban roads. It is therefore not ideally suited for large distribution uses. The most appropriate uses for the site will be light industrial, high tech and small warehouse units for suppliers serving local market/specialist sectors.
- 6.102 Furthermore, in terms of office development, this part of Watford is not a prime office location due to accessibility problems, the lack of commercial prominence and its

distance from the town centre. The main office locations in Watford are the town centre (Clarendon Road) or Croxley Business Park.

North Watford

- 6.103 Employment land in North Watford is located within the area identified as area E6 on the proposals map and at the former Sun Chemicals factory on Cow Lane, which is not currently allocated for a particular use in the Local Plan.
- 6.104 The E6 employment land allocation lies to the south of the A41 Colne Way, straddling the St Albans - Watford railway line and is surrounded on three sides by high-density housing. In accessibility terms, the employment area is close to the A41 and the M1, although is less well positioned in this respect than the Imperial Way area, which lies further to the south and has a more direct access to the main highway network. The main drawback of this area from an employment perspective is that it is embedded within a residential district. Access to all of the employment land in this area is via Bushey Mill Lane, which is a predominantly residential street and housing surrounds the individual industrial estates; there is therefore significant potential for conflict to arise from the use of the industrial estates and vehicles accessing them.
- 6.105 The core of this employment area is Greycaine Road, which is a high-density warehouse and industrial estate, accommodating a range of tenants including Booker, NTL and Parker Hanifin. It is comprised predominantly of older stock, dating from at least the 1950 and is occupied as small and medium sized terraced units of between 10 - 15,000 square feet. There are few examples of recent development on this estate, but the level of vacancy appears is in line with that of the borough as a whole. In physical terms, the Greycaine estate is a self-contained estate and it would be impractical to release parts of it to other uses, furthermore the level of vacancy on the estate does not indicate that it is redundant and ripe for redevelopment for other uses. This estate should therefore remain allocated for employment uses.
- 6.106 The other elements of the E6 employment area are more fragmentary than Greycaine and in physical terms would be more easily released for other uses without compromising the employment use of the remainder. For example, part of Odhams Trading Estate to the west of the railway line has been redeveloped for retail uses (Asda supermarket and petrol station) without affecting the employment uses on the southern part of the trading estate (occupied by Amertrans etc). Nevertheless, bearing in mind the site's good accessibility arising from its proximity to the A41, it remains a suitable location for employment uses and its release to other uses should be balanced against the current and future needs for employment floorspace. Our assessment of the current property market for example, indicates that there is a relatively healthy demand for industrial floorspace.
- 6.107 A poorer quality element of employment area E6 is the Sandown/Paramount Industrial Estate on Sandown Road. This a very high intensity land use, providing workshop accommodation in a 19th century multi storey factory/warehouse building. Consequently, there the provision of off street parking and servicing land is inadequate, resulting in severe congestion on the surrounding residential streets. This is detrimental to the amenity of those living nearby and also makes the employment area difficult to access for occupiers and businesses on the estate. This part of E6 may be suitable for live/work development, which could act as a buffer between the residential area and the railway line.
- 6.108 There is a significant area of employment land in the North Watford area that has not been specifically allocated for such uses in the Local Plan; this is the Sun Chemicals factory on Cow Lane, which has recently closed. The site provides approximately 2 hectares of land and lies to the north of the A41. In locational terms, this site is a reasonable quality location for employment uses. It has good strategic access, being located off the A41, with direct access to the M1. However, local access to the site via

Cow Lane is less favourable and this may inhibit the scale and density of employment development that could be accommodated on the site. Unlike some other employment areas in the borough, it is less constrained by neighbouring uses, being adjacent to a Sainsbury's supermarket and a waste recycling facility, although there is some housing opposite the site's northern boundary, on Cow Lane and Heronslea.

- 6.109 The main drawback with the Sun Chemicals site is that it is likely to be contaminated, bearing in mind its previous use as a chemical factory, and this will add to the cost of redevelopment. Furthermore, the existing buildings are unlikely to be reused, and the cost of their demolition is also likely to be high. This, coupled with the accessibility problem presented by Cow Lane, means that the development of the whole of this site for employment uses is unlikely to be practical. Nevertheless, bearing in mind the broader locational advantages of this site the first consideration for its redevelopment should be for mixed uses, including some employment, although this should be subject to the test of viability.

Imperial Way

- 6.110 The Imperial Way/Colonial Way employment area (E3 on the Proposals Map) represents the best quality general industrial/warehousing location in the borough. From an industrial and warehouse occupier perspective, this area is the most accessible of all the borough's employment areas, being located just off the A4008, which provides direct access to the M1. As with the majority of the employment areas in Watford, the area is bounded by residential uses, but the layout of the employment area, with Colonial Way providing its own dedicated estate road that is not shared with other, non commercial uses, means that overall, conflict between the commercial and residential uses in this area is minimized.
- 6.111 The Imperial Way/Colonial Way employment area is predominantly industrial and warehouse uses, although there are some examples of modern office development within the estate, most notably the Belfry development on Colonial Way, which is currently 50% occupied. The area is a well-established employment location comprising a mixture of older stock, some of which dates from the 1930's, together with 1980's developments and brand new industrial premises. The most recent industrial scheme in the area is Imperial Park, some of which remains un-developed. Indeed, the land at Imperial Park represents the only substantial employment land available for immediate development in the borough, although there is potential for older units within this area to be redeveloped.
- 6.112 In terms of a mix of units, Imperial Way/Colonial Way offers some of the larger warehouse units in the borough (20 - 30,000 square feet), although there are examples of smaller units, such as the Empire Centre, a development of 20 terraced units of 2 - 2,500 square feet, which are fully occupied. As discussed earlier, the Watford industrial market is different from neighbouring Hemel Hempstead in that it caters for smaller and medium sized occupiers and is less dominated by 'big shed' occupiers; indeed there are no sites in the borough that are capable of competing with Hemel Hempstead in this market; the recent development of a 200,000 square foot unit for Porcelanosa at Otterspool Way by Gazeley being the exception rather than the rule.
- 6.113 Imperial Way is suitable for the full range of employment uses, but is particularly suitable for medium sized distribution and manufacturing occupiers because of its location relative to the highway network. Overall, office premises are less attractive when surrounded by industrial uses; close proximity to industrial uses and their associated noise, vibrations, odours and visual intrusion, detracts from the quality of an office environment, making such locations less prestigious and high profile than dedicated office locations. Because of the particular benefits in terms of highway access and the relative shortage of locations of this nature in Watford, it should be retained predominantly for industrial uses. Office uses would be better located closer to the town centre or on the gateway to the employment area.

Central Watford

- 6.114 Employment land in Central Watford is located along Clarendon Road and Upton Road, and there is potential for additional employment land to be released around Watford Junction station
- 6.115 In qualitative terms, the employment areas in Central Watford are the best quality locations in the borough and are particularly suited to office uses. In particular, Clarendon Road and the Watford Junction area score highly with regard to sustainability, as they are highly accessible both to public transport, pedestrians and private cars. The land adjacent to Watford Junction has been earmarked for regeneration under policy RA6 of the Local Plan (which also encompasses employment areas E5a and E5b) and a development brief has been adopted outlining a masterplan for the site. Much of the proposal for the site involves land uses associated with the railway station, including an improved passenger car park, a bus interchange and new passenger facilities. It also includes plans for a new road that will link Colonial Way to St Albans Road, which is currently separated by the St Albans Abbey branch line. These proposals have the potential to release land that is currently under used to other uses, including employment uses.
- 6.116 This is a highly sustainable location and would be suitable to accommodate office uses, provided that access arrangements within the site are improved along the lines of those indicated in the masterplan. The current oversupply of office accommodation in Watford means that an office development here would be unlikely to come forward in the short to medium term. Indeed other developments such as Glasshouse on Exchange Road have been delayed due to the quantity of space on the market. However, the complex nature of the site and the need for substantial infrastructure improvements to take place to open it to development means that an office development could not practically commence for at least three or four years.
- 6.117 The Clarendon Road employment area is the main office location in Watford and has been the focus of considerable office redevelopment over the past few years. The area is highly sustainable in locational terms and its proximity to the town centre means that it is close to leisure and retail facilities, making it an attractive working environment. Although there is currently a substantial over supply of office space in Watford, and particularly on Clarendon Road where there is over 22,000 square metres of vacant space, this is largely a function of problems affecting the wider office market in the south east and does not necessarily mean that this situation will persist indefinitely. The market will need to be monitored to examine whether this oversupply proves to be a symptom of more fundamental problems.
- 6.118 A further office location identified in the Local Plan is the Upton Road area (E7b) situated to the west of Watford Town Centre. This area is outside the main retail centre and marks the area of transition from the town's commercial core and the surrounding residential areas of Watford. This employment area encompasses a large and prominent development site, the Glasshouse, which has planning permission for 65,000 square feet of office floorspace. The proximity of Upton Road to the town centre is a strength in sustainability terms but the ring road currently presents a barrier. The area should capitalise on its relationship to the town centre to make it a more attractive working environment. From an employment perspective, this area is most suited to office uses, however the current problems with the office market in Watford means that demand for office floorspace is depressed and office development in this area will not occur until this situation improves. If the over supply of office space proves to be a long term problem, then consideration may be given to a more mixed use approach in this area.

Conclusions

6.119 Our key conclusions and recommendations with respect to Watford are as follows.

- The borough currently has a constrained industrial/warehouse supply, and a shortage of good quality sites for development.
- The Sun Chemicals site should be specifically identified in the Local Development Framework to ensure that some employment uses are developed on the site in future, as part of a mixed-use regeneration scheme for the site. A development brief in the form of a supplementary planning document may be necessary to achieve this.
- Poor quality sites such as Sandown Road should be considered for release to other uses in the longer term. This site could be a suitable location for live/work units
- Improved access to Cardiff Road is essential to open the land for employment development. The most appropriate uses here will be light industrial, high tech and small warehouse units for suppliers serving local market/specialist sectors. This is not a prime office location, particularly in view of oversupply in the market.
- The re-cycling of sites in Watford Business Park should be encouraged by planning policy, but in a manner that will improve the quality of the environment on the business park. Redevelopment here is likely to lead to a reduction in floorspace due to current high density of development on the site. Any release of land elsewhere should take account of this.
- We would not recommend using site RA3 for employment, it currently acts as a natural buffer between Watford Business Park and adjacent housing.
- Clarendon Road should remain a core office location despite the current oversupply in this area, but the market should be monitored to determine whether oversupply becomes a persistent rather than cyclical problem.
- Upton Road should remain a core office location, but as with Clarendon Road, the market needs to be monitored and if the oversupply proves to be structural, then a mixed use approach should be taken to this area.
- Office uses should be considered as part of the Watford Junction regeneration programme. This area has the potential to release some land for employment uses in the medium term, therefore current market conditions may be different when this land becomes available.
- Linkages between Watford Business Park and Tolpits Lane area should be improved.

7 LIVE/WORK SPACE

- 7.1 The Inspector's Report on the Dacorum Draft Local Plan (September 2002) recommends that Dacorum Council consider the benefits of live/work space, the demand for it and what might be appropriate locations for it in Dacorum.
- 7.2 As part of this study, we have briefly reviewed the readily available evidence which could assist Dacorum in considering these issues. As will be clear from the summary below, there is no conclusive evidence either that there is potential demand for live/work accommodation in Dacorum or that encouraging its provision would bring significant benefits to the borough.

Live/work Space in the UK

- 7.3 Live/work space describes a new hybrid form of mixed development that combines business and domestic functions within a single self-contained unit.
- 7.4 The amount of live/work space in the UK has grown over the past decade and continues to grow as advances in technology and new working practices of the new economy lead more people to opt to work from home, according to *Sunday Business* (May 2004)²⁹. In the UK, the share of the working population working at or mainly from home has risen from 5 percent in 1991 to 9 percent in 2001. Similarly in Dacorum the share doubled from 5 percent in 1991 to 10 percent in 2001³⁰.
- 7.5 Demand for live/work units was previously concentrated in inner London, however the number of units is growing around the UK³¹. Information regarding the numbers, size and success of live/work schemes in the UK is diffuse. To tackle this key issue the *Live/work Network* was launched in October 2003 as the first information service in the UK to support live/work developments and collate information on live/work schemes in the UK. A number of live/work schemes have been concluded in the UK. For example a massive 900 live/work units were built since the mid-1990s in Hackney, London³². There are also large live/work schemes Birmingham and Manchester³³.
- 7.6 The majority of live/work schemes in the UK are still in the planning and development stage. Schemes vary significantly in size. For example OneSE8 in Deptford London will feature 75 formal live/work units; 55 units are planned in a disused jam factory in Bermondsey, London; 25 live/work units in Kensal Green Northwest London. Outside London planned live/work schemes include 24 units in Barry, Wales supported by the Welsh development agency; 200 waterfront units in Poole, Dorset; 50 units in an old radio factory site in rural Malmesbury, Wiltshire and a similar number in an old village brickworks in Napton near Stratford upon Avon. Dacorum has only received one application for live/work units. The majority of live/work schemes are undertaken in disused premises.
- 7.7 Demand for live/work units generally arises from three main groups³⁴:
- Small-scale, 'clean' commercial activities.
 - Small businesses with relatively low financial resources and tight profit margins. Currently the price of live/work units are up to 15 percent lower than that of a

²⁹ Sunday Business, Increasing Numbers of London Property Buyers Want Live/work Space, 19 May 2004

³⁰ Data from Census 1991 and 2001

³¹ Sunday Business, 19 May 2004, op. cit

³² David Spittles, Working to save our Home, Evening Standard 29 April 2004

³³ Sunday Business, 19 May 2004, op. cit

³⁴ Patrick Hayes and Tim Dwelly, Living in the Office Regeneration and Renewal, 16 April 2004

conventional home since land values are lower³⁵. Cost reductions also incur from lower travelling costs.

- Those in creative/cultural occupations such as freelance writers, architects, artists and craftsmen; thus demand has depended on the existence of a creative and cultural sector. The reason why demand is generally generated from this sector is because creative and cultural activities gain a real advantage from the ability to work whenever they muse. Live/work accommodation is also particularly attractive to disabled people with problems travelling to work.

Live/work in Hertfordshire

7.8 In Hertfordshire there has been a low presence of live/work developments. Our investigation unearthed no live/work schemes in Dacorum. Other areas in Hertfordshire have experience of 'potential' developments, including:

- Watford Council approved of what is thought to be the first live/work units in Watford in April 2003. The development, comprising six live/work units and 18 residential units, is part of an attempt to transform a run down site on Whippendell Road³⁶.
- In November 2002, EP submitted a framework for the development of the Breakspear Way site in Hemel Hempstead to include the development of live/work units. However, Dacorum Council decided to accept the Inspector's Report and Breakspear Way is now allocated for B2 and B8 uses only.
- East Herts Council provided planning permission for the conversion of an estates office into two live work units in October 2003. Also in 2003, following a public inquiry, six live/work units were approved at Crane Mead, Ware but the developer then chose to reallocate the land for affordable housing. It is speculated that this was due to lack of interest for live/work units in the area.³⁷
- St Albans District Council recently rejected a planning application for the conversion of existing building at Turners Hall Farm to form two live/work units and office space.

Planning Policy

7.9 There is currently no national or regional planning guidance on the definition, control, budget or support of live/work spaces. However central government is showing a greater interest in how live/work units may be integrated into the sustainable communities, mixed-use development and affordable housing strategies.

7.10 The *Live/work Network*³⁸ suggests that live/work units may contribute to the sustainable development agenda since:

- Transport and commuting costs are reduced thereby a reduction in environmental emissions is also expected.
- The live/work units are an effective way of breathing life back into urban centres through regeneration and urban renewal. Expected benefits include generation of employment, use of vacant/ disused properties and providing areas with new residents who spend most of their time in the area. This is likely to have an impact on the local economy as well as safety and crime.

³⁵ Sunday Business, 19 May 2004, op. cit

³⁶ The Watford Observer, First Live/work Flats Win Approval, 10 April 2003
http://www.watfordobserver.co.uk/homes/planningapplication/display.var.288296.0.first_livework_flats_win_approval

³⁷ Interview with planning officer, East Herts Council, December 2004

³⁸ <http://www.liveworknet.com/modules.php>

- They may make better use of scarce resources through the combination of two properties in one. This form of mixed-use may promote the efficient use of land through improved densities.
 - Finally, live/work units may generate opportunities for the creation of local business clusters and networks.
- 7.11 Few local authorities have drawn up policies on live /work space. Where there are such policies, they tend to focus heavily on conditions and requirements such as minimum percentage of floor space for the whole unit and employment use share; parking and loading standards. Appendix 4 contains examples of the live/work policies of Islington Council and Waltham Forest Council as well as an example of a planning guidance produced for a live/work planning application in Bermondsey, London.
- 7.12 The lack of clear policy guidance regarding live/work units in local plans and Unitary Development Plans has created a number of practical problems.
- For example, Hackney Council has argued that its live/work policies are being undermined since a number of live/work schemes have been allowed on appeal³⁹. The live/work policy contained in the Supplementary Planning Guidance (SPG) for the borough has been revoked as a live/work enforcement investigation found that a number of live/work units are being used purely for residential purposes. The Council suspects that the numbers of live/work units being used to abuse planning rules and mask the building of residential units on employment land, are far more significant than the cases the enforcement team are aware of. 11 schemes are being targeted and 274 Planning Contravention Notices have been issued. Hackney Council has commissioned a study (December 2004) to review the implementation of the Council's live/work policy and to amend their live/work SPG. Other London Councils, including Islington and Tower Hamlets, are hoping that the results of this study will help them resolve problems with their live/work policies.
 - The advantage of higher densities is not always true for the residential element, because live/work units have fewer residential units than a pure residential scheme on the same space.

Options for Dacorum

- 7.13 Live/work spaces are only a small specialist aspect of employment land policy and not an alternative for all employment uses. They do offer alternatives to fully residential developments in areas where large employment space is no longer required.
- 7.14 If the Dacorum LDF were to include a policy to permit live/work development in certain circumstances, the policy would need to include conditions and restrictions for live/work developments. See for example the live/work policies of Islington Council and Waltham Forest Council in Appendix 4.
- 7.15 Two alternative approaches have been taken by other local authorities, and each has been upheld on appeal. These are to treat live/work units as:
- Two separate activities, with the housing element falling under C class, and the business element under B class, with the respective controls. The planning authority would then monitor from time to time that this is being abided by. If not they can start enforcement action.
 - Sui generis, to be treated as a single planning unit and not falling into either business or residential classes, but treated on a case-by-case basis.
- 7.16 The evidence on potential future demand for live/work units in Dacorum is inconclusive. It is too early to tell whether live/work developments in the borough would

³⁹ Hackney Council, Planning Update, 22/03/04.

be a success, since most live/work units only exist in big cities and are only in the planning stage in rural areas.

- 7.17 If live/work units were provided, the most suitable locations would probably be old industrial buildings which are no longer suitable for their original use and are not close to incompatible land uses such as bad neighbour or heavy industry. Possible locations in Dacorum are the Nash Mills site (if and when its existing use ceases) and one of the smaller employment areas in Tring, such as Akeman and Brook Street.
- 7.18 There is a danger that, if live/work units are provided by commercial developers, they will be used as a cover for live/live units. This danger might be averted if the space was provided by Housing Associations through tenancies or shared ownership deals. Housing Associations are more likely to monitor and comply with planning agreements, which would help move the burden of monitoring use away from the planning authority.

8 CONCLUSIONS

Policy Objectives

- 8.1 Our analysis of broad economic trends suggests that, measured against national and regional standards, the sub-regional and local economies of SW Herts have no major disadvantages or deficiencies that employment land policy should aim to rectify. One possible exception is the level of out-commuting, especially from Three Rivers, which you may aim to reduce.
- 8.2 Overall, the analysis suggests that the objectives of employment land policy should focus on preserving and enhancing existing advantages, and making the most of future opportunities, rather than correcting disadvantage. More specifically, and in the context of the emerging regional strategy, the Councils might consider setting out three broad objectives:
- i) To contribute to the growth of population, output and employment in the East of England as required by the Regional Economic Strategy;
 - ii) To maximize the current and future economic well-being of the area's residents, so far as is compatible with environmental quality and sustainability objectives;
 - iii) To maintain or reduce the length of residents' travel-to-work trips, especially those made by car.

Offices v Industry

- 8.3 In planning for employment land, it is important to distinguish between industrial/warehousing space and offices. Not only do these different land uses have different location requirements, they also occupy land at vastly different densities. The large and continuing shift of employment from industrial space to offices is producing large and continuing intensification of uses, or spaceless growth, which is a main driver of the future land requirements forecast in this study.
- 8.4 Before summarising our findings on demand and supply and drawing the policy implications, we need to point out an apparent contradiction between our analysis of local economies and property markets (Chapter 3-4) and the demand forecasts in Chapter 5:
- Both history and economic forecasts show steady long-term decline in industrial employment, and the space occupied by industry, while conversely office employment and office space expand.
 - In contrast, in the current market offices are oversupplied, with a recent history of falling rents and high availability of both built floorspace and development sites. Conversely, in the industrial/warehousing sector the property market appears balanced or tight, and the market for land is definitely tight, with very limited availability of development sites.
- 8.5 One possible explanation is that, while demand for industrial space has been falling, supply has been falling even faster, perhaps fuelled by commercial pressures to transfer land to higher-value uses. If SW Herts is to provide enough employment land to meet the economic objectives of the RSS, then these pressures will need to be contained in future, to avoid employment uses being forced out or priced out of the area.
- 8.6 Another factor is the condition of the national and regional property markets. We have seen that property forecasters generally consider the current office slump to be a manifestation of the property cycle, and expect growth to resume in the near future. Other commentators, however, argue that the office market is undergoing a

fundamental and far-reaching change, with demand permanently lowered because of new working practices and corporate strategies to save space and money.

- 8.7 In our view, this 'end of the office' view is not supported by the available evidence so far, and it would be imprudent to make any recommendations based on it. Therefore our demand calculations are based on traditional economic forecasting and constant employment densities. It is possible of course that we are wrong, and office demand is in fact undergoing a major downward shift, future monitoring will indicate and policies for SW Herts - along with most other parts of the country - will have to be radically reviewed.

The Quantity of Employment Land

Quantitative Guidelines

- 8.8 Based on employment targets in the draft Regional Spatial Strategy, we recommend that the Councils adopt quantitative guidelines for employment land. These guidelines should set out land requirements for 2001-21 based on Policy E2 in the draft RSS. For SW Herts as a whole, we estimate these requirements (including the safety margin provided to cover choice and uncertainty) as follows:

Net Change in Floorspace Capacity, 2001-21, sq m

Industrial/warehousing space	-157,000
Offices	+286,000
Total business space	+129,000

- 8.9 Site-specific policies and decisions should collectively fit within these quantitative guidelines, which of course should be kept under review and will need to change if the regional strategy changes (see Chapter 5 and Appendix 6 for alternative scenarios and time periods).
- 8.10 To see how much land should be added to the planned supply, or alternatively could be released for other uses, we have compared this requirement with the identified planned supply (which, as explained in Chapter 5, includes change which has occurred since 2001, current planning commitments at 2004, plus an adjustment for vacant floorspace).
- 8.11 For industrial/warehousing space, our analysis suggests that::
- In SW Herts as a whole, the RSS scenario shows a small oversupply of 90,000 sq m, 7% of the floorspace stock, to 2021. In effect, if these figures are correct, the market at sub-regional level is almost in balance over the planning period.
 - As noted earlier, if each District is considered in isolation, the figures suggest that Dacorum and Watford could lose small amounts of industrial land while still meeting demand, while Three Rivers cannot afford to lose any land at all. In practice, we need to bear in mind that the three areas, and especially Watford and Three Rivers, are physically close and draw on overlapping labour catchments. Thus, losses in one District could be compensated by gains in another.
 - How far gains in Watford, for example, can compensate losses in Three Rivers, will depend on the micro-location and character of individual sites. To meet footloose demand displaced from Three Rivers, Watford ideally should provide space in the west of its area, close to the borough boundary, and small-scale accommodation that suits the profile of industrial occupiers in Three Rivers.
- 8.12 The broad implication from the figures is that, if it is to meet the forecast requirement to 2021, SW Herts in net terms can afford to lose only little of its industrial/warehousing capacity over and above existing commitments. In contrast to recent years, which have seen substantial losses of industrial land, in future any significant capacity lost to other

uses should be replaced, whether by identifying more land or by intensification at existing sites.

8.13 In the office market:

- Based on the RSS scenario, we estimate a future oversupply of 166,000 sq m, 20% of the floorspace stock. This reflects oversupplies in all three Districts, of which by far the largest is in Three Rivers.
- But the sub-regional surplus is due to the major development sites at Spencers Park (Three Cherry Trees Lane) and Leavesden, which for different reasons may not come forward for offices within the planning period.
- Without Spencers Park and Leavesden, the RSS scenario shows the sub-regional office market almost in balance overall, with some undersupply in Dacorum counter-balanced by oversupply in the other two Districts.

8.14 Some of the demand for office space is likely to be footloose across borough boundaries. Therefore, depending on the micro-location and qualitative features of sites gained and lost, these local mismatches may not make any difference to total employment and output across the sub-region.

Safeguarding and Replacing Land

8.15 Our calculations on the balance of demand and supply relate to net change - the space gained to business uses through new development less any space lost to other uses, for example where industrial sites are redeveloped for housing. If there are such losses in future, over and above the planning commitments we have discussed, the requirements estimated earlier will increase to compensate for these losses.

8.16 Even in the industrial/warehousing sector, where demand is falling, the analysis suggests that it is falling quite slowly - with a reduction of 15% over 15 years in SW Herts as a whole. It follows that, if estimated requirements are to be fulfilled, the bulk of the existing floorspace should be either retained or replaced. A key task of the planning system will be the management of existing employment sites and areas, to ensure that enough land is protected from the pressure of higher-value uses and to facilitate the renewal or replacement of space which becomes obsolete.

8.17 This task will be especially important in relation to small secondary sites, start-up accommodation and low-value or bad-neighbour uses, where the market cannot necessarily be relied upon to deliver redevelopment. The Councils may consider using planning obligations to support the development of such space, using some of the financial gains produced by the switch of employment land to housing or mixed use, as discussed in more detail in the next section.

Specific Sites and Areas

8.18 To help inform planning decisions on individual sites and areas, our qualitative review of employment areas provides the following advice and observations.

Dacorum

- The only new land identified specifically for B1 development in the borough is the Spencers Park site at Three Cherry Trees Lane, which is allocated specifically for Specialised Technological Activities. Development opportunities for new employment uses such as distribution or general offices will arise largely from the recycling of existing employment land.
- The North East Hemel Hempstead employment areas are good quality employment areas in accessibility terms but it will be necessary to address the congestion problems and the reliance on the private car, particularly if the usage of the area is to be intensified. There are over 60,000 square metres of office

floorspace with planning permission at the Peoplebuilding site, and the Key Employment Site of Spencers Park at Three Cherry Trees Lane could add a further 66,400 square metres of floorspace to the area in the long term. It will be important to ensure that there is sufficient capacity in the local highway network to accommodate this level of development and if not, a strategy should be developed to address the resulting bottlenecks. The Borough Council is addressing some of these problems and the Local Plan contains a number of transport proposals (T4, T5, T6 and T7).

- Ancillary facilities in North East Hemel Hempstead are currently inadequate for the size of the daytime population. There are no meaningful retail outlets in the area and restaurants are mainly on-site cafeterias. The leisure offer has improved recently with the opening of Esporta at Peoplebuilding but there is no centre or focus for the area and people working in the area are likely to travel elsewhere during the day for food, leisure and convenience retail. North East Hemel Hempstead is a major employment location in the South East but operates in a competitive market. Whilst the area undoubtedly has advantages particularly for the distribution sector, office occupiers will be more footloose. It is important to consider what makes North East Hemel Hempstead special as place to work and do business. At present, it lacks social amenities and this affects its overall attractiveness as an employment location.
- The policy strategy in the current Local Plan, which seeks to differentiate the office and industrial/distribution uses, is sensible both in planning and market terms. From an occupational perspective, office accommodation is more attractive where it is not surrounded by heavy industrial uses that generate noise, vibration, odours and visual intrusion. Furthermore, prestige office space needs a strong image and identity, and is better suited to 'gateway' locations, rather than being reached via roads that are largely industrial in character.
 - Doolittle Meadows is a Core Office Location that is some distance from the main urban centre, although the site does have good public transport links, being close to Apsley Station. Its proximity to residential uses means that it is not suitable for general industrial or warehousing uses.
 - The Apsley Industrial Estate is an average quality employment site, suitable for a range of small-scale light and general industrial uses. Strategic access to the site is poor. However the site is relatively unconstrained by adjoining uses.
 - Nash Mills is an established employment site located alongside the River Gade for historic reasons. It is located in a sensitive environment and the costs of any future redevelopment are likely to be high.
 - The Major Developed Sites in the Green Belt should be retained in their existing uses. Bourne End Mills is suitable for a range of industrial and warehousing uses; it is actively used, providing a good location for a range of engineering, metal works and accident repair companies without conflicting with neighbouring uses. The Bovingdon Brickworks is an established use in the Green Belt and should remain an allocated employment site, but this should be reviewed should this site ever become vacant.
 - Hemel Hempstead town centre is a valuable source of office supply and the balance between in-town and out-of-town provision should be maintained. Office supply in Hemel Hempstead town centre needs to be monitored. Office accommodation should only be considered for release to other uses or mixed use where it is no longer suitable for employment uses and its redevelopment for such uses would not be commercially viable.
 - There is the potential for the Council to consider relocating the STA/science park site from Spencer's Park to the Hemel Gateway site. Hemel Gateway has superior

prominence and access, a better environment and could provide economies of scale not available at Spencers Park.

Three Rivers

- Most of the employment land in Three Rivers District is good quality.
- The poorest quality employment area is Carpenders Park, but is the only employment site in that part of the District.
- Otherwise, sites that are embedded within residential areas should be the first to be considered for release to other uses if a surplus is identified, and a criteria-based policy should be used to do this.
- The Leavesden Aerodrome site should not be relied upon as the only source of employment land in the District, because it has a long-term development time horizon for a specific type of employment floorspace and its development and implementation are under the control of a single entity.
- With regard to the Tolpits Lane area, the local environment of this employment area would be significantly enhanced if public transport facilities were improved, including improving linkages with the adjacent employment areas in Watford Business Park.
- There is a reasonable supply of small and medium sized units in Tolpits Lane and this should be encouraged. Because this area is rather congested, with poorer strategic access (particularly relative to NE Watford, Hemel and Kings Langley) this area is less attractive to big shed developers, therefore the market will function to provide the type of units that are in demand, and the planning system should support this.
- Any release of office floorspace in Rickmansworth town centre should be treated cautiously. Office accommodation should only be released to other uses where it is no longer suitable for employment uses and its redevelopment for such uses would not be commercially viable.

Watford

- The borough currently has a constrained industrial/warehouse supply, and a shortage of good quality sites for development.
- The Sun Chemicals site should be specifically identified in the Local Development Framework to ensure that some employment uses are developed on the site in future, as part of a mixed-use regeneration scheme for the site. A development brief in the form of a supplementary planning document may be necessary to achieve this.
- Poor quality sites such as Sandown Road should be considered for release to other uses in the longer term. This site could be a suitable location for live/work units
- Improved access to Cardiff Road is essential to open the land for employment development. The most appropriate uses here will be light industrial, high tech and small warehouse units for suppliers serving local market/specialist sectors. This is not a prime office location, particularly in view of oversupply in the market.
- The re-cycling of sites in Watford Business Park should be encouraged by planning policy, but in a manner that will improve the quality of the environment on the business park. Redevelopment here is likely to lead to a reduction in floorspace due to current high density of development on the site. Any release of land elsewhere should take account of this.

- We would not recommend using site RA3 for employment; it currently acts as a natural buffer between Watford Business Park and adjacent housing.
- Clarendon Road should remain a core office location despite the current oversupply in this area, but the market should be monitored to determine whether oversupply becomes a persistent rather than cyclical problem.
- Upton Road should remain a core office location, but as with Clarendon Road, the market needs to be monitored and if the oversupply proves to be structural, then a mixed use approach should be taken to this area.
- Office uses should be considered as part of the Watford Junction regeneration programme. This area has the potential to release some land for employment uses in the medium term, therefore current market conditions may be different when this land becomes available.
- Linkages between Watford Business Park and Tolpits Lane area should be improved.

Criteria

- 8.19 Development plan documents should also provide more general guidance, to cover sites which are too small to be identified individually. To help decide which sites should be retained, which should be released for other uses and which are suitable for mixed use, future development plans should provide formal criteria. Key criteria should include the factors covered by our qualitative site assessment, which are strategic access, local access, general location, external environment, internal environment and current vacancy rates.
- 8.20 The Councils should also consider commercial viability criteria. Planning Policy Guidance (PPG)3, both in its current form and proposed revisions, requires that vacant employment sites be considered for release if they do not have realistic prospects of being developed as such within the period of development plans. In practice, a site whose development is not financially viable of course will generally not have realistic prospects of development.
- 8.21 This provision could make it difficult to conform to the draft RSS, which is driven by employment growth targets rather than financial viability, and furthermore covers a much longer period than local development documents. As a matter of practical feasibility, mixed-use development in many cases may be the most effective way to deliver the employment capacity required by RSS targets.
- 8.22 Where commercial viability is a criterion in the decision to safeguard or release sites, this viability should not be judged on the basis of current rental values and market conditions alone. Indicative appraisals need to consider how far development is likely to be viable in future, given the increases in rents and reductions in void periods that are expected in coming years.
- 8.23 Finally, policy criteria should reflect the pressure of demand for small units both in the industrial and office markets. We cannot be sure that this will continue throughout the planning period. But certainly in the short to medium term, if demand is to be met, it will be especially important to protect and promote those sites that can provide small to medium units.

Value Capture

- 8.24 The three authorities in SW Herts have a policy approach which either protects sites for employment use or allows them to be developed for another use. The relative value of residential and commercial development is, all other things being equal, heavily weighted towards residential use. So, where a landowner of an employment sites has the choice between upgrading/redeveloping their employment site for employment or

switching to a housing use, the latter will nearly always be preferred. The overall effect of this is that, over time, employment space on non-protected sites gradually ages, is not renewed and becomes unsuited to modern business requirements. It is then ready for a switch of use and the policy approach becomes self-fulfilling.

- 8.25 We suggest that the SW Herts authorities consider an alternative policy approach, which encourages investment in employment space and which helps maintain the quality and modernity of the stock of employment space, especially supporting the provision of specialist accommodation for very small and new firms, which the market typically cannot provide, or not in sufficient quantities.
- 8.26 Employment sites should not be allowed to switch to residential development without consideration being given to redevelopment of part of the site for employment use.
- 8.27 The idea of mixed-use development on employment land is not new, and many authorities seek mixed-use schemes which allow the redevelopment of employment land for a range of development types, the exact mix of uses depending on local requirement and site circumstances. But we suggest the SW Herts authorities should go a little further and make it a requirement of a mixed use option on particular sites, that a certain amount of employment space be provided. The amount and type of new employment space provided should meet identified gaps in the (local) market for employment space. This would point to the need for smaller workshop and incubator type units, either for start up or 'second stage' businesses.
- 8.28 Such a mixed-use approach would need to be strengthened by an accompanying S106 agreement which ensured that the employment space was delivered at a particular time in the redevelopment of the site e.g. before the Nth house was occupied. This would be akin to S106 agreements for mixed tenure residential schemes which specify when the affordable housing is to be delivered.
- 8.29 The onus could be on the developer to provide the employment space themselves or they could simply be obliged to provide a serviced site for employment space and let the market take over. In either case, it would be important to ensure that the scheme was viable and development was not hampered by a too onerous planning obligation. This would partly depend on the amount and type of employment space required and the amount and type of housing included.
- 8.30 Sites where such a mixed-use approach would be useful need to be carefully selected. They could be specifically identified in forthcoming local plan reviews or a criterion-based approach. Such criteria could include:
- The availability of other employment land in the settlement (about which this report gives more guidance);
 - The suitability of the site for continuing employment use (especially for workshop/incubator units);
 - The suitability of the site for residential use;
 - The suitability of the site for mixed residential and employment use;
 - Development viability and practicalities.
- 8.31 Where residential and employment use would be incompatible, the authority could consider taking a financial contribution to help provide employment space elsewhere.
- 8.32 These ideas on the re-use of employment land are not, in our experience, in widespread use, with few existing examples of similar approaches in practice. One example we have identified is in South Lakeland⁴⁰. Here, permission was granted for the conversion of office premises to residential and commercial use, despite going

⁴⁰ Ecotec with Roger Tym & Partners for ODPM, Planning for Economic Development, 2004

against the authority's policy of protecting existing employment uses. The accompanying S106 agreement required the developer to contribute to an Employment Investment Fund set up by the Council.

- 8.33 A different approach, but following similar principles, has been adopted by the London Borough of Hammersmith and Fulham. This only allows the re-development of vacant non-residential sites and buildings, (which would otherwise be retained and are not in an employment zone or town centre) for 'permanently available affordable housing'.⁴¹
- 8.34 We have not been asked to consider the Councils' housing requirements and the need for affordable housing but would imagine that it is large. Some variant on the Hammersmith and Fulham approach (if not for 100% affordable housing, then delivering a high proportion of affordable housing) may be another option which needs to be considered.
- 8.35 All the above ideas require further development and testing. However, the principles we have set out could form the basis for a more flexible and creative use of apparently redundant employment sites to help achieve a range of objectives, both directly relating to employment needs and possibly contributing to other corporate objectives e.g. the provision of affordable housing.

A Sub-Regional Approach

- 8.36 The three local planning authorities in SW Herts (reflecting county and regional guidance) all have similar objectives, yet each of the local authorities takes its own view on how this is to be achieved and looks for balance within its own administrative boundaries. This shapes the decision by each on the amount of employment land required by each and how this translates into policies to protect this supply. Our study may cause the numbers to be revised but this will still be within the current separated approach.
- 8.37 But employment markets and labour supply are flexible and mobile and pay little heed to local authority boundaries. There are good reasons for the SW Herts authorities to take a sub-regional approach to employment space which focuses employment growth in those locations which are best for the sub-region and allows sites to switch to other uses in the light of sub-regional needs.
- 8.38 If a sub-regional approach to employment space were to be pursued, it would need to be mirrored by a sub regional approach to labour supply and hence housing supply. If, for employment reasons, one authority allows more employment sites to be switched to residential development, then this authority would be contributing a higher proportion of housing supply to the sub regional requirement. In a study such as ours, we can only look at the task in front of us - employment space requirements. But the work could be used as a first step in developing a sub regional approach to labour market balance as well.

Plan, Monitor and Manage

- 8.39 As is well known, forecasts are uncertain and often wrong. Nevertheless, we must use them because no other tools are available to help you plan for the long term - which you are required to do by national and regional guidance. There is another, and less obvious, difficulty in planning for the long term: while forecasts and Plan periods have a definite end data (2021 in the present case), in reality time will not end abruptly at that date. Good planning has to take account of both the near and the far future, in different ways and with different degrees of precision, with no hard and fast dividing lines between distinct periods.

⁴¹ LB Hammersmith and Fulham, Unitary Development Plan, 2003, Policy HO5

- 8.40 The best way to deal with these difficulties of course is to Plan, Monitor and Manage. In this approach, analysis and forecasting and the resulting policies are periodically reviewed and rolled forward. Policy is always based on the best knowledge available at the time, and the end of the planning period is never reached or even approached closely.
- 8.41 In this spirit, the councils should consider the following approach to monitoring and review of employment land polices:
- A review of employment forecasts and the resulting demand forecasts at 3-5 year intervals and when there are major step changes in the economy or strategic guidance.
 - Continuous monitoring of key economic data, especially employment change by sector;
 - Continuous monitoring of demand, supply and market balance, covering:
 - Development completions (land demand) and commitments (land supply), focusing on net floorspace change (both negative and positive), and if possible splitting the B1 class into offices and light industrial sites;
 - Vacancy rates (both for land and floorspace), rentals and land values in the local authority compared to competing areas, which provide a direct measure of the balance;
 - Insofar as possible, business relocations and expansions into and out of the local authority, together with enquiries for business space.
- 8.42 To keep up to date on qualitative issues, the Councils should also consider an annual workshop or forum on Space for Business, where the property industry and occupiers can share information and opinions with the Councils and other public sector stakeholders.

APPENDIX 1

ECONOMIC SECTORS AND BUSINESS SPACE

Industrial Sectors	SIC (1992)	Activities
Manufacturing	15.11-37.20 (ex publishing, 22.11-22.15)	<ul style="list-style-type: none"> ▪ Includes all manufacturing, including recycling, but excludes publishing)
Some construction	45.33-45.45	<ul style="list-style-type: none"> ▪ Plumbing ▪ Other building installation ▪ Plastering ▪ Joinery installation ▪ Floor and wall covering ▪ Painting and glazing ▪ Other building completion
Motor vehicle activities	50.20, 50.40	<ul style="list-style-type: none"> ▪ Maintenance and repair of motor vehicles ▪ Sale, maintenance and repair of motor cycles and related parts and accessories
Sewage and refuse disposal	90.00	<ul style="list-style-type: none"> ▪ Sewage and refuse disposal, ▪ Sanitation and similar activities.
Warehousing Sectors	SIC (1992)	Activities
Wholesale	51.11-51.70	<ul style="list-style-type: none"> ▪ Wholesale on a fee contract basis ▪ Wholesale of goods
Freight transport by road	60.24	
Cargo handling	63.11	
Storage and Warehousing	63.12	
Other supporting land transport activities	63.21	
Post and courier activities	64.11-64.12	
Office Sectors (including R&D)	SIC (1992)	Activities
Financial and business services	65-67, 70-74	<ul style="list-style-type: none"> ▪ Financial intermediation etc ▪ Insurance and pension funding ▪ Activities auxiliaries to financial intermediation ▪ Real estate activities ▪ Renting machinery, equipment etc ▪ Computing and related activities ▪ Research and Development ▪ Other business activities
Publishing	22.1	
Administration of the State and the economic and social policy of the community	75.1	<ul style="list-style-type: none"> ▪ General (overall) public service activities ▪ Regulation of the activities of agencies that provide health care, education, cultural services and ▪ other social services excluding social security ▪ Regulation of and contribution to more efficient operation of business ▪ Supporting service activities for the government as a whole

APPENDIX 2

Stakeholder Seminar Notes

SW HERTS EMPLOYMENT FLOORSPACE STUDY SEMINAR NOTES - 16 JULY 2004

BELOW ARE COMMENTS MADE BY STAKEHOLDERS ATTENDING THE SEMINAR AND RECORDED BY THE CONSULTANTS. THEY DO NOT NECESSARILY REPRESENT THE VIEWS OF THE CONSULTANTS

Key issues include:

- Dacorum: will they be able to develop more offices; is there too much office space?
- Watford: is there enough employment land and of the right type?
- Three Rivers: loss of employment land to housing.

Offices and industry are always going to need locational advantages to attract occupiers. Therefore need to secure suitable sites for development.

Attracting occupiers to out of town employment areas like NE Hemel Hempstead was said to be getting difficult as occupiers recognise there is no staff infrastructure, ie, amenities like leisure and sandwich shops for lunchtime and after work activities. An Agent from Aitcheson Rafferty (also chamber of commerce) says he is getting more enquiries for town centre space because of the issue of staff amenity.

While parking is generally an advantage in the out of centre employment locations, it is also becoming a problem with recent changes in parking regulation resulting in developers getting more space on their site with less parking. Comments were noted on the need to improve public transport links with the business parks and town centre. There are more facilities in town centres but car parking remains a big issue. Some Agents mentioned this is a reason why occupiers leave the town.

SW Herts has great links to London. Three Rivers is on the tube network. Watford is best for trains, but Hemel and Watford are both well connected nationally to the highway network. The main problems for businesses operating in this part of Herts include parking, congestion, recruitment due to low unemployment and housing affordability. Businesses are known to be extending their areas of search for labour to areas outside the county where the market is less tight, but are still being hampered by the lack of car parking space to attract these workers with a long commute.

Stakeholders felt Watford needs a park and ride scheme similar to that for Hemel Hempstead.

There is also the problem of not enough housing, particularly affordable. There were concerns about the loss of sites to housing. Three Rivers is particularly threatened: Home Park at Kings Langley, Junction Park at Abbots Langley.

A problem in releasing big employment sites to housing and the loss of jobs will become irreplaceable owing to the 'one way street' effect: turning residential areas back into employment areas is very difficult. An example was given of the sorts of problem this leads to: the 'Scalemate (???)' employment site was converted into a housing estate only later to require Government SRB regeneration funding due to the lack of employment and economic well-being in the area. For this reason sites should not be turned fully into housing and should at least be developed on a mixed-use basis so there are jobs for the residents.

An Agent representative queried whether the oversupply of offices is a function of a cyclical market or more structural. The former was considered the main issue, ie, offices will take time to fill and are already starting to. Also the SW Herts' office market is less dominated by large US multinationals, and has been less badly hit by the downturn than M4 corridor areas (Reading, Slough etc). A comment was made that landlord attitudes are key to letting

space here; many are waiting for the 'right tenant' but may need to be flexible to attract them.

Some stakeholders felt there to be a structural problem with too much space on the market e.g. Clarendon Road, and the wrong type of space, ie, too large size units that doesn't meet the demand for space in SW Herts. The market is being driven by smaller companies, both start up and existing businesses. And Big occupiers have moved out and will continue to do so, eg, PB, AstraZeneca, etc, and now Kodak.

Kodak representative said that Kodak is to close its office in Hemel (Kodak tower) moving elsewhere in Dacorum and to their existing site in Harrow. Not unhappy with Hemel as a location, but the building no longer suits their needs - inefficient, dated.

A problem Kodak recognises is that the market for large office buildings over 30 years old in Hemel Hempstead at present is virtually nil. Even the modern Brakespear House office building is two thirds vacant; and with Kodak adding their building to the market, the potential for unoccupied large offices and general dilapidation increases. Kodak have managed to let part as a serviced office but can't envisage letting all 150,000 odd sq ft of it to small occupiers, particularly not in the short term; plus Kodak are not interested in getting into property leasing. Consequently, Kodak is exploring residential conversion of their building.

In Watford there were questions over whether there is a need to provide more employment sites as employment sites are being redeveloped and adding more may over burden the market.

Consensus opinion from public and private sector was that demand is not for large-scale industrial development but primarily small units. Units in greatest demand are around 1,500 to 5,000 sq ft. But these are rarely built.

A representative from WENTA (Watford Enterprise), which operates an enterprise centre on Watford Business Park and other sites in Herts, commented they have units of 1,200 sq ft and have been fully occupied since 1996. They have also received many enquiries, with a huge demand for flexible space of 1,500 - 2,000 sq ft. Similarly, a representative from Hertfordshire Future, which deals with inward investment, estimates that they receive 100 enquiries per month and 85% are for office/B1 of c. 2,500 sq ft.

Another reason for a shift towards smaller space was noted to be changes in working patterns, eg, hot-desking, and homeworking. Kodak mentioned that they like other major employers were cutting space per head. Examples given include IBM which is seeking a ratio of 10-11 sq m per job, and BP is doing something similar.

The prospect for building space of this size could be good for property firms owing to the flexibility it offers in converting from office to workshops and vice-versa, as the market sees fit.

A difficulty is that offices - besides in Leavesden - are not being speculatively built and so it is difficult. Also, planning makes it easier to build larger units on sites than several smaller units that provide the same aggregate floorspace. And developers are less interested in building less than 5,000 sq ft units where there's room to build more because maintenance costs are higher. But with restrictions in the amount private pensions can have in property portfolios and the emerging REITs, there may be changes in development purchasing behaviour.

Suggestions for generating smaller business units include sites over a certain size threshold having an allocation for a certain degree of small units. RTP mentioned an example in Buckinghamshire where an S106 agreement with a housing developer led to a contribution towards economic development objectives.

Several participants mentioned the possibility of a policy akin to an affordable housing policy, requiring developers to provide a certain proportion of small units, eg, 5,000 sq ft or less.

Some key sites have been built for big sheds - around 2-300,000 sq ft - but the problem is they are competing with the same market in cheaper locations with looser labour markets, like Leicester and Luton. The latter is benefiting from Regional Selective Assistance because of Vauxhall's closure, which is putting competitive pressure on Hemel Hempstead.

If there is a need for smaller space then some mentioned the idea of converting these big office buildings into smaller unit sizes. There are difficulties, however, with floorplates in some of these large buildings are too big; but can be subdivided.

Re The Peoplebuilding - the view is that it is a great building but too big. Occupiers want their own building with their own front entrance rather than a floor in a bigger building. Most demand is sub 20,000 sq ft, which is the size of the smallest floorplate in the Peoplebuilding. It was mentioned that the building may split floorspace to 10,000 sq ft.

Re Cardiff Road - subject of a development brief/joint venture with hospital Watford FC and council. Consulting on the Health Campus masterplan, should conclude end 2004. Looking to develop business uses that relate to the hospital. Considered to be side of Watford for warehousing that was originally considered. An issue is where to relocate some of the existing occupiers.

Re Leavesden - key employment site for offices. But is a homogenous product in single ownership. Therefore cannot rely on this as the main source of employment land in the borough as it does not provide for all the requirements of occupiers. The landlord is looking for B1 with more housing to make it more sustainable.

Re Three Cherry Trees Lane - Herts CC keen to see this preserved for specialist technology sectors e.g. advanced engineering, technology, R&D. An STA is based on set criteria; eg, have to be primarily R&D based with a certain proportion of staff qualified scientists. It lacks a university for a Science Park, but businesses spinning out of Oxford/London/Cambridge cannot afford or find space in these areas so could be accommodated here. Hemel is in the centre of this metaphoric 'triangle'. The owners, EP, think there is no demand, and Herts CC think EP are more interested in housing on this site. Elsewhere, they have been happy to develop mixed uses, incubator units etc on other sites, such as in Basildon. Herts CC have commissioned a study to examine the commercial viability and demand for the specialist technology uses at Three Cherry Trees Lane.

APPENDIX 3

Travel to Work

Dacorum

Table 1

		Live in... Dacorum											
		Hemel Hempstead & Kings Langley		Berkhamstead		Tring		Markyate		Rural Dacorum		Total Dacorum	
Total		43,236		9,492		6,782		2,752		6,846		69,108	
Berkhamstead		964	2%	3,563	38%	409	6%	29	1%	336	5%	5,301	8%
HH + KL		25,861	60%	1,320	14%	666	10%	339	12%	1,031	15%	29,217	42%
Tring		206	0%	178	2%	2,437	36%	9	0%	153	2%	2,983	4%
Markyate		128	0%	26	0%	14	0%	860	31%	18	0%	1,046	2%
Rural Dacorum		798	2%	340	4%	174	3%	35	1%	2,195	32%	3,542	5%
Rural 3 Rivers		1,119	3%	133	1%	78	1%	14	1%	160	2%	1,504	2%
Chorleywood		26	0%	0	0%	3	0%	0	0%	12	0%	41	0%
Rickmansworth		134	0%	38	0%	12	0%	5	0%	40	1%	229	0%
Watford inc CG		2,292	5%	319	3%	187	3%	87	3%	371	5%	3,256	5%
SW Herts		31,528	73%	5,917	62%	3,980	59%	1,378	50%	4,316	63%	47,119	68%
Total Herts		35,094	81%	6,382	67%	4,279	63%	1,898	69%	4,715	69%	52,368	76%
Broxbourne		61	0%	12	0%	18	0%	6	0%	12	0%	109	0%
Dacorum		27,957	65%	5,427	57%	3,700	55%	1272	46%	3,733	55%	42,089	61%
East Herts		148	0%	33	0%	32	0%	16	1%	27	0%	256	0%
Hertsmere		698	2%	87	1%	65	1%	29	1%	103	2%	982	1%
North Herts		117	0%	12	0%	16	0%	16	1%	18	0%	179	0%
St Albans		1,929	4%	216	2%	97	1%	373	14%	168	2%	2,783	4%
Stevenage		159	0%	27	0%	30	0%	19	1%	21	0%	256	0%
Three Rivers		1,457	3%	190	2%	111	2%	23	1%	260	4%	2,041	3%
Watford District		2,074	5%	300	3%	169	2%	83	3%	323	5%	2,949	4%
Welwyn Hatfield		494	1%	78	1%	41	1%	61	2%	50	1%	724	1%
Beds		854	2%	183	2%	187	3%	370	13%	122	2%	1,716	2%
Bedford		54	0%	9	0%	9	0%	6	0%	0	0%	78	0%
Luton		450	1%	78	1%	74	1%	190	7%	61	1%	853	1%
Mid Beds		38	0%	9	0%	3	0%	6	0%	3	0%	59	0%
South Beds		312	1%	87	1%	101	1%	168	6%	58	1%	726	1%
Bucks		1,118	3%	694	7%	1,103	16%	70	3%	437	6%	3,422	5%
Aylesbury Vale		213	0%	185	2%	598	9%	19	1%	80	1%	1,095	2%
Chiltern		381	1%	251	3%	279	4%	9	0%	210	3%	1,130	2%
Milton Keynes		286	1%	124	1%	101	1%	36	1%	59	1%	606	1%
South Bucks		92	0%	44	0%	26	0%	0	0%	38	1%	200	0%
Wycombe		146	0%	90	1%	99	1%	6	0%	50	1%	391	1%
Essex		148	0%	15	0%	27	0%	6	0%	12	0%	208	0%
London		4,896	11%	842	9%	889	13%	348	13%	1,282	19%	8,257	12%
Central		2,133	5%	257	3%	489	7%	203	7%	677	10%	3,759	5%
East		332	1%	112	1%	51	1%	15	1%	88	1%	598	1%
North		640	1%	85	1%	52	1%	31	1%	100	1%	908	1%
South		114	0%	30	0%	21	0%	6	0%	33	0%	204	0%
West		1,677	4%	358	4%	276	4%	93	3%	384	6%	2,788	4%
Surrey		144	0%	49	1%	30	0%	15	1%	51	1%	289	0%

Source: Census 2001

Table 2

	Work in...											
	Hemel Hempstead & Kings Langley		Tring		Berkhamsted		Markyate		Rural Dacorum		Total Dacorum	
		%		%		%		%		%		%
Total	49,506		4,849		7,467		1,787		4,826		68,435	
Berkhamsted	1,320	3%	178	4%	3,563	48%	26	1%	340	7%	5,427	8%
HH & KL	25,861	52%	206	4%	964	13%	128	7%	798	17%	27,957	41%
Tring	666	1%	2,437	50%	409	5%	14	1%	174	4%	3,700	5%
Markyate	339	1%	9	0%	29	0%	860	48%	35	1%	1,272	2%
Rural Dacorum	1,031	2%	153	3%	336	4%	18	1%	2,195	45%	3,733	5%
Rural 3 Rivers	957	2%	6	0%	66	1%	3	0%	81	2%	1,113	2%
Chorleywood	59	0%	3	0%	3	0%	0	0%	6	0%	71	0%
Rickmansworth	101	0%	6	0%	7	0%	0	0%	11	0%	125	0%
Watford inc CG	1,241	3%	30	1%	185	2%	22	1%	104	2%	1,582	2%
SW Herts	31,575	64%	3,028	62%	5,562	74%	1,071	60%	3,744	78%	44,980	66%
Herts	35,886	72%	3,154	65%	5,745	77%	1,210	68%	3,904	81%	49,899	73%
Broxbourne	102	0%	0	0%	6	0%	3	0%	3	0%	114	0%
Dacorum	29,217	59%	2,983	62%	5,301	71%	1,046	59%	3,542	73%	42,089	62%
East Herts	204	0%	0	0%	3	0%	6	0%	6	0%	219	0%
Hertsmere	427	1%	9	0%	24	0%	3	0%	41	1%	504	1%
North Herts	418	1%	24	0%	24	0%	12	1%	24	0%	502	1%
St. Albans	2,423	5%	71	1%	95	1%	103	6%	62	1%	2,754	4%
Stevenage	262	1%	13	0%	18	0%	3	0%	12	0%	308	0%
Three Rivers	1,241	3%	21	0%	97	1%	3	0%	119	2%	1,481	2%
Watford district	1,123	2%	24	0%	158	2%	22	1%	83	2%	1,410	2%
Welwyn Hatfield	469	1%	9	0%	19	0%	9	1%	12	0%	518	1%
London	3,062	6%	63	1%	242	3%	27	2%	108	2%	3,502	5%
North London	758	2%	15	0%	70	1%	24	1%	42	1%	909	1%
East London	297	1%	6	0%	18	0%	0	0%	9	0%	330	0%
South London	200	0%	0	0%	18	0%	3	0%	3	0%	224	0%
West London	1,393	3%	30	1%	79	1%	0	0%	45	1%	1,547	2%
Central London	414	1%	12	0%	57	1%	0	0%	9	0%	492	1%
Befordshire	3,919	8%	239	5%	367	5%	462	26%	229	5%	5,216	8%
Bedford	171	0%	12	0%	15	0%	3	0%	0	0%	201	0%
Luton	1,463	3%	22	0%	86	1%	142	8%	66	1%	1,779	3%
Mid Beds	388	1%	21	0%	21	0%	19	1%	12	0%	461	1%
South Beds	1,897	4%	184	4%	245	3%	298	17%	151	3%	2,775	4%
Bucks	3,114	6%	1,219	25%	850	11%	40	2%	459	10%	5,682	8%
Aylesbury Vale	1,480	3%	996	21%	511	7%	22	1%	254	5%	3,263	5%
Chiltern	587	1%	108	2%	216	3%	6	0%	169	4%	1,086	2%
Milton Keynes	518	1%	55	1%	41	1%	6	0%	18	0%	638	1%
South Bucks	96	0%	6	0%	15	0%	0	0%	3	0%	120	0%
Wycombe	433	1%	54	1%	67	1%	6	0%	15	0%	575	1%
Essex	422	1%	12	0%	33	0%	6	0%	3	0%	476	1%
Surrey	270	1%	12	0%	6	0%	0	0%	6	0%	294	0%

Source: Census 2001

Three Rivers

Table 3

	Rickmansworth		Live in... Chorleywood		Rural 3 Rivers		Total 3 Rivers	
Total	5,512		4,150		24,580		40,662	
Berkhamstead	4	0%	3	0%	63	0%	97	0%
HH & KL	104	2%	59	1%	960	4%	1,241	3%
Tring	6	0%	3	0%	6	0%	21	0%
Markyate	0	0%	0	0%	3	0%	3	0%
Rural Dacorum	11	0%	6	0%	81	0%	119	0%
Rural 3 Rivers	263	5%	167	4%	6,676	27%	7,372	18%
Chorleywood	133	2%	1158	28%	135	1%	1,482	4%
Rickmansworth	1,664	30%	224	5%	695	3%	3,015	7%
Watford Inc CG	652	12%	359	9%	4,941	20%	8,711	21%
SW Herts	2,837	51%	1,979	48%	38,140	155%	46,641	115%
Total Herts	3,094	56%	2,165	52%	15,663	64%	25,034	62%
Broxbourne	15	0%	0	0%	48	0%	69	0%
Dacorum	125	2%	71	2%	1,113	5%	1,481	4%
East Hertfordshire	18	0%	3	0%	75	0%	121	0%
Hertsmere	97	2%	88	2%	1,072	4%	1,460	4%
North Hertfordshire	0	0%	6	0%	36	0%	54	0%
St Albans	68	1%	53	1%	581	2%	804	2%
Stevenage	15	0%	9	0%	60	0%	96	0%
Three Rivers	2,177	39%	1,609	39%	7,785	32%	13,751	34%
Watford District	535	10%	299	7%	4,662	19%	6,829	17%
Welwyn Hatfield	44	1%	27	1%	231	1%	369	1%
London	1,895	34%	1,371	33%	7,145	29%	12,182	30%
Central	848	15%	674	16%	2,229	9%	4,452	11%
East	81	1%	59	1%	319	1%	540	1%
North	72	1%	62	1%	563	2%	806	2%
South	27	0%	24	1%	84	0%	165	0%
West	867	16%	552	13%	3,950	16%	6,219	15%
Bedfordshire	25	0%	31	1%	170	1%	274	1%
Bedford	0	0%	6	0%	15	0%	30	0%
Luton	19	0%	16	0%	116	0%	184	0%
Mid Bedfordshire	0	0%	3	0%	6	0%	12	0%
South Bedfordshire	6	0%	6	0%	33	0%	48	0%
Buckinghamshire	270	5%	261	6%	617	3%	1,340	3%
Aylesbury Vale	34	1%	18	0%	71	0%	135	0%
Chiltern	90	2%	144	3%	197	1%	502	1%
Milton Keynes	9	0%	3	0%	61	0%	85	0%
South Bucks	75	1%	58	1%	181	1%	363	1%
Wycombe	62	1%	38	1%	107	0%	255	1%
Essex	15	0%	27	1%	75	0%	135	0%
Surrey	33	1%	42	1%	153	1%	267	1%

Source: Census 2001

Table 4

	Work in...							
	Rickmans-worth		Chorley Wood		Rural Three Rivers		Total Three Rivers	
		%		%		%		%
Total	6,008		2,046		18,184		30,839	
Berkhamsted	38	1%	0	0%	133	1%	190	1%
HH & KL	134	2%	26	1%	1,119	6%	1,457	5%
Tring	12	0%	3	0%	78	0%	111	0%
Markyate	5	0%	0	0%	14	0%	23	0%
Rural Dacorum	40	1%	12	1%	160	1%	260	1%
Rural Three Rivers	695	12%	186	9%	6,676	37%	7,185	23%
Rickmansworth	1,664	28%	82	4%	263	1%	2,177	7%
Chorleywood	224	4%	1,158	57%	167	1%	1,609	5%
Watford inc CG	987	16%	153	7%	2,067	11%	5,292	17%
SW Herts	3,799	63%	1,620	79%	10,677	59%	18,304	59%
Total Herts	4,110	68%	1,683	82%	12,046	66%	21,041	68%
Broxbourne	9	0%	0	0%	48	0%	63	0%
Dacorum	229	4%	41	2%	1,504	8%	2,041	7%
East Herts	3	0%	12	1%	63	0%	105	0%
Hertsmere	133	2%	27	1%	613	3%	911	3%
North Herts	9	0%	3	0%	49	0%	87	0%
St. Albans	119	2%	18	1%	445	2%	707	2%
Stevenage	3	0%	0	0%	42	0%	70	0%
Three Rivers	3,015	50%	1,482	72%	7,372	41%	13,751	45%
Watford district	555	9%	97	5%	1,801	10%	3,112	10%
Welwyn Hatfield	35	1%	3	0%	109	1%	194	1%
London	938	16%	118	6%	2,703	15%	4,294	14%
North London	97	2%	12	1%	314	2%	538	2%
East London	42	1%	6	0%	120	1%	204	1%
South London	31	1%	3	0%	173	1%	240	1%
West London	711	12%	94	5%	1,846	10%	2,941	10%
Central London	57	1%	3	0%	250	1%	371	1%
Bedfordshire	78	1%	12	1%	414	2%	627	2%
Bedford	6	0%	0	0%	39	0%	48	0%
Luton	32	1%	6	0%	153	1%	230	1%
Mid Beds	13	0%	3	0%	36	0%	79	0%
South Beds	27	0%	3	0%	186	1%	270	1%
Buckinghamshire	405	7%	185	9%	833	5%	1,741	6%
Aylesbury Vale	78	1%	15	1%	215	1%	364	1%
Chiltern	211	4%	143	7%	254	1%	732	2%
South Bucks	34	1%	9	0%	124	1%	270	1%
Wycombe	64	1%	18	1%	166	1%	264	1%
Milton Keynes	18	0%	0	0%	74	0%	111	0%
Essex	27	0%	3	0%	135	1%	243	1%
Surrey	60	1%	12	1%	212	1%	332	1%

Source: Census 2001

Watford

Table 5

		Live in...			
		Watford town Croxley Green		Watford Borough	
Total		48,029		41,609	
	Berkhamstead	185	0%	158	0%
	HH & KL	1,241	3%	1,123	3%
	Tring	30	0%	24	0%
	Markyate	22	0%	22	0%
	Rural Dacorum	104	0%	83	0%
	Rural 3 Rivers	2,067	4%	1,801	4%
	Chorleywood	153	0%	97	0%
	Rickmansworth	987	2%	555	1%
	Watford inc CG	24,165	50%	21,406	51%
	SW Herts	28,954	60%	25,269	61%
	Total Herts	33,968	71%	29,856	72%
	Broxbourne	45	0%	39	0%
	Dacorum	1,582	3%	1,410	3%
	East Hertfordshire	139	0%	114	0%
	Hertsmere	2,652	6%	2,449	6%
	North Hertfordshire	99	0%	87	0%
	St Albans	1,365	3%	1,263	3%
	Stevenage	135	0%	123	0%
	Three Rivers	5,292	11%	3,112	7%
	Watford district	22,080	46%	20,747	50%
	Welwyn Hatfield	579	1%	512	1%
	London	10,529	22%	8,758	21%
	Central	3,657	8%	2,956	7%
	East	571	1%	490	1%
	North	1,041	2%	932	2%
	South	210	0%	180	0%
	West	5,050	11%	4,200	10%
	Bedfordshire	404	1%	356	1%
	Bedford	30	0%	21	0%
	Luton	272	1%	239	1%
	Mid Bedfordshire	21	0%	18	0%
	South Bedfordshire	81	0%	78	0%
	Buckinghamshire	922	2%	730	2%
	Aylesbury Vale	94	0%	82	0%
	Chiltern	281	1%	210	1%
	Milton Keynes	151	0%	139	0%
	South Bucks	222	0%	173	0%
	Wycombe	174	0%	126	0%
	Essex	129	0%	111	0%
	Surrey	180	0%	141	0%

Work in...

Source: Census 2001

Table 6

	Work in... Watford town including Croxley Green			
	Watford Borough			
Total	53,585		49,254	
Berkhamsted	319	1%	300	1%
HH&KL	2,252	4%	2,074	4%
Tring	187	0%	169	0%
Markyate	87	0%	83	0%
Rural Dacorum	371	1%	323	1%
Rural Three Rivers	4,941	9%	4,662	9%
Chorleywood	359	1%	299	1%
Rickmansworth	652	1%	535	1%
Watford inc Croxley Green	24,165	45%	22,080	45%
SW Herts	33,333	62%	30,525	62%
Total Herts	39,532	74%	36,327	74%
Broxbourne	163	0%	157	0%
Dacorum	3,216	6%	2,949	6%
East Herts	220	0%	193	0%
Hertsmere	3,062	6%	2,921	6%
North Herts	269	1%	243	0%
St. Albans	1,890	4%	1,765	4%
Stevenage	189	0%	164	0%
Three Rivers	8,711	16%	6,829	14%
Watford district	21,406	40%	20,747	42%
Welwyn Hatfield	406	1%	359	1%
London	7,384	14%	6,849	14%
North London	1,488	3%	1,373	3%
East London	503	1%	467	1%
South London	333	1%	300	1%
West London	4,511	8%	4,221	9%
Central London	549	1%	488	1%
Bedfordshire	1,633	3%	1,510	3%
Bedford	128	0%	125	0%
Luton	608	1%	569	1%
Mid Bedfordshire	231	0%	204	0%
South Bedfordshire	666	1%	612	1%
Bucks	1,970	4%	1,740	4%
Aylesbury Vale	555	1%	499	1%
Chiltern	653	1%	529	1%
South Bucks	126	0%	111	0%
Wycombe	246	0%	230	0%
Milton Keynes	390	1%	371	1%
Essex	471	1%	408	1%
Surrey	281	1%	233	0%

Source: Census 2001

APPENDIX 4

Examples of Live/Work Policies

Islington Council: Supplementary Planning Guidance

In addition, the following standards will apply specifically to live/work units. Live/work units will not be allowed in wholly or very largely residential areas.

Dwelling Mix: The council does not consider live/work units to be suitable for family accommodation. Linked residential accommodation of no more than two bedrooms should be on one or two upper floors with the workspace at ground level where possible.

Floor Space: Each live/work unit should have the following minimum floor space: a one bedroom unit should be 85 sq m; a two bedroom unit should be 105 sq m. There should always be an identifiable workspace. The workspace should be capable of accommodating the whole range of B1 uses, including light industry.

Sub-Division: Each live/work unit should be occupied as a single integrated unit and should not be subdivided without prior written consent of the council.

Service facilities: Provision should be made within conversion schemes for adequate servicing of units. Off-street loading and servicing facilities for vehicles should be at least large enough for a 'Transit' size vehicle. Easy access for bulky goods and materials must be provided with 2m width double doors to work areas.

Waltham Forest Unitary Development Plan - Second Deposit (April 2003)

In B10 proposals for live/work developments (composite B1/C3 uses) will be encouraged in non-designated employment areas and other areas with a commercial character, where the use:-

- Would not result in the loss of buildings or land currently in employment use or, if vacant, buildings or land well suited to continued employment or commercial use.
- Would not undermine the retail and service function of Walthamstow town centre, district and neighbourhood centres or be contrary to other plan policies and would bring a vacant property back into use.
- Work areas must be of sufficient size, the residential element should be subsidiary to the work element and they should have adequate floor loading to take the full range of b1 uses, including light industry.

Live/work units are composite C3 (dwelling) and B1 (business) use developments in which the business floorspace is proportionately greater. They can provide valuable accommodation for starter businesses or for people to expand a business that they are operating from their current dwelling. By combining residential and business uses in one unit they can provide substantial cost savings. However, being composite uses, there would normally be permitted development rights to change to solely one use or the other; these rights will be removed either by condition or legal agreement to ensure that a proportion of the business floorspace is retained. Live/work units also assist in reducing the need to travel and in this respect the Council will consider the need to impose conditions to ensure that those working in these developments also reside there.

Sites may become available where craft workshops/live/work could be provided. The most suitable locations for such provision will be where the area has a partly commercial character, providing that proposals would not conflict with other plan policies in this and the town centres and retailing chapter. In this regard, the development of live/work in designated Strategic Employment Areas will not be permitted due to the potential incompatibility between residential and general industrial uses and the need to protect London's best employment areas for a range of commercial uses. Live/work units are also considered unsuitable in Local Employment Areas because they would fundamentally alter the character of these areas.

Live/work may be suitable in non-designated employment areas where their development would assist in alleviating juxtaposition between residential and general industrial use and would not result in the loss of buildings and land that is well suited for continued

employment use. Although live/work units are not normally considered appropriate in borough Employment Areas (see policy INB1) they may be acceptable in exceptional circumstances. This could entail their development as part of a mixed-use employment only scheme which predominantly consists of dedicated business premises where a site or premise has remained vacant for a significant period. Such mixed developments will only be considered favourably where the live/work element is necessary to enable redevelopment that would otherwise not have taken place under prevailing market conditions.

They may also be suitable where the retail and service function of neighbourhood shopping centres and non-designated parades has contracted. In order to enhance the area's vitality and viability the reuse of vacant properties for business or mixed business/residential use may be considered appropriate if a property is capable of suitable conversion and where there is no adverse effect upon amenity. Live/work developments in Walthamstow town centre and the borough's district centres could enhance vitality providing that the essential retail and service function would not be undermined. Each application here will be considered on its merits against those policies contained in the retail and town centres chapter.

Because the dual use of live/work units can be taken into account in the design of the buildings, many of the physical problems associated with homeworking (see policy INB9) can be eliminated. However, in considering applications for such uses the Council will be guided by its standards for new development contained in the Environment and Planning Standards Chapters as well as Supplementary Planning Guidance, which is to be produced. As a general rule, applications should have a minimum definable functional workspace of 40 sq m, conform to car parking standards and have no more than two bedrooms in each unit. This is because they are not considered appropriate for use as family accommodation. They will also be required to have regard to the character of existing residential areas.

Live/work Development in Bermondsey Street

Approved by council 9 February 1999

Introduction

The aim of this note is to provide developers with clear and concise advice when submitting planning applications for live/work developments within the Bermondsey Street area (see map).

Live/work development is the provision of associated living and working accommodation within a single self-contained unit. This type of accommodation is attractive to people either setting up their first business or seeking to expand a business which they are operating from their current dwelling. Associated living and working is particularly attractive to a disabled person, as travelling to work is one of the main barriers to employment that disabled people face. Live/work developments are in line with the Government's aims to reduce the need to travel by car, to facilitate home working and to provide for small groups of employees to work together locally. The Council recognises that there is a demand for this type of accommodation within the Bermondsey Street area but needs to ensure that the increase in such developments does not compromise the employment generating status of buildings and land within the area.

Live/work proposals can provide a means to bring vacant buildings back into use, achieving the refurbishment of those buildings, and in Bermondsey Street provide significant conservation benefits.

This guidance sets out the background to the development of live/work interest in Bermondsey Street. It identifies a range of requirements that will need to be met by live/work developments, as well as specific planning conditions that are likely to be attached to any approval of such developments. In assessing proposals for live/work

development in Bermondsey Street, the first consideration will be their acceptability against the relevant planning policies.

Planning Policy

Part of the Bermondsey Street area is located within a defined Employment Area in the Council's Unitary Development Plan [UDP] and is therefore subject to the following policies:

Policy B.2.1 Employment Areas and Sites

The Council will support the development of new employment generating activity through the identification of sites for business, office, general industrial and storage uses within defined Employment Areas and in other appropriate locations, and through encouragement of the re-use of vacant buildings.

Policy B.1.1 Protection of Employment Areas and Sites:

Within Employment Areas and Sites Identified under Policy B.1.2 planning permission will normally only be granted for proposals where the proposed use falls within Class B.

Outside the defined employment area, buildings or sites which are currently used for either business, general industrial or storage uses will be subject to the following employment protection policy:

- Policy B.1.2 Protection Outside Employment Areas and Sites Outside Employment Areas and Sites identified under Policy B.2.2 planning permission will normally be granted for development proposals which involve the loss of business, general industrial or storage uses only where the following conditions are met:
 - the existing use creates an unavoidable nuisance to adjoining properties by reason of noise,
 - vibration or traffic generation; or
 - the site or premises has remained vacant for at least 24 months, and there is evidence to show that attempts have been made to sell or let the site to a business, general industrial or storage occupier.

Planning Policy Guidance 1 - General Policy and Principles

- Mixed use development is one of the main objectives underlying the Government's approach to the planning system. Developments which produce a variety of compatible uses on site or in an area are more sustainable because of the benefits mixed use brings such as; increasing vitality, strengthening the economic base, improving security and reducing the need to travel especially by car.

Mixed-use Development in Bermondsey Street

In March 1995, the Bermondsey Street Area Action Plan (BSAAP) was published as an advisory document to the Council's UDP. Recommendation 2 of the Plan seeks to retain and encourage a mix of uses in Bermondsey:

- In all schemes, whether new build or conversion, developers should be encouraged to provide something of interest at street level and, in commercial schemes, penthouse apartments and caretaker flats on the top floors. In larger housing developments some commercial element, workhomes, some business units and/or social facilities should be investigated.

Following on from the publication of the BSAAP and to reflect the spirit of the above recommendation, a number of applications for mixed use and wholly residential developments were granted planning permission. This was generally for the following reasons:

- to promote mixed land use developments to increase vitality and viability of Bermondsey Street area;

- to fund restoration of Bermondsey Street's buildings of architectural or historic merit, including Buildings at Risk, and to maintain the character and appearance of the Conservation Area;
- to reduce the amount of vacant and apparently difficult to let floorspace which was giving the area a depressed atmosphere;
- to bring back into use vacant sites and buildings to meet regeneration objective; and
- to provide reduced cost accommodation in the form of live/work units for small businesses without compromising the employment status of the area

A survey of recent planning permissions for live/work and mixed use developments in the Bermondsey Street defined Employment Area has revealed the following:

- **Loss of Employment Floorspace:** the balance of uses within recent mixed use developments is skewed heavily in favour of residential development despite the defined Employment Protection status of part of the area.
- **Inappropriate size and use of implemented live/work units:** the majority of the live/work units surveyed are being used for single person operations (such as writing, drawing and photography) which do not create employment and are uses which could often take place within a dwelling house without the need for planning permission. This type of domestic scale activity is not in the spirit of live/work use and should not be encouraged.
- **Inappropriate location for mixed use developments:** the survey revealed residential and live/work developments adjacent to general industrial (B2) uses, one operating on a 24 hour basis. The incompatible juxtaposition of land uses could result in noise and disturbance issues and potentially prejudice the future of general industrial uses in the Bermondsey Street area.
- **Enforceability of conditions to control usage:** conditions which do not refer to a defined area of working floorspace appear to allow single person operations to operate legitimately as it is difficult to demonstrate on site the balance between working and living space within a unit.
- **Business Rates and Mortgages:** small live/work units in use for home working purposes are generally defined as domestic premises for Council Tax purposes and are not, therefore, subject to the financial burden of business rates. This fact may encourage abuse of the lawful use of approved live/work units. Mortgage institutions lending money for the purchase of live/work units, that are aware of the lawful use of such premises, may define the mortgage in the business category.

Requirements for Live/work Developments

When assessing live/work developments in the Bermondsey Street area, or for sites which do not comply with policy B.1.2 (Protection Outside Employment Areas and Sites) emphasis should be placed on ensuring the provision of employment generating floorspace. The Council will, therefore, expect the following requirements to be met:

- **Design**
 - Each live/work unit should have a minimum of 40 sq. m of definable functional workspace in addition to the residential element conforming to the Council's adopted residential standards. The size of the live/work unit should reflect its purpose as employment generating floorspace with a capacity for a number of employees and should deter operations which can take place within a residential unit often without the need for planning permission.

- The workspace should be identified on submitted drawings and physically delineated from the residential element, preferably with a horizontal split.[shell schemes will be subject to a condition requiring detailed drawings of internal layout
- In order to protect the commercial vitality of the Employment Area, live/work units should not occupy units at ground floor level. In smaller units it may be permissible to provide the work element of a live/work unit at ground floor level with the residential above (this will be controlled with a planning condition)
- No more than two bedrooms should be included in each unit as live/work uses are not considered suitable for family accommodation, particularly within a defined Employment Area.
- The workspace needs to be capable of accommodating the whole range of B1 uses, including light industry. Easy access for bulky goods and materials should be provided with double doors (2m width), high ceilings and goods lifts.
- Suitability of Building for Conversion
 - Conversion of buildings to live/work use will not generally be permitted where the building is well suited to continued employment use (e.g. high ceilings, servicing including goods lifts and parking facilities) even if that building has a history of vacancy.
 - A full assessment will need to be made by the applicant as to the demand for employment floorspace in the Bermondsey Street area.
- Residential Amenity
 - Live/work developments should not be permitted close to Class B2 (General Industrial) uses and other operations where the external environment is poor, where there is a potential noise problem from 24 hour operations, where safe access cannot be achieved or where inadequate lighting and ventilation of living areas cannot be achieved.
 - An assessment will need to be made regarding the need for compliance with the Council's standards and controls for residential development.

Servicing and Parking

- Where new build live/work is proposed, provision should be made for the proper servicing of individual units (including goods lifts to upper floors). Within conversion schemes, provision should also be made for adequate servicing and any existing service facilities should be retained and re-used.
- Off-street parking provision of up to one space per unit should be sought but it is recognised that given the dense historic fabric of Bermondsey Street and the proximity of public transport, with both new build and conversions, this may not be achievable.
- Access and Facilities for Disabled People
 - Disabled access for new non-domestic buildings now has to comply with Building Regulations 1991 Approved Document M (Access and Facilities for Disabled People). This is for both newly erected and substantially reconstructed buildings. The Disabilities Discrimination Act 1995 (DDA) applies to employers of 15 or more staff, therefore any such employer looking to use these units would need the premises, work area and facilities to be fully accessible to disabled people. It is therefore recommended that advice is obtained as to the specific requirements for access and facilities to the commercial workspace within a live/work unit.

Planning Conditions and Legal Agreements

In addition to any other conditions that may be required, the following conditions should be attached to any planning permission for a live/work development:

- The work part of the live/work Units hereby approved and shown on the approved drawing number [] shall only be used for purposes falling within Class B1 of the Town and Country Planning (Use Classes) Order 1987 in association with the Residential parts of the units as shown on the submitted plans hereby approved and shall not be used for any other purpose.
- The Residential parts of the live/work Units hereby approved and shown on the approved drawing number [] shall only be used for residential purposes in association with the Work part of the said live/work units and shall not be used for any other purpose.

For applications seeking a change of use from Class B1 to live/work the following condition will usually be included:

- In the event that a live/work unit hereby approved ceases to be used for live/work purposes the whole of the unit may be used for purposes falling within Class B1 Business Purposes of the Town and Country Planning (Use Classes) Order 1987 provided:
 - no part of the unit shall be used for any purpose other than Class B1 and
 - in the event that a unit's use changes from live/work to wholly Class B1 use pursuant to this condition the unit may not return to use as a live/work use without the prior written permission of the Local Planning Authority.

The following condition will usually be included when shell live/work units are approved:

- Detailed drawings showing the internal layout of the live/work units hereby approved shall be submitted to and approved in writing by the Local Planning Authority before any work in connection with this permission is carried out and the development shall not be carried out otherwise than in accordance with any such approval given.
- Without prejudice to condition [above] no live/work units hereby approved shall be used or occupied for any purpose unless and until the detailed drawings referred to in condition [above] have been submitted to and approved in writing by the Local Planning Authority.

In order to ensure the authentic use of live/work units, particularly those that form part of speculative schemes or do not fully comply with the Council's standards, it may be necessary to enter into a Legal Agreement under S106 of the Town and Country Planning Act 1990. Such Agreements may include requirements analogous to those set out in paragraph above.

Where live/work development is permitted in Bermondsey Street Employment Area, the following informative will be attached:

- Your attention is drawn to the location of the site within the defined Employment Area where the Council's planning policies encourage the retention and reuse of sites and premises for employment generating uses. These may include general and light industrial buildings, warehouses etc, which could be potentially disturbing. The Council will not seek to restrict any appropriate employment generating use in the area on the basis of the residential element of the units hereby approved.

APPENDIX 5

Planned Supply

2001 to 2004 Completions

Dacorum 2001-2004 Completions

Address	Town	Gain Completed in Year to Use Class			Loss Completed in Year to Use Class		
		B1	B2	B8	B1	B2	B8
Stable Cott & Coach House	Aldbury	320	0	0	0	0	0
Northbridge Road	Berkhamsted	0	0	0	0	-610	0
Northbridge Road	Berkhamsted	0	0	0	0	610	0
Agrevo Site	Berkhamsted	0	0	0	370	14,076	0
Bourne End Farm	Bourne End	484	0	0	0	0	0
Eastern Counties Farmers	Flamstead	0	0	650	0	0	0
Ex John Dickinson Ltd	Hemel Hempstead	0	0	0	33,000	0	0
60 Maylands Avenue	Hemel Hempstead	3,035	0	0	0	0	0
Kodak Ltd	Hemel Hempstead	0	0	7,312	0	0	2,993
Eastman Way/	Hemel Hempstead	0	0	0	0	0	27,788
32 Mark Road	Hemel Hempstead	949	0	0	0	0	0
Unit 1 Macted Court	Hemel Hempstead	582	0	0	0	0	582
Land Adj Finway Road	Hemel Hempstead	0	0	1,115	0	0	0
Adj Finway Road	Hemel Hempstead	0	0	4,166	0	0	0
Uk House	Markyate	0	0	853	853	0	0
Hill Farm	Markyate	808	0	0	0	0	0
27-28 Akeman Street	Tring	0	0	0	0	0	2,442
295-299 High Street	Berkhamsted	0	0	0	499	0	0
The Stables Ashlyns Hall	Berkhamsted	0	0	0	432	0	0
Former Glaxo Wellcome	Berkhamsted	0	0	0	0	9,293	0
Just Tyres Retail Ltd	Hemel Hempstead	0	0	0	0	1,125	0
Balrawl House	Hemel Hempstead	0	0	0	2,300	0	0
Iron Mountain Uk Ltd	Hemel Hempstead	0	0	960	0	0	0
Eastman Way/	Hemel Hempstead	0	9,387	0	0	0	0
Former Yoplait/Dairy Cr	Hemel Hempstead	0	16,258	0	0	12,000	0
Units C1 & C2	Hemel Hempstead	0	0	0	0	0	3,820

Lucas Site	Hemel Hempstead	0	0	0	0	7,860	0
Lucas Site	Hemel Hempstead	0	0	0	0	7,860	0
Site A Ethylwin	Hemel Hempstead	0	4,371	0	0	0	0
Colorama Site	Tring	0	0	0	0	0	730
St Peters House	Tring	0	0	0	250	0	0
Alton	Berkhamsted	0	0	0	643	0	0
Ackwell Simmonds Yard	Chipperfield	0	0	0	0	0	1,147
The British Paper Co	Hemel Hempstead	0	0	0	0	480	0
Just Tyres Retail Ltd	Hemel Hempstead	0	0	0	0	-1,125	0
Just Tyres Retail Ltd	Hemel Hempstead	0	0	0	0	1,125	0
Eagle Star Site	Hemel Hempstead	0	0	0	-17,400	0	0
Bp House Site	Hemel Hempstead	0	0	0	17,400	0	0
1 St Albans Road	Hemel Hempstead	0	0	0	2,815	0	0
100 Leighton Buzzard Road	Hemel Hempstead	0	0	0	588	0	0
Site B	Hemel Hempstead	0	0	0	0	0	7,000
Somers Press	Hemel Hempstead	0	0	0	0	0	435
Eastman Way/	Hemel Hempstead	0	9,387	0	0	0	0
Lucas Site	Hemel Hempstead	0	0	0	0	-7,860	0
Lucas Site	Hemel Hempstead	0	0	0	0	7,860	0
Lucas Site	Hemel Hempstead	10,160	0	0	0	0	0
1-2 Maxted Road	Hemel Hempstead	0	0	0	1,539	0	0
Adj Uk House	Markyate	0	0	620	0	0	0
Aircraft Electrical	Potten End	0	0	0	1,176	0	0
104 High Street	Tring	0	0	0	82	0	0
Northbridge Road	Berkhamsted	234					
Hill & Coles Farm	Flamstead	246					
1-2 Maxted Road	Hemel Hempstead	2,600					
Roe End Farm	Markyate	318					
Binghams Park Farm	Potten End	324					
25 High Street	Hemel Hempstead				396		
32-34 Tring Road	Long Marston				451		
2 Buckwood Road	Markyate				800		

The Mill Site	Wilstone		1,215
Adj Hardy House	Berkhamsted	4,577	
Button House	Hemel Hempstead		636
Unit 1 Hicks Road	Markyate		326
Lucas Site	Hemel Hempstead		7,860
Northbridge Road	Berkhamsted	333	
Hill & Coles Farm	Flamstead	412	
Water End Garage	Hemel Hempstead	228	
1A Frogmore Road	Hemel Hempstead		386
Button House	Hemel Hempstead	636	
Unit 1 Hicks Road	Markyate	326	
B&M Cattle Market	Tring	470	
Water End Garage	Hemel Hempstead		228
Binghams Park Farm	Potten End		324
Ladybird Day Nursery	Water End		346

Three Rivers 2001-2004 Completions

Address	Town	Gain Completed in Year to Use Class			Loss Completed in Year to Use Class		
		B1	B2	B8	B1	B2	B8
31 & R/O 33-35 New Road	Croxley Green	0	0	0	0	0	196
Unit 6 Century Court	Croxley Green	301	0	0	301	0	0
Hunton Bridge Ind Estate	Hunton Bridge	5,398	0	0	6,688	0	0
Novartis Nutrition Uk Ltd	Kings Langley	4,912	0	0	0	4,912	0
Leavesden Aerodrome	Leavesden	0	0	0	0	1,000	0
Adj Hertford Place	Maple Cross	0	0	0	300	0	0
Penn Place	Rickmansworth	0	0	0	3,000	0	0
Wrights Garage	Rickmansworth	2,750	0	0	0	0	0
Batchworth Arms Site	Rickmansworth	990	0	0	0	0	0
Lot Mead	Croxley Green	0	0	0	176	0	0
R/O Woodlands	Kings Langley	0	0	0	0	0	476
Newhall Farm	Kings Langley	0	0	310	0	0	0
Leavesden Aerodrome	Leavesden	16,686	0	0	0	0	0
Maple Cross Ind Estate	Maple Cross	9,601	0	0	0	0	0
Kings Yard	Rickmansworth	0	0	0	648	0	0
Darvells Yard	Chorleywood	0	0	0	1,096	0	0
Leavesden Aerodrome	Leavesden	21,979	0	0	0	0	0
The Old Brickworks	Oxhey	0	0	0	0	0	253
The Old Brickworks	Oxhey	313					
20-21 Heronsgate Road	Chorleywood				390		
Brookdell Yard	Garston				334		
Loudwater Garage	Loudwater					258	

Watford 2001-2004 Completions

Address	Town	Gain Completed in Year to Use Class			Loss Completed in Year to Use Class		
		B1	B2	B8	B1	B2	B8
22-34 Caxton Way	Watford	0	0	0	9,680	0	0
22-34 Caxton Way	Watford	0	0	0	2,107	0	0
Westfield School	Watford	560	0	0	0	0	0
R/O 2 Addiscombe Road	Watford	0	0	0	0	0	68
53 Clarendon Road	Watford	0	0	0	4,850	0	0
41-43 Clarendon Road	Watford	0	0	0	4,119	0	0
St Albans House	Watford	0	0	0	1,245	0	0
76-80 St Albans Road	Watford	4,482	0	0	0	0	0
29-37 St Albans Road	Watford	0	0	0	400	0	0
Railway Carriage Works	Watford	0	0	0	-12,800	0	0
Cardiff Road	Watford	0	0	0	12,800	0	0
Senior House	Watford	0	0	0	1,400	0	0
Phase 1	Watford	6,282	0	0	0	0	0
14 Greycaine Road	Watford	0	0	975	0	975	0
Unit 2	Watford	0	0	860	0	860	0
22-34 Caxton Way	Watford	6,266	0	0	0	0	0
22-34 Caxton Way	Watford	1,728	0	0	0	0	0
1 Greenhill Crescent	Watford	286	0	0	0	0	0
53 Clarendon Road	Watford	0	0	0	-4,850	0	0
41-43 Clarendon Road	Watford	5,544	0	0	0	0	0
Granchester Court	Watford	2,685	0	0	0	0	0
19 Bridle Path	Watford	0	0	0	632	0	0
70 St Albans Road	Watford	65	0	0	0	0	0
293 High Street	Watford	0	0	0	289	0	0
R/O 100-104 Queens Road	Watford	0	0	0	125	0	230
The Trident Centre	Watford	0	0	2,173	2,173	0	0

Unit 3, Chiltern Estate	Watford	0	0	0	0	0	610
Units 2/3 Colonial	Watford	0	0	0	885	0	0
Adj Empire Centre	Watford	0	0	1,907	0	0	900
Creighton House	Watford	0	0	0	0	0	-620
Creighton House	Watford	0	0	0	0	0	620
Phase 1	Watford	1,490	0	0	0	0	0
Phase li	Watford	1,442	0	0	0	0	0
Units 5 & 6 Imperial Way	Watford	0	0	0	0	3,950	0
2 Greycaine Road	Watford	4,484	0	0	0	0	4,484
3 The Boulevard	Watford	845	0	0	0	0	0
Metropolitan Stn Approach	Watford	0	0	0	2,042	0	0
Adj 1 Brightwell Road	Watford	0	0	0	480	0	0
19-23 Exchange Road	Watford	0	0	0	806	0	0
26 Exchange Road	Watford	0	0	0	4,390	0	0
116 The Parade	Watford	0	0	0	200	0	0
Star House	Watford	7,071	0	0	0	0	0
64 Clarendon Road	Watford	7,483	0	0	0	0	0
7 Hamilton Street	Watford	0	0	0	0	0	261
Cardiff Road &	Watford	0	0	0	-12,800	0	0
Cardiff Road &	Watford	0	0	0	12,800	0	0
66-68 Queens Road	Watford	0	0	0	305	0	0
Unit 3, Chiltern Estate	Watford	0	0	745	0	0	0
3 Caxton Way	Watford	2,090	0	0	0	0	0
34 Clarendon Road	Watford	631	0	0	0	0	0
Creighton House	Watford	683	0	0	0	0	0
Venta Business Centre	Watford	387	0	0	0	0	0
114-124 Rickmansworth Rd	Watford	0	0	0	2,065	0	0
3 Faraday Close	Watford	0	596	0	0	0	0
Unit 1 Brookside	Watford	0	0	0	0	523	0
1-3 Gammons Lane	Watford	0	0	0	0	790	0
Areas A & C	Watford	0	0	0	0	23,225	0
Area B	Watford	0	0	0	0	23,225	0

Unit 1 Brookside	Watford	0	0	523	0	0	0
3 Faraday Close	Watford	0	0	0	0	0	596
728-732 St Albans Road	Watford	0	0	0	0	0	375
3 Caxton Way	Watford	0	0	0	0	2,090	0

2004 Commitments

Dacorum 2004 Commitments

Address	Town	Change Code	Plan Use Class	Outstanding Flrsp(sqm)
Three Cherry Trees Lane	Hemel Hempstead	Gain	B1	66,400
28 Mark Road	Hemel Hempstead	Gain	B1	560
Phase 3 3com	Hemel Hempstead	Gain	B1	9,813
New Ground Farm	Aldbury	Gain	B1	1,675
Site B	Hemel Hempstead	Gain	B1	2,484
Sharlowes Farm	Flaunden	Gain	B1	960
Lucas Site Phase 2	Hemel Hempstead	Gain	B1	21,424
Lucas Site	Hemel Hempstead	Gain	B1	10,160
235-237 London Road	Hemel Hempstead	Gain	B1	410
R/O 121 High Street	Berkhamsted	Gain	B1	563
76 High Street	Markyate	Gain	B1	323
Adj Spectra House	Hemel Hempstead	Gain	B1	541
Unit 5	Hemel Hempstead	Gain	B1	1,669
Maylands House	Hemel Hempstead	Gain	B1	3,696
Miswell Lane/Icknield Way	Tring	Gain	B1	3,200
28 Mark Road	Hemel Hempstead	Loss	B1	466
Knoll House	Hemel Hempstead	Loss	B1	850
Unit 3 Site One	Berkhamsted	Loss	B1	251
Aviation House	Berkhamsted	Loss	B1	825
Castle Mill	Berkhamsted	Loss	B1	936
The Mill Site	Wilstone	Loss	B1	-
Stags End House	Hemel Hempstead	Loss	B1	840
Maylands House	Hemel Hempstead	Loss	B1	1,900
Boxted Farm	Hemel Hempstead	Gain	B10	3,000
Kodak Sports Ground	Hemel Hempstead	Gain	B10	11,200
Dixons 200 The Campus	Hemel Hempstead	Gain	B1a	803
21-21a High Street	Hemel Hempstead	Gain	B1a	139
13 High Street	Hemel Hempstead	Gain	B1a	250
Hertfordshire House	Hemel Hempstead	Gain	B1a	1,640
Lucas Site	Hemel Hempstead	Gain	B1a	10,160
Eaton Court	Hemel Hempstead	Gain	B1a	625
Hertfordshire House	Hemel Hempstead	Loss	B1a	1,158
Icw Power	Berkhamsted	Gain	B1c	712
Golden West Foods Ltd	Hemel Hempstead	Gain	B1c	1,952
32-34 Tring Road	Long Marston	Loss	B1c	-
2 Buckwood Road	Markyate	Loss	B1c	-
K Langley Builders Yard	Kings Langley	Loss	B1c	360
Gossoms End/Stag Lane	Berkhamsted	Loss	B1c	7,572
Fletcher Way Garage	Hemel Hempstead	Gain	B2	285
Hewden Hire Ltd	Hemel Hempstead	Gain	B2	709
Sharlowes Farm	Flaunden	Loss	b2	431
London Road	Tring	Loss	b2	320
Harts Motors	Markyate	Loss	B2	660

235-237 London Road	Hemel Hempstead	Loss	B2	395
Fourways Garage	Little Gaddesden / Hudnall	Loss	B2	1,028
Land Adj Finway Road	Hemel Hempstead	Gain	B20	743
Horizon Point	Hemel Hempstead	Gain	B20	14,901
Lucas Site Phase 2	Hemel Hempstead	Loss	B20	13,620
Lucas Site	Hemel Hempstead	Loss	B20	-
Twinmar Ltd	Hemel Hempstead	Gain	B8	900
Sappi Europe Ltd	Hemel Hempstead	Gain	B8	356
Unit 3 Site One	Berkhamsted	Gain	B8	251
Field Farm	Markyate	Gain	B8	4,050
Aviation House	Berkhamsted	Gain	B8	825
Chiltern Hills W/Coolers	Aldbury	Gain	B8	341
Opp School House				
Farm	Markyate	Loss	B8	560
Warehouse	Berkhamsted	Loss	B8	357
R/O 15-15a Kitsbury				
Road	Berkhamsted	Loss	B8	130
Unit 5	Hemel Hempstead	Loss	B8	1,669
Hewden Hire Ltd	Hemel Hempstead	Loss	B8	546
Gas Board Site	Hemel Hempstead	Loss	B8	7,330

Three Rivers 2004 Commitments

Address	Town	Change Code	Plan Use Class	Outstanding Flrsp (sqm)
Adj Kebbell House	Carpenders Park	Gain	B1	2,110
Adj Hertford Place	Maple Cross	Gain	B1	8,825
Adj Hertford Place	Maple Cross	Gain	B1	7,440
Ovaltine Egg Farm	Kings Langley	Gain	B1	3,060
Hartcran House	Carpenders Park	Gain	B1	238
Unit B Home Park Ind Est	Kings Langley	Gain	B1	470
Land Adj 244 Prestwick Road	South Oxhey	Gain	B1	2,880
Ovaltine Site	Kings Langley	Gain	B1	4,252
Leavesden Aerodrome	Leavesden	Gain	B1	82,000
Hilltop Farm	Kings Langley	Gain	B1a	635
45-47 Church Street	Rickmansworth	Loss	B1	243
Brookdell Yard	Garston	Loss	B1	334
Darvells Yard	Chorleywood	Loss	B1	2,043
Seabrook Park	Kings Langley	Loss	B1	556
Brookdell Yard	Garston	Gain	B2	357
Brookdell Yard	Garston	Gain	B2	357
Adj Unit 6	Kings Langley	Gain	B8	285
Ovaltine Site	Kings Langley	Gain	B2	2,479
Harvey Road	Croxley Green	Loss	B1c	3,000
Napier House	Rickmansworth	Loss	B1c	725
Adj Kebbell House	Carpenders Park	Loss	B2	298
Ovaltine Site	Kings Langley	Loss	B2	27,900
Middleton Road	Rickmansworth	Loss	B8	1,057
Harefield Road Depot	Rickmansworth	Loss	B8	925

Watford 2004 Commitments

Address	Town	Change Code	Plan Use Class	Outstanding Firsp (sqm)
Russells Site	Watford	Gain	B1	3,550
7-9 Station Road	Watford	Gain	B1	3,260
The Pavillion	Watford	Gain	B1	240
R/O 117 Bushey Mill Lane	Watford	Gain	B1	387
24-28 Water Lane	Watford	Gain	B1	700
Maccess Group	Watford	Gain	B1	3,832
70 St Albans Road	Watford	Gain	B1	2,935
Central Hall	Watford	Gain	B1	266
19 Bridle Path	Watford	Gain	B1	761
26 Exchange Road	Watford	Gain	B1	7,734
Shell House	Watford	Gain	B1	1,939
Rocket Medical	Watford	Gain	B1	2,223
Carlos Industrial Estate	Watford	Gain	B1	560
Astral House	Watford	Gain	B1	1,310
22-24 Aldenham Road/	Watford	Gain	B1	2,285
Astral House	Watford	Gain	B1	465
Cardiff Road &	Watford	Gain	B1	15,050
Hertfordshire Arms	Watford	Gain	B1a	505
7-9 Station Road	Watford	Gain	B1a	3,838
53 Clarendon Road	Watford	Gain	B1a	5,390
Shell House	Watford	Gain	B1a	10,810
232-234 St Albans Road	Watford	Gain	B1a	296
Colonial Way / Radlett Road	Watford	Gain	B1a	2,895
T K Max	Watford	Gain	B1a	515
58-68 The Parade	Watford	Loss	B1	386
70 St Albans Road	Watford	Loss	B1	1,511
11-17 The Parade	Watford	Loss	B1	325
Laharna Trading Estate	Watford	Loss	B1	1,700
Rembrandt House	Watford	Loss	B1	603
Unit 10 Colne Way Court	Watford	Loss	B1	503
Gazelda Industrial Estate	Watford	Loss	B1	495
Colonial Way / Radlett Road	Watford	Loss	B1	1,108
Rocket Medical	Watford	Loss	B1	497
53 Clarendon Road	Watford	Loss	B1a	4,850
Shell House	Watford	Loss	B1a	1,301
Unit 5 Odhams Trading Est	Watford	Gain	B1c	2,079
Edson Printers	Watford	Gain	B1c	240
16-20 Upton Road	Watford	Gain	B1c	2,286
British Rail Land	Watford	Gain	B1c	48,791
24 Greenhill Crescent	Watford	Gain	B2	658
Imperial Way/Railway	Watford	Gain	B2	9,765
Cardiff Road &	Watford	Gain	B2	11,263
Laharna Trading Estate	Watford	Gain	B2	990
Shell Sceptre	Watford	Gain	B2	2,184
Unit 3 Imperial Park	Watford	Gain	B2	2,072
Rembrandt House	Watford	Gain	B2	303
Bays 2 & 3	Watford	Gain	B2	1,145

Unit 1	Watford	Gain	B2	564
232-234 St Albans Road	Watford	Gain	B8	155
Unit 2 Brookside	Watford	Gain	B8	300
Areas A & C	Watford	Gain	B8	2,110
Unit 10 Colne Way Court	Watford	Gain	B8	503
Unit 6 Woodshots Meadow	Watford	Gain	B8	712
Unit 3 Imperial Park	Watford	Loss	B2	2,072
R/O 96a-96c Queens Road	Watford	Loss	B1c	125
Bays 2 & 3	Watford	Loss	B1c	1,145
Unit 1	Watford	Loss	B1c	564
16-20 Upton Road	Watford	Loss	B1c	800
24 Greenhill Crescent	Watford	Loss	B2	919
Unit 6 Woodshots Meadow	Watford	Loss	B2	712
Cardiff Road &	Watford	Loss	B2	4,761
Unit 5 Odhams Trading Est	Watford	Loss	B8	2,079
Adj 19 Watford Heath	Watford	Loss	B8	182
Maccess Group	Watford	Loss	B8	2,842
Carlos Industrial Estate	Watford	Loss	B8	430
428 Whippendale Road	Watford	Loss	B8	1,858
Council Depot Site	Watford	Loss	B8	3,051
Cardiff Road &	Watford	Loss	B8	1,783
Clements Store	Watford	Loss	B8	39

APPENDIX 6

Future Employment and Demand for Space: 2011 and 2016

Forecasts to 2011

Dacorum

Table 8.1 Employment Forecasts for Dacorum, 2001-2011

	RSS scenario		High scenario	
	# Change	% Change	# Change	% Change
Manufacturing	-2,171	-32%	-2,770	-38%
Distribution	-394	-4%	-570	-6%
Other industrial	-44	-3%	-10	-1%
Total ind/whsg	-2,609	-15%	-3,350	-18%
Total offices	2,678	16%	1,937	11%
Total B space	69	0%	-1,413	-4%
Total other	6,344	16%	6,358	16%
Total jobs	6,413	9%	4,944	7%

Source: EBS; RTP

Table 8.2 Forecast Floorspace Demand for Dacorum, 2001-2011

Sq m	RSS scenario		High scenario	
	Change (sq m)	% Change	Change (sq m)	% Change
Ind/whsg	-80,864	-11%	-103,848	-14%
Offices	48,197	12%	34,859	9%
Total B space	-32,667	-3%	-68,989	-6%

Source: RTP; EBS

Three Rivers

Table 8.3 Employment Forecasts for Three Rivers, 2001-2011

	RSS scenario		High scenario	
	# Change	% Change	# Change	% Change
Manufacturing	-449	-17%	-621	-22%
Distribution	-716	-25%	-204	-9%
Other industrial	-43	-3%	432	43%
Total ind/whsg	-1,208	-18%	-393	-6%
Total offices	1,636	26%	1,983	27%
Total B space	428	3%	1,591	12%
Total other	1,941	10%	2,936	14%
Total jobs	2,369	7%	4,526	13%

Source: EBS; RTP

Table 8.4 Forecast Floorspace Demand for Three Rivers, 2001-2011

Sq m	RSS scenario		High scenario	
	Change (sq m)	% Change	Change (sq m)	% Change
Ind/whsg	-37,451	-19%	-12,168	-6%
Offices	29,450	15%	35,696	18%
Total B space	-8,000	-2%	23,528	6%

Source: RTP; EBS

Watford

Table 8.5 Employment Forecasts for Watford, 2001-2011

	RSS scenario		High scenario	
	# Change	% Change	# Change	% Change
Manufacturing	-2,134	-40%	-1,777	-33%
Distribution	242	4%	273	4%
Other industrial	393	39%	208	24%
Total ind/whsg	-1,499	-12%	-1,296	-10%
Total offices	1,316	7%	1,893	11%
Total B-Space	-183	-1%	597	2%
Total other	6,596	15%	3,504	10%
Total jobs	6,413	9%	4,101	6%

Source: EBS; RTP

Table 8.6 Forecast Floorspace Demand for Watford, 2001-2011

Sq m	RSS scenario		High scenario	
	Change (sq m)	% Change	Change (sq m)	% Change
Ind/whsg	-46,480	-10%	-40,168	-9%
Offices	23,689	10%	34,073	14%
Total B-Space	-22,792	-3%	-6,095	-1%

Source: RTP; EBS

SW Herts

Table 8.7 Employment Forecasts for SW Herts, 2001-2011

	RSS scenario		High scenario	
	# Change	% Change	# Change	% Change
Manufacturing	-4,754	-32%	-5,167	-33%
Distribution	-868	-5%	-501	-3%
Other industrial	306	8%	630	19%
Total ind/whsg	-5,316	-14%	-5,038	-14%
Total offices	5,630	14%	5,813	14%
Total B space jobs	314	0%	774	1%
Total other	14,881	15%	12,797	14%
Total jobs	15,195	8%	13,571	8%

Source: EBS; RTP

Table 8.8 Forecast Floorspace Demand for SW Herts, 2001-2011

	RSS scenario		High scenario	
	Change (sq m)	% Change	Change (sq m)	% Change
Ind/whsg	-164,796	-12%	-156,185	-11%
Offices	101,336	12%	104,628	13%
Total B space	-63,459	-3%	-51,557	-2%

Source: RTP; EBS

Table 8.9 Annual Employment Change, SW Herts, Past and Forecast

Jobs		1991-2001	2001-2011	
			RSS	High
Industrial/warehousing	#	90	-354	-336
	%	0.2%	-1.0%	-1.0%
Offices	#	695	375	388
	%	2.0%	0.9%	0.9%

Source: EBS; ABI, RTP

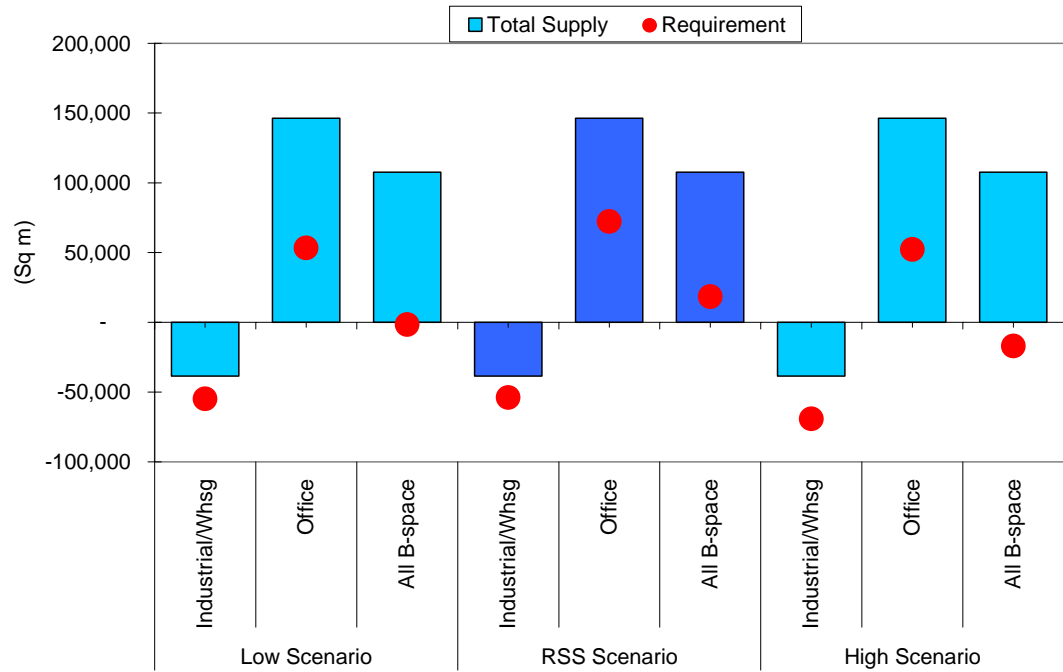
Table 5.11 Annual Completions, Business Space, SW Herts, Past and Forecast

Sq m	1991-2004	2001-2011	
		RSS	High
Gross Gain	53,987		
Gross Loss	61,319		
Net Change	-10,965	-4,231	-3,437

Source: HCC; RTP

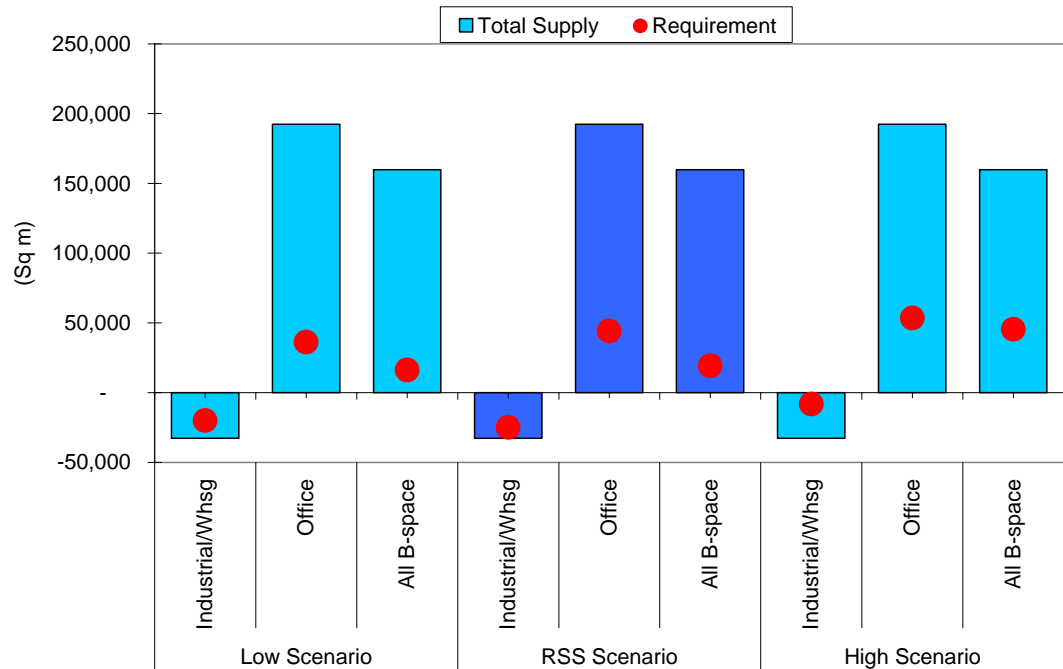
Market Balance

Figure 5.1 Supply and Requirement, Dacorun, 2001-2011



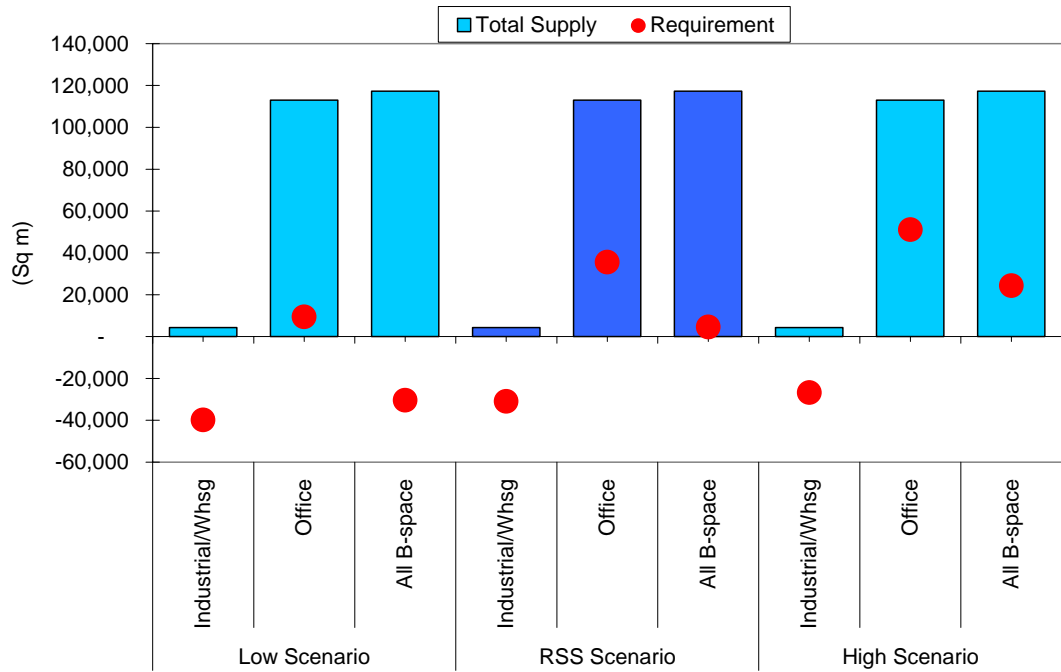
Source: RTP, King Sturge

Figure 5.2 Supply and Requirement, Three Rivers, 2001-2011



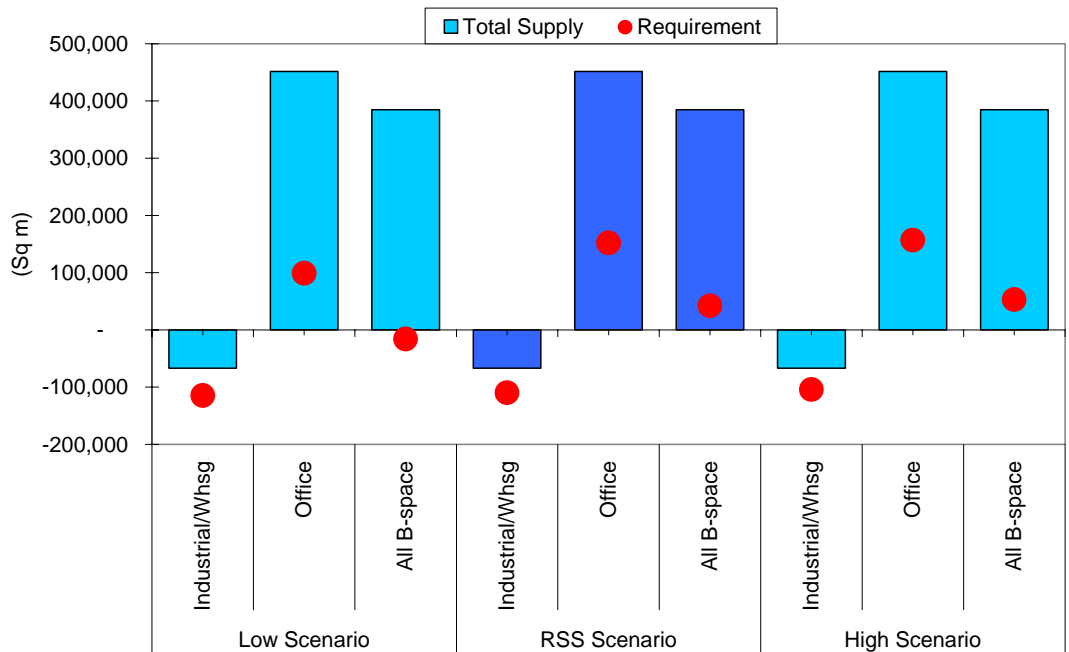
Source: RTP, King Sturge

Figure 5.3 Supply and Requirement, Watford, 2001-2011



Source: RTP, King Sturge

Figure 5.4 Supply and Requirement, SW Herts, 2001-2011



Source: RTP, King Sturge

Forecasts to 2016

Dacorum

Table 8.10 Employment Forecasts for Dacorum, 2001-2016

	RSS scenario		High scenario	
	# Change	% Change	# Change	% Change
Manufacturing	-2,731	-40%	-3,358	-46%
Distribution	-623	-7%	-683	-7%
Other industrial	64	4%	42	3%
Total ind/whsg	-3,290	-18%	-3,999	-22%
Total offices	3,811	23%	3,511	20%
Total B space	521	2%	-488	-1%
Total other	8,372	22%	8,992	23%
Total jobs	8,893	12%	8,504	11%

Source: EBS; RTP

Table 8.11 Forecast Floorspace Demand for Dacorum, 2001-2016

Sq m	RSS scenario		High scenario	
	Change (sq m)	% Change	Change (sq m)	% Change
Ind/whsg	-101,983	-14%	-123,977	-17%
Offices	68,598	17%	63,205	16%
Total B space	-33,385	-3%	-60,771	-5%

Source: RTP; EBS

Three Rivers

Table 8.12 Employment Forecasts for Three Rivers, 2001-2016

	RSS scenario		High scenario	
	# Change	% Change	# Change	% Change
Manufacturing	-730	-28%	-758	-27%
Distribution	-798	-28%	-255	-11%
Other industrial	108	9%	660	66%
Total ind/whsg	-1,420	-21%	-353	-6%
Total offices	2,126	34%	3,019	41%
Total B space	706	5%	2,666	20%
Total other	2,576	13%	3,934	19%
Total jobs	3,282	10%	6,600	19%

Source: EBS; RTP

Table 8.13 Forecast Floorspace Demand for Three Rivers, 2001-2016

Sq m	RSS scenario		High scenario	
	Change (sq m)	% Change	Change (sq m)	% Change
Ind/whsg	-44,024	-23%	-10,940	-6%
Offices	38,266	19%	54,333	27%
Total B space	-5,758	-1%	43,393	11%

Source: RTP; EBS

Watford

Table 8.14 Employment Forecasts for Watford, 2001-2016

	RSS scenario		High scenario	
	# Change	% Change	# Change	% Change
Manufacturing	-2,677	-51%	-2,451	-46%
Distribution	359	6%	552	9%
Other industrial	516	51%	330	38%
Total ind/whsg	-1,802	-14%	-1,569	-13%
Total offices	2,271	13%	3,194	19%
Total B-Space	469	2%	1,625	6%
Total other	8,423	20%	5,220	15%
Total jobs	8,893	12%	6,844	11%

Source: EBS; RTP

Table 8.15 Forecast Floorspace Demand for Watford, 2001-2016

Sq m	RSS scenario		High scenario	
	Change (sq m)	% Change	Change (sq m)	% Change
Ind/whsg	-55,854	-12%	-48,646	-11%
Offices	40,882	17%	57,488	24%
Total B-Space	-14,972	-2%	8,842	1%

Source: RTP; EBS

SW Herts

Table 8.16 Employment Forecasts for SW Herts, 2001-2016

	RSS scenario		High scenario	
	# Change	% Change	# Change	% Change
Manufacturing	-6,138	-41%	-6,567	-42%
Distribution	-1,062	-6%	-386	-2%
Other industrial	688	17%	1,032	30%
Total ind/whsg	-6,512	-17%	-5,921	-16%
Total offices	8,208	20%	9,724	23%
Total B space jobs	1,696	2%	3,802	5%
Total other	19,371	19%	18,145	19%
Total jobs	21,068	12%	21,948	13%

Source: EBS; RTP

Table 8.17 Forecast Floorspace Demand for SW Herts, 2001-2016

	RSS scenario		High scenario	
	Change (sq m)	% Change	Change (sq m)	% Change
Ind/whsg	-201,861	-15%	-183,563	-13%
Offices	147,746	18%	175,027	21%
Total B space	-54,115	-2%	-8,536	0%

Source: RTP; EBS

Table 8.18 Annual Employment Change, SW Herts, Past and Forecast

Jobs	1991-2001		2001-2016	
			RSS	High
Industrial/warehousing	#	90	-434	-395
	%	0.2%	-1.3%	-1.2%
Offices	#	695	547	648
	%	2.0%	1.2%	1.4%

Source: EBS; ABI, RTP

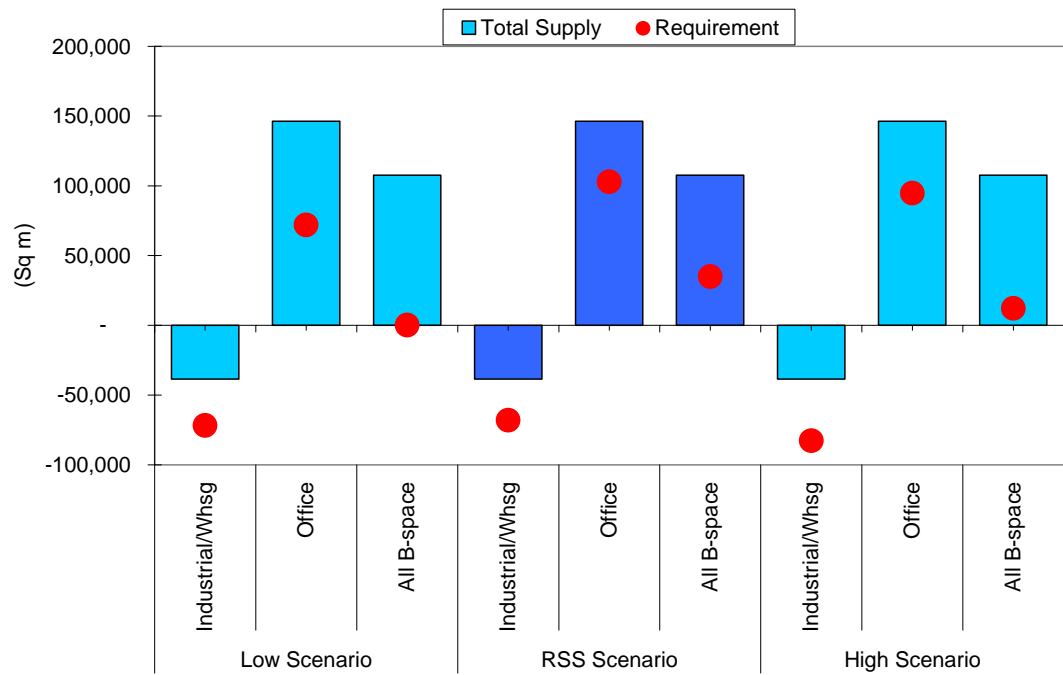
Table 5.11 Annual Completions, Business Space, SW Herts, Past and Forecast

Sq m	1991-2004	2001-2016	
		RSS	High
Gross Gain	53,987		
Gross Loss	61,319		
Net Change	-10,965	-3,608	-569

Source: HCC; RTP

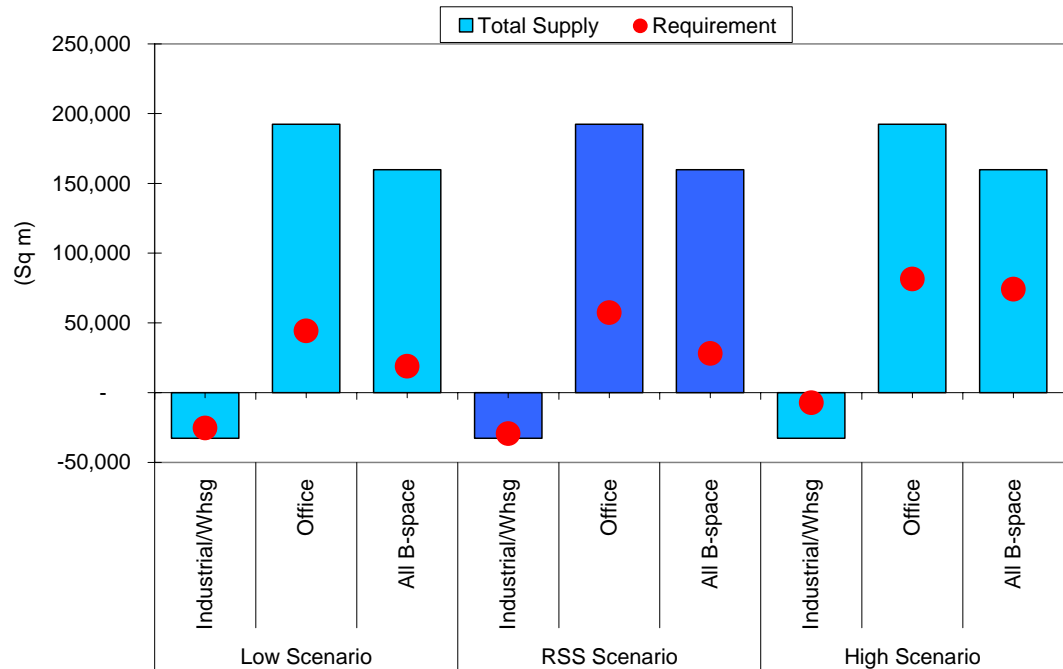
Market Balance

Figure 5.1 Supply and Requirement, Dacorun, 2001-2016



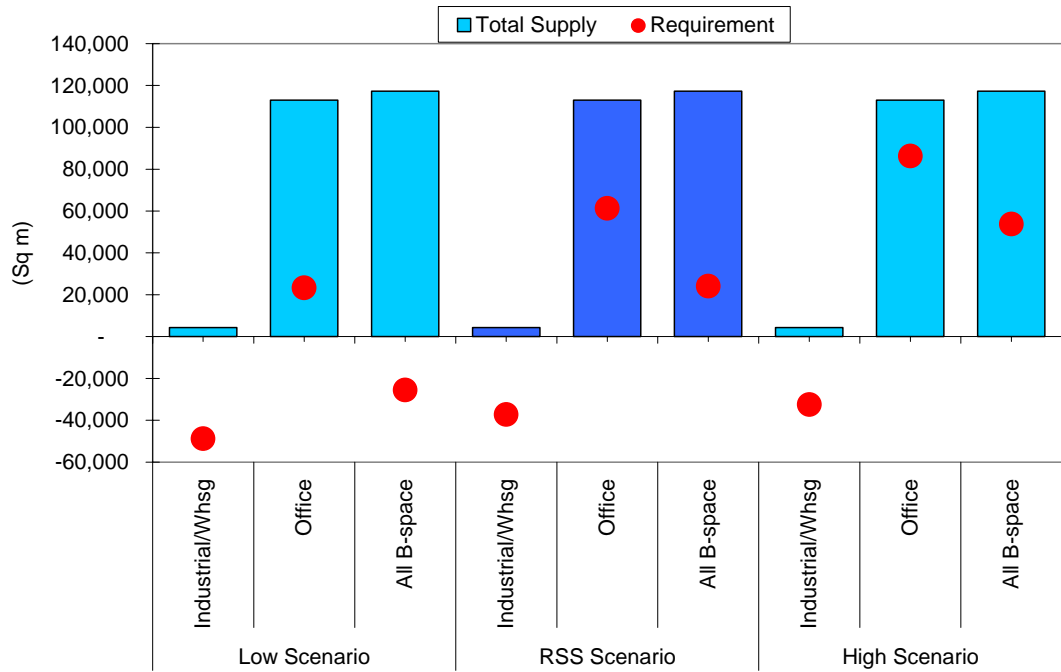
Source: RTP, King Sturge

Figure 5.2 Supply and Requirement, Three Rivers, 2001-2016



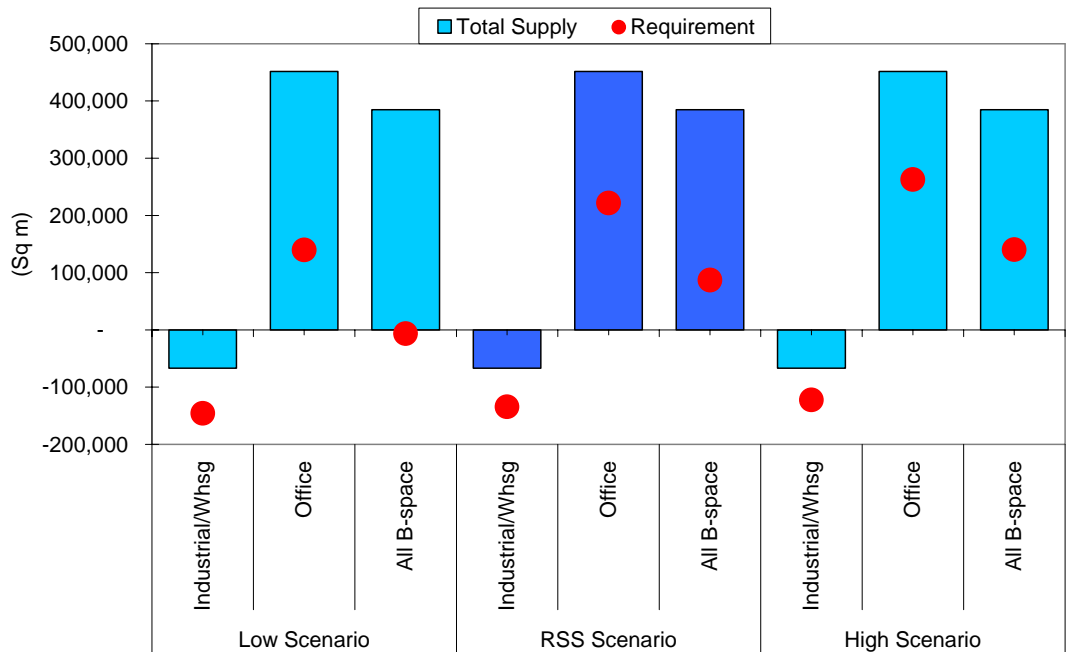
Source: RTP, King Sturge

Figure 5.3 Supply and Requirement, Watford, 2001-2016



Source: RTP, King Sturge

Figure 5.4 Supply and Requirement, SW Herts, 2001-2016



Source: RTP, King Sturge