

Loss of Employment Space in Hertfordshire

Study into extent, implications and solutions

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Contents

Executive Summary	i
1. Introduction	5
Context	5
Purpose and Focus	6
2. The Evidence	7
Market Geography	7
Change in Floorspace	9
Introduction	9
Change in Stock of Floorspace	12
Loss of Commercial Floorspace to Residential	15
Loss of Commercial Floorspace to Residential via PDR	17
Future Commitments	19
3. The Implications	22
Introduction	22
Key Drivers of Change	22
Key Implications	24
Future Implications	26
4. Conclusions and Solutions	28
Appendix A: Property Market Review	31
Appendix B: Floorspace Change	49
Appendix C: Future Workspace Developments	65
Appendix D: Stakeholder Engagement	71



Executive Summary

The Evidence

- This study has established a strong evidence base covering the change in employment floorspace in Hertfordshire over the last 10 years, with a particular focus on the loss of employment floorspace how much, where, the type of space lost, and what is driving the change. A key element has been on assessing the significance of the loss of employment floorspace on the economy, and what the practical solutions or responses to this could be.
- The property market analysis has demonstrated that there is healthy underlying demand in both
 the office and industrial sectors across Hertfordshire. The sectors that Hertfordshire performs
 well in the life sciences, agri-tech, advanced engineering and manufacturing, sustainable
 construction and the creative industries are leading this occupier demand, as well as pent-up
 demand in the SME market in particular.
- However, there is a severe lack of available supply to meet these demands. This has been one of
 the reasons for the relatively suppressed take-up rates compared to demand requirements. New
 stock is coming forward, but it is insufficient to meet demand levels. Development opportunities
 do exist, but difficulties with land ownership and assembly are holding back some of these
 potential schemes.
- Rental value growth in both the office and industrial sectors has been strong over the last few
 years, and out-performing regional trends. This is a double-edged factor, however. Whilst it is
 making development more viable, particularly for the office sector, it is also putting financial
 pressure on occupiers looking to move or expand. It is also eroding the price advantage that
 Hertfordshire has relative to surrounding locations, particularly London.
- In contrast to an active but highly constrained occupier market, Hertfordshire has seen a major haemorrhaging of commercial floorspace. Almost a quarter of the office stock has been lost over the last decade, and for some local authorities it has effectively halved. This contrasts with an increase in office-related employment of 19% over this period. Whilst efficiencies in workspace use are happening across the economy, the scale of the divergence between office loss and employment growth in Hertfordshire is putting major pressure on businesses.
- The industrial sector has not seen a net loss to the same extent as the office sector. Approximately 7% of the industrial floorspace stock was lost over the period 2008-09 to 2017-18, whilst employment increased by 1.5% in the sector. However, the nature of this market requires larger scale developments to meet future needs, so losses of industrial floorspace without suitable replacement space will create problems for the successful operation of the market.
- In total, there has been a net loss of over 771,000 sq. m. of commercial floorspace across Hertfordshire over the last decade. This is equivalent to the total office stock in St Albans, Watford and Welwyn Garden City combined.

- In part, this reflects the natural operation of the market, whereby obsolete, inefficient or poorly located floorspace is re-used for other purposes, and is resulting in more efficient business operations through more intensive space use. However, the scale of commercial floorspace loss witnessed across Hertfordshire goes beyond this, and is creating very real problems for existing, expanding and new businesses, and for those looking to move into the area, notably international investors.
- In that context, the impact of PDR on the office sector has been particularly significant. It has been responsible for the vast majority of the increased rate of loss of office floorspace since 2013-14. This is having a very significant impact on existing and potential occupiers.
- Whilst PDR has helped to remove excess or inappropriate floorspace in some areas and to contribute to housing needs to a small degree, the scale of loss, and the inability to avoid the loss of good quality and in-demand floorspace, is creating serious imbalances between supply and demand in the market. There are various examples of good quality, well located and in-demand office floorspace being lost to residential uses through PDR conversions across Hertfordshire. This includes cases of existing good covenant tenants being given notice to leave in order to convert the premises to residential use via permitted development.
- Further office PDR floorspace loss is set to arise as a result of PDR approvals which are yet to be implemented. These outstanding PDR office to residential conversions are equivalent to almost 80% of the total amount of floorspace lost via PDR over the period 2013-14 and 2017-18, so will denude the office floorspace stock further. In some local authorities in Hertfordshire this is equivalent to the total scale of loss of office floorspace to residential seen over the last five years. This will seriously impact the efficient, effective and sustainable operation of city and town centres as economic growth locations, especially for the creative and knowledge-based economy, as noted in a recent report by the Centre for Cities¹.

The Implications

- There are a number of key implications for the economy of Hertfordshire of this loss of employment floorspace. These include:
 - Constraining Growth the lack of currently available commercial space is inhibiting growth potential across the county. A particular concern is over the loss of small units, which has been driven by PDR conversions to a noticeable extent. These units are central to the needs of the SME business community, and the loss and lack of availability of such units is seen as a major limitation to the growth potential of this sector.
 - Forcing Relocations a knock-on consequence of the above issue is that existing businesses are being pushed outside of the county, and inward investment re-locations are effectively looking beyond Hertfordshire.

¹ Centre for Cities (March 2018). City Space Race. Balancing the need for housing and office space in cities.

- Reinforcing Home-Working space shortages are reinforcing home-working, although by default rather than design. This can have negative impacts upon economic performance and productivity, and lead to unintended consequences, such as a worker looking for employment opportunities elsewhere (potentially outside of the county) or relocating entirely.
- Limiting Productivity and Performance the reduction in the amount of floorspace per worker may be leading to operational difficulties for businesses and constraining the potential to achieve productivity improvements.
- Deteriorating Image there is a risk that Hertfordshire may be seen as 'closed for business', at least in a number of the key market areas, or may suggest a location in which business needs are secondary.
- Inhibiting Place-Making/Place-Shaping- the piecemeal loss of commercial floorspace is hindering local authorities and other stakeholders from delivering their place-making agendas.
- Restricting Achievement of SEP Objectives the loss of commercial floorspace and the
 potential continued loss of such floorspace will put major restrictions on the potential
 for the LEP to achieve the four key principles it has set out in the Strategic Economic Plan.
- In terms of the longer-term implications, a series of Strategic Scenarios were tested. These suggested that for the office sector the net reduction in the office floorspace stock could be between 34%-53% over the period 2008-2028, whilst industrial floorspace stock would reduce by between 8%-20%. These are significant levels of loss, which are likely to exacerbate the impacts on the Hertfordshire economy outlined earlier.
- In practical terms, office floorspace density levels could move from 8.4 sq. m. per FTE in 2018 to between 6-6.3 sq. m. per FTE in 2028. These notional employment density levels are considerably below normal operating density levels, as identified from recognised industry standards.

The Solutions

 There are a number of actions that would help in balancing the often competing land-use demands between residential and commercial use, and which would help ensure there is an appropriate amount, form, quality and distribution of employment floorspace to serve the needs of the Hertfordshire economy. These include the following:

A. Planning & Place-Making

- A1. Reinforcing Joint-Planning. The existing joint-planning initiatives introduced in Hertfordshire between the various Local Planning Authorities (LPAs) should be maintained and developed further.
- A2. Ensuring Local Plan Delivery. It is essential that up-to-date and NPPF conforming Local Plans are delivered across the county.

- A3. Balanced Housing and Commercial Space Delivery. It is important to reinforce
 the message to Government that securing sustainable communities and economy
 requires a balanced approach to housing and commercial land/floorspace provision –
 not just a housing emphasis.
- A4. Halting the use of PDR. The Government should halt the existing PDR conversions and should not proceed with proposed PDR extension contained in the recent consultation document. If the existing PDR conversions of commercial floorspace to residential are to continue, then we would urge the Government to prioritise commercial floorspace in key town and city centres, allowing automatic exemptions from the PDR that permits conversion of commercial floorspace to residential use.

B. Investment & Funding

- o **B1. Promoting Public Sector Development**. Where LPAs and other public bodies own land/property, the potential for developing SME and Grow-On units should be actively explored. This is an area of particular shortage of commercial floorspace in Hertfordshire, compounded by losses via PDR.
- B2. Developing Joint-Venture Initiatives. There should be further exploration of joint-venture opportunities between the public sector (LPAs and Hertfordshire LEP) and developers.
- o **B3. Provide Greater Tax Break Incentives**. Government should be encouraged to provide more incentivised tax breaks for upgrading or providing commercial property.
- B4. LEP Marketing and Funding. Hertfordshire LEP should lobby central Government on the impact of the loss of commercial floorspace for the Hertfordshire economy, and should progress further the work with LPAs and others in developing common strategies to support businesses in the county.

C. Infrastructure

- C1. Coordinated Master-Planning. The Garden Town and Village initiative could play an important role in meeting housing need in a well-planned and balanced manner, based around agreed master-planning principles, and should be progressed further. This same master-planning approach has application more widely across the County in relation to different forms of development, and would assist in dealing with the generally fragmented nature of land ownership in Hertfordshire.
- C2. Improving Transport Links. East-West transport links need improvement in order to achieve greater economic integration across the county and allow more internal business migration.
- Our research indicates that without appropriate support for and protection of commercial floorspace in Hertfordshire, over the next decade there will be further net floorspace loss which may result in the office stock in the County being at least 50% smaller than it was in 2008 and the industrial stock up to 20% smaller. This will critically impact the economic objectives and ambitions of the County.

1. Introduction

"Our Vision is simply that Hertfordshire should perform to its full potential". Hertfordshire LEP Strategic Economic Plan

Context

Hertfordshire LEP has the vision that by 2030, Hertfordshire will be recognised as the functional core of the Golden Triangle, the single most concentrated area in Europe for scientific research and development, benefiting the UK economy as a whole. Hertfordshire will therefore be among the UK's leading economies, helping to realise the full economic potential of the assets and opportunities within the Golden Triangle².

To achieve this vision Hertfordshire LEP has identified four Priorities that need to be advanced. These are:

- Maintaining global excellence in science and technology
- Harnessing positively the interconnectedness of Hertfordshire, particularly the relationships with London and elsewhere
- Re-invigorating places for the 21st Century
- Building the wider foundations for growth across the County for both businesses and people.

However, whilst Hertfordshire has seen jobs and population growth over the last decade this has not translated into an increase in economic output to the same extent. There are also substantial variations at a local level across the County. This relatively weak recent performance, particularly in terms of productivity (the key metric of economic efficiency), is the core overarching challenge that the Hertfordshire Strategic Economic Plan (SEP)³ is addressing.

One element of this challenge is understanding how the loss of commercial floorspace in Hertfordshire may be impacting the economy. This study has addressed this topic, and has assessed the nature and extent of such floorspace loss, examined what the implications are for the Hertfordshire economy, and considered what some of the solutions might be.

The results from this analysis will help inform the Local Industrial Strategy (LIS) that Hertfordshire LEP is developing in conjunction with partners. The LIS is in response to the Government's Industrial Strategy White Paper, which commits to working with local areas to co-develop Local Industrial Strategies that build on local strengths and deliver economic opportunities. The White Paper also states that it will prioritise areas with "the potential to drive regional growth, focusing on clusters of expertise and centres of economic activity"⁴.

² Hertfordshire LEP. *Perfectly Placed for Business. The Refreshed Strategic Economic Plan: 2017–2030* (July 2017) page 15

³ Hertfordshire LEP. Perfectly Placed for Business. The Refreshed Strategic Economic Plan: 2017–2030 (July 2017) page 7

⁴ Hertfordshire LEP. Grand Challenges for Hertfordshire. Towards our Local Industrial Strategy (2018) page 1

Hertfordshire LEP has committed to being in the vanguard of developing such a LIS, building on the work of the refreshed Strategic Economic Plan. As such, the findings from this study provide an important evidence base relating to the scale of and reasons for change in employment floorspace across the County, as well as a consideration of how best to deal with future change. This will help ensure the LIS is tailored to tackling the core needs of the County and reinforcing the focus of the Government's Industrial Strategy White Paper.

Purpose and Focus

An important objective of the study has been to establish a strong evidence base covering the change in employment floorspace in Hertfordshire over the last 10-years – both gains and losses. Of particular interest, though, is the loss of employment floorspace – how much has been lost, where has it been lost, the type of space lost, and what is driving this change? Underlying this, however, is the extent to which the loss of employment floorspace is of significance to the Hertfordshire economy, and, if it is, what are the implications and potential solutions?

There are a number of sources indicating that there has been a loss of employment floorspace across Hertfordshire, although the detail is variable. In addition, a number of potential drivers for this loss of employment floorspace have also been noted, including:

- Reduced Commercial Demand. A structurally-based overall net reduction in the level of demand for employment floorspace;
- Increased Residential Demand. Increased residential demand and limited residential supply leading to change of use of employment floorspace to residential;
- Commercial/Residential Value Differential. Differences in relative (higher) residential
 and (lower) commercial values leading to change of use of employment floorspace to
 residential;
- Removal of Poor Quality Stock. Removal of poorer quality of employment floorspace stock from the market (either with or without corresponding levels of replacement); and/or
- Competing Locations. Alternative commercial locations attracting businesses out of the local area.

This study has examined these and other factors in order to assess the extent to which they do apply across the different Hertfordshire economic markets. This has been through a combination of analysis of baseline datasets but also through consultation with a range of relevant stakeholders. This has been important in ensuring that the results and conclusions are both quantitatively based, qualitatively informed and align with the realities of the market and planning policy objectives.

The focus of the study has been Hertfordshire as a whole and the 10 individual local planning authorities within the County. However, reference has been made to the wider functional economic geography of the different market areas within Hertfordshire as relevant.

For the purposes of this study employment floorspace (also referred to as commercial floorspace) relates to the B Use Class categories only, namely offices, industrial and warehousing/logistics floorspace. Other forms of Non B Use Class employment, such as retail, health, education, data centres etc. have not been covered as part of this study.

2. The Evidence

"Once you eliminate the impossible, whatever remains, no matter how improbable, must be the truth".

Arthur Conan-Doyle

Market Geography

Hertfordshire has a population of approximately $1,180,900^5$, a full-time equivalent workforce of over $490,000^6$, and an economic output (as measured by Gross Value Added – GVA) of over £37 billion⁷. This results in an average economic output per worker of approximately £75,840 compared to £65,050 for the region⁸, and helps demonstrate the economic success and significance of the County.

This economic performance has been helped by the County having good motorway and railway connections, and its access and links to London. As a result, Hertfordshire is well represented in several internationally significant sectors, including the life sciences, agri-tech, advanced engineering and manufacturing, sustainable construction and the creative industries. There are a range of HQ functions within the County, as well as key operational functions, although most of the 58,000+ businesses are small enterprises.

The continued success of these sectors and businesses, and the wider economy more generally, depends upon a number of key ingredients. One of these is having suitable and available commercial property to meet the needs of businesses. In other words, potential occupiers need to be able to find the right type of space, at the right price and in the right location. This section explores the position across Hertfordshire, but with a particular focus on how changes in the commercial property market – notably loss of employment floorspace – may be changing this dynamic.

As a starting point, however, the administrative and economic geographies of Hertfordshire need to be understood. Whilst the diversity of the County is one of its strengths, it also means that the economic and property markets can have significant differences. These need to be noted in order to put the subsequent analysis into context.

Administratively there are 10 individual local planning authorities within the County:

Broxbourne St Albans
Dacorum Stevenage
East Hertfordshire Three Rivers
Hertsmere Watford

North Hertfordshire Welwyn Hatfield

⁵ ONS Mid-Year Population Estimates 2017 (https://www.hertfordshire.gov.uk/microsites/herts-insight/topics/population.aspx)

⁶ Experian (2018) UK Local Market Forecasts 2018 figures. Note that total workforce, including self-employed, is estimated as 665,000 in *Perfectly Placed for Business. The Refreshed Strategic Economic Plan: 2017–2030* (Hertfordshire LEP July 2017) page 6

⁷ Experian (2018) UK Local Market Forecasts 2018 figures

⁸ Experian (2018) UK Local Market Forecasts 2018 figures

These range from relatively compact town based authorities, such as Stevenage and Watford, to more rural market-town focused authorities, such as East and North Hertfordshire. In terms of the settlement pattern of the County, the largest towns are Hemel Hempstead, St Albans, Stevenage and Watford. These are distinct in nature, ranging from new towns (Hemel Hempstead and Stevenage), an historic city and commercial centre (St Albans) and a major regional centre in the case of Watford. There are also a range of smaller market towns and settlements, such as Borehamwood, Bishops Stortford, Cheshunt, Hertford, Hoddesdon and Welwyn Garden City.

This variation means there are different functional economic market areas operating across Hertfordshire. These functional economic market areas have different drivers and economic focus, and have seen differences in terms of employment floorspace change over the last decade. This has been drawn out as relevant as part of the analysis.

Based on published sources⁹ there are the following functional economic market areas covering Hertfordshire, which are also illustrated in Figure 2.1:

South West Hertfordshire - Dacorum, Hertsmere, St Albans, Three Rivers, Watford.

Hertfordshire London Arc – Broxbourne, Dacorum, Hertsmere, St Albans, Three Rivers, Watford, Welwyn Hatfield.

Broxbourne – Broxbourne, East Hertfordshire, Hertsmere, Welwyn Hatfield – and Enfield, Harlow, Epping Forest.

North Hertfordshire and Stevenage – North Hertfordshire, East Hertfordshire, Stevenage – and Luton, South Cambridgeshire.

Welwyn Hatfield – East Hertfordshire, North Hertfordshire, St Albans, Stevenage, Welwyn Hatfield – and Central Bedfordshire, Luton.

Regeneris (Feb 2016) South West Hertfordshire Economic Study.; RTP (March 2009) Hertfordshire London Arc Jobs Growth and Employment Land.; Regeneris (March 2013) North Hertfordshire Employment Land Review.

 ⁹ pba (October 2017) Dacorum Employment Land Availability Assessment, Atkins (Feb 2017 and Dec 2015)
 Welwyn Hatfield Economy Study.; AECOM (July 2016) Broxbourne Local Plan Employment Land Study.;

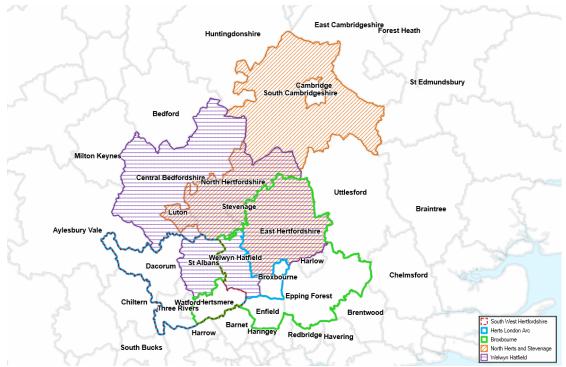


Figure 2.1: Functional Economic Market Areas in Hertfordshire

Source: LSH based on referenced source documents

Initially, however, analysis is considered at the local planning authority level as this will enable the findings to be married to planning and economic policy development.

Change in Floorspace

Introduction

To help put the change in commercial floorspace across Hertfordshire in context, we have provided an overview of the property market, primarily in terms of occupiers and their needs. This is provided in Appendix A.

The purpose of this analysis is to illustrate the performance of the commercial market across Hertfordshire, and any particular issues faced. This provides a gauge as to the underlying 'health' of the commercial property market, and allows this to be related to the longer-term changes that have been taking place in the amount of floorspace available for businesses and other organisations.

In terms of the office sector, the underlying demand for office space is strong in Hertfordshire, but is constrained by a severe lack of available supply. This is illustrated clearly in Figures 2.2 and 2.3, which show how office vacancy rates have reduced sharply and what this means in terms of the potential number of 'years' supply'. There is also little new stock coming forward, although there are a few (relatively minor) development opportunities emerging. This cocktail of factors is driving rental growth, which will hit occupiers but may make development more viable if there are opportunities to develop which are not taken for residential.

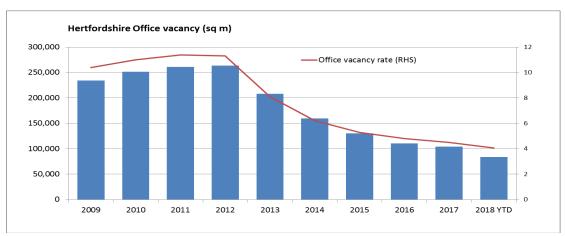


Figure 2.2: Office Vacancy in Hertfordshire

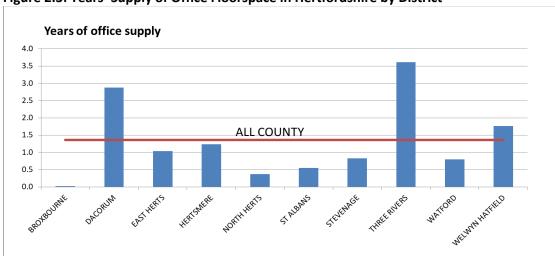


Figure 2.3: Years' Supply of Office Floorspace in Hertfordshire by District

Source: LSH and CoStar

The industrial sector has also witnessed strong demand for industrial space in Hertfordshire, but the severe lack of available supply is constraining the market. This is demonstrated in Figures 2.4 and 2.5, which show how industrial vacancy rates have declined significantly and how little notional 'years' supply' of floorspace there is to cater for demand.

New stock is coming forward, but it is insufficient to meet demand levels. Development opportunities do exist, but difficulties with land ownership and assembly are holding back some of these potential schemes. These factors are driving rental growth, which is reducing the competitive advantage of the County. However, alongside yield reductions, it is reinforcing development viability, although opportunities do need to come forward.

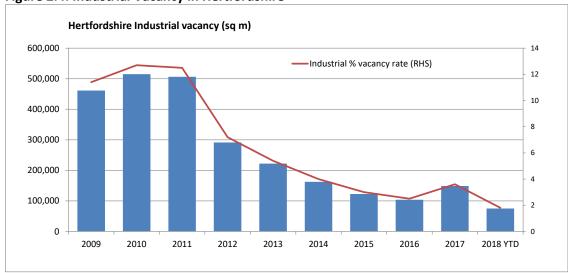


Figure 2.4: Industrial Vacancy in Hertfordshire

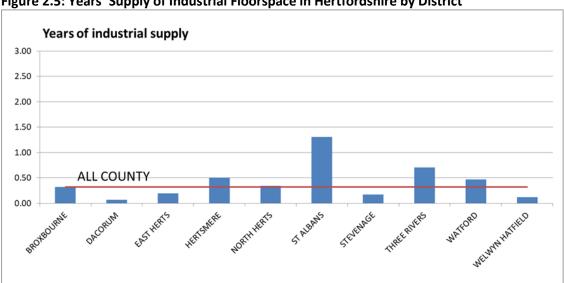


Figure 2.5: Years' Supply of Industrial Floorspace in Hertfordshire by District

Source: LSH and CoStar

The above property market analysis describes the expressed demand for commercial floorspace across Hertfordshire in the form of take-up of space, and how this relates to available supply and relationship with values. Alongside the expressed demand picture however, are changes in the total stock of floorspace. This can include additions to the stock of floorspace as a result of redevelopment or green-field development. It can also include losses to the stock of floorspace.

This pattern of overall change in commercial floorspace is examined below for Hertfordshire. To assist with this, we have used Valuation Office Agency (VOA) data as an initial reference point to provide an indication of the total stock of employment floorspace at local planning authority level. (Fuller details on the change in floorspace analysis are contained in Appendix B).

Change in Stock of Floorspace

Office Sector

In order to provide an appropriate understanding of the change in the stock of employment floorspace, as based on the Use Classes order, we have examined planning permission completions data. This presents a more 'planning focussed' set of results, and which are more closely tied to business operations. A range of data sets were supplied by Hertfordshire County Council (Spatial Planning & Economy) on planning permission completions by District and Use Class, Prior Approval data, and commitments. This has provided a detailed evidence base on how the commercial floorspace has changed across Hertfordshire over the last 10 years.

Figure 2.6 summarises the picture for the office sector in Hertfordshire. This shows that there has been a net loss of approximately 407,820 sq. m. of office floorspace over the past decade. Despite gains of approximately 230,040 sq. m. of office floorspace over this period, this was off-set by the loss of almost 637,900 sq. m. of office floorspace. All local authorities have seen a net loss in office floorspace stock, with the largest net losses being in Welwyn Hatfield, Hertsmere, Dacorum and St Albans.

Figure 2.6: Composition of Changes in Stock of Office Floorspace in Hertfordshire by District

	VOA Stock 2008-	Floorspace	Floorspace	Net	Change	Adjusted Stock
Office	09 (sq m)	Gains (sq m)	Losses (sq m)	(sq	m)	2017-18 (sq m)
Broxbourne	77,000	5,206	26,253	-	21,047	55,953
Dacorum	310,000	26,167	88,011	-	61,844	248,156
East Hertfordshire	176,000	20,507	55,969	-	35,462	140,538
Hertsmere	198,000	18,179	81,901	-	63,722	134,278
North Hertfordshire	137,000	9,753	41,527	-	31,774	105,226
St Albans	213,000	15,770	74,317	-	58,547	154,453
Stevenage	149,000	34,061	48,706	-	14,645	134,355
Three Rivers	153,000	31,854	34,786	-	2,932	150,068
Watford	231,000	13,902	48,943	-	35,041	195,959
Welwyn Hatfield	301,000	54,641	137,443	-	82,802	218,198
Total	1,945,000	230,040	637,856	-	407,816	1,537,184

Source: LSH and VOA

The resulting impact upon the office floorspace stock is summarised in Figure 2.7. This shows that, in proportionate terms, the largest losses have been in Hertsmere, Welwyn Hatfield, Broxbourne and St Albans. These local authorities have lost more than a quarter of the total office stock over the period 2008-09 to 2017-18. Overall, approximately 21% of the office floorspace stock in Hertfordshire has been lost over this period.

Figure 2.7: Change in Total Stock of Office Floorspace in Hertfordshire by District

	VOA Base	LPA Adjusted	LPA Adjusted	Stock Change
Office	Stock 2008-09	Stock 2012-13	Stock 2017-18	2008-9 to 2017-8
Broxbourne	77,000	69,633	55,953	-27%
Dacorum	310,000	273,789	248,156	-20%
East Hertfordshire	176,000	160,784	140,538	-20%
Hertsmere	198,000	185,358	134,278	-32%
North Hertfordshire	137,000	126,978	105,226	-23%
St Albans	213,000	196,280	154,453	-27%
Stevenage	149,000	166,563	134,355	-10%
Three Rivers	153,000	155,364	150,068	-2%
Watford	231,000	230,558	195,959	-15%
Welwyn Hatfield	301,000	255,546	218,198	-28%
Total	1,945,000	1,820,853	1,537,184	-21%

Source: Hertfordshire County Council and LSH

Meanwhile, office related employment has increased by approximately 19% over the period 2008 to 2018¹⁰ in Hertfordshire. There is likely to be an element of improved workspace efficiency and new working practices which may be reducing the overall need for office floorspace (see Appendix C). Nevertheless, the scale of divergence between employment growth and office floorspace reduction is likely to be leading to operational difficulties for businesses.

As an illustration of this, the notional office employment floorspace density figure has reduced from 12.7 sq. m. per FTE in 2008 to 8.4 sq. m. per FTE¹¹. This is a reduction in office floorspace per FTE of over a third over this period. Whilst the actual employment density figure needs to be viewed as a guide only, the key point is the scale of change in floorspace provision per worker.

Industrial Sector

In terms of the industrial sector, Figure 2.8 summarises the picture for the industrial sector in Hertfordshire. This shows that there has been a net loss of approximately 370,500 sq. m. of industrial floorspace over the past decade. There were gains of approximately 550,000 sq. m. of industrial floorspace over this period, but this was off-set by the loss of almost 920,480 sq. m. of industrial floorspace. The main locations of net loss have been East Hertfordshire, Stevenage, Three Rivers, Dacorum and St Albans. These local authorities have seen approximately three-quarters of the net loss of industrial floorspace across the county.

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¹⁰ Source: Experian (2018) UK Local Market Forecasts FTE Employment, broad sectors. 2018 figures

¹¹ Based on FTE employment for Hertfordshire from Experian (2018) UK Local Market Forecasts, and office floorspace figures from Table B5 in Appendix B.

Figure 2.8: Composition of Changes in Stock of Industrial Floorspace in Hertfordshire by District

	VOA Stock 2008-	Floorspace	Floorspace	Net Change	Adjusted Stock
Industrial	09 (sq m)	Gains (sq m)	Losses (sq m)	(sq m)	2017-18 (sq m)
Broxbourne	567,000	61,520	50,110	11,410	578,410
Dacorum	679,000	83,311	126,616	- 43,305	635,695
East Hertfordshire	658,000	48,999	139,120	- 90,121	567,879
Herts mere	381,000	23,660	65,351	- 41,691	339,309
North Hertfordshire	654,000	71,009	97,425	- 26,416	627,584
St Al bans	408,000	29,263	71,308	- 42,045	365,955
Stevenage	595,000	61,072	113,239	- 52,167	542,833
Three Rivers	150,000	67,896	111,487	- 43,591	106,409
Watford	431,000	40,176	64,833	- 24,657	406,343
Welwyn Hatfield	688,000	63,077	80,990	- 17,913	670,087
Total	5,211,000	549,983	920,479	- 370,496	4,840,504

Source: Hertfordshire County Council and LSH

The resulting impact upon industrial floorspace stock is summarised in Figure 2.9. This shows that, overall, there has been a 7% net loss in industrial floorspace between 2008-09 and 2017-18. The major net losses have been at East Hertfordshire, Hertsmere, St Albans and Stevenage.

The most significant apparent net decline is at Three Rivers, with a 29% reduction in industrial stock. However, this is based upon one particular scheme, the redevelopment of Leavesden Studios, which was approximately 50,000 sq. m. in size. However, this is an exceptional scheme, which is not representative of the broader industrial market. Excluding this scheme from the figures means that Three Rivers has a net decline of approximately 2%. The overall net decline for Hertfordshire reduces to a 6% net loss as a result of this adjustment.

Figure 2.9: Change in Total Stock of Industrial Floorspace in Hertfordshire by District

	VOA Base	LPA Adjusted	LPA Adjusted	Stock Change
Industrial	Stock 2008-09	Stock 2012-13	Stock 2017-18	2008-9 to 2017-8
Broxbourne	567,000	586,439	578,410	2%
Dacorum	679,000	643,600	635,695	-6%
East Hertfordshire	658,000	643,667	567,879	-14%
Hertsmere	381,000	358,792	339,309	-11%
North Hertfordshire	654,000	646,679	627,584	-4%
St Albans	408,000	393,017	365,955	-10%
Stevenage	595,000	559,323	542,833	-9%
Three Rivers	150,000	96,845	106,409	-29%
Watford	431,000	427,900	406,343	-6%
Welwyn Hatfield	688,000	679,194	670,087	-3%
Total	5,211,000	5,035,456	4,840,504	-7%

Source: Hertfordshire County Council and LSH

In contrast to the decline in the overall industrial floorspace stock, there has been a small increase of approximately 1.5% in industrial related employment over the period 2008 to 2018¹² in Hertfordshire. Automation and other developments in this sector (see Appendix C), notably the logistics sector, may well have been able to absorb these differing trends in broad terms. However, the employment growth rate over the next 10 years is expected to double in this sector in Hertfordshire, which may start to increase pressure.

As an illustration of this, the notional industrial employment floorspace density figure has reduced from 55.5 sq. m. per FTE in 2008 to 50.8 sq. m. per FTE¹³. This is a reduction in industrial floorspace per FTE of approximately 8% over this period. The projected employment growth rate of 3.2% over the next decade in this sector with no further net loss in industrial floorspace, would result in a notional industrial employment floorspace density figure of 45.8 sq. m. per FTE. This would mean a reduction in employment floorspace provision of over 17% since 2008.

Loss of Commercial Floorspace to Residential

Office Sector

A key destination for floorspace lost from commercial use is for residential purposes. Figure 2.10 summarises the amount of office floorspace that has been lost to residential use. It should be noted, however, that this probably under-estimates the amount of floorspace lost to residential uses due to the way data has been recorded and captured on the planning applications and permissions database. Nevertheless, the figures contained in Figure 2.18 are likely to be representative of the broad scale of office floorspace loss to residential.

From Figure 2.10 it can be seen that approximately 335,440 sq. m. of office floorspace has been lost to residential use, or 53% of total loss of office floorspace over the period 2008-09 to 2017-18. The largest absolute losses have been in Welwyn Hatfield, St Albans, Stevenage and Hertsmere, and the largest proportional losses have been in St Albans, Stevenage and Broxbourne.

Of particular interest, however, has been the change in the proportion of office floorspace loss to residential between the periods 2008-09 to 2012-13 and from 2013-14 to 2017-18. Over the period 2008-09 to 2012-13 approximately 35% of the loss of office floorspace was to residential use, whilst from 2012-13 to 2017-18 the rate of loss almost doubled to 65%. As will be discussed later, this has been driven by PDR conversions.

¹³ Based on FTE employment for Hertfordshire from Experian (2018) UK Local Market Forecasts, and office floorspace figures from Table B5 in Appendix B.

¹² Source: Experian (2018) UK Local Market Forecasts FTE Employment, broad sectors. 2018 figures

Figure 2.10: Loss of Office Floorspace to Residential in Hertfordshire by District

Office (Loss to Residential)	Floorspace Losses (sq m)	Loss to Residential (sq m)	Loss to Residential (% of All Loss)
Broxbourne	26,253	16,531	63%
Dacorum	88,011	28,121	32%
East Hertfordshire	55,969	22,447	40%
Hertsmere	81,901	36,514	45%
North Hertfordshire	41,527	22,968	55%
St Albans	74,317	59,741	80%
Stevenage	48,706	36,594	75%
Three Rivers	34,786	13,094	38%
Watford	48,943	22,205	45%
Welwyn Hatfield	137,443	77,223	56%
Total	637,856	335,438	53%

Source: Hertfordshire County Council and LSH

Industrial Sector

Figure 2.11 summarises the amount of industrial floorspace that has been lost to residential use. This shows that approximately 138,710 sq. m. of industrial floorspace has been lost to residential use, or 25% of the loss of industrial floorspace over the period 2008-09 to 2017-18. The largest absolute losses have been in North Hertfordshire, Welwyn Hatfield and St Albans, and the largest proportional losses have been in North Hertfordshire, St Albans, Stevenage and Broxbourne.

As with the office sector, there has been a change in the proportion of industrial floorspace loss to residential between the periods 2008-09 to 2012-13 and from 2013-14 to 2017-18. Over the period 2008-09 to 2012-13 approximately 21% of the loss of industrial floorspace was to residential use, whilst from 2013-14 to 2017-18 the rate of loss increased to 28%.

Figure 2.11: Loss of Industrial Floorspace to Residential in Hertfordshire by District

Industrial (Loss to	Floorspace Losses	Loss to Residential	Loss to Residential
Residential)	(sq m)	(sq m)	(% of All Loss)
Broxbourne	50,110	9,040	18%
Dacorum	126,616	9,933	8%
East Hertfordshire	139,120	23,197	17%
Hertsmere	65,351	22,008	34%
North Hertfordshire	97,425	51,391	53%
St Albans	71,308	31,775	45%
Stevenage	113,239	44,839	40%
Three Rivers	111,487	7,682	7%
Watford	64,833	7,361	11%
Welwyn Hatfield	80,990	23,551	29%
Total	920,479	230,777	25%

Source: Hertfordshire County Council and LSH

Loss of Commercial Floorspace to Residential via PDR

An extension to Permitted Development Rights (PDR) was introduced in 2013 to allow the conversion of office floorspace to residential use. Analysis of the scale of loss of office floorspace to residential use via PDR approval in Hertfordshire is summarised in Figure 2.12. This focuses on the office sector, as this is where the vast majority of change has been within Hertfordshire. It should be noted that a direct comparison between the PDR floorspace figures and the completed planning permission data is difficult in terms of an annual like-for-like basis, but the overall figures provide a reasonable basis for comparison.

From Figure 2.12 it can be seen that the amount of office floorspace loss to residential via PDR approvals across Hertfordshire over the period 2013-14 to 2017-18 was approximately 133,540 sq. m. This is approximately 55% of all the office floorspace loss to residential use over this period. In absolute terms the local authorities with the largest amount of office PDR to residential are Welwyn Hatfield, St Albans and Stevenage. In proportionate terms those most noticeably impacted are Three Rivers, Welwyn Hatfield, Broxbourne and Stevenage.

Figure 2.12: Loss of Office Floorspace to Residential via PDR in Hertfordshire by District

Office (PDR Loss to	Total Office Loss	Total Office Loss	Office Loss to	Office Loss to	Loss via PDR	PDR Loss as %
Residential)	2008-09 to 2012-	2013-14 to 2017-	Residential 2008-09	Residential 2013-14	2013-14 to 2017-	2013-14 to 2017-
Residential)	13 (sq m)	18 (sq m)	to 2012-13 (sq m)	to 2017-18 (sq m)	18 (sq m)	18 Loss
Broxbourne	7,891	18,362	1,754	14,777	10,890	73.7%
Dacorum	44,986	43,025	8,500	19,621	10,558	53.8%
East Hertfordshire	25,340	30,629	2,619	19,828	3,820	19.3%
Hertsmere	25,365	56,536	5,460	31,054	12,906	41.6%
North Hertfordshire	13,212	28,315	7,191	15,777	4,683	29.7%
St Albans	23,229	51,088	13,807	45,934	26,145	56.9%
Stevenage	8,159	40,547	1,572	35,022	25,487	72.8%
Three Rivers	11,474	23,312	4,322	8,772	6,825	77.8%
Watford	7,352	41,591	4,283	17,922	5,271	29.4%
Welwyn Hatfield	92,189	45,254	41,355	35,868	26,950	75.1%
Total	259,197	378,659	90,863	244,575	133,535	54.6%

Source: Hertfordshire County Council and LSH

From Figure 2.12 it can also be seen that the amount of office floorspace loss increased from approximately 259,200 sq. m. between 2008-09 and 2012-13, to approximately 378,660 sq. m. between 2013-14 and 2017-18 (146% increase). The amount of office floorspace loss to residential over these two periods increased from approximately 90,860 sq. m. between 2008-09 and 2012-13, to approximately 244,575 sq. m. between 2013-14 and 2017-18 (169% increase).

Of the 244,575 sq. m. of office floorspace loss to residential between 2013-14 and 2017-18, 133,535 sq. m. was via PDR approvals. Assuming that the 90,860 sq. m. is the 'natural' rate of loss of office to residential use, then of the 153,710 sq. m. increase in office floorspace loss between 2013-14 and 2017-18 (244,575-90,863) over this 'natural' rate of 90,860 sq. m., approximately 86% (133,535 sq. m.) is due to PDR approvals. In other words, the increased rate of loss of office floorspace post-2013 is fundamentally associate with PDR conversions.

However, this only captures part of the picture, as it deals with completed PDR approvals up to March 2018. There are a considerable number of PDR approvals of office to residential conversions that are committed but which have not been implemented as yet. The scale of the potential loss of office floorspace to residential via these committed approvals is summarised in Figure 2.13.

From Figure 2.13 it will be seen that there is potentially another 106,840 sq. m. of office floorspace that could be lost to residential use via PDR approvals. This is almost 80% of the scale of office floorspace loss via PDR approvals seen since 2013-14. The largest absolute losses may be in Dacorum, St Albans and Hertsmere.

Figure 2.13: Committed Office Floorspace Losses to Residential via PDR in Hertfordshire by District

Local Authority	Prior Approval Commitments 31/03/2018 (Office Sector - sq m)
Broxbourne	2,594
Dacorum	21,480
East Hertfordshire	10,842
Hertsmere	17,647
North Hertfordshire	2,150
St Albans	21,083
Stevenage	1,057
Three Rivers	11,463
Watford	10,036
Welwyn Hatfield	8,490
Total	106,842

Source: Hertfordshire County Council and LSH

Figure 2.14 illustrates what the additional office to residential PDR conversions may mean in terms of the total stock of office floorspace in Hertfordshire. If all of these PDR approvals are developed out, then the total loss of office floorspace since 2008-09 may increase by 5%-points to stand at 26%.

Figure 2.14: Potential Impact of Committed PDR Approvals on Total Office Floorspace Stock in Hertfordshire by District

Local Authority	VOA Stock 2008- 09	Adjusted Stock 2017-18	2018 Stock with PDR Commitments	Stock Change 2008- 09 to 2018+
Broxbourne	77,000	55,953	53,359	-31%
Dacorum	310,000	248,156	226,676	-27%
East Hertfordshire	176,000	140,538	129,696	-26%
Hertsmere	198,000	134,278	116,631	-41%
North Hertfordshire	137,000	105,226	103,076	-25%
St Albans	213,000	154,453	133,370	-37%
Stevenage	149,000	134,355	133,298	-11%
Three Rivers	153,000	150,068	138,605	-9%
Watford	231,000	195,959	185,923	-20%
Welwyn Hatfield	301,000	218,198	209,708	-30%
Total	1,945,000	1,537,184	1,430,342	-26%

Source: Hertfordshire County Council, VOA and LSH

Future Commitments

The above analysis has illustrated what *has* happened in terms of the change of floorspace across Hertfordshire, along with indications of the outstanding implementation of office to residential PDR approvals. Below we outline what *may* happen over the short-term in relation to identified commitments. This includes both additions to the stock as well as losses.

The total identified B Use floorspace commitments are summarised in Figure 2.15, which indicates approximately 807,310 sq. m. of B Use floorspace 'gains' across Hertfordshire as a whole. However, this includes exceptional developments such as the 331,655 sq. m. Strategic Rail Freight Interchange in St Albans, which need to be removed from the analysis in order to provide a more representative picture of the commercial property market.

In addition, there are anticipated losses in B Use floorspace that need to be incorporated into the analysis. Once these are accounted for, then there may be approximately 146,700 sq. m. of B Use floorspace that could come forward over the next few years, although there is no certainty that this amount of floorspace would be developed (Figure 2.215.

When split down by sector it can be seen that approximately 81,970 sq. m. of office floorspace may come forward over the next few years, once committed losses are accounted for. Notwithstanding the overall small gain in office floorspace, there are expected to be losses in a number of local authorities. This includes approximately 22,190 sq. m. at St Albans, 8,140 sq. m. at Hertsmere and 7,670 sq. m. at Dacorum.

The industrial sectors may see an additional 64,730 sq. m. of floorspace come forward across Hertfordshire as a whole. Again, there are some local authorities where there may be a net loss, including Stevenage (approximately 21,740 sq. m.), Watford (approximately 12,590 sq. m.) and Three Rivers (approximately 11,145 sq. m.).

Figure 2.15: B Use Commitments in Hertfordshire

Local Authority/ sq m	Total Office Commitments	Total Industrial Commitments	Total	Total Office Commitments after Planned Losses	Total Industrial Commitments after Planned Losses	Total
Broxbourne	5,871	6,618	12,489	1,202	-1,864	-662
Dacorum	22,901	88,681	111,582	-7,672	76,372	68,700
East Hertfordshire	24,395	29,907	54,302	11,946	19,589	31,535
Hertsmere	19,419	18,202	37,621	-8,142	16,730	8,588
North Hertfordshire	5,999	13,668	19,667	-4,885	6,119	1,234
St Albans	5,166	335,012	340,178	-22,187	-1,853	-24,040
Stevenage	25,325	10,690	36,015	11,225	-21,743	-10,518
Three Rivers	51,119	325	51,444	36,363	-11,145	25,218
Watford	81,010	6,028	87,038	53,052	-12,588	40,464
Welw yn Hatfield	34,865	22,107	56,972	11,072	-4,889	6,183
Total	276,070	531,238	807,308	81,974	64,728	146,702

Source: Hertfordshire County Council and LSH

Figure 2.16 summarises the position for the office sector in terms of the change in office floorspace over the last decade adjusted for net commitments and outstanding PDR office to residential approvals. This shows that, overall, there has been a 22% reduction in the total stock of office floorspace across Hertfordshire, assuming all the outstanding commitments are delivered.

There are some dramatic reductions at some local authorities. The stock of office floorspace at St Albans and Hertsmere has almost halved over the past decade. Apart from Stevenage, Three Rivers and Watford, the other local authorities are expected to see drops of between 20% and 29%. These are substantial levels of office floorspace loss.

Figure 2.16: Actual and Planned Change in Stock of Office Floorspace in Hertfordshire

		Adjusted Stock	Adjusted Stock for	Adjusted Stock	
	VOA Office	2017-18 (Net B	Committed PDR	for B Use	% Change 2008-9
Local Authority/sq m	Stock 2008-09	Use Changes)	Office Losses	Commitments	to 2018+
Broxbourne	77,000	55,953	53,359	54,561	-29%
Dacorum	310,000	248,156	226,676	219,004	-29%
East Hertfordshire	176,000	140,538	129,696	141,642	-20%
Hertsmere	198,000	134,278	116,631	108,489	-45%
North Hertfordshire	137,000	105,226	103,076	98,191	-28%
St Albans	213,000	154,453	133,370	111,183	-48%
Stevenage	149,000	134,355	133,298	144,523	-3%
Three Rivers	153,000	150,068	138,605	174,968	14%
Watford	231,000	195,959	185,923	238,975	3%
Welwyn Hatfield	301,000	218,198	209,708	220,780	-27%
Total	1,945,000	1,537,184	1,430,342	1,512,316	-22%

Source: Hertfordshire County Council and LSH

Figure 2.17 summarises the position for the industrial sector in terms of the change in industrial floorspace over the last decade adjusted for net commitments. This shows that, overall, there has been a 5% reduction in the total stock of industrial floorspace across Hertfordshire, assuming all the outstanding commitments are delivered. Apart from Broxbourne and Dacorum, all local authorities are expected to see a net reduction in industrial floorspace. The largest reductions are in East Hertfordshire, St Albans and Stevenage.

Figure 2.17: Actual and Planned Change in Stock of Industrial Floorspace in Hertfordshire

		Adjusted Stock	Adjusted Stock	
	VOA Office	2017-18 (Net B	for B Use	% Change 2008-9
Local Authority/sq m	Stock 2008-09	Use Changes)	Commitments	to 2018+
Broxbourne	567,000	578,410	576,546	2%
Dacorum	679,000	635,695	712,067	5%
East Hertfordshire	658,000	567,879	587,468	-11%
Hertsmere	381,000	339,309	356,039	-7%
North Hertfordshire	654,000	627,584	633,703	-3%
St Albans	408,000	365,955	364,102	-11%
Stevenage	595,000	542,833	521,090	-12%
Three Rivers	150,000	157,049	145,904	-3%
Watford	431,000	406,343	393,755	-9%
Welwyn Hatfield	688,000	670,087	665,198	-3%
Total	5,211,000	4,891,144	4,955,872	-5%

Source: Hertfordshire County Council and LSH

3. The Implications

"By changing nothing, nothing changes."

Tony Robbins

Introduction

This section examines what the implications of the changes in floorspace outlined in Section 2 may mean for the Hertfordshire economy. To do so, however, we need to understand what some of the key reasons for the changes are. This has been informed by discussions with a range of stakeholders (see Appendix D), market knowledge, review of the data, and evidence from other relevant studies.

Key Drivers of Change

There are various reasons underlying the **net** loss of floorspace across Hertfordshire. In part, this reflects normal land-use adjustments, responding to property obsolescence¹⁴, changing location preferences and policy emphasis, as well as changing work practices (see Appendix C). However, in an ideal market situation, such losses would be addressed by delivery of more suitable floorspace gains, at least as far as employment growth and occupier demand supported this.

This has not occurred in Hertfordshire to the same level as losses, despite relatively healthy occupier demand levels (as discussed earlier), and relatively strong past and future employment growth. In fact, the scale of loss seen in Hertfordshire, especially over the last five years, suggests there are more significant drivers of change than 'normal' market functioning.

A key driver has been residential demand. There has been increasingly strong demand for land to meet housing requirements, reinforced by Government policy as well as market demand. National and Local Planning policy have therefore been influential in this respect. There has been a strong drive by Government to deliver housing targets, which has incentivised interest in residential development opportunities. However, the lack of up-to-date and NPPF conforming Local Plans has weakened the response position of local planning authorities in this respect.

In addition, the lack of identified housing land and physical restrictions (e.g. Green Belt) have reinforced the competition for and hence value of residential development opportunities. The lack of suitable housing land and opportunities to meet this demand means that developers' interest has extended to employment property as a potential residential development opportunity.

This is compounded by employment land assembly and land ownership issues, which are holding back land from commercial development. However, in certain cases this is related to developing strategic visions for a scheme. Equally, though, it can be inertia or lack of prioritisation from land-owners, which is hindering sites coming to the market.

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¹⁴ Obsolescence factors driving the (initial) loss of floorspace would include ageing of properties (technological obsolescence), lack of demand for a specific type of property (functional obsolescence) or poor location (locational obsolescence).

Residential value returns (relative to commercial property) are further reinforcing the loss of commercial floorspace, and are intimately linked to the increase in residential demand. Commercial floorspace development returns have not been as attractive as residential development in terms of change of use, which has made residential development more attractive and has led to competition from residential developers to obtain change of use of existing commercial property. This has reinforced the interest in converting existing commercial floorspace to residential via PDR, which has been particularly significant in the office sector.

The other side of the 'value' issue, is the viability of development, which has been an issue in the commercial sector in Hertfordshire. It is only in the last few years, and in specific locations, that the office sector has seen prime rents rise to a level that is making development more attractive. The industrial sector has seen viability potential in key locations prior to the office sector, but a key issue has been land holding and availability constraints.

Changing work practices also feed into the explanation and assessment of implications and potential responses. Increased automation and delivery requirements in the industrial/logistics sector and self-employment, home working, co-working and use of office space components have and are influencing overall space needs. (Further detail is contained in Appendix C).

The influence of Permitted Development Rights (PDR) has been particularly significant in Hertfordshire, notably on the office sector. This has driven the vast majority of the increased rate of loss of office floorspace in Hertfordshire since 2013. Whilst PDR has helped to remove excess or inappropriate floorspace in some areas and to contribute to housing needs to a small degree, the scale of loss, and the inability to avoid the loss of good quality and in-demand floorspace, is creating serious imbalances between supply and demand in the market.

Further office PDR floorspace loss is set to arise as a result of PDR approvals which are yet to be implemented. As seen in Section 2, in some local authorities in Hertfordshire this is equivalent to the total scale of loss of office floorspace to residential seen over the last five years. This will seriously impact the efficient, effective and sustainable operation of city and town centres as economic growth locations, especially for the creative and knowledge-based economy, as noted in a recent report by the Centre for Cities¹⁵:

"Instead of looking to address the housing crisis through the shortcut of the conversion of commercial space, more new homes should be built instead. The risk is that by allowing offices in city centre in particular to be converted, the policy holds back the main engine of growth in a city.....PDR creates an incentive to deliver residential property rather than commercial space in the most expensive, indemand city centres. But it is these city centres where the economy most needs high-skilled businesses to succeed. Putting the space they require at risk threatens the economic success not only of these cities but also the national economy". (Page 22-23)

¹⁵ Centre for Cities (March 2018). City Space Race. Balancing the need for housing and office space in cities.

Although strong residential demand is an important reason for the use of permitted development rights to convert commercial floorspace to residential, this is driven by higher residential values (relative to commercial property). This means that without proper safeguards in place there is a serious risk of major areas of highly-suitable commercial floorspace being lost to residential via PDR because of the greater financial return associated with their conversion, rather than meeting a specific need and providing a balanced approach to economic and housing growth. Furthermore, the more finite and location-sensitive nature of commercial floorspace supply means that once this stock of floorspace is removed from commercial use it is much more difficult to re-create, especially in town centre locations.

Key Implications

The fact that Hertfordshire has seen a net loss of approximately a quarter of its office floorspace stock over the last decade, as well as a net reduction in industrial floorspace stock (a key strategic sector for Hertfordshire), is undoubtedly having impacts on the business community. It is more difficult, however, to provide a precise and direct assessment of the scale, nature and knock-on consequences of this in terms of the wider operation of the economy.

Even so, the consultation work with stakeholders, as well as local property market knowledge, has highlighted a number of major issues. These are summarised below, although it is recognised that there is inter-play between these issues.

Constraining Growth. The lack of currently available commercial space is a major issue for existing and potential occupiers in both the office and industrial sectors, and is inhibiting growth potential across the county. This has been compounded by the absolute levels of loss of commercial floorspace over the last decade, and especially over the last five years.

A more specific issue, and reinforced from property analysis, is that of the limited amount of commercial floorspace that is on the market, a considerable proportion is of poorer quality. This is not always suitable or attractive as expansion or start-up space, particularly for knowledge-based sectors. In addition, there is a growing proportion of existing occupied space that is of declining quality. In short, existing occupiers and potential new ones are looking for commercial space in Hertfordshire but are not able to easily find any to meet their requirements. This is resulting in many businesses staying in their existing accommodation, which is limiting their growth potential, or new entrants to the market having to look elsewhere.

A particular concern is over the loss of small units, which has been driven by PDR conversions to a noticeable extent. These units are central to the needs of the SME business community, and the loss and lack of availability of such units is seen as a major limitation to the growth potential of this sector. This is both in terms of start-up and grown-on businesses within Hertfordshire, and for inward investment opportunities. Recent examples have included four international companies looking to locate in Hertfordshire but failing to find suitable space.

Forcing Relocations. A knock-on consequence of the above issue is that the lack of available space, alongside the reducing total stock, may well push existing businesses outside of the county. Stakeholders noted cases where this had already happened, but comprehensive quantitative data on the scale of this is lacking. This is exacerbated by the shortage of commercial floorspace starting to push up rental values. So not only can it be difficult to find suitable space, occupational costs are also increasing, both for new space and the space businesses are already occupying.

The re-location implication has two dimensions: impacts on indigenous businesses and impacts on external businesses. There can be relocation pressures on Hertfordshire businesses or potential new businesses, with the direction of 'push' being to surrounding counties. There is also an impact on London businesses looking to move outside of London due to price pressure and property shortages, who have traditionally looked to Hertfordshire given its proximity to London. The lack of suitable space means that many such re-locations are effectively looking beyond Hertfordshire.

Reinforcing Home-Working. Space shortages are also helping to reinforce home-working, although by default rather than design. This is wrapped-up in wider workplace changes that are taking place, so the contribution that floorspace availability is having on this is difficult to assess accurately.

Increased home-working is anticipated across the national economy, although the likely future scale is harder to predict. However, a key issue noted is that home-working needs to be on a 'pull' basis, i.e. it is a deliberate choice by the worker, rather than having to do so (a 'push' drive). If there is too strong a 'push' emphasis this can have negative impacts upon economic performance and productivity, and lead to unintended consequences, such as a worker looking for employment opportunities elsewhere (potentially outside of the county) or relocating.

Limiting Productivity and Performance. Improved workspace efficiency and new working practices may be reducing the overall need for floorspace per FTE, at least in the office-related sector. However, if the amount of floorspace per worker reduces too much then it will lead to operational difficulties for businesses and constrain the potential to achieve productivity improvements.

Deteriorating Image. A less tangible, but still relevant issue, is the extent to which the change in commercial floorspace influences the image of Hertfordshire plc. There is a risk that Hertfordshire may be seen as 'closed for business', at least in a number of the key market areas. The inability to secure suitable space at affordable prices may present the impression of a buoyant economy, but it may also suggest to expanding businesses or those looking to locate in the county that it is running at capacity and may therefore constrain their potential. Alternatively, the fact that an increasing proportion of the limited space that is available is of poorer quality in certain locations, may indicate a location in which business needs are secondary.

Inhibiting Place-Making/Place-Shaping. The piecemeal loss of commercial floorspace, especially town and city centre office space, is hindering local authorities and other stakeholders from delivering their place-making agendas. This point was emphasised in a recent report by the Centre for Cities¹⁶, which noted that:

"But commercial space must be the priority in city centres. Knowledge-intensive firms thrive in these central locations, and generate jobs for the local economy. Without this space, a city's role as a place of production is threatened. The attractiveness of the city centre to businesses will be compromised if firms cannot access the premises they need. It is these high-skilled, knowledge-intensive industries that drive productivity growth in the national economy, so restricting their growth is not only bad for the city, but also the UK's prosperity." (Page 10)

25

¹⁶ Centre for Cities (March 2018). City Space Race. Balancing the need for housing and office space in cities.

The Garden Town and Village proposals, such as at Gilston, and the ambitions behind the Hertfordshire Enviro-Tech Enterprise Zone are important contributions to progressing place-making potential within the county. This is particularly alongside wider Master-Planning initiatives within other settlements. However, these can be counter-acted by the unmanaged and unplanned loss of commercial floorspace that is of value in delivering these ambitions.

Restricting Achievement of SEP Objectives. The loss of commercial floorspace – and the potential continued loss of such floorspace – will put major restrictions on the potential for the LEP to achieve the objectives it has set out in the Strategic Economic Plan¹⁷. Thus, the ability to 'maintain global excellence in science and technology', to 'harness positively the interconnectedness of Hertfordshire', to 're-invigorate places' and to 'build the wider foundations for growth', will be compromised in there is not sufficient commercial space of the right type to support these objectives.

The growth ambitions of some of the key growth sectors in the Hertfordshire economy will also be hampered by not having the right type and amount of commercial space available. This includes the Film & TV, Enviro-tech, Life Sciences, and Professional Services sectors in particular.

Future Implications

What are the implications for the Hertfordshire economy if commercial floorspace continues to be lost? Table 3.1 provides an indicative strategic assessment of what these impacts may be, focussing on how it may change employment floorspace densities. This provides a guide or proxy as to the realistic operational efficiency of businesses – in effect, if the employment density becomes too 'dense' it will constrain operations¹⁸. In other words, improving the efficient use of space is beneficial for businesses as it reduces costs, but if there is too little space per worker then this is likely to reduce productivity and well-being.

Alongside a reference 'Baseline' position, four potential Scenarios are outlined in Table 3.1, which assess matters over the next 10 years (2018-2028). Scenario A examines what the impacts may be if there is no further loss of commercial floorspace but taking account of projected future employment growth (The market reverting to 'Business as Usual' scenario). Scenario B examines the impacts if the loss of commercial floorspace continues at the broad rate seen over the last 10 years, alongside the projected future employment growth ('Housing Led Demand Continues' scenario).

Scenario C assess the potential impacts if floorspace loss is greater than in Scenario B, due to Brexit, the shortage of floorspace limiting demand, and property value increases pricing occupiers to other locations ('Housing Led & Demand Flight' scenario). Scenario D, in contrast, looks at the amount of floorspace that would be required to retain employment density levels at their current (2018) levels, incorporating projected future employment growth.

¹⁸ Recognising that the employment density figures are notional indicators rather than based on local survey evidence

¹⁷ Hertfordshire LEP. Perfectly Placed for Business. The Refreshed Strategic Economic Plan: 2017–2030 (July 2017)

In terms of the office sector, the results indicate that the notional average employment density would increase (i.e. less space per FTE) by a further 5% between 2018 and 2028 under Scenario A, by 25% under Scenario B, by 29% under Scenario C, and a net increase of approximately 85,300 sq. m. of floorspace would be needed to keep employment densities at their current (2018) level under Scenario B.

Of particular note, is that under Scenarios A to D the net reduction in the office floorspace stock is between 34%-53% over the period 2008-2028, whilst industrial floorspace stock would reduce by between 8%-20%. These are significant levels of loss, which are likely to exacerbate the impacts on the Hertfordshire economy outlined earlier.

In practical terms, Scenarios B and C would mean office floorspace density levels moving from 8.4 sq. m. per FTE in 2018 to between 6-6.3 sq. m. per FTE in 2028. These notional employment density levels are considerably below normal operating density levels, as identified from recognised industry standards¹⁹.

Figure 3.1: Future Implications of Loss of Floorspace – Strategic Scenarios

Implication Position	Sector	Basline Position		Notional Employment Density 2018 (sq/FTE)		
Paralina.	Office	2018 Stock Figure (sq m) 1,537,184		8.4		
Baseline	Industrial	2018 Stock Figure (sq m) 4,840,504		50.8		
Scenario (2018-2028)	Sector	Key Changes		Notional Employment	Change in Employment Density (%)	
		Assumption	Scale Floorspace Change (sq m)	Density 2028 (sq/FTE)	2018-2028	2008-2028
A. Natural Market Adjustment ('Business as Usual')	Office	No further loss of floorspace, but projected employment growth	0	8.0	-5%	-37%
	Industrial	No further loss of floorspace, but projected employment growth	0	49.3	-3%	-11%
B. Housing Led Demand Continues ('Continued Pressure')	Office	Continued floorspace loss at past rate, and projected employment growth	-322,308	6.3	-25%	-50%
	Industrial	Continued floorspace loss at past rate, and projected employment growth	-344,154	45.8	-10%	-17%
C. Housing Led & Demand Flight ('Brexit, Supply Constraint, Prices') Office Industrial	Office	As B but 25% more floorspace loss	-384,296	6.0	-29%	-53%
	Industrial	As B but 10% more floorspace loss	-484,050	44.4	-13%	-20%
D. Proactive Management	Office	Keep employment density at current level	85,305	8.4	0%	-34%
	Industrial	Keep employment density at current level	152,537	50.8	0%	-8%

¹⁹ HCA (November 2016) *Employment Density Guide*.

4. Conclusions and Solutions

"For every complex problem there is an answer that is clear, simple and wrong"

There are a variety of factors driving the loss of employment floorspace in Hertfordshire, many of which are inter-linked and reinforcing. At one level they reflect national trends and complex patterns of change, whilst at another level there are more policy related or locally-specific reasons for this change. As such, developing a relevant, realistic, robust and refined response to these factors requires a combination of measures and coordinated activities from different stakeholder groups and interests.

It is also important to recognise that it may not be possible to directly 'solve' matters, due to the nature of the underlying causes (although that is not necessarily a reason for inaction). Furthermore, in some cases the change in employment floorspace (more specifically the loss of floorspace) may be beneficial to local circumstances, such as removing old, obsolete and poorly located employment floorspace which is better suited to more appropriate land-use.

Nevertheless, there are a number of actions that would help in balancing the often competing landuse demands, and in ensuring there is an appropriate amount, form, quality and distribution of employment floorspace to serve the needs of the Hertfordshire economy. These have been grouped into the following broad headings.

A. Planning & Place-Making

- 1. Reinforcing Joint-Planning. The existing joint-planning initiatives introduced in Hertfordshire between the various Local Planning Authorities (LPAs) should be maintained and developed further. In particular, there is potential to ensure that there is a coordinated approach to commercial floorspace provision across the county, i.e. more closely aligned to the functional core property markets across Hertfordshire. The joint-planning approach will also help to ensure there is greater policy alignment between authorities, as well as enable best-practice to be shared.
- Ensuring Local Plan Delivery. Notwithstanding the above point, it is still essential that upto-date and NPPF conforming Local Plans are delivered across the county. The lack of a recent adopted Local Plan can be a major potential impediment for local authorities in providing support for the retention of employment floorspace and in managing the delivery of new space.
- 3. **Balanced Housing and Commercial Space Delivery**. It is important to reinforce the message to Government that securing sustainable communities and economy requires a balanced approach to housing and commercial land/floorspace provision not just a housing emphasis. The focus of Government policy over recent years has been on increasing housing delivery. This is an important focus, but if it is done at the expense of commercial floorspace then it risks limiting the potential for economic growth in a local economy and hence the delivery of jobs to support residential growth.

4. Halting the use of PDR. The extension of Permitted Development Rights (PDR) to allow the conversion of office and industrial floorspace to residential has delivered additional residential units to meet the Government's policy emphasis on housing delivery. However, this has come at a cost – in terms of poor quality housing in a number of instances, lack of social infrastructure funding to support the additional residential demands, and a denuding of commercial floorspace in town and city centres, which are the engines of economic growth in many locations.

The Government should halt the existing PDR conversions and should not proceed with the proposed PDR extension contained in the recent consultation document. The PDR approach contains a serious risk of under-mining the town planning system, and is a blunt instrument that does not allow local authorities to respond sensitively to local circumstances.

If the existing PDR conversions of commercial floorspace to residential are to continue, then we would urge the Government to prioritise commercial floorspace in key town and city centres, allowing automatic exemptions from the PDR that permits conversion of commercial floorspace to residential use. This would enable cities and key urban centres to maintain or increase the commercial space that is a key ingredient to future economic success. Alternatively, a 'capped' system should be introduced, with maximum rates/scale of loss. This would operate by linking the amount or proportion of commercial floorspace loss to the total stock of such floorspace in order to prevent going beyond a 'critical-mass' level of loss. The current Article 4 approach is not an effective mechanism for achieving this given the variation in interpretation used in reviewing such measures.

B. Investment & Funding

1. **Promoting Public Sector Development**. Where LPAs and other public bodies own land/property, the potential for developing SME and Grow-On units should be actively explored. This is an area of particular shortage of commercial floorspace in Hertfordshire, compounded by losses via PDR.

A number of LPAs are exploring the rationalisation of their own estates in town centres, with a view to delivering value realisation and public realm improvements. The opportunity to deliver new smaller unit space as part of these plans should be examined. There may also be opportunities for edge/out of town unit developments, particularly for the industrial sector. As well as supporting wider economic objectives this will also provide longer-term income streams for the public sector.

2. Developing Joint-Venture Initiatives. There should be further exploration of joint-venture opportunities between the public sector (LPAs and Hertfordshire LEP) and developers. This will help de-risk projects, and build upon the specialist skills of the respective parties, but may also open up development opportunities. This may be assisted by discussions with funders as well as developers.

- 3. Provide Greater Tax Break Incentives. Government should be encouraged to provide more incentivised tax breaks for upgrading or providing commercial property. There are differences between the UK and other European countries in terms of this form of tax break, but the key issue is that providing greater incentive for developers and funds to improve or deliver new commercial floorspace via tax incentives would be a useful mechanism in helping to support the delivery of more and better commercial space.
- 4. **LEP Marketing and Funding.** Hertfordshire LEP has an important role in promoting economic growth and prosperity within Hertfordshire, which includes developing initiatives that link in with other public sector bodies and other stakeholder groups, marketing development and economic opportunities within the county, and in understanding the risks and threats that the economy faces. This research helps in addressing the last of these points, but is a platform for developing the other points. In particular, lobbying central Government on the impact of the loss of commercial floorspace for the Hertfordshire economy, and in working with LPAs and others in developing common strategies to support businesses in the county.

Whilst the LEP has limited funding, there may be a case for targeted match-funding with other organisations to take forward appropriate schemes or initiatives that could deliver priority commercial floorspace. This is likely to be in relation to smaller unit space, but also in relation to particular sector needs.

C. Infrastructure

- Coordinated Master-Planning. The Garden Town and Village initiative could play an
 important role in meeting housing need in a well-planned and balanced manner, based
 around agreed master-planning principles. This same master-planning approach has
 application more widely across the County in relation to different forms of development,
 and would assist in dealing with the generally fragmented nature of land ownership in
 Hertfordshire.
- 2. Improving Transport Links. Hertfordshire has good North-South transport links, both in terms of the road network and rail links. However, the East-West transport links need improvement in order to achieve greater economic integration across the county and allow more internal business migration. This may help in balancing out commercial demand/supply imbalances within the county, although recognising that there is very limited commercial space available generally.

Connectivity is a key ingredient to economic success for the County, not just in terms of transport links but wider infrastructure including digital connectivity. Focusing development around key transport nodes will also be of benefit in this respect.

Without appropriate support for and protection of commercial floorspace in Hertfordshire, our research indicates that over the next decade there will be further net floorspace loss which may result in the office stock in the County being at least 50% smaller than it was in 2008 and the industrial stock up to 20% smaller. This will critically impact the economic objectives and ambitions of the County.

Appendix A: Property Market Review

Property Market Overview

Office Market Analysis

Office take-up analysis

Until 2016, the historic pattern of office take-up across Hertfordshire broadly mirrored the wider national trend. The global financial crisis of 2008 and the ensuing recession weighed heavily on occupier demand, reflected in several years of weak occupier market activity over the period 2008 to 2012 (see Figure A1). Alongside improving conditions in the UK economy, take-up in Hertfordshire subsequently recovered, but not to the level seen in 2007.

The post-recessionary recovery across the UK's regional markets has generally been stronger compared with Hertfordshire, with UK regional-wide office take-up surpassing 2007's high in three of the previous five years. Indeed, over each of the past two years, amid strong and rising take-up at the macro level, take-up in Hertfordshire has softened, with the annual total for 2018 forecast to be its lowest since 2012. As will be discussed later, this is reflective of very limited availability of floorspace for occupiers.

Hertfordshire office take-up by grade (sq m) 140,000 1800000 All year forecast 1600000 120,000 1400000 Grade C 100.000 1200000 80.000 1000000 Grade B 800000 60,000 600000 Grade A 40,000 20,000 All UK regional markets 200000 inc 2018 forecast (RHS) 2007 2008 2009 2010 2011 2012 2013 2014 2016 Up to July 2018

Figure A1: Office Take-up in Hertfordshire by Grade

Source: LSH and CoStar

Parts of Hertfordshire rode the wave of decentralised office development that took place in the 1980s and 1990s. As a consequence, over the past decade, the majority of the county's take-up has taken place 'out-of-town', typically within purpose built office parks (see Figure A2). One of the key wider occupier market trends in this economic cycle, however, has been the increased focus of demand for central urban areas. This has not been reflected in Hertfordshire though, with in-town's share of take-up accounting for a steadily decreasing share of the total in each of the last four years to 2017. As will be discussed later, a key driver of this has been the impact of Permitted Development Rights (PDR).

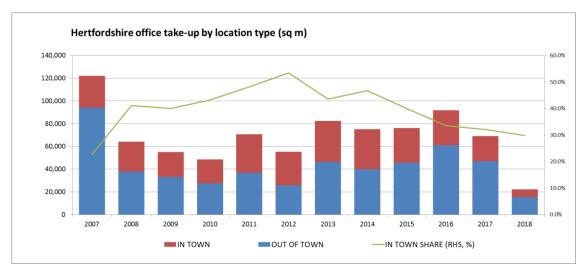


Figure A2: Office Take-up in Hertfordshire by Location

Reflecting the diverse character of the county between rural and urban settings, there are significant contrasts between districts regarding the quantum of office take-up. The primary focus of office market activity is within the three districts of Watford, Welwyn Hatfield and Dacorum, each of which have seen average take-up over the past ten years at or above 10,000 sq. m. and which collectively have accounted for 57% of county-wide take-up over the ten year period to the end of 2017 (see Figure A3).

Each of these three key districts has also seen significant annual variance in activity between their respective 'best' and 'worst' years for take-up. The pattern largely reflects the occurrence, or otherwise, of a major transaction taking place in the district, which often has the effect of skewing take-up significantly (see Figure A3).

This variance is most extreme in Welwyn Hatfield, where annual take-up has ranged from 5,000 sq. m. to circa 25,000 sq. m. during the ten year period 2008 to 2017. Here, Ocado's 15,000 sq. m. pre-let at Hatfield Business Park in 2016 was fundamental to that extraordinary year. Of the three key districts, Watford can be seen to have the more consistent range of activity over time.

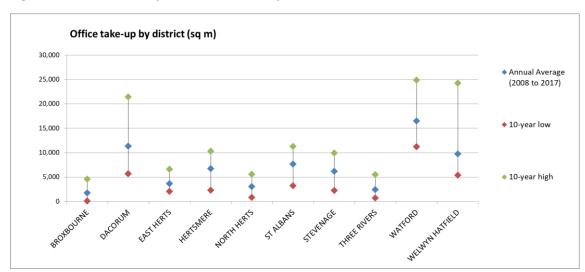


Figure A3: Office Take-up in Hertfordshire by District

There is a clear difference in the typical size of office transactions according to the quality of the building (see Figure A4). Over the ten years 2008 to 2017, the average deal size for Grade A space amounts to 875 sq. m., more than three times the average deal size for Grade B space (262 sq. m.) and almost seven times the average deal size for Grade C space. While transactions are typically far smaller, second-hand space plays a vital role in serving the vast majority of market requirements. Over the ten year period, Grade B and C space has accounted for 71% of county-wide take-up, but has involved some 83% of recorded transactions (see Figure A5).

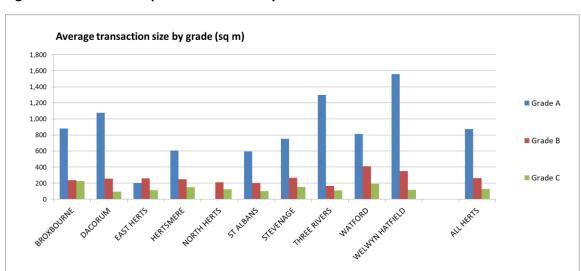


Figure A4: Office Take-up in Hertfordshire by Grade

Source: LSH and CoStar

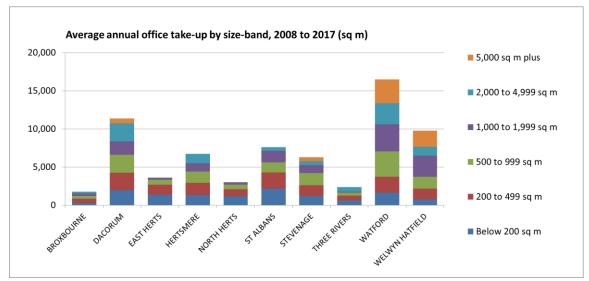


Figure A5: Office Take-up in Hertfordshire by Unit Size

Office active demand assessment

Office demand, in the form of serious enquiries, remains active, although within a market where there is increasingly less occupational options. In broad terms, the nature of demand can be characterised as follows:

- It remains stronger for the traditionally popular office centres, such as Watford and St Albans, and to a lesser extent, Hemel Hempstead and Welwyn Garden City/Hatfield.
- The most active size range is the 1- 2,000 sq. m. unit range.
- Proximity to rail stations is becoming an increasingly important factor

The market may also be forced to become increasingly flexible on location within the County, as some traditional office locations become chronically undersupplied in certain, and some cases all, size ranges. This is to some extent a legacy of the loss of existing office stock to residential PDR, as will be examined later, which competes directly for existing office space.

Office supply analysis

County-wide office supply has declined sharply during the current economic cycle. According to blended Co-Star and LSH in-house data, only 94,222 sq. m. of office space is currently vacant across the county, placing the vacancy rate at a record low of only 4.1%. This compares with a vacancy rate peak of 10.4% at the end of 2012, after which supply fell sharply over the following few years (see Figure A6). The period coincided with a marked improvement in occupier market activity and witnessed the extension of permitted development rights (PDR), allowing conversions from office to residential without planning permission.

It is important to note that the 'true' level of office supply may be higher than the above figure due to the presence of serviced office operators throughout the county's principal towns. At any one time, such operations are likely to have a proportion of space available. This is not accounted for in the analysis owing the fact that the building is already leased or owned by an operator in its entirety. That said, serviced office space makes up a marginal proportion of stock in the county meaning availability in these operations does little to alter the overriding picture of very tight supply.

Hertfordshire Office vacancy (sq m) 300,000 12 Office vacancy rate (RHS) 250,000 10 200.000 150,000 100.000 50,000 0 2011 2009 2010 2012 2013 2014 2015 2016 2018 YTD

Figure A6: Office Vacancy in Hertfordshire

Source: LSH and CoStar

The sharp fall in supply at the county level has been evident in the majority of the constituent districts (see Figure A7). In the space of a decade, Hertsmere has gone from the most heavily supplied district to one of the tightest, with vacant space contracting by 84% since the end of 2009 to stand at 3,611 sq. m. Welwyn Hatfield has also seen a sharp contraction in vacancy, and over a shorter time frame, falling by 70% in the space of only five years. The only district to have seen a rise in vacancy over the past five years is Dacorum.

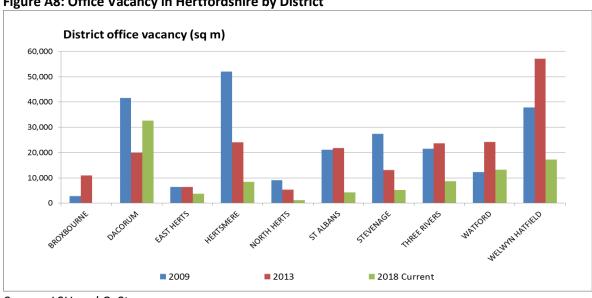


Figure A8: Office Vacancy in Hertfordshire by District

Source: LSH and CoStar

A simple calculation of 'years of supply' is a useful method of placing vacancy levels into context with prevailing take-up. For the county as a whole, current vacancy equates to only 1.36 years of supply, based on annual average take-up of 68,000 sq. m. per annum over the ten year period. (See Figure A9). For additional context, this figure is among the lowest of any UK regional markets, with other particularly tight examples including Bristol (1.2), Bath (1.1) and Exeter (0.8) in the South West region.

Of the key three key districts of Watford, Welwyn Hatfield and Dacorum, only the latter might be said to have a reasonable level of choice on offer, with vacancy equivalent to 2.9 years of supply. However, over 30% of this is accounted for by a single building, namely the Maylands, Hemel Hempstead (12,000 sq. m.), which was refurbished in 2017. While Three Rivers stands above any other district with vacancy equivalent to 3.6 years of supply, this better reflects a paucity of take-up over the ten year period.

For the majority of the county's districts, vacancy is extremely low. Watford, St Albans and Stevenage all have vacancy equivalent to less than a single year of office supply. Naturally, large requirements will be difficult to satisfy within these locations unless a pre-let / pre-sale is agreed to source the space directly.

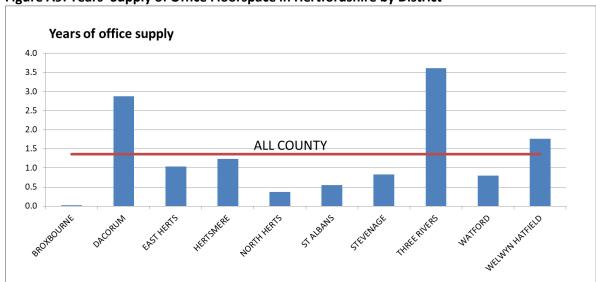


Figure A9: Years' Supply of Office Floorspace in Hertfordshire by District

Source: LSH and CoStar

An important distinction needs to be made between vacancy and availability. Availability will typically differ from vacancy, due to the fact some of the space will be in occupation yet available (i.e. actively marketed), perhaps because the occupier seeks to sub-let some of its space or is seeking to relocate entirely. By the same token, on occasion vacant stock may not actually be available. Owing to the nature by which LSH and Co-Star monitor supply on a building by building basis, our analysis of supply in terms of its quality employs figures relating to availability.

In the case of Hertfordshire, the two figures are quite closely aligned, with the county-wide availability rate of 4.5% being marginally higher than vacancy (as discussed above) of 4.1%. Our analysis of availability by quality reveals that, despite limited new-build development, 50,270 sq. m. of Grade A space is available, accounting for the largest share of space across the three gradings, at 46% of the county total.

However, much of the Grade A space is itself accounted for by a clutch of large buildings. Almost half of the county's Grade A space is within Dacorum, which is itself accounted for by four refurbished buildings within Hemel Hempstead (see Figure A10). Of these, the largest is the aforementioned Maylands Building (12,000 sq. m.), followed by Breakspear Park (6,000 sq. m.). The same is true of Three Rivers and Welwyn Hatfield, where, despite Grade A space making up the majority of district availability, it is largely accounted for by only two buildings.

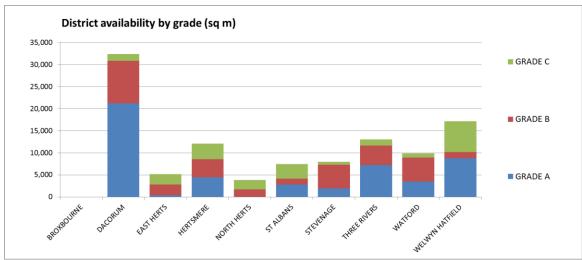


Figure A10: Office Vacancy in Hertfordshire by Grade

Source: LSH and CoStar

By historic standards, the county has seen very little new development over recent years, with much of the currently available Grade A space comprising refurbishment / upgrades of existing buildings. Over the ten year period, new office completions for the county amount to 25,850 sq. m., which is equivalent to 1.2% of current office stock, or a development rate of only 0.12% per annum (See Figure A11).

Furthermore, the majority of this space is made up of two buildings, Affinity Water, Tamblin Way, Hatfield (8,185 sq. m. design and build in 2012) and 2 Croxley Park, Three Rivers (6,100 sq. m.), which completed in 2017 and is already entirely let-up. The most recent deliveries are Clarendon Works, Watford (2,800 sq. m.) and 55 Victoria Street, St Albans (230 sq. m.), both of which completed during 2018.

Office Pipeline

There are speculative development opportunities in Hertfordshire. There are, for example, both inand out-of-town schemes likely to go ahead in the traditionally strong Watford market. Elsewhere, for both new build and refurbishment, matters are more difficult to predict. For example, the recently launched 5,850 sq. m. Production Hall scheme on the former Cereal Partners site in Welwyn Garden City is moving forward, while the 4,900 sq. m. scheme by Hemel Hempstead station, looks far less certain. Other sites, such as the corner plot at Arlington Business Park, Stevenage have been around for a while but are unlikely unless rent levels in the proximity increase markedly. Overall, though, the new supply coming forward is still very limited relative to demand levels and the loss of office floorspace that has occurred over the last decade.

Hertfordshire new-build office completions (sq m) ■ Welwyn Hatfield ■ Watford ■ Three Rivers ■ St Albans Dacorum 2018 YTD

Figure A11: New Office Development in Hertfordshire by District

Source: LSH and CoStar

Market pricing

Improving conditions in the economy and a tightening of supply have put upward pressure on rental levels. Analysis of CoStar data reveals that average office rents in the county as a whole started to recover in 2014, culminating in strong growth of 15.7% in 2017, among the highest in the country. Growth has continued into 2018, albeit to a more modest level of 3.5% over the year to August (See Figure A12). With regard to actual current levels, CoStar data reveals that average rents across Hertfordshire stand at £22.03 per sq. ft., recovering by 38% from the low point of end 2013.

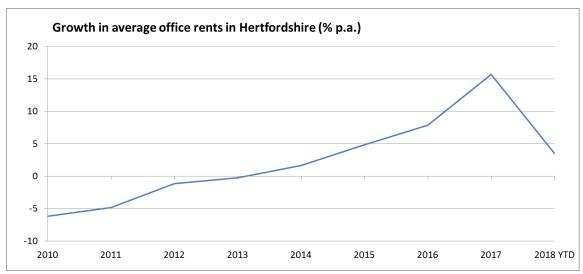


Figure A12: Growth in Average Office Rents in Hertfordshire

The pattern of rising rental levels over the period 2015 to 2017 is familiar to every district, albeit rates of growth vary significantly reflecting their own set of supply / demand dynamics. Of the ten districts, Dacorum has seen very strong rental growth of 57% since 2013, while Welwyn Hatfield has seen the lowest growth, albeit at a relatively strong 21% over the period. Despite being 'mid-ranking' for growth, Three Rivers commands the highest average rent of the districts currently, standing at £26.25 per sq. ft. (See Figure A13).

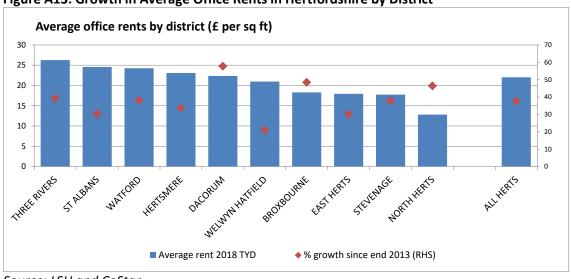


Figure A13: Growth in Average Office Rents in Hertfordshire by District

Source: LSH and CoStar

The upward movement in average rental levels has also been evident for new or Grade A space, boosting the development viability potential of the county's principal markets. According to LSH's rent database, the markets of Watford, St Albans and to a lesser degree Hemel Hempstead, have all witnessed a step-change in prime headline rental levels in the past few years, most notably Watford, where rents have climbed by 44% since 2016 to stand at £32.50 per sq. ft. (See Figure A14).

This steep growth has been linked to the delivery and subsequent absorption of brand new or high quality refurbished space in the respective markets. Moreover, evidence of demand for quality space will be key to stimulating further interest from developers and investors and potentially further rental prime rental growth in the process.

Prime headline office rents (£ per sq ft) 35 Hemel Hempstead 30 (OOT) 25 Watford 20 15 St Albans 10 2008 2009 2018 2010 2011 2012 2013 2014 2015 2016 2017

Figure A14: Growth in Headline Office Rents in Hertfordshire by Key District

Source: LSH and CoStar

In summary, the underlying demand for office space is strong in Hertfordshire, but is constrained by a severe lack of available supply. There is little new stock coming forward, although there are a few (relatively minor) development opportunities emerging. This cocktail of factors is driving rental growth, which will hit occupiers but may make development more viable if there are opportunities to develop which are not taken for residential

Industrial & Logistics Market Analysis

Industrial take-up analysis

Hertfordshire is an important focus of activity for industrial and logistics. In addition to serving local demands, the county's location and motorway links afford it strategic significance for logistics and distribution activities on a regional and national scale. Taking Hemel Hempstead (Dacorum) as a centre-point, 80% of UK consumers can be reached within a four hour drive time, placing it among the top 25% most accessible local authorities in the country.

At the macro level, the UK industrial and logistics market has witnessed strong and consistent levels of activity over the past decade. However, this trend is not reflected in the county of Hertfordshire, where annual take-up dropped noticeably after 2012 (Figure A15). 2017 was an exception, however, where strong take-up was partly fuelled by the delivery of over 50,000 sq. m. of much needed newbuild stock into the market. This below-trend take-up post 2012 reflects the increasingly sparse supply of space, rather than a lack of demand. As will be discussed later, vacancy rates went below the 5% level from 2013.

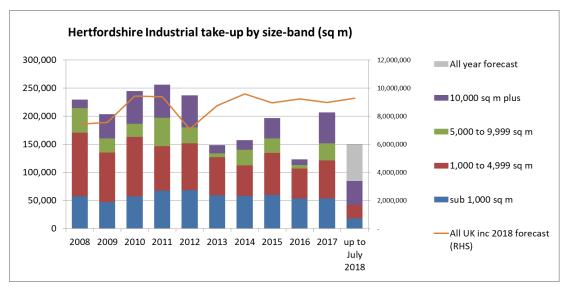


Figure A15: Industrial Take-up in Hertfordshire by Unit Size

Several of the county's districts have seen a substantial fluctuation in rates of activity over the past decade (Figure A16). This is primarily linked to the availability, or otherwise, of large logistics units at any one time. Home to Prologis Park and Maylands Industrial Estate, Dacorum is the most extreme case, where annual take-up has ranged from circa 20,000 sq. m. to a maximum of circa 90,000 sq. m. over the past decade. In contrast, Watford has seen relatively consistent levels of activity over the past decade, due in large part to the greater prevalence of activity for small to medium-sized units (Figure A17).

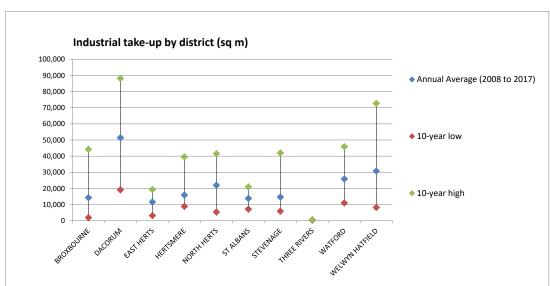


Figure A16: Industrial Take-up in Hertfordshire by District

Source: LSH and CoStar

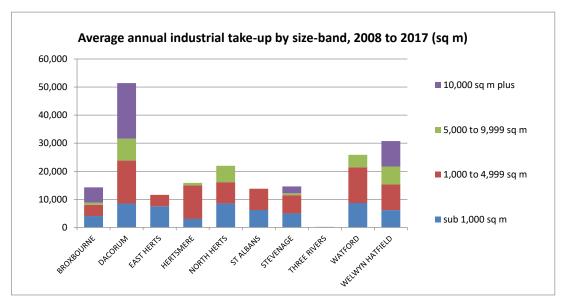


Figure A17: Industrial Take-up in Hertfordshire by District and Unit Size

Industrial demand assessment

Active demand remains strong in key industrial areas such as Dacorum. The recently completed Prologis Park, Hemel Hempstead witnessed a flurry of leasehold completions before reaching Practical Completion at the end of last year. Primarily due to the proximity to the M1 motorway but also the size of units available (1-15,000 sq. m.) the scheme has attracted interest from both local and national occupiers.

In fact, such is the confidence in Hemel Hempstead, Prologis have recently acquired (Jan 2019) a neighbouring site of 4.7 hectares. The site, formerly owned by Aviva Investors, will allow further expansion to Prologis Park Hemel Hempstead and once built both sites will provide almost 70,000 sq. m. of industrial and logistics space taking Prologis's ownership in Hemel Hempstead to over 130,000 sq. m.

However, the Prologis expansion needs to be set within the wider context. Nile Trading UK Ltd, importers and distributors of natural stone and quartz, recently acquired a new 1,070 sq. m. facility on Prologis Park Hemel Hempstead. The move from their previous facility In Cheshunt was due to the site being redeveloped into a higher value residential use.

Watford continues to see demand for industrial units towards the smaller end of the scale. As part of the £400m Watford Riverwell scheme Trade City Watford provides 12 new light industrial units and only has one remaining since reaching Practical Completion in summer 2017. National occupiers include Screwfix and Toolstation with further national brands due to be announced over the coming weeks.

Industrial supply analysis

The supply of industrial space has been acute across the county over the past few years, having fallen steeply from a relatively elevated position in 2011 (Figure A18). According to blended Co-Star and LSH in house data, only 75,128 sq. m. of industrial space is currently vacant across the county, leaving the vacancy rate at a record low of only 1.8%. Furthermore, in terms of sizing, there is currently nil vacancy of units in excess of 5,000 sq. m.

Strong take-up seen earlier in the decade was fuelled in part by significant levels of supply in the market, with the early stages of economic recovery coinciding with the ready availability of competitively priced space. The position has since turned on its head, with a severe shortage of space in the market driving strong rental growth but arguably stifling potential activity.

Whilst permitted development has played a key role in removing vacant space from the office market, the fall in industrial supply has been particularly driven by the strength of demand. Driven by technological advances, structural change in shopping patterns is supporting the growth of logistics and distribution activity, a trend being seen all around the UK and particularly so in the wider South Eastern corner of the UK.



Figure A18: Industrial Vacancy in Hertfordshire

Source: LSH and CoStar

The sharp fall in supply observed at the county level is a common theme to each of the ten local authorities (see Figure A19). In the space of a decade, Broxbourne, Dacorum, East Hertfordshire and Welwyn Hatfield have seen vacancy levels drop from circa 80,000 sq. m. to under 5,000 sq. m., representing a fall of around 95%. At the current time, St Albans has the highest level of vacancy of any district, albeit standing at only 18,000 sq. m. and largely resulting from two relatively large units being available at Ventura Park.



Figure A19: Industrial Vacancy in Hertfordshire by District

As with the office analysis, 'years of supply' usefully places industrial vacancy levels into context with prevailing take-up. For the county as a whole, current vacancy equates to only 0.3 years of supply (i.e. four months), based on average annual take-up of 200,000 sq. m. per annum (Figure A20). This represents an exceptionally low level of supply and can be considered as inhibitive to occupier movements, leaving pre-lets or pre-purchase agreements as the only option to secure quality space.

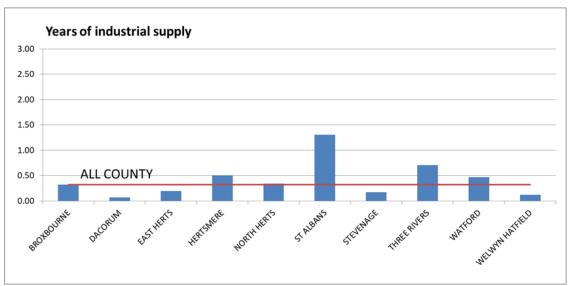


Figure A20: Years' Supply of Industrial Floorspace in Hertfordshire by District

Source: LSH and CoStar

In addition to extremely low levels of vacancy, Grade A space (i.e. new / refurbished and the highest specification) represents just a fraction of the total available space in the market (Figure A21). Indeed, Grade A space is limited to just several options across the county, and focused across several units at Trade City, Watford. Extreme shortages of quality space have knock-on implications for the whole market, prompting rental growth for lower quality second-hand space whilst limiting the prospects for inward investment.

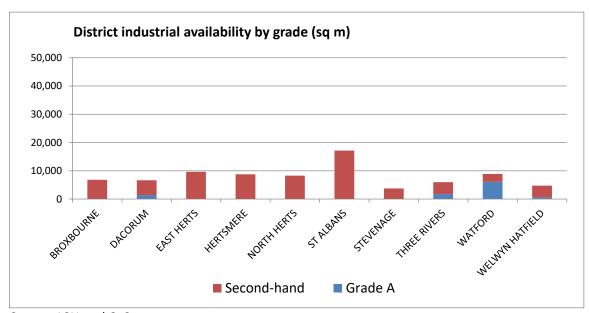


Figure A21: Industrial Vacancy in Hertfordshire by Grade

Over the past few years, the UK has seen a wave of speculative development in the industrial market, albeit this activity has been focused at the larger end of the spectrum (i.e. units in excess of 5,000 sq. m.). The trend has been largely driven by structural changes to consumer patterns stemming from the growth of e-commerce, which has driven the demand for logistics and warehousing facilities. Rising rental levels and capital values over the past three years have greatly assisted viability prospects, bringing a multitude of investors and developers into the market.

Whilst Hertfordshire benefits from its strategic location for distribution, development has been relatively limited in this cycle compared with other locations in the UK, such as the Midlands and North West region. Over the past decade, total development completions for the county amount to 223,000 sq. m., which is equivalent to 5% of current stock, or a development rate of only 0.50% per annum (See Figure A22).

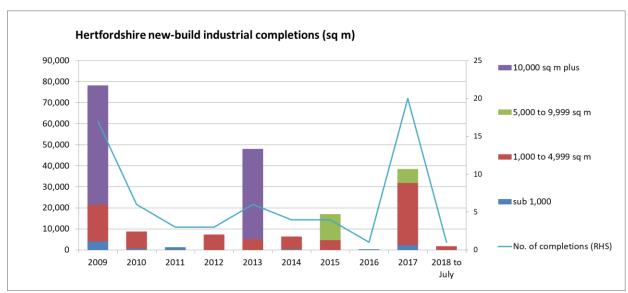


Figure A22: Industrial Vacancy in Hertfordshire by Unit Size

Market pricing

As alluded to, a cocktail of supply scarcity and structural change have driven strong rental growth over the past few years. Analysis of CoStar data reveals that average office rents in the county as a whole began to grow meaningfully in 2015, culminating in strong growth of 10.2% in 2016: a trend witnessed throughout London and the wider South East of the UK. Growth has also accelerated in 2018, climbing by 10.8% in the year to July alone (Figure A23). With regard to actual current levels, Co-Star data reveals that average industrial rents across Hertfordshire stand at £9.58 per sq. ft., recovering by 42% from the low point of end 2011.

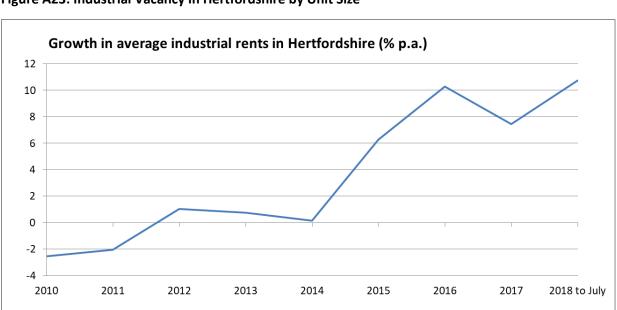


Figure A23: Industrial Vacancy in Hertfordshire by Unit Size

Source: LSH and CoStar

While the pattern of rising industrial rental levels is familiar across the county, rates of growth vary significantly between districts. Three Rivers, Watford and Welwyn Hatfield have seen very strong rental growth of circa 60% since the low point of 2011, while the established industrial area of Dacorum has seen more modest growth of 35% over the period. Watford currently commands the highest average rent of the districts, standing at £12.65 per sq. ft. (see Figure A24).

Average industrial rent by district (£ per sq ft) 14 70% 12 60% 10 50% 8 40% 6 30% 4 20% 2 10% 0% n WE WANT HATFELD EASTHERTS HERISMERE MORTHHERTS THREE RIVERS WATEORD ALLHERTS Average rent (July 2018) ■ Growth from 2011 low (RHS)

Figure A24: Industrial Vacancy in Hertfordshire by Unit Size

Source: LSH and CoStar

In contrast with the office sector, strong rental growth in the industrial sector has also been accompanied by significant and sustained yield compression over the past five years, reflecting investor's confidence in the sector's long-term prospects. According to MSCI figures for the East region, average industrial yields currently command circa 150 basis point premium over average office yields, having shown relative parity around a decade ago (Figure A25). Whilst industrial land values have also increased significantly, the rapid growth in rental and capital values in the industrial market has provided existing industrial land owners with a clear boost to development viability.

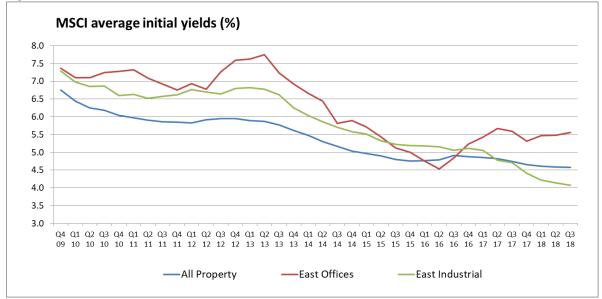


Figure A25: Industrial Yields in Hertfordshire

Whilst viability has acted as a barrier for office development in this cycle, this has not been so for the industrial sector. Nevertheless, in spite of strong rental growth, development opportunities and land are in very short supply whilst residential continues to compete with industrial land uses. There are major strategy land holdings, such as the 30+ acres owned by The Crown Estates next to the M1 in Hemel Hempstead. However, these are either part of longer-term development plans or there is reluctance to progress matters.

In addition, the pace of rental growth may increasingly be seen as detrimental to the operation of certain aspects of the local market. Pressures on rental levels stem from a rippling out of growth from established London industrial locations, leading to new arrivals to the region in search of more economical space, driving rental growth locally in turn. Consequently, there are numerous instances of local businesses becoming effectively priced out of the market

In summary, there is strong demand for industrial space in Hertfordshire, but the severe lack of available supply is constraining the market. New stock is coming forward, but it is insufficient to meet demand levels. Development opportunities do exist, but difficulties with land ownership and assembly are holding back some of these potential schemes. These factors are driving rental growth, which is reducing the competitive advantage of the County. However, alongside yield reductions, it is reinforcing development viability, although opportunities do need to come forward.

Appendix B: Floorspace Change

Change in Floorspace

Total Stock

The above property market analysis describes the expressed demand for commercial floorspace across Hertfordshire in the form of take-up of space, and how this relates to available supply and relationship with values. Alongside the expressed demand picture, however, are changes in the total stock of floorspace. This can include additions to the stock of floorspace as a result of redevelopment or green-field development. It can also include losses to the stock of floorspace.

This pattern of overall change in commercial floorspace is examined below for Hertfordshire. To assist with this, we have used Valuation Office Agency (VOA) floorspace data as an initial reference point. The VOA provide an indication of the total stock of employment floorspace at local planning authority level, which is based on five year valuations of property for taxation purposes. Periodically there are changes within the data analysis process, however, including how the relevant units of property taxation (hereditaments) are used as part of the analysis and the types of property that fall within the categories of space type, which can result in changes in floorspace stock figures..

Whist the VOA provides a useful source of data on the total stock of employment floorspace, it does not reflect employment floorspace in the same way as the Use Class Orders do. As such, like-for-like comparisons between the VOA data and data from planning-related sources (e.g. local authority planning permissions or proprietary commercial market databases, such as CoStar and EGi) are difficult to establish with any reliability.

As such, the 2008-09 VOA data on commercial floorspace has been used in order to establish a reference base for subsequent analysis (rather than relying on the data series from 2008-09 to 2015-16), and details of the amount of office and industrial floorspace stock are summarised in Table B1. It is important to note that the VOA data does not distinguish between manufacturing and warehousing uses. Instead a total industrial floorspace figure is used as the basis for the analysis.

From Table B1 it can be seen that the major locations of office floorspace stock in 2008-09 are Dacorum, Welwyn Hatfield, Watford and St Albans, each with over 200,000 sq. m. of office floorspace. In the industrial sector, the main locations of floorspace stock are Welwyn Hatfield, Dacorum, East Hertfordshire, North Hertfordshire, and Stevenage, each with of the order of 600,000 sq. m. of floorspace or more.

Table B1: Total Commercial Floorspace Stock in Hertfordshire by District and Sector

District/sq. m.	VOA Office Floorspace Stock 2008-09	VOA Industrial Floorspace Stock 2008-09
Broxbourne	77,000	567,000
Dacorum	310,000	679,000
East Hertfordshire	176,000	658,000
Hertsmere	198,000	381,000
North Hertfordshire	137,000	654,000
St Albans	213,000	408,000
Stevenage	149,000	595,000
Three Rivers	153,000	150,000
Watford	231,000	431,000
Welwyn Hatfield	301,000	688,000
Total	1,945,000	5,211,000

Source: LSH and VOA

Change in Stock of Floorspace

Office Sector

In order to provide an appropriate understanding of the change in the stock of employment floorspace, as based on the Use Classes order, we have examined planning permission completions data. This presents a more 'planning focussed' set of results, and which are more closely tied to business operations. A range of data sets were supplied by Hertfordshire County Council (Spatial Planning & Economy) on planning permission completions by District and Use Class, Prior Approval data, and commitments. This has provided a detailed evidence base on how the commercial floorspace has changed across Hertfordshire over the last 10 years²⁰.

Data covering the 'gains' in B Use floorspace was identified for each local authority by year, based on analysis of planning permission completions. The 'losses' of B Use floorspace by local authority were also identified covering the same period. The difference between the two provides the 'net' picture of development activity – either a net increase in B Use floorspace or a net reduction.

The data was also split into the office sector (taken as B1, B1a and B1b) and the industrial sector (B1c, B2 and B8). There was a relatively small element of mixed-use schemes where an assignment between the office and industrial sectors was not possible, and these are not reported in the main tables below but are captured in the overall results.

Table B2 summarises the gains in office floorspace by year for each local authority in Hertfordshire. In total, over 230,000 sq. m. of office floorspace has been permitted and delivered in Hertfordshire over the period 2008-09 to 2017-18. Locations with notable levels of gains include Welwyn Hatfield, Stevenage, Three Rivers and Dacorum. In the case of Welwyn Hatfield, a significant element of this gain was delivery of pre-recession developments, with more muted but steadier levels of gain since

²⁰ It should be noted that there may be small discrepancies in some of the 2017-18 figures as not all the data had been re-checked by local authorities. However, this does not alter the substance of the findings in any material way, as the modifications are very small.

2010-11. Stevenage, in contrast, has had more punctuated levels of office floorspace gains. Three Rivers and Dacorum have seen steadier levels of office floorspace gains.

Table B2: Gains in Office Floorspace in Hertfordshire by District

													2008-17
Office	SQ M	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total	Average
Broxbourne	Gains	-	-	253	176	95	30	118	3,372	697	465	5,206	521
Dacorum	Gains	2,482	368	355	3,624	1,946	1,265	4,046	1,192	8,466	2,423	26,167	2,617
East Hertfordshire	Gains	940	1,037	1,243	548	6,356	2,770	144	5,881	792	796	20,507	2,051
Hertsmere	Gains	6,216	2,294	3,177	981	55	690	459	904	1,052	2,351	18,179	1,818
North Hertfordshire	Gains	1,717	391	464	99	519	1,280	1,128	2,883	272	1,000	9,753	975
St Albans	Gains	2,872	1,029	503	708	1,397	562	4,381	-	702	3,616	15,770	1,577
Stevenage	Gains	14,926	370	-	10,426	-	31	-	748	-	7,560	34,061	3,406
Three Rivers	Gains	623	3,086	89	801	9,239	-	3,302	6,036	458	8,220	31,854	3,185
Watford	Gains	1,398	1,034	1,408	2,580	490	460	596	2,423	251	3,262	13,902	1,390
Welwyn Hatfield	Gains	28,898	13,113	2,494	837	1,393	3,234	859	2,667	191	955	54,641	5,464
Total	Gains	60,072	22,722	9,986	20,780	21,490	10,322	15,033	26,106	12,881	30,648	230,040	23,004

Source: Hertfordshire County Council and LSH

Table B3 shows the picture in terms of loss of office floorspace. From this it can be seen that there has been a very substantial level of office floorspace loss across Hertfordshire, with over 637,000 sq. m. of floorspace lost to other uses. Notable losses have been in Welwyn Hatfield (approximately 137,440 sq. m. lost), Dacorum (approximately 88,010 sq. m. lost), Hertsmere (approximately 81,900 sq. m. lost) and St Albans (approximately 74,320 sq. m. lost).

In the case of Welwyn Hatfield there were major losses in 2010-11 and 2012-13 in particular, but also steady losses from 2013-14 onwards. Dacorum witnessed major losses in 2011-12, but also steady losses across the period. Hertsmere has seen noticeable losses from 2012-13 period onwards, whilst St Albans has seen more noticeable losses from 2014-15.

Table B3: Losses in Office Floorspace in Hertfordshire by District

													2008-17
Office	SQ M	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total	Average
Broxbourne	Losses	4,500	617	250	471	2,053	1,085	1,084	10,512	4,517	1,164	26,253	2,625
Dacorum	Losses	7,077	2,288	10,823	22,965	1,833	10,993	7,509	11,998	7,063	5,462	88,011	8,801
East Hertfordshire	Losses	1,375	1,379	1,649	2,203	18,734	5,957	5,313	9,323	3,889	6,147	55,969	5,597
Hertsmere	Losses	58	640	1,010	1,061	22,596	7,305	2,709	16,790	6,981	22,751	81,901	8,190
North Hertfordshire	Losses	910	1,044	2,251	1,996	7,011	3,304	7,787	5,116	5,090	7,018	41,527	4,153
St Albans	Losses	1,939	8,970	2,254	2,216	7,850	3,581	14,750	3,988	19,838	8,931	74,317	7,432
Stevenage	Losses	1,550	400	946	4,025	1,238	595	8,764	9,610	17,045	4,533	48,706	4,871
Three Rivers	Losses	363	6,051	2,250	1,967	843	2,435	632	4,152	13,285	2,808	34,786	3,479
Watford	Losses	1,997	371	1,990	1,513	1,481	6,243	10,276	9,412	3,187	12,473	48,943	4,894
Welwyn Hatfield	Losses	1,429	414	41,209	2,600	46,537	5,430	5,317	8,837	18,746	6,924	137,443	13,744
Total	Losses	21,198	22,174	64,632	41,017	110,176	46,928	64,141	89,738	99,641	78,211	637,856	63,786

Source: Hertfordshire County Council and LSH

Table B4 presents the net floorspace change picture, and shows that overall there has been a net loss of office floorspace of approximately 407,820 sq. m. over the period 2008-09 to 2017-18 across Hertfordshire. This is approximately 40,780 sq. m. per annum. All local authorities have seen a net loss

in office floorspace stock, with the largest net losses being in Welwyn Hatfield, Hertsmere, Dacorum and St Albans.

Table B4: Net Change in Office Floorspace in Hertfordshire by District

													2008-17
Office	SQ M	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total	Average
Broxbourne	Net	- 4,500	- 617	3	- 295	- 1,958	- 1,055	- 966	- 7,140	- 3,820	- 699	- 21,047	- 2,105
Dacorum	Net	- 4,595	- 1,920	- 10,468	- 19,341	113	- 9,728	- 3,463	- 10,806	1,403	- 3,039	- 61,844	- 6,184
East Hertfordshire	Net	- 435	- 342	- 406	- 1,655	- 12,378	- 3,187	- 5,169	- 3,442	- 3,097	- 5,351	- 35,462	- 3,546
Hertsmere	Net	6,158	1,654	2,167	- 80	- 22,541	- 6,615	- 2,250	- 15,886	- 5,929	- 20,400	- 63,722	- 6,372
North Hertfordshire	Net	807	- 653	- 1,787	- 1,897	- 6,492	- 2,024	- 6,659	- 2,233	- 4,818	- 6,018	- 31,774	- 3,177
St Albans	Net	933	- 7,941	- 1,751	- 1,508	- 6,453	- 3,019	- 10,369	- 3,988	- 19,136	- 5,315	- 58,547	- 5,855
Stevenage	Net	13,376	- 30	- 946	6,401	- 1,238	- 564	- 8,764	- 8,862	- 17,045	3,027	- 14,645	- 1,465
Three Rivers	Net	260	- 2,965	- 2,161	- 1,166	8,396	- 2,435	2,670	1,884	- 12,827	5,412	- 2,932	- 293
Watford	Net	- 599	663	- 582	1,067	- 991	- 5,783	- 9,680	- 6,989	- 2,936	- 9,211	- 35,041	- 3,504
Welwyn Hatfield	Net	27,469	12,699	- 38,715	- 1,763	- 45,144	- 2,196	- 4,458	- 6,170	- 18,555	- 5,969	- 82,802	- 8,280
Total	Net	38,874	548	- 54,646	- 20,237	- 88,686	- 36,606	- 49,108	- 63,632	- 86,760	- 47,563	- 407,816	- 40,782

Source: Hertfordshire County Council and LSH

The resulting impact upon the office floorspace stock is summarised in Table B5. This shows that, in proportionate terms, the largest losses have been in Hertsmere, Welwyn Hatfield, Broxbourne and St Albans. These local authorities have lost more than a quarter of the total office stock over the period 2008-09 to 2017-18. Overall, approximately 21% of the office floorspace stock in Hertfordshire has been lost over this period.

Table B5: Change in Total Stock of Office Floorspace in Hertfordshire by District

	VOA Base	LPA Adjusted	LPA Adjusted	Stock Change
Office	Stock 2008-09	Stock 2012-13	Stock 2017-18	2008-9 to 2017-8
Broxbourne	77,000	69,633	55,953	-27%
Dacorum	310,000	273,789	248,156	-20%
East Hertfordshire	176,000	160,784	140,538	-20%
Hertsmere	198,000	185,358	134,278	-32%
North Hertfordshire	137,000	126,978	105,226	-23%
St Albans	213,000	196,280	154,453	-27%
Stevenage	149,000	166,563	134,355	-10%
Three Rivers	153,000	155,364	150,068	-2%
Watford	231,000	230,558	195,959	-15%
Welwyn Hatfield	301,000	255,546	218,198	-28%
Total	1,945,000	1,820,853	1,537,184	-21%

Source: Hertfordshire County Council and LSH

Meanwhile, office related employment has increased by approximately 19% over the period 2008 to 2018²¹ in Hertfordshire. There is likely to be an element of improved workspace efficiency and new working practices which may be reducing the overall need for office floorspace (see Appendix C).

²¹ Source: Experian (2018) UK Local Market Forecasts FTE Employment, broad sectors - 2018 figures

Nevertheless, the scale of divergence between employment growth and office floorspace reduction is likely to be leading to operational difficulties for businesses.

As an illustration of this, the notional office employment floorspace density figure has reduced from 12.7 sq. m. per FTE in 2008 to 8.4 sq. m. per FTE²². This is a reduction in office floorspace per FTE of over a third over this period. Whilst the actual employment density figure needs to be viewed as a guide only, the key point is the scale of change in floorspace provision per worker.

Industrial Sector

In terms of the industrial sector, Table B6 summarises the industrial floorspace gains that have arisen across Hertfordshire over the last 10 years. From this it can be seen that, overall, approximately 550,000 sq. m. of industrial floorspace has been gained. The largest industrial floorspace gains have been in Dacorum, North Hertfordshire, Three Rivers, Welwyn Hatfield, Broxbourne and Stevenage. Generally there has been a punctuated form of delivery across the period and by local authority.

Table B6: Gains in Industrial Floorspace in Hertfordshire by District

														2008-17
Industrial	SQ M	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total	Average	Average
Broxbourne	Gains	35,916	2,152	1,651	813	1,583	2,173	2,008	11,544	3,222	458	61,520	6,152	6,152
Dacorum	Gains	2,947	3,828	460	9,568	5,324	2,987	9,024	20,932	20,270	7,971	83,311	8,331	8,331
East Hertfordsh	Gains	3,436	6,844	7,102	1,823	2,833	1,721	3,740	6,318	2,704	12,478	48,999	4,900	4,900
Hertsmere	Gains	1,951	2,772	2,700	1,124	80	4,879	787	1,835	125	7,407	23,660	2,366	2,366
North Hertfords	Gains	9,007	1,079	14,964	2,729	2,787	3,775	4,040	24,937	1,017	6,674	71,009	7,101	7,10
St Albans	Gains	892	7,044	741	505	1,284	1,280	8,522	-	1,150	7,845	29,263	2,926	2,926
Stevenage	Gains	16,522	1,472	1,767	127	2,083	114	20,296	11,531	2,841	4,319	61,072	6,107	6,107
Three Rivers	Gains	127	-	-	8,897	45,318	-	10,359	234	961	2,000	67,896	6,790	6,790
Watford	Gains	1,348	2,932	1,211	12,772	4,615	3,920	715	1,968	2,201	8,494	40,176	4,018	4,018
Welwyn Hatfiel	Gains	8,444	-	2,370	953	6,486	25,238	7,358	4,956	4,782	2,490	63,077	6,308	6,30
Total	Gains	80,590	28,123	32,966	39,311	72,393	46,087	66,849	84,255	39,273	60,136	549,983	54,998	54,998

Source: Hertfordshire County Council and LSH

Despite the gains seen in industrial floorspace over the last decade, as Table B7 illustrates, there has still been approximately 920,480 sq. m. of industrial floorspace loss across Hertfordshire over this period. The major losses have been in East Hertfordshire (approximately 139,120 sq. m.), Dacorum (approximately 126,600 sq. m.), Stevenage (approximately 113,240 sq. m.) and Three Rivers (approximately 111,490 sq. m.).

²² Based on FTE employment for Hertfordshire from Experian (2018) UK Local Market Forecasts, and office floorspace figures from Table B5 in Appendix B.

Table B7: Losses in Industrial Floorspace in Hertfordshire by District

														2008-17
Industrial	SQ M	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total	Average	Average
Broxbourne	Losses	3,208	400	5,037	1,619	12,412	3,955	998	11,413	4,365	6,703	50,110	5,011	5,011
Dacorum	Losses	17,105	8,321	10,939	16,046	5,116	10,835	13,811	18,117	17,648	8,678	126,616	12,662	12,662
East Hertfordsh	Losses	5,480	7,592	17,672	2,426	3,201	11,095	66,134	6,962	4,133	14,425	139,120	13,912	13,912
Hertsmere	Losses	6,639	9,947	2,735	553	10,961	12,234	3,089	4,570	11,624	2,999	65,351	6,535	6,535
North Hertfords	Losses	5,328	3,442	21,518	3,087	4,512	3,820	35,706	6,068	3,176	10,768	97,425	9,743	9,743
St Albans	Losses	14,233	2,567	3,959	942	3,748	8,570	9,787	2,749	8,631	16,122	71,308	7,131	7,131
Stevenage	Losses	49,965	2,375	535	2,943	1,830	-	29,705	14,947	6,570	4,369	113,239	11,324	11,324
Three Rivers	Losses	1,478	5,043	95,958	3,599	1,419	1,094	953	392	241	1,310	111,487	11,149	11,149
Watford	Losses	1,137	1,671	1,868	18,145	3,157	24,622	1,617	4,481	6,749	1,386	64,833	6,483	6,483
Welwyn Hatfiel	Losses	9,208	12,650	1,585	1,799	1,817	7,781	3,844	26,392	1,585	14,329	80,990	8,099	8,099
Total	Losses	113,781	54,008	161,806	51,159	48,173	84,006	165,644	96,091	64,722	81,089	920,479	92,048	92,048

Table B8 presents the net change picture for Hertfordshire, from which is can be seen that overall there has been a net loss of approximately 370,495 sq. m. of industrial floorspace. The main locations of net loss have been East Hertfordshire, Stevenage, Three Rivers, Dacorum and St Albans. These local authorities have seen approximately three-quarters of the net loss of industrial floorspace across the county.

Table B8: Net Change in Industrial Floorspace in Hertfordshire by District

														2008-17
Industrial	SQ M	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total		Average
Broxbourne	Net	32,708	1,752	- 3,386	- 806	- 10,829	- 1,782	1,010	131	- 1,143	- 6,245	11,410		1,141
Dacorum	Net	- 14,158	- 4,493	- 10,479	- 6,478	208	- 7,848	- 4,787	2,815	2,622	- 707	- 43,305	-	4,331
East Hertfordsh	Net	- 2,044	- 748	- 10,570	- 603	- 368	- 9,374	- 62,394	- 644	- 1,429	- 1,947	- 90,121	-	9,012
Hertsmere	Net	- 4,688	- 7,175	- 35	571	- 10,881	- 7,355	- 2,302	- 2,735	- 11,499	4,408	- 41,691	-	4,169
North Hertfords	Net	3,679	- 2,363	- 6,554	- 358	- 1,725	- 45	- 31,666	18,869	- 2,159	- 4,094	- 26,416	-	2,642
St Albans	Net	- 13,341	4,477	- 3,218	- 437	- 2,464	- 7,290	- 1,265	- 2,749	- 7,481	- 8,277	- 42,045	-	4,205
Stevenage	Net	- 33,443	- 903	1,232	- 2,816	253	114	- 9,409	- 3,416	- 3,729	- 50	- 52,167	-	5,217
Three Rivers	Net	- 1,351	- 5,043	- 95,958	5,298	43,899	- 1,094	9,406	- 158	720	690	- 43,591	-	4,359
Watford	Net	211	1,261	- 657	- 5,373	1,458	- 20,702	- 902	- 2,513	- 4,548	7,108	- 24,657	-	2,466
Welwyn Hatfiel	Net	- 764	- 12,650	785	- 846	4,669	17,457	3,514	- 21,436	3,197	- 11,839	- 17,913	-	1,791
Total	Net	- 33,191	- 25,885	- 128,840	- 11,848	24,220	- 37,919	- 98,795	- 11,836	- 25,449	- 20,953	- 370,496	-	37,050

Source: Hertfordshire County Council and LSH

The resulting impact upon industrial floorspace stock is summarised in Table B9. This shows that, overall, there has been a 7% net loss in industrial floorspace between 2008-09 and 2017-18. The major net losses have been at East Hertfordshire, Hertsmere, St Albans and Stevenage.

The most significant apparent net decline is at Three Rivers, with a 29% reduction in industrial stock. However, this is based upon one particular scheme, the redevelopment of Leavesden Studios, which was approximately 50,000 sq. m. in size. However, this is an exceptional scheme, which is not representative of the broader industrial market. Excluding this scheme from the figures means that Three Rivers has a net decline of approximately 2%. The overall net decline for Hertfordshire reduces to a 6% net loss as a result of this adjustment.

Table B9: Change in Total Stock of Industrial Floorspace in Hertfordshire by District

	VOA Base	LPA Adjusted	LPA Adjusted	Stock Change
Industrial	Stock 2008-09	Stock 2012-13	Stock 2017-18	2008-9 to 2017-8
Broxbourne	567,000	586,439	578,410	2%
Dacorum	679,000	643,600	635,695	-6%
East Hertfordshire	658,000	643,667	567,879	-14%
Hertsmere	381,000	358,792	339,309	-11%
North Hertfordshire	654,000	646,679	627,584	-4%
St Albans	408,000	393,017	365,955	-10%
Stevenage	595,000	559,323	542,833	-9%
Three Rivers	150,000	96,845	106,409	-29%
Watford	431,000	427,900	406,343	-6%
Welwyn Hatfield	688,000	679,194	670,087	-3%
Total	5,211,000	5,035,456	4,840,504	-7%

In contrast to the decline in the overall industrial floorspace stock, there has been a small increase of approximately 1.5% in industrial related employment over the period 2008 to 2018²³ in Hertfordshire. Automation and other developments in this sector (see Appendix C), notably the logistics sector, may well have been able to absorb these differing trends in broad terms. However, the employment growth rate over the next 10 years is expected to double in this sector in Hertfordshire, which may start to increase pressure.

As an illustration of this, the notional industrial employment floorspace density figure has reduced from 55.5 sq. m. per FTE in 2008 to 50.8 sq. m. per FTE²⁴. This is a reduction in industrial floorspace per FTE of approximately 8% over this period. The projected employment growth rate of 3.2% over the next decade in this sector with no further net loss in industrial floorspace, would result in a notional industrial employment floorspace density figure of 45.8 sq. m. per FTE. This would mean a reduction in employment floorspace provision of over 17% since 2008.

²³ Source: Experian (2018) UK Local Market Forecasts FTE Employment, broad sectors. 2018 figures

²⁴ Based on FTE employment for Hertfordshire from Experian (2018) UK Local Market Forecasts, and office floorspace figures from Table B5 in Appendix B.

Loss of Commercial Floorspace to Residential

Office Sector

A key destination for floorspace lost from commercial use is for residential purposes. Table B10 summarises the amount of office floorspace that has been lost to residential use. It should be noted, however, that this probably under-estimates the amount of floorspace lost to residential uses due to the way data has been recorded and captured on the planning applications and permissions database. Nevertheless, the figures contained in Table B10 are likely to be representative of the broad scale of office floorspace loss to residential.

From Table B10 it can be seen that approximately 335,440 sq. m. of office floorspace has been lost to residential use. The largest absolute losses have been in Welwyn Hatfield, St Albans, Stevenage and Hertsmere.

Table B10: Loss of Office Floorspace to Residential in Hertfordshire by District

Office - Loss to												2008-17
Residential (sq m)	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total	Average
Broxbourne	-	475	229	471	579	73	1,084	8,654	4,240	726	16,531	1,653
Dacorum	674	340	1,597	4,534	1,355	1,012	1,084	9,486	5,652	2,387	28,121	2,812
East Hertfordshire	600	776	335	547	361	4,758	1,162	8,403	3,006	2,499	22,447	2,245
Hertsmere	-	-	30	837	4,593	616	2,148	14,880	4,837	8,573	36,514	3,651
North Hertfordshire	298	808	512	1,443	4,130	2,239	3,848	1,711	4,142	3,837	22,968	2,297
St Albans	1,023	7,442	1,629	966	2,747	3,581	11,767	3,344	19,417	7,825	59,741	5,974
Stevenage	1,100	-	-	334	138	556	8,169	9,308	16,989	-	36,594	3,659
Three Rivers	363	600	1,727	1,414	218	206	243	1,936	4,052	2,335	13,094	1,309
Watford	1,997	204	1,595	399	88	3,086	2,056	4,526	2,406	5,848	22,205	2,221
Welwyn Hatfield	930	-	39,094	893	438	3,476	3,418	5,854	16,286	6,834	77,223	7,722
Total	6,985	10,645	46,748	11,838	14,647	19,603	34,979	68,102	81,027	40,864	335,438	33,544

Source: Hertfordshire County Council and LSH

Table B11 compares the data in Table B10 with the office floorspace loss in Table B3, which shows what proportion of the loss of office floorspace has been for residential uses. (Note that this is a comparison with the 'total' loss of office floorspace, rather than the net change in office floorspace figure).

From Table B.11 it can be seen that approximately 53% of the loss of office floorspace over the period 2008-09 to 2017-18 has been for residential purposes. The largest proportional losses have been in St Albans, Stevenage and Broxbourne. Of particular interest, however, has been the change in the proportion of office floorspace loss to residential between the periods 2008-09 to 2012-13 and from 2013-14 to 2017-18. Over the period 2008-09 to 2012-13 approximately 35% of the loss of office floorspace was to residential use, whilst from 2012-13 to 2017-18 the rate of loss almost doubled to 65%. As will be discussed later, this has been driven by PDR conversions.

Table B11: Loss of Office Floorspace to Residential in Hertfordshire as % Total Loss by District

Office - Residential											2008-17	2008-12	2013-17
Loss as % Total Loss	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Average	Average	Average
Broxbourne	0%			-	-		100%			62%	63%	22%	
Dacorum	10%		-						-		32%	19%	
East Hertfordshire	44%	56%	20%	25%	2%	80%	22%	90%	77%	41%	40%	10%	65%
Hertsmere	0%	0%	3%	79%	20%	8%	79%	89%	69%	38%	45%	22%	55%
North Hertfordshire	33%	77%	23%	72%	59%	68%	49%	33%	81%	55%	55%	54%	56%
St Albans	53%	83%	72%	44%	35%	100%	80%	84%	98%	88%	80%	59%	90%
Stevenage	71%	0%	0%	8%	11%	93%	93%	97%	100%	0%	75%	19%	86%
Three Rivers	100%	10%	77%	72%	26%	8%	38%	47%	31%	83%	38%	38%	38%
Watford	100%	55%	80%	26%	6%	49%	20%	48%	75%	47%	45%	58%	43%
Welwyn Hatfield	65%	0%	95%	34%	1%	64%	64%	66%	87%	99%	56%	45%	79%
Total	33%	48%	72%	29%	13%	42%	55%	76%	81%	52%	53%	35%	65%

Industrial Sector

Table B12 summarises the amount of industrial floorspace that has been lost to residential use. This shows that approximately 138,710 sq. m. of industrial floorspace has been lost to residential use. The largest absolute losses have been in North Hertfordshire, Welwyn Hatfield and St Albans. These three local authorities account for approximately 60% of the loss of industrial floorspace to residential use.

Table B12: Loss of Industrial Floorspace to Residential in Hertfordshire by District

Industrial - Loss to												2008-17
Residential (sq m)	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total	Average
Broxbourne	966	-	69	786	-	1,682	368	1,175	536	3,458	7,219	904
Dacorum	635	150	69	988	1,935	100	53	3,714	1,735	554	6,156	993
East Hertfordshire	3,183	93	3,952	679	350	7,342	924	581	2,060	4,033	14,940	2,320
Hertsmere	-	8,371	1,941	-	856	7,808	-	1,680	1,352	-	10,840	2,201
North Hertfordshire	772	781	7,464	-	3,195	1,064	32,142	1,248	2,519	2,206	39,179	5,139
St Albans	3,155	1,990	2,661	82	1,688	-	7,225	662	4,672	9,640	22,199	3,178
Stevenage	35,425	225	-	652	-	-	-	5,750	2,787	-	8,537	4,484
Three Rivers	200	5,043	-	111	1,419	-	528	112	73	196	909	768
Watford	55	192	482	102	1,101	1,698	754	927	1,869	181	5,429	736
Welwyn Hatfield	-	-	250	-	-	5,250	850	2,782	192	14,227	23,301	2,355
Total	44,391	16,845	16,888	3,400	10,544	24,944	42,844	18,631	17,795	34,495	138,709	23,078

Source: Hertfordshire County Council and LSH

Table B13 compares the data in Table B12 with the industrial floorspace loss in Table B7, which shows what proportion of the loss of industrial floorspace has been for residential uses. (Note that this is a comparison with the 'total' loss of industrial floorspace, rather than the net change in industrial floorspace figure).

From Table B13 it can be seen that approximately 25% of the loss of industrial floorspace over the period 2008-09 to 2017-18 has been for residential purposes. The largest proportional losses have been in North Hertfordshire, St Albans, Stevenage and Broxbourne. As with the office sector, there has been a change in the proportion of industrial floorspace loss to residential between the periods 2008-09 to 2012-13 and from 2013-14 to 2017-18. Over the period 2008-09 to 2012-13 approximately 21% of the loss of industrial floorspace was to residential use, whilst from 2013-14 to 2017-18 the rate of loss increased to 28%.

Table B13: Loss of Industrial Floorspace to Residential in Hertfordshire as % Total Loss by District

Industrial - Residential											2008-17	2008-12	2013-17
Loss as % Total Loss	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Average	Average	Average
Broxbourne	30%	0%	1%	49%	0%	43%	37%	10%	12%	52%	18%	8%	26%
Dacorum	4%	2%	1%	6%	38%	1%	0%	21%	10%	6%	8%	7%	9%
East Hertfordshire	58%	1%	22%	28%	11%	66%	1%	8%	50%	28%	17%	23%	15%
Hertsmere	0%	84%	71%	0%	8%	64%	0%	37%	12%	0%	34%	36%	31%
North Hertfordshire	14%	23%	35%	0%	71%	28%	90%	21%	79%	20%	53%	32%	66%
St Albans	22%	78%	67%	9%	45%	0%	74%	24%	54%	60%	45%	38%	48%
Stevenage	71%	9%	0%	22%	0%	0%	0%	38%	42%	0%	40%	63%	15%
Three Rivers	14%	100%	0%	3%	100%	0%	55%	29%	30%	15%	7%	6%	23%
Watford	5%	11%	26%	1%	35%	7%	47%	21%	28%	13%	11%	7%	14%
Welwyn Hatfield	0%	0%	16%	0%	0%	67%	22%	11%	12%	99%	29%	1%	43%
Total	39%	31%	10%	7%	22%	30%	26%	19%	27%	43%	25%	21%	28%

Loss of Commercial Floorspace to Residential via PDR

An extension to Permitted Development Rights (PDR) was introduced in 2013 to allow the conversion of office floorspace to residential use. In 2015 the same right was extended to storage or distribution (B8 floorspace) for three years, and was extended in April 2018 for one year, with the Government consulting on making this permanent and extending other PDR powers. The purpose of these measure was to provide a more streamlined and certain route for developers in changing the use of commercial floorspace to residential use, and to increase the number of residential units delivered. This has helped deliver additional residential units and has removed some out-moded commercial floorspace, but it has also had a range of unintended consequences which have been detrimental to the successful operation of the Hertfordshire property market and economy.

Analysis of the scale of loss of office floorspace to residential use via PDR approval is summarised below. This focuses on the office sector, as this is where the vast majority of change has been within Hertfordshire. It should be noted that a direct comparison between the PDR floorspace figures and the completed planning permission data is difficult in terms of an annual like-for-like basis, but the overall figures provide a reasonable basis for comparison.

Table B14 shows the amount of office floorspace loss to residential via PDR approvals across Hertfordshire on a year-by-year basis. In total, over the period 2013-14 to 2017-18, approximately 133,540 sq. m. of office floorspace has been approved for residential use via PDR approvals. This is approximately 55% of all the office floorspace loss to residential use over this period.

In absolute terms the local authorities with the largest amount of office PDR to residential are Welwyn Hatfield, St Albans and Stevenage. In proportionate terms those most noticeably impacted are Three Rivers, Welwyn Hatfield, Broxbourne and Stevenage.

Table B14: Loss of Office Floorspace to Residential via PDR in Hertfordshire by District

Total	2013-14	2014-15	2015-16	2016-17	2017-18	Total	Average	Prior Approvals as % Loss to Residential (2013-14 to 2017-18)
Prior Approvals to R	esidentia	I (Compl	etions - s	q m)				
Broxbourne	-	177	700	9,313	700	10,890	2,178	73.7%
Dacorum	-	90	6,082	2,338	2,048	10,558	2,112	53.8%
East Hertfordshire	187	306	1,869	895	563	3,820	764	19.3%
Hertsmere	-	777	1,878	4,608	5,644	12,906	2,581	41.6%
North Hertfordshire	-	1,359	16	2,775	533	4,683	937	29.7%
St Albans	-	6,130	6,702	1,619	11,694	26,145	5,229	56.9%
Stevenage	-	-	-	25,487	-	25,487	5,097	72.8%
Three Rivers	-	243	376	4,011	2,195	6,825	1,365	77.8%
Watford	-	449	2,278	1,485	1,059	5,271	1,054	29.4%
Welwyn Hatfield	-	3,418	1,670	15,028	6,834	26,950	5,390	75.1%
Total	187	12,949	21,571	67,559	31,270	133,535	26,707	54.6%

Table B15 provides further insight to the same data in Table B14, by showing the total amount of office to residential PDR floorspace approvals against the amount of office floorspace loss to residential.

Table B15: Relationship of Loss of Office Floorspace to Residential and PDR Approvals

		Total Prior Approvals to Residential (2013-14 to 2017-18 - sq. m.)	Prior Approvals as % Loss to Residential (2013-14 to 2017-18)
Broxbourne	14,777	10,890	73.7%
Dacorum	19,621	10,558	53.8%
East Hertfordshire	19,828	3,820	19.3%
Hertsmere	31,054	12,906	41.6%
North Hertfordshire	15,777	4,683	29.7%
St Albans	45,934	26,145	56.9%
Stevenage	35,022	25,487	72.8%
Three Rivers	8,772	6,825	77.8%
Watford	17,922	5,271	29.4%
Welwyn Hatfield	35,868	26,950	75.1%
Total	244,575	133,535	54.6%

Source: Hertfordshire County Council and LSH

Table B16 puts the loss of office floorspace via PDR approval into a wider context. From Table B16 it will be seen that the amount of office floorspace loss increased from approximately 124,150 sq. m. between 2008-09 and 2012-13, to approximately 283,670 sq. m. between 2013-14 and 2017-18 (128% increase). The amount of office floorspace loss to residential over these two periods increased from approximately 90,860 sq. m. between 2008-09 and 2012-13, to approximately 244,575 sq. m. between 2013-14 and 2017-18 (169% increase).

Of the 244,575 sq. m. of office floorspace loss to residential between 2013-14 and 2017-18, 133,535 sq. m. was via PDR approvals. Assuming that the 90,860 sq. m. is the 'natural' rate of loss of office to residential use,²⁵ then of the 153,710 sq. m. increase in office floorspace loss between 2013-14 and 2017-18 over this 'natural' rate of 90,860 sq. m., approximately 86% (133,535 sq. m.) is due to PDR approvals. In other words, the increased rate of loss of office floorspace post-2013 is fundamentally associate with PDR conversions.

Table B16: Impact of Office to Residential PDR Approvals on Office Floorspace Loss

Office Sector	Change 2008-09	Change 2013-14	Additional Loss 2008-09/2012-	
Office Sector	to 2012-13	to 2017-18	13 and 2013-14/2017-18	
Office Floospace Loss (sq m)	124,147	283,669	159,522	
Office Loss to Residential (sq m)	90,863	244,575	153,712	
Residential Loss as %	73%	86%	-	
Loss to Residential via PDR (sq m)	-	133,535	Therefore 86% of increased loss of office floorspace due to PDR (133,535 sqm as % 153,712 sq m)	

Source: Hertfordshire County Council and LSH

However, this only captures part of the picture, as it deals with completed PDR approvals up to March 2018. There are a considerable number of PDR approvals of office to residential conversions that are committed but which have not been implemented as yet. The scale of the potential loss of office floorspace to residential via these committed approvals is summarised in Table B17.

From Table B17 it will be seen that there is potentially another 106,840 sq. m. of office floorspace that could be lost to residential use via PDR approvals. This will is almost 80% of the scale of office floorspace loss via PDR approvals seen since 2013-14. The largest absolute losses may be in Dacorum, St Albans and Hertsmere.

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²⁵ This is questionable, as it may reflect wider market pressure, such as increased residential demand and greater residential values driving demand and hence leading to the loss of employment floorspace.

Table B17: Committed Office Floorspace Losses to Residential via PDR in Hertfordshire by District

Local Authority	Prior Approval Commitments 31/03/2018 (Office Sector - sq m)
Broxbourne	2,594
Dacorum	21,480
East Hertfordshire	10,842
Hertsmere	17,647
North Hertfordshire	2,150
St Albans	21,083
Stevenage	1,057
Three Rivers	11,463
Watford	10,036
Welwyn Hatfield	8,490
Total	106,842

Table B18 illustrates what the additional office to residential PDR conversions may mean in terms of the total stock of office floorspace in Hertfordshire. If all of these PDR approvals are developed out, then the total loss of office floorspace since 2008-09 may increase by 5%-points to stand at 26%.

Table B18: Potential Impact of Committed PDR Approvals on Total Office Floorspace Stock in Hertfordshire by District

Local Authority	VOA Stock 2008- 09	Adjusted Stock 2017-18	2018 Stock with PDR Commitments	Stock Change 2008- 09 to 2018+
Broxbourne	77,000	55,953	53,359	-31%
Dacorum	310,000	248,156	226,676	-27%
East Hertfordshire	176,000	140,538	129,696	-26%
Hertsmere	198,000	134,278	116,631	-41%
North Hertfordshire	137,000	105,226	103,076	-25%
St Albans	213,000	154,453	133,370	-37%
Stevenage	149,000	134,355	133,298	-11%
Three Rivers	153,000	150,068	138,605	-9%
Watford	231,000	195,959	185,923	-20%
Welwyn Hatfield	301,000	218,198	209,708	-30%
Total	1,945,000	1,537,184	1,430,342	-26%

Source: Hertfordshire County Council, VOA and LSH

Future Commitments

The above analysis has illustrated what has happened in terms of the change of floorspace across Hertfordshire, along with indications of the outstanding implementation of office to residential PDR approvals. Below we outline what may happen over the short-term in relation to identified commitments. This includes both additions to the stock as well as losses.

The total identified B Use floorspace commitments are summarised in Table B19, which indicates approximately 807,310 sq. m. of B Use floorspace 'gains' across Hertfordshire as a whole. However, this includes exceptional developments such as the 331,655 sq. m. Strategic Rail Freight Interchange in St Albans, which need to be removed from the analysis in order to provide a more representative picture of the commercial property market.

In addition, there are anticipated losses in B Use floorspace that need to be incorporated into the analysis. Once these are accounted for, then there may be approximately 146,700 sq. m. of B Use floorspace that could come forward over the next few years, although there is no certainty that this amount of floorspace would be developed (Table B19).

When split down by sector it can be seen that approximately 81,970 sq. m. of office floorspace may come forward over the next few years, once committed losses are accounted for. Notwithstanding the overall small gain in office floorspace, there are expected to be losses in a number of local authorities. This includes approximately 22,190 sq. m. at St Albans, 8,140 sq. m. at Hertsmere and 7,670 sq. m. at Dacorum.

The industrial sectors may see an additional 64,730 sq. m. of floorspace come forward across Hertfordshire as a whole. Again, there are some local authorities where there may be a net loss, including Stevenage (approximately 21,740 sq. m.), Watford (approximately 12,590 sq. m.) and Three Rivers (approximately 11,145 sq. m.).

Table B19: B Use Commitments in Hertfordshire

Local Authority/ sq m	Total Office Commitments	Total Industrial Commitments	Total	Total Office Commitments after Planned Losses	Total Industrial Commitments after Planned Losses	Total
Broxbourne	5,871	6,618	12,489	1,202	-1,864	-662
Dacorum	22,901	88,681	111,582	-7,672	76,372	68,700
East Hertfordshire	24,395	29,907	54,302	11,946	19,589	31,535
Hertsmere	19,419	18,202	37,621	-8,142	16,730	8,588
North Hertfordshire	5,999	13,668	19,667	-4,885	6,119	1,234
St Albans	5,166	335,012	340,178	-22,187	-1,853	-24,040
Stevenage	25,325	10,690	36,015	11,225	-21,743	-10,518
Three Rivers	51,119	325	51,444	36,363	-11,145	25,218
Watford	81,010	6,028	87,038	53,052	-12,588	40,464
Welw yn Hatfield	34,865	22,107	56,972	11,072	-4,889	6,183
Total	276,070	531,238	807,308	81,974	64,728	146,702

Source: Hertfordshire County Council and LSH

Table B20 summarises the position for the office sector in terms of the change in office floorspace over the last decade adjusted for net commitments and outstanding PDR office to residential approvals. This shows that, overall, there has been a 22% reduction in the total stock of office floorspace across Hertfordshire, assuming all the outstanding commitments are delivered.

There are some dramatic reductions at some local authorities. The stock of office floorspace at St Albans and Hertsmere has almost halved over the past decade. Apart from Stevenage, Three Rivers and Watford, the other local authorities are expected to see drops of between 20% and 29%. These are substantial levels of office floorspace loss.

Table B20: Actual and Planned Change in Stock of Office Floorspace in Hertfordshire

		Adjusted Stock	Adjusted Stock for	Adjusted Stock	
	VOA Office	2017-18 (Net B	Committed PDR	for B Use	% Change 2008-9
Local Authority/sq m	Stock 2008-09	Use Changes)	Office Losses	Commitments	to 2018+
Broxbourne	77,000	55,953	53,359	54,561	-29%
Dacorum	310,000	248,156	226,676	219,004	-29%
East Hertfordshire	176,000	140,538	129,696	141,642	-20%
Hertsmere	198,000	134,278	116,631	108,489	-45%
North Hertfordshire	137,000	105,226	103,076	98,191	-28%
St Albans	213,000	154,453	133,370	111,183	-48%
Stevenage	149,000	134,355	133,298	144,523	-3%
Three Rivers	153,000	150,068	138,605	174,968	14%
Watford	231,000	195,959	185,923	238,975	3%
Welwyn Hatfield	301,000	218,198	209,708	220,780	-27%
Total	1,945,000	1,537,184	1,430,342	1,512,316	-22%

Table B21 summarises the position for the industrial sector in terms of the change in industrial floorspace over the last decade adjusted for net commitments. This shows that, overall, there has been a 5% reduction in the total stock of industrial floorspace across Hertfordshire, assuming all the outstanding commitments are delivered. Apart from Broxbourne and Dacorum, all local authorities are expected to see a net reduction in industrial floorspace. The largest reductions are in East Hertfordshire, St Albans and Stevenage.

Table B21: Actual and Planned Change in Stock of Industrial Floorspace in Hertfordshire

		Adjusted Stock	Adjusted Stock	
	VOA Office	2017-18 (Net B	for B Use	% Change 2008-9
Local Authority/sq m	Stock 2008-09	Use Changes)	Commitments	to 2018+
Broxbourne	567,000	578,410	576,546	2%
Dacorum	679,000	635,695	712,067	5%
East Hertfordshire	658,000	567,879	587,468	-11%
Hertsmere	381,000	339,309	356,039	-7%
North Hertfordshire	654,000	627,584	633,703	-3%
St Albans	408,000	365,955	364,102	-11%
Stevenage	595,000	542,833	521,090	-12%
Three Rivers	150,000	157,049	145,904	-3%
Watford	431,000	406,343	393,755	-9%
Welwyn Hatfield	688,000	670,087	665,198	-3%
Total	5,211,000	4,891,144	4,955,872	-5%

Source: Hertfordshire County Council and LSH

Summary

In contrast to an active but highly constrained occupier market, Hertfordshire has seen a major haemorrhaging of commercial floorspace. Almost a quarter of the office stock has been lost over the last decade, and for some local authorities it has effectively halved. This contrasts with an increase in office-related employment of 19% over this period. Whilst efficiencies in workspace use are happening across the economy, the scale of the divergence between office loss and employment growth in Hertfordshire is putting major pressure on businesses.

The industrial sector has not seen a net loss to the same extent as the office sector. Approximately 7% of the industrial floorspace stock was lost over the period 2008-09 to 2017-18, whilst employment increased by 1.5% in the sector. However, the nature of this market requires larger scale developments to meet future needs, so losses of industrial floorspace without suitable replacement space will create problems for the successful operation of the market.

In total, there has been a net loss of over 771,000 sq. m. of commercial floorspace across Hertfordshire over the last decade. For context, this is equivalent to the total office stock in St Albans, Watford and Welwyn Garden City combined.

In part, this reflects the natural operation of the market, whereby obsolete, inefficient or poorly located floorspace is re-used for other purposes, and is resulting in more efficient business operations through more intensive space use. However, the scale of commercial floorspace loss witnessed across Hertfordshire goes beyond this, and is creating very real problems for existing, expanding and new businesses, and for those looking to move into the area, notably international investors.

In that context, the impact of PDR on the office sector has been particularly significant. It has been responsible for the vast majority of the increased rate of loss of office floorspace since 2013-14. This is having a very significant impact on existing and potential occupiers.

Whilst PDR has helped to remove excess or inappropriate floorspace in some areas and to contribute to housing needs to a small degree, the scale of loss, and the inability to avoid the loss of good quality and in-demand floorspace, is creating serious imbalances between supply and demand in the market. There are various examples of good quality, well located and in-demand office floorspace being lost to residential uses through PDR conversions across Hertfordshire. This includes cases of existing good covenant tenants being given notice to leave in order to convert the premises to residential use via permitted development.

Further office PDR floorspace loss is set to arise as a result of PDR approvals which are yet to be implemented. These outstanding PDR office to residential conversions are equivalent to almost 80% of the total amount of floorspace lost via PDR over the period 2013-14 and 2017-18, so will denude the office floorspace stock further. In some local authorities in Hertfordshire this is equivalent to the total scale of loss of office floorspace to residential seen over the last five years. This will seriously impact the efficient, effective and sustainable operation of city and town centres as economic growth locations, especially for the creative and knowledge-based economy, as noted in a recent report by the Centre for Cities²⁶.

²⁶ Centre for Cities (March 2018). City Space Race. Balancing the need for housing and office space in cities.

Appendix C: Future Workspace Developments

Introduction

The nature of employment has changed significantly over the last few decades, which has had important influences upon the working environment. Changes are expected to continue, and most likely accelerate in terms of the nature and form of the workplace environment. This will be driven by technological advancement and innovation, alongside social and cultural trends.

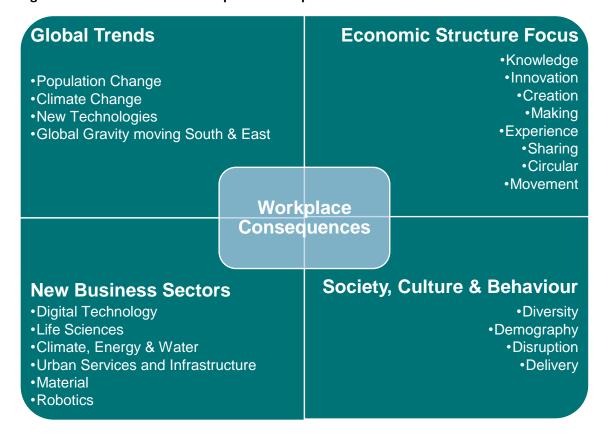
Much has been written about the changing trends impacting on employment, the future of work and the implications for the future of the workplace and workspace. This Appendix provides a summary overview of key trends that are central to the ways in which work and workplaces are changing.

While many of the trends do not generally impact on the workplace directly, they affect the way that work is undertaken. As such, understanding future trends on how people may work and are organised, the technologies that enable work, and the organisational structure for a workforce are fundamental considerations for shaping the end provision of workspace and the commercial market response.

The key trends of relevance can be grouped into four main themes, as illustrated in Figure C1:

- Global Trends
- New Business Sectors
- Differing Types of Economic Structure
- Society, Culture and Behavioural Change

Figure C1: Drivers of Future Workplace Developments



Global Trends

There are a range of critical global trends which will influence the scale and form of workplace requirements in the UK. These include:

- Population change creating pressures but also opportunities
- Climate change driving new energy, transport and adaptation systems and uses
- New technologies leading to changes in science, medicine and trade
- Global gravity moving South and East with implications for UK trade pattern

As an example, under climate change there may be increasing emphasis on more resilience in design, and less reliance on carbon based energy and transport systems.

New Business Sectors

These global trends also link with new or growing global business sectors, which include:

- Digital Technology
- Life Sciences
- Climate, Energy & Water
- Urban Services and Infrastructure
- Materials
- Robotics.

As an example, the Digital Technology sector is likely to lead to increased levels of connectivity which will influence workplace requirements, the manufacturing of new types of kit, potentially on-site, with distribution sector impacts.

Differing Types of Economic Structure

These are also, to varying degrees, reflected in the Government's Industrial Strategy and 'Big 5 Ideas' push. In addition, however, the 'type' of economy is changing, and can include differing levels of focus on the following characteristics:

- Knowledge
- Innovation
- Creation
- Making
- Experience
- Sharing
- Circular
- Movement

As an example, under an increased Knowledge-based focus, there may be increasing demand for collaboration environments and increased levels of freelancing. In terms of the Movement economy, the rise of Autonomous Vehicles will have consequences for distribution as well as office design.

Society, Culture and Behaviour

The combination of the above trends has impacts on and is shaped by society, culture and behavioural change. Four key trends can be identified in this respect: a more diverse workforce, combining 'millennials' and older generations, and different work-life attitudes; an aging population, living more independently and working for longer; disruptive innovations, particularly new technology, data analytics and social networks; and new responses to these developments in the form of new business models and industries.

- Diversity a more diverse workforces;
- Demography people living and working for longer;
- Disruption disruptive innovations, particularly the availability of technology; and
- Delivery new business models and industries

The above key trends are closely inter-linked, and their combination will have consequences for the workplace. This will include the scale, location, form, design, connectivity and usage of such space. Although these impacts were more noticeable in the technology sector, as technology has become more ingrained into business operations and social structures, the impacts are filtering through to the mainstream work environment. However, one consistent trend is that the future of work is changing, and the pace of change to 2030 and beyond will mean the working life for many people will look quite different to the current time.

Workplace Consequences

In terms of the workplace consequences of the above trends, two aspects are worth highlighting. These are how existing technology developments are driving workplace requirements, and what some of the emerging technology drivers may be.

Existing Technology Drivers

New Business Models

Technology 'disruption' has created uncertainty in the business world, and has reinforced the need for more agile, flexible organisational structure, which is reflected in workspace trends. This can be seen in the identification of various different organisational models in place in the workplace: the corporate world, the ethical/corporate care sector; and the 'small' sector with a focus on a collaborative network of small organisations and specialisms.

In fact, the growth in small and medium enterprises (SME's) is a major indicator of the growth of the low impact, high tech economy, and has supported the development of a more collaborative and flexible working environment, particularly for offices. This growth in SME's has driven a need for flexibility which is a fundamental basis of office workspace provision for such organisations. The growth in the importance of SME's, which has been supported and accelerated by technology, has key implications for the location of offices together with their design, facilities and local environment.

Location

Technology has had a major influence on the role of location and working, and is expected to become more so into the future. Digital eco-systems and dependencies on digital infrastructure will be key drivers of change in terms of business location, as workers have a degree of location flexibility unseen in the past. This has led to 'spoke and hub' property arrangement by businesses, for example, allowing staff to work from a network of spaces.

The disaggregated property model also goes hand-in-hand with collaboration between larger organisations and SMEs, who are less often seen as a threat but more of an opportunity for leveraging competitive advantage. This also helps in retaining workers, as the 'competition for talent' is of increasing significance and the competitive advantage that the location and arrangement of workspace can provide, including provision of complementary facilities and access to surrounding amenities, is of increasing significance.

Workplace provision

The ways in which workspace is used and what occupiers demand of such space, is undergoing major change. This includes the demands from new sectors, who can have different requirements from the traditional services sectors, which has implications in terms of the type of workspace provision, its design and the importance of the local environment.

The office sector already has a range of flexible types of workspace types, such as hot desking, coworking, co-share, serviced accommodation. However, there is likely to be increased pressure on landlords and developers to deliver more commercial flexibility in terms of occupational arrangements, such as short term leases, easy in/easy out terms, reductions in space standards, and the provision of a range of support facilities on-site.

Different types of workspace are likely to be provided within the same building on different floors in order to maximise the flexibility and appeal of commercial office workspace. Flexible space, such as co-working offices, may be used to support the greater use of freelancers for example. However, the overall trend is towards greater flexibility, but with increased reliance on a high level of connectivity.

Emerging Technologies Drivers

There are a range of merging technologies that may influence workspace requirements. Equally, however, there are developments that are yet unseen which may have important impacts. However, as a summary overview the following developments are seen as having potentially significant impacts upon the scale, location, form, design and use of future workspace:

 Artificial Intelligence. Increased automation is set of have far reaching effects upon work, which includes not just the manual sector but also office work. It has been suggested that the scale of the impact could be more significant than the internet.

- Human Cloud. The potential from the growth of the 'human cloud' could also be significant, allowing a global pool of freelancers to work from remote locations on demand, although with the ability to access highly accessible office locations as appropriate. From a business perspective this would allow immediate access to a pool of competitive, talent labour without the associated fixed costs of workspace and employee benefits, whilst for workers it provides flexibility, both in terms of hours and location. This may see a reduction in certain types of office floorspace, although equally may lead to the use of more flexible, well located space.
- SMART Buildings. This relates to buildings/structures that use automated processes to
 automatically control a building's operations, including heating, ventilation, air conditioning,
 lighting, security and other systems. It also relates to intelligent design systems, such as BIM.
 Such premises may be a preferential location for many workers, but may also have cost and
 operational advantages for landlords, developers and investors.

There are also a range of other developments which may have particular relevance for the industrial and distribution sectors including automation and robotics on material handling and distribution, local delivery hubs and automated delivery systems, omni-channel logistics hubs, and combined retail and distribution centres to name a few.

Conclusions

In summary, there are several core trends associated with these changing workspace and lifestyle dynamics that are and will affect the commercial property market over time. These include:

- Change. The pace of technological change is increasing, which will have knock-on effects on
 organisational structures and associated cultural and social trends. This means that matters
 associated with workplace requirements may have changed significantly by the time
 commercial employment development is delivered. It may also mean there may be several
 different use within a building at any point in time, as well as over time.
- **Flexibility**. Increased flexibility and a focus on user experience to reflect changing business structures and workspace-needs will become even more important. This is already well established within the offices sector, which reflects changing work trends in the types of workspace provision increasingly available, such as co-working, hot desking and serviced accommodation.
- Differences. There will be an increasingly wide range of generational groups in the workforce, with potentially different requirements. Even so, there will still be a key focus on proximity and access to public transport options, pedestrian and cycle friendly environments, leisure facilities and a range of local amenities, all of which are vital to attracting future employees and occupiers.
- Connectivity. Connectivity is a key utility, and will become increasingly critical for businesses
 and the workplace. This means that this will need to form an integral part of future workspace
 provision, covering internet provision, 5G networks, and smart systems as part of the fabric
 of the building. Locations (building or area wide) without this connectivity are likely to become
 secondary.

•	Well-being . There is likely to be increased importance placed on health and well-being associated with the workplace and built environment. This is likely to form a key part in the design and functionality of workspace.

Appendix D: Stakeholder Engagement

A range of stakeholder discussions and meetings were held. This included a set of round table discussions with local authorities (covering planning strategy, development control, economic development, and tourism), as well as one-to-one interviews with a variety of stakeholders representing various perspectives.

A list of key organisations involved in the stakeholder engagement work is provided below.

- Chambers of Commerce
- Federation of Small Businesses
- University of Hertfordshire
- Hertfordshire Enterprise Zone
- Taylor Wimpey
- Arlington
- Hertfordshire LEP Board
- Hertfordshire County Council
- Broxbourne Borough Council
- Dacorum Borough Council
- East Hertfordshire Council
- Hertsmere Borough Council
- North Hertfordshire District Council
- St Albans Council
- Stevenage Borough Council
- Three Rivers District Council
- Watford Council
- Welwyn Hatfield Council