

WARWICK DISTRICT EMPLOYMENT LAND REVIEW – FINAL REPORT

Warwick District Council

April 2009



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Appendix	Α _	Existing	Employ	ment	Sites	Proforma
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- Appendix B Existing Employment Site Scores
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- Appendix I Detailed Employment Forecasts
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- Appendix K Floorspace Forecasts
- Appendix L Employment Floorspace and Land Requirements

1. INTRODUCTION AND APPROACH

1.1 This report sets out the processes and findings of the Warwick District Employment Land Review. It has been produced taking into consideration ODPM (as was) Guidance on conducting employment land reviews (Employment Land Reviews – Guidance Note 2004) and has been undertaken by GVA Grimley and GHK Consulting.

Brief

- 1.2 The Client, Warwick District Council, issued a brief on 13th November 2008 concerning the future employment land requirements within the District Council's administrative area in the period 2006 2026.
- 1.3 The main requirements of the Brief were to:
 - Build upon the work undertaken in the Sub Regional Employment Land Review for Coventry, Solihull and Warwickshire (May 2006);
 - Undertake a quantitative assessment of future employment land requirements within Warwick from 2006 – 2026, taking into account new growth proposed within Draft Policy PA6A of the emerging West Midlands Regional Spatial Strategy and the potential housing growth set out in the GOWM response;
 - Provide qualitative and quantitative assessments of existing and committed employment areas;
 - Compare employment land supply with total future demand to identify any "gaps" in provision; and
 - Provide guidance on a new portfolio of employment sites.

RSS and its Relationship to this work

1.4 The West Midlands Regional Spatial Strategy (WMRSS) provides a long term land use and transport planning framework for the Region and guides the preparation of local authority development plans and local transport plans. The RSS is currently undergoing a revision and the consultation period for the Phase Two Revision (housing and employment) closed in December 2008. The RSS sets out requirements for the provision of employment land for each local authority in the Region. Within Warwick, there is a requirement to provide a rolling

supply of 30 hectares (ha) of readily available employment land and a longer term requirement of 90ha over the plan period, subject to testing and possible revision as part of the Core Strategy.

1.5 The outputs from this study will provide evidence in relation to the future employment land needs of Warwick to 2026 in response to the employment land requirements as detailed in the RSS. It also provides an evidence base for the recommendation of a new employment land portfolio, including identifying those employment sites that will need to be protected from alternative forms of development in order that Warwick's economic aims can be accomplished.

Report Structure

- 1.6 The remainder of the report is structured as follows:
 - Section 2 Baseline Review;
 - Section 3 Property Market Analysis;
 - Section 4 Review of Employment Land Supply;
 - Section 5 Demand Scenarios;
 - Section 6 Forecasts of Future Employment Land Demand;
 - Section 7 Comparison of Demand & Supply;
 - Section 8 Future Direction of Employment Land Growth; and
 - Section 9 Conclusions.

2. BASELINE REVIEW

2.1 In this section of the report we provide a review of a range of baseline information, including relevant planning policy and research documents, analysis of local socio-economic data and draw out the key themes from interviews undertaken with key stakeholders with an interest in the study area.

Background Document Review

2.2 In this part of the baseline review we highlight the key themes and recommendations coming from a number of key background documents that are of particular relevance to this study. This work has accentuated our appreciation of the key issues affecting the economic growth of Warwick District in the context of both the West Midlands, and the Coventry, Solihull and Warwickshire (CSW) sub-region.

West Midlands Economic Strategy / Development Framework

- 2.3 The West Midlands Regional Economic Strategy (RES), published in December 2007, sets out an ambitious vision for the region: "To be a global centre where people and businesses choose to connect". This means becoming more prosperous, more cosmopolitan, more inclusive and more sustainable.
- 2.4 The strategy builds on four pillars: business, place, people and a powerful voice:
 - Business Aims to seize market opportunities, improve competitiveness and harness knowledge on the business strand;
 - Place Identifies the substantial land base of under-utilised industrial land within the
 Region which offers great scope and potential for supporting further economic growth;
 - People Aims to create sustainable living, raise ambitions and aspirations and achieve full potential and opportunities for all; and
 - Powerful Voice Identifies the need for a strong voice and evidence base to attract increased investment and stimulate greater levels of ambition within the region.
- 2.5 Together, these strands need a strong voice and a compelling evidence base so that the region can attract increased investment, stimulate greater levels of ambition and animate support for its economic vision.

Coventry, Solihull & Warwickshire Sub-Regional Economic Development Strategy (2008 – 2026)

2.6 This Strategy, produced by the CSW Partnership (CSWP), sets out the economic development strategy for the CSW sub-region up to 2026. The location of Warwick District within the CSW sub-region is highlighted in Figure 2.1 below.

Main settlements
Sub Region

NORTH
WARMCKSHIRE
BOROUGH
NINDIFICATION
BEDWORTH
BOROUGH
WARWICK SHIRE
BOROUGH
WARWICK SHIRE
BOROUGH
WARWICK SHIRE
BOROUGH
WORKING
WARWICK
WARWIC

Figure 2.1 – The CSW Sub-Region

Source: CSWP, 2008

- 2.7 The Strategy identifies that the CSW sub-region has one of the strongest economies within the West Midlands, and is starting to become more like the economy of the neighbouring South East region, with a focus on professional services and service sector companies. There are also strong concentrations of knowledge intensive manufacturing businesses and clusters of ICT and specialist business services within the sub-region, many of which are based around Warwick.
- 2.8 The District enjoys good accessibility and connectivity, and is the centre of the knowledge economy within the sub-region. This has helped to grow higher value, knowledge based

industries that have a focus for enterprise, research and entrepreneurship, assisted by the close links that exist between Warwick and Coventry Universities and the High Technology Corridor, which runs from Birmingham to Warwick / Leamington, including the emerging Science City being created in Birmingham.

- 2.9 The Strategy identifies a number of key priorities for the sub-region in order to secure its economic growth up to 2026. It proposes to build on its sub-regional sector strengths, through increased innovation and entrepreneurship focussing on finance, IT and other business activities, public administration, education (particularly higher and further education) and health.
- 2.10 Growth within the sub-region must be employment led, therefore Warwick will need to be able to provide land for employment growth ahead of that for residential. This theme ties in with the Regional Economy Strategy, published by Advantage West Midlands.

Coventry Solihull and Warwickshire High Technology Corridor Strategy Document 2006-2008

- 2.11 The Coventry, Solihull and Warwickshire (CSW) High Technology Corridor (HTC) is recognised as an area of high concentration of technology led and innovative business together with research activity and academic institutions.
- 2.12 The vision for the CSW HTC set out by the strategy document is to create a wealthy economy by linking imagination and technology.
- 2.13 The key themes and clusters for the CSW HTC are as follows:
 - Innovation and Design Increasing the recognition of the importance of innovation and design within the Corridor and retaining the excellent skills and capabilities generated in the sub-region;
 - Global Competitiveness Enhancing the competitive position of the Corridor by utilising
 the skills and technologies in the Universities and supporting local SMEs to access new
 markets;
 - Digital Technologies Providing access to specialised digital infrastructures and provide SME focused training;
 - ICT Cluster (including Serious Games) Managing the transition from manufacturing to services, creating a networked business community and focusing on a small number of sub-sectors such as Serious Gaming;

- Medical Technologies Cluster Support cluster development through projects such as the MediPark at Ansty and the Health Design Technologies Institute;
- Building Technologies Build upon the regions existing core strengths in building materials, design and manufacturing; and
- Automotive Technology / Niche Manufacturing Becoming a centre of excellence for niche vehicles, advanced automotive technology and advanced materials.

Coventry, Solihull & Warwickshire Employment Land Review

2.14 The Coventry, Solihull and Warwickshire (CSW) Sub Region Employment Land study was published by DTZ in June 2007 and reviewed the supply of, and demand for, employment land and premises across the sub-region. It provided a basis for identifying / specifying the amount of employment land to be provided in Coventry, Solihull and Warwickshire at a sub-regional level. The outputs from the study were used to inform the partial review of the RSS. The study was produced in accordance with the government's guidance on Employment Land Reviews (ELR). As a comparison, data on Coventry, as well as Warwick, has been included due to the economic relationship that exists between the two authorities.

Employment Forecasts

2.15 The study constructed baseline, medium growth and high growth scenarios to demonstrate the potential number of jobs that could be created within the sub-region between 2006 and 2026. Based on the Demand Forecasting model, the CSW sub-region could generate between 44,000 and 63,500 jobs by 2026, as indicated in Table 2.1 below.

Table 2.1 - Projected Employment Growth within the Study Area

	Baseline Scenario	Medium Growth Scenario	High Growth Scenario
Warwick	9,100	10,400	12,000
Coventry	12,600	14,900	17,500
CSW Total	44,000	53,700	63,500

Source: CSW Employment Land Review, DTZ, 2007

Alternative Scenario

2.16 The population will inevitably increase and based on future population change there will be an increase of 27,100 in the labour force by 2026. Housing growth within the sub-region could also create an additional 15,000 – 20,200 people in employment. When adding the total additional employment figure to this, the total labour supply increase would be 42,100 – 47,300 between 2006 and 2026. The lower end of this range is in line with the baseline

scenario of 44,000 based on demand forecasting, but there is still a large shortfall between the upper end of this range and the high growth scenario figure of 63,500.

2.17 Interestingly, the study adopted the high growth scenario in its conclusions as it best reflects the strengths of Coventry, Solihull and Warwickshire and its ability to outperform the West Midlands region as a whole in terms of attracting employment related investment.

Employment Land Requirements

- 2.18 The study provided a detailed assessment of the employment land requirements with regards to each Use Class. Below in Table 2.2, is a summary of the employment land requirements (net additional) for Coventry, Warwick and the sub-region, against each of the forecasting techniques, over the period 2006-2026.
- 2.19 In the left-most columns of the table, the employment land requirements are shown for each land use class that have been derived using the Cambridge Econometrics (CE) data, based on the high growth employment scenario as detailed in Table 2.1. These figures indicate a total requirement of around 31.5ha within Warwick, which seems low in comparison with the requirement set out in the WMRSS Policy PA6A. This could be because the CE data is predicting a more conservative level of growth within the District to 2026 than has been seen in the past (using past trends formed the basis of the forecasting technique used to produce the figures in the WMRSS).
- 2.20 The figures in the central part of the table are derived using trends of past take up of employment land. This method analyses take up of employment land over a set period of time and projects this rate forward over the period to 2026. For Warwick the Past Take-Up (PTU) method indicates a total requirement of around 124ha. The figures in the right-most columns provide the range of employment land requirements that can be derived from the two forecasting methods. On the basis of these figures, Warwick is forecast to have between 31.5 and 124 ha of employment land demand to 2026, whilst Coventry had a demand of 50.4 266 ha. Coventry, Solihull and Warwick were expected to experience the highest levels of demand for office workspace.

Table 2.2 – Employment Land Requirements

		Forecasting Technique											
	Cambridge Econometrics						Past Tal	ke-Up		Figur	es rounded	– CE & PTU	l
	B1a	B1b/c, B2	В8	SG	Total	B1a	B1b/c, B2	В8	Total	B1a	B1b/c, B2	B8	G
Warwick	8.1	4.0	13.1	6.3	31.5	34	36	54	124	8 - 34	4 - 36	13 - 54	6
Coventry	10.4	3.7	23.8	12.5	50.4	78	78	110	266	10 - 78	4 - 78	24 - 110	12.5
CSW Total	40.6	24.4	76.3	34.8	176.1	244	316	558	1,118	40 - 244	24 - 316	76 - 558	35

Source: CSW Employment Land Review, DTZ, 2007

N.B. Other districts have not been included in this summary table.

2.21 Whilst the figures presented in Table 2.2 above are considered to be robust, the fact that they provide a wide range of results means that they are not particularly helpful in assisting with development of employment land policies for inclusion in the emerging Core Strategy.

Employment Land Supply

- 2.22 A total of 26 sites (a mixture of proposed sites and existing premises) were assessed in Warwick and the key findings are summarised below:
 - Location and Accessibility Warwick's proximity to the M40 is considered integral to the attractiveness of employment sites;
 - Site Conditions Considered largely good especially in the more recent developments, such as Spa Park and Tachbrook Park;
 - Availability The strength of the local economy is illustrated by the fact the availability of premises is limited, particularly modern space in good locations; and
 - Developer Interest This is strong; the M40 link to London has created considerable interest in the district in recent times.
- 2.23 The analysis showed that there was 59.3ha of available land and 43,725 sq m of available premises. In addition, over 60% of employment sites and premises are classified as good / very good in terms of quality.
- 2.24 In comparison, there was 65.6ha of available land and 133,432 sq m of available premises in Coventry and approximately 50% of employment sites and premises were classified as good / very good in Coventry.

Conclusions

- 2.25 The main finding of the report was that there was enough land available in the entire subregion to meet the needs to 2011, based on Cambridge Econometrics (CE) and Past Take Up (PTU) forecasts. Furthermore, under the CE forecast, there is also enough land to meet requirements up to 2016.
- 2.26 Warwick had a healthy supply of employment land within the district to 2011. Coventry also has sufficient land to meet forecasting requirements to 2011; however there was a shortfall of supply to meet the PTU forecast which could have implications on employment land supply in Warwick District.

Coventry Employment Land Review

2.27 'Coventry's Economy' was published by Coventry City Council on 1st September 2008 and reviews the changes in Coventry's economy between 1976 and 2006. It reviews the changes in the socio-economic structure of Coventry and its relationship with Warwick District.

Employment Land Requirements within Coventry

- 2.28 The document illustrates how the structure of Coventry's economy has changed from 57% manufacturing in 1976 to 13% in 2006. By 2026 it is predicted that manufacturing will only account for 11% of Coventry's employment.
- 2.29 The changing economic structure means that there is an emphasis on different types of jobs and therefore different types of employment land. The report predicts that by 2026, there is likely to be a demand for circa 50,000 additional jobs. Most of these jobs are likely to be located in Ansty, Ryton and other business areas within close proximity of the city boundary.
- 2.30 Table 2.3 below identifies the net new employment building space requirements for Coventry between 2006 and 2026.

Net New Jobs Created Employment Building Space Requirement (sq m) Land Use Density sq m 2006-2016 2016-2026 2006-2016 2016-2026 Total per employee City Centre 13,400 12,850 19 254,600 244,150 498,750 **B Business** 11,420 251,240 10,800 22 237,600 488,840 Park B2 3,500 3,510 126,000 126,360 252,360 36 B8 1,750 1,760 50 87,500 88,000 175,500 City Centre Retail 5,270 2,450 18 94,860 44,100 138,960 Other 520 430 50 26,000 21,500 47,500

Table 2.3 - Net New Building Space Requirements 2006-2026

3,700

35,500

Source: Coventry City Council, 2008

Leisure

Total

3,700

39,560

2.31 Table 2.3 above identifies a requirement for 1,868,310 sq m (20,110,488 sq ft) of net new employment floorspace between 2006 and 2026 to accommodate 75,060 new jobs.

36

133,200

973,400

133,200

894,910

266,400

1,868,310

2.32 Many existing employment areas within Coventry have the potential to increase their employment densities and absorb some of this requirement such as Middlemarch (partly situated within Warwick District) and Torrington Avenue. There are also a number of pipeline developments which could absorb some of the requirement such as Friargate, Cheylesmore, Bishop Street and Belgrade Plaza.

Employment Land to be Accommodated in Warwick District

2.33 The study acknowledges that the city's economic boundaries are wider than the city boundary and that these economic boundaries include employment land located outside of the city boundary such as the University of Warwick, Middlemarch Business Park, Ryton, Ansty and Bayton Road. These are illustrated in Figure 2.2 below.

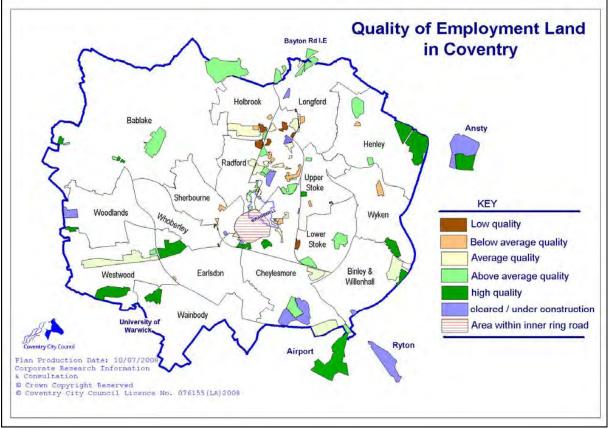


Figure 2.2 – Employment Sites in Coventry

Source: Coventry ELR, 2008

2.34 Although part of the University of Warwick, and Middlemarch Business Park are situated within Warwick District, they are considered to supply employment land to both Coventry and Warwick.

Planning Policy Review

2.35 This review sets out the relevant planning policy and regeneration frameworks that will guide future employment land development within Warwick District. The relationship between the different tiers of planning policy is shown below in Figure 2.3.

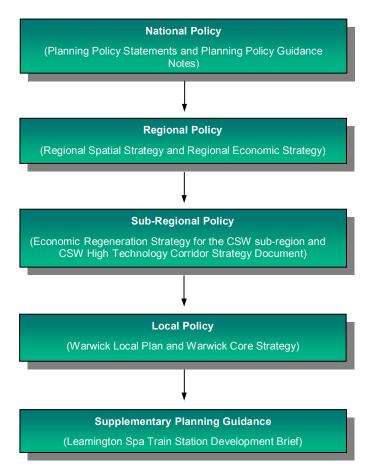


Figure 2.3 – Planning Policy Context for the Study Area

Source: GVA Grimley, 2009

2.36 The sections below provide more detail on each of the tiers of planning policy outlined above.

National Planning Policy

2.37 National planning policy comprises a series of Planning Policy Guidance Notes (PPGs) and Planning Policy Statements (PPSs). These provide material considerations in the production of Local Development Frameworks and in the determination of planning applications. Policies of particular relevance to employment land within Warwick are as follows:

Planning Policy Statement 1: Delivering Sustainable Development (2005)

2.38 PPS1 sets out the Government's overarching planning policies on the delivery of sustainable development. It requires local planning authorities to facilitate and promote sustainable and inclusive patterns of urban development by contributing to sustainable economic development, protecting the natural environment and ensuring high quality development

through good design and the efficient use of land. It also seeks to ensure that development supports existing communities and contributes to the creation of safe, sustainable, liveable and mixed communities with access to good housing, jobs and key services for all members of the community.

Planning Policy Statement: Planning and Climate Change - Supplement to Planning Policy Statement 1 (2007)

2.39 This PPS on climate change supplements PPS1 by setting out how planning should contribute to reducing emissions and stabilising climate change, taking into account the unavoidable consequences. Patterns of urban growth should be delivered which provide a mix of residential, retail and employment opportunities and promote public transport to cut reliance on private transport and thus cut carbon emissions. Development plan documents should encourage energy supply for new development to be renewable or low carbon.

Planning Policy Guidance 4: Industrial and Commercial Development and Small Firms (1992)

2.40 PPG4 seeks to encourage continued economic development in a way which is compatible with environmental objectives. The policy document looks to local planning policy to provide a flexible choice of allocated industrial land that is realistic and in its assessment of the needs of businesses. PPG4 looks to encourage economic development in locations which minimise the length and number of trips the community take in order to work. PPG4 is due to be replaced and on 17th December 2007 the DCLG issued a consultation paper for the draft Planning Policy Statement 4: Economic Development.

Draft Planning Policy Statement 4: Planning for Sustainable Economic Development (2007)

- 2.41 PPS4 will eventually succeed the existing PPG4 (Industrial and Commercial Development and Small Firms). It sets out guidelines encouraging Local Authorities to plan positively for economic development and target deprived areas to facilitate job creation. It seeks to promote economic growth in ways which complement social and environmental objectives and sustainable development. Mixed use sites involving business development should be located in areas well served by public transport, have adequate infrastructure and are integrated into the surrounding area.
- 2.42 The consultation period for draft PPS4 closed on 17th March 2008. A date for the revised version of PPS4 to be published has yet to be determined.

Planning Policy Statement 6: Planning for Town Centres (2005)

2.43 PPS6 seeks to promote sustainable and inclusive patterns of development, that contribute to the vitality and vibrancy of the town centre. The main aims of PPS6 are to promote social inclusion, encourage investment to regenerate deprived areas, and to ensure that local centres are accessible by a choice of transport options, especially public transport, walking and cycling, as well as by car. In addition, it seeks to encourage retail growth in town centres rather than in out of town locations. Where existing centres are in decline, local planning authorities should assess the scope for consolidating and strengthening these centres by seeking to focus a wider range of services there, promote the diversification of uses and improve the environment.

Regional Planning Policy

West Midlands Regional Spatial Strategy (2008)

- 2.44 The WMRSS was adopted in January 2008. It sets out a vision for the region until 2021, seeking to promote economic growth and sustainable development within the region.
- 2.45 A review of the WMRSS is being undertaken in three phases, as follows:
 - Phase 1: Incorporating Black Country policies into the RSS. First stage revision published January 2008;
 - Phase 2: Includes housing and employment issues and consultation closed in December 2008; and
 - Phase 3: Includes environmental issues. Preferred options consultation is scheduled for summer 2009.
- 2.46 The current timetable for the RSS Phase 2 is as follows:
 - 28th April 2009 Examination in Public (EiP) due to commence; and
 - Mid 2010 Adoption.
- 2.47 The following policies set out in the WMRSS are particularly relevant to future employment land development within Warwick:
 - Policy UR3, Enhancing the Role of City, Town and District Centres City, Town and District Centres, in particular those identified in Policy PA11, such as Leamington Spa, should play a leading role in urban renaissance programmes. This should include driving the economy forward by providing services for local communities and a sense of identity;

- Policy PA3, High Technology Corridors The RSS identifies three High Technology Corridors including one at Coventry, Solihull and Warwickshire (CSW). New development should be focused within the Corridor at specific nodes, including Leamington Spa;
- Policy PA6, Portfolio of Employment Land Local Authorities should provide a range and choice of readily available employment sites. Regionally significant sites should include Regional Investment Sites (RIS), Major Investment Sites (MIS) and Regional Logistics Sites (RLS). Locally significant sites should include sub-regional employment sites, good quality employment sites and other employment sites;
- Policy PA7, Regional Investment Sites Provision should be made for a series of RIS to support the diversification and modernisation of the Region's economy. When identifying RIS the existing needs of the High Technology Corridor should be taken into account. At least one RIS should be made available within or linked by public transport to the High Technology Corridor (i.e. Blythe Valley Park in CSW); and
- Policy PA11, The Network of Town and City Centres 25 Strategic Towns and Cities have been identified, including Leamington Spa. These towns and centres will be the focus for major retail developments (those exceeding 10,000 sq m gross floorspace), large scale leisure and office developments (those exceeding 5,000 sq m gross floorspace) and cultural, tourist, social and community uses which attract a large number of visitors.
- 2.48 The RSS identifies Learnington Spa as a Strategic Town and a centre for economic development. The CSW High Technology Corridor will also be a focus for economic development and a possible location for future Regional Investment Sites.

WMRSS Preferred Options

- 2.49 The WMRSS Phase Two Preferred Option identifies employment land requirements for the West Midlands region. Policy PA6A sets out a requirement for Local Authorities to make provision for a five year rolling supply of employment land outside of town centres. It also outlines a further requirement for likely longer term land requirements.
- 2.50 For the West Midlands as a whole, the document identifies a rolling five year employment land requirement of 1,055ha, 30ha of which should be located within Warwick District. The indicative longer term employment land requirement for the West Midlands region is 3,165ha, 90ha of which should be located within Warwick District.

Nathanial Lichfield & Partners Report in Response to NHPAU

- 2.51 As part of a review of the Regional Spatial Strategy (RSS) Phase Two Revision, the Government Office for the West Midlands (GOWM), commissioned a report looking into options for delivering higher housing numbers within the West Midlands. The study was carried out by planning consultants, Nathaniel Lichfield and Partners (NLP), and the final report published on 7th October 2008.
- 2.52 The NLP Report considers a range of options and presents three potential growth scenarios proposing between 417,100 and 445,600 housing units up to 2026. These represent housing allocations which build on and are between 51,500 and 80,000 higher than the Phase Two Revision to the RSS. One of the key findings of the NLP Report is that additional housing can support economic growth within the Region.
- 2.53 The NLP Report appraises a number of options, based on different growth scenarios taking into account both the quantum and spatial distribution of growth within the Region. For Warwick, the conclusion is that it is an area with significant growth pressures, including affordability, an 'under-provision' against CLG projections, and with the RSS Phase Two Preferred Option proposing 200 units per annum less than the market has delivered on average over the past five years. It is in a high technology corridor and identified as a key focal point for economic growth.
- 2.54 The three options that are considered as part of the report "South East Focus"; "Spreading Growth"; and "Maximising Growth" provide for an additional 5,000 10,000 dwellings on top of those that are proposed within the RSS Preferred Option, which is 10,800. This means that Warwick could have to accommodate between 15,800 20,800 new homes by 2026 if the conclusions of the NLP report were included in the RSS. These additional homes will bring with them a greater requirement for employment and employment land, which will need to be taken into account when planning for the amount of employment land that will be required in the District. We take account of these alternative growth scenarios as part of our demand forecasting analysis, explained in further detail in Section 5.

Local Planning Policy

Warwick Local Plan (2007)

2.55 The Warwick District Local Plan was adopted on 21st September 2007 for the period 1996 – 2011, providing a framework for planning decisions. The policies set out in the Plan provide for the needs of the community whilst protecting and enhancing the quality of environment.

- 2.56 The Warwickshire Structure Plan sets out a requirement to provide land for industrial development. It states that the Local Plan must make provision for 132ha of land for industrial development between 1996 and 2011. This should comprise 110ha of Large Industrial Sites (LIS) and 22ha of Small Industrial Sites (SIS).
- 2.57 Appendix 1 of the Warwick District Local Plan illustrates that 112.26ha of land has been provided for LISs, exceeding the Structure Plan target. However, only 9.35ha of land have been provided for SISs. There is therefore a residual requirement of approximately 9ha of employment land to be provided in the District by 2011.
- 2.58 The following policies set out in the Warwick Local Plan are particularly relevant to the future employment land development within Warwick:
 - Policy SC2, Protecting Employment Land and Buildings The redevelopment or change of use of existing committed employment land and buildings for other uses will not be permitted unless:
 - Existing employment activity has an adverse upon adjacent residential uses; or
 - The use of the site for existing or alternative employment uses is not economically viable; or
 - The proposal is for affordable housing; or
 - The application is not for housing and complies with all other policies set out in the Local Plan.
 - Policy UAP2, Directing New Employment Development Major office development will be permitted on previously developed land within Town Centres. Light Industry and small scale offices and research and development will only be permitted on previously developed land within established employment areas, within sites allocated under SSP1, within Town Centres, on upper floors of shopping centres and adjacent to public transport interchanges. General Industrial (B2) and storage and distribution (B8) employment uses will only be permitted within established employment areas, within Town Centres or within sites allocated under SSP1.

Town Centres

Policy TCP7, Opportunity Sites in Old Town, Learnington Spa – Within the Opportunity Sites identified on the Proposals Map, regeneration proposals for employment uses will be supported as follows:

- Site A, Station Area Housing / commercial and business uses (B1/B2/B8)/improved access to the railway station / improvements to car parking/improvements to pedestrian accessibility; and
- Site B, Wise Street Area Housing / commercial and business uses (B1/B2/B8)/retail/environmental enhancements.
- Policy TCP9, Protecting Employment Land and Buildings The redevelopment or change of use of existing employment land and buildings will be permitted except within the Town Centre Employment Areas as defined on the Proposals Map;

Allocations

- Policy SSP1, Employment Allocations The following sites are allocated for 'B' class uses on the Proposals Map:
 - A Station Goods Yard, Station Approach, Learnington Spa (2.1ha);
 - B Land at High Street/Lower Avenue, Learnington Spa (0.2ha);
 - C Land at Queensway, Learnington Spa (3.2ha);
 - D Land at Rear of Homebase, Princes Drive, Learnington Spa (1.8ha);
 - E Saltisford Depot, Saltisford, Warwick (1.2ha); and
 - F Land at Nelson Lane, Warwick (0.5ha).
- Policy SSP2, Major Developed Sites in Green Belt Within the following major developed sites within the Green Belt appropriate infilling and redevelopment for employment uses are identified as being appropriate:
 - Stoneleigh Park;
 - University of Warwick;
 - Stoneleigh Business Park;
 - Former Honiley Airfield, Oldwich Lane East, Wroxall;
 - Police Headquarters, Leek Wootton;
 - North Leamington School, Leamington;
 - The Woodside Training Centre, Kenilworth; and
 - Haseley Business Centre, Haseley.

2.59 The Warwick Local Plan identifies a number of sites for employment development. In addition it states that development should not occur in areas that are inaccessible by public transport or with no provision for cyclists or pedestrians.

Emerging Core Strategy (2008)

- 2.60 In May 2008 Warwick District Council published their Core Strategy (CS) Options paper for an eight week consultation period. The Preferred Options Document is likely to go to consultation in Spring 2009 with the Draft Core Strategy due to be published in Autumn 2009.
- 2.61 The CS Options Paper identifies a requirement for 90ha of employment land during the period 2006 2026 which is reflective of policy PA6A in the WMRSS preferred options. Around 55ha of suitable (at that time) employment land had been identified meaning that there was still a requirement for 35ha of employment land. It was estimated that there was capacity within towns and brownfield sites to accommodate this requirement, however, approximately 15ha may have to be found on greenfield sites.

Supplementary Planning Guidance

Planning and Development Brief for Station Area, Royal Leamington Spa (2008)

- 2.62 Published in September 2008, this planning and development brief sets out a vision for the station area in light of the closure of the Ford Foundry on Old Warwick Road. The closure of the Foundry was a significant blow to the local economy and the best future use for this site needs to be considered to support the economic regeneration of the old town.
- 2.63 The station area is centrally located within Leamington Spa to the south west of the town centre. It comprises 16.5ha of predominantly previously developed land comprising various uses including a bus depot, retail trade centres and car sales.
- 2.64 The vision for the area is to promote and enhance the image and character of the area, creating a gateway for Leamington through the use of high quality landmark buildings, a mix of uses and improved linkages to other areas of the town.
- 2.65 The document splits the area into sub-areas as follows:
 - Former Foundry and Associated Landholdings The introduction of an office-led mixed-use development would be preferable for the site. The mix of uses should predominantly be B1a to support the economic regeneration of the area. Other uses

- should be compatible with a high quality office location such as a hotel / conference centre, residential apartments or small scale retail;
- Old Warwick Road Frontage Employment led mixed-use development would be the
 preferred option for the site. This would require the relocation of existing uses to suitable
 alternative sites. This would present an opportunity to improve linkages between the
 former Foundry and the Railway Station;
- Railway Station and Associated Land In order to promote sustainable public transport, the station must be easily accessible by all means of transport. Provision should be made for a new multi-storey car park and improved pedestrian and cycle links. Limited development of residential or small scale retail could be accommodated on the northern side of the station; and
- Land North of the Railway At the time of this document, planning permission had been granted (subject to a section 106 agreement) for an office development on the former coal yard at the western end of Station Approach. A mix of residential and business (B1) will be suitable uses for the former garage site.

Socio-Economic Review

2.66 This part of the Baseline Review identifies the key socio-economic characteristics of the Warwick District, comparing local statistics with those at a regional and national level. In this section we outline the current socio-economic position of Warwick District, using a variety of Census based and Warwick District Council data sources. We also provide an overview of the key indicators of the property market and economic development issues. Where possible, data for Warwick District has been compared to regional and national statistics.

Brief Socio-Economic Profile of Warwick District

- 2.67 This section provides an overview of the key socio-economic issues which have a direct relation to the production of this Employment Land Review (ELR). The key issues that are highlighted in this section are as follows:
 - Population;
 - Index of Multiple Deprivation:
 - Skills;
 - Economically active;
 - Employment structure;

- Employment sectors;
- Wages for residents and workforce; and
- VAT registrations.

Population

2.68 Table 2.4 below demonstrates the projected population increase for Warwick District during the period 2006 – 2031.

Table 2.4 - Population Projections for Warwick District 2007-2031

	Warwick District	West Midlands	England
2007	134,600	5,381,800	59,216,200
2031	174,900	6,113,700	60,431,500
% Increase	23.04%	11.97%	16.00%

Source: Warwickshire Observatory (http://www.warwickshireobservatory.org/) (2008)

2.69 The projected population increase for Warwick District is 24.01%. This is far higher than both the regional (12.21%) and national (16.00%) projected increases. This figure is trend based on the assumption that recent demographic trends continue into the future, i.e. the continued out migration of people from the major conurbations of the region to the District. The WMRSS is seeking to address this trend.

Index of Multiple Deprivation

- 2.70 The Index of Multiple Deprivation provides a relative ranking of areas across England based on a number of social and economic criteria. These are:
 - Income;
 - Employment;
 - Heath;
 - Education;
 - Skills and Training;
 - Housing;
 - Living Environment; and
 - Crime.

- 2.71 Each local authority is given a score and these are then ranked to provide an indication of the level of relative deprivation within an area.
- 2.72 The 2007 Index of Multiple Deprivation gave Warwick an average score of 11.97 and a ranking of 262 out of 354 local authorities, showing that Warwick District is a relatively affluent and prosperous area.

Skills

2.73 Table 2.5 below details the highest level of qualifications achieved by the population of Warwick District.

Table 2.5 – Qualifications within Warwick District

Qualification	Warwick District (%)	West Midlands (%)	Great Britain (%)
NVQ4 and above	42.3%	24.6%	28.6%
NVQ3 and above	65.1%	42.0%	46.4%
NVQ2 and above	79.0%	61.1%	64.5%
NVQ1 and above	87.0%	75.4%	78.1%
Other Qualifications	4.3%	7.7%	8.8%
No Qualifications	8.7%	17.0%	13.1%

Source: Nomis (www.nomisweb.co.uk) – Annual Population Survey (December 2007)

2.74 As can be seen in Table 2.5 above, the percentage of Warwick District residents who achieve qualifications of Level NVQ4 and above¹ and above is around 42.3%, significantly higher than the percentage in both the West Midlands (24.6%) and Great Britain (28.6%), highlighting the fact that many residents within Warwick District enter higher and further education. The proportion of Warwick District residents with no qualifications is considerably lower than both regional and national averages, indicating that there is a high level of educational attainment within the District compared with the West Midlands and Great Britain.

Economic Activity

2.75 Table 2.6 below demonstrates the percentage of the population of Warwick District that are economically active and economically inactive.

¹ i.e. those with a degree, higher degree, NVQ levels 4 and 5; HNC; HND; qualified teacher status; qualified medical doctor; qualified dentist; qualified nurse; midwife; or health visitor

Table 2.6 - Economic Activity in Warwick District June 2008

		Warwick District (%)	West Midlands (%)	Great Britain (%)
Economically Inactive		21.2%	22.6%	21.2%
	Wanting a Job	3.3%	4.9%	5.5%
	Not Wanting a Job	17.9%	17.7%	15.8%
Ecor	nomically Active	78.8%	77.4%	78.8%
	Employees	67.4%	63.6%	64.7%
	Self Employed	7.7%	8.4%	9.4%
Unemployed		4.8%	6.2%	5.2%

Source: Nomis (www.nomisweb.co.uk) – Annual Population Survey (June 2008)

2.76 The percentage of economically active (78.8%) and economically inactive (21.2%) people within Warwick District matches that at a national level. The number of unemployed people living in Warwick District (4.8%) is slightly below that at a regional (6.2%) and national (5.2%) level. High levels of economic activity are likely to be due to the skilled population of Warwick District as illustrated by Table 2.5. This indicates average participation rates in the labour market and average demands for employment.

Employment Structure

2.77 Table 2.7 below illustrates the occupation groups of the resident population of Warwick District in 2001.

Table 2.7 – The Economic Structure of Warwick District

	Warwick District (%)	West Midlands (%)	England (%)
Managers and Senior Officials	18.4%	14.0%	15.3%
Professional Occupations	16.4%	10.0%	11.2%
Associate Professional and Technical Occupations	14.4%	12.0%	13.8%
Administrative and Secretarial Occupations	13.1%	12.7%	13.4%
Skilled Trades Occupations	9.4%	13.3%	11.6%
Personal Service Occupations	5.9%	6.7%	6.9%
Sales and Customer Service Occupations	6.3%	7.4%	7.7%
Process, Plant and Machine Operatives	6.4%	10.9%	8.4%
Elementary Occupations	9.7%	13.0%	11.7%

Source: Neighbourhood Statistics (www.neighbourhoodstatistics.gov.uk) (2001)

2.78 A high percentage of the resident population of Warwick District are employed as managers or officials or within professional, associate professional and technical occupations (49.2%) compared with regionally (36.0%) and nationally (40.3%), reflecting the highly educated population of Warwick District. The high proportion of Warwick District residents employed in professional and managerial occupations means that there is likely to be a high demand for office space as opposed to manufacturing or distribution premises. A low percentage of the population of Warwick District are employed in skilled trades occupations, as process, plant and machinery operatives or in elementary occupations compared with a regional level in particular.

Employment Sectors

2.79 Table 2.8 below demonstrates the distribution of employees by industry within the Warwick District when compared with regional and national figures.

Table 2.8 – 2007 Employee Jobs by Industry within Warwick District

		Warwick District (%)	West Midlands (%)	Great Britain (%)
Manufacturing		9.2%	14%	10.6%
Construction		2.8%	5.1%	4.9%
Services		85.4%	79.4%	83.0%
	Distribution, Hotels and Restaurants	24.8%	23.3%	23.3%
	Transport and Communications	5.5%	5.6%	5.9%
	Finance, IT and other business activities	30.2%	19.0%	21.6%
	Public Admin, Health and Education	19.1%	26.5%	26.9%
	Other Services	5.8%	5.0%	5.3%
Tourism-related		8.0%	7.7%	8.2%

Source: Nomis (www.nomisweb.co.uk) – Office for National Statistics Annual Business Inquiry Employee Analysis (2007)

2.80 Table 2.8 identifies a higher percentage of people working within the service sector in Warwick District (85.4%) than at a regional level (79.4%). Within the service sector, a large number of people work in finance, IT and other business related activities (30.2%) compared to a regional (19.0%) and national (21.6%) level. This is reflected by the large proportion of the residents of Warwick District who are employed in professional and managerial occupations as illustrated by Table 2.7. This also supports the requirement for additional office space

rather than manufacturing or distribution. A lower percentage of the population of Warwick District work within public admin, health and education (19.1%) than regionally (26.5%) and nationally (26.9%).

Earnings

2.81 Table 2.9 below illustrates the average earnings for residents and the workforce population of Warwick District.

Table 2.9 – Average Gross Weekly Pay of People Living and Working in Warwick District (2008)

Group		Warwick District	West Midlands	Great Britain
Residents	Full-time Workers	£511.70	£450.00	£479.30
	Male Full-time Workers	£579.50	£488.30	£525.00
	Female Full-time Workers	£418.10	£388.30	£412.70
Workforce	Full-time Workers	£511.50	£448.90	£479.10
	Male Full-time Workers	£568.00	£488.70	£523.50
	Female Full-time Workers	£409.20	£379.40	£412.40

Source: Nomis (www.nomisweb.co.uk) - Office for National Statistics Annual Survey of Hours and Earnings (2008)

As can be seen in Table 2.9 above, residents of Warwick District earn well above the regional and national average, with £511.70 (gross) per week compared with £450.00 (gross) per week in the West Midlands and £479.30 (gross) per week in Great Britain. This reflects the high percentage of the population employed in managerial, senior and professional occupations. This pattern is also true for the workforce population of Warwick District. Comparison with earnings of the workforce population shows that within Warwick, resident earnings are very slightly higher. This balance between the two shows that there is no large scale out-migration of residents to work elsewhere in order to earn higher wages. This reflects the strong economic base within Warwick and the range of jobs on offer to local people.

VAT Registered Businesses

2.83 The number of businesses, together with the percentage of registrations and de-registrations in Warwick District in 2007 is shown in Table 2.10 below.

Table 2.10 - VAT Registered Businesses within Warwick District (2007)

	Warwick District	West Midlands	Great Britain
Registrations	10.8%	9.4%	10.2%
Deregistrations	7.4%	7.2%	7.3%
Stock (at end of year)	5,915	-	-

Source: Nomis (www.nomisweb.co.uk) - BEER (2007)

- As can be seen in Table 2.10 above, the number of registered businesses in Warwick District (10.8%) is similar to that at a national level (10.2%) but higher than that at a regional level (9.4%). The number of deregistered businesses in Warwick District is similar to that at a regional and national level.
- 2.85 Overall there were more registrations than de-registrations in 2007, therefore indicating growth of the economy. However, due to the current economic downturn, this trend may have been reversed in 2008.

Summary

- It is predicted that the population of Warwick District will grow between 2006 and 2031 by 24.01% which is almost double the rate of population growth in the West Midlands and the UK;
- Table 2.5 illustrates that the resident population of Warwick District is highly skilled with 42.3% achieving NVQ4 and above which is far higher than the population of West Midlands and the UK;
- Warwick is a relatively advantaged area with a 2007 Index of Multiple Deprivation ranking of 262 out of 354 local authorities;
- Table 2.7 and Table 2.8 indicate a heavy reliance on office markets within Warwick District with a large proportion of the resident population employed in the service sector, particularly professional and managerial occupations; and
- The economy of Warwick District is growing as illustrated by the larger number of business registrations than de-registrations in 2007. However, due to the market downturn, this may have slowed or reversed in 2008.

Stakeholder Interviews

2.86 As part of the evidence gathering process, a number of interviews were undertaken with key stakeholders from across Warwick and the wider sub-region. The purpose of these interviews

was to gain a greater understanding of the issues affecting the demand for, and supply of employment land within Warwick. This included talking to planning officers, inward investment officers, local commercial agents and the education sector. A number of stakeholders recommended to the consultant team by the Client were unresponsive to invitations to be part of the ELR process. After three attempts to invite stakeholders, no further contact was made. A full list of stakeholders who were interviewed as part of this process is shown in Table 2.11 below.

Table 2.11 - List of Stakeholders Interviewed as part of the ELR Process

Name	Organisation	
Mary Matthews	Blitz Games	
Dianne Williams	Coventry & Warwickshire Chamber of Commerce	
Louise Alton	CSW Partnership	
Roger Dowthwaite	CSW Partnership	
Pat Moroney	Deeley Properties	
Nicholas Evans	Evans Blake	
Neil Moran	Prodrive	
Bill Wareing	Wareing & Company	
Chris Elliott	Warwick District Council	
Paul Pinkney	Warwick District Council	
Jon Baldwin	Warwick University	
Chris Paget	Warwickshire College	
Ioan Morgan	Warwickshire College	
Andy Cowan	Warwickshire County Council	
Pam Neale	Warwickshire County Council	
Sackie Somal	Warwickshire Investment Partnership	

Source: GVA Grimley, 2009

2.87 Below, we have summarised the key themes that arose from the stakeholder interviews.

Warwick's Economy

- 2.88 The key characteristics of Warwick's economy were identified as being as follows:
 - Focus of growth will be in the North-South Corridor running through Nuneaton-Coventry-Warwick-Leamington;
 - Within Warwick, economic growth is focussed to the south of the railway;
 - Growth in Warwick has been greater than compared with other districts in the Region, such as Coventry and Nuneaton – however because of this, the impact of the Credit

Crunch could hit Warwick harder than in other districts. Despite this, Warwick is still seen as one of the most attractive places to invest in the Region; and

The sub-region has seen difficult times over the last five years with redundancies at large companies such as Peugeot and Jaguar. Job losses have however, been absorbed through the diversification of the economy into other sectors, such as high technology manufacturing, ICT and gaming.

Growth within Warwick

- Growth within Warwick should be employment led, creating the right types of jobs to attract skilled workers;
- Infrastructure improvements are required at the district and sub-regional level congestion will be a key issue if projected levels of housing are built within Warwick, in particular around Warwick / Leamington Spa, unless there is significant investment in public transport / road infrastructure. Congestion within Leamington town centre is a constraint to growth. At the sub-regional level there are proposals for improved infrastructure between the north (Nuneaton / Coventry) and the south (Warwick / Leamington) of the sub-region. These proposals include improvements to roads and a new rail link;
- Growth of the three main urban areas is polycentric, each having their own distinct role
 within the economy; Learnington retail, Warwick; night-time economy and potentially
 tourism, Kenilworth mix of commuter town with limited retail (though this has been
 improved by the recent arrival of Waitrose);
- There is likely to be a rise in certain sectors (such as construction and technologies relating to sustainable homes) as a result of the housing growth that is forecast within Warwick District; and
- People are attracted to Warwick District due to the excellent education facilities, access, proximity to the south east and the general good quality of life.

Employment Land Demand

- 2.89 Stakeholders have highlighted the following issues in relation to the demand for employment land within Warwick District:
 - A great deal of employment growth in recent years has occurred without employment land being taken up – this has occurred through redevelopment of existing space, particularly in Leamington town centre;

- Demand for office space within Leamington town centre has historically been high as much as 40% of all demand for offices has ended up within the town centre. However, there is little space left now and most new office space will need to be located out of the town centre;
- Development of employment land has previously focussed on quantity (e.g. Tournament Fields, Gallagher Business Park), however the future should focus on quality developments where demand is proven; and
- Demand for further education is likely to increase in the current economic climate;
 therefore there could be demand for additional educational facilities relating to
 Warwickshire College.

Future Employment Locations

- 2.90 Stakeholders have identified the following as being key employment locations within the study area:
 - Tachbrook Park not in the best location due to lack of prominence, poorly planned and around 20-30 acres remaining for offices / distribution development;
 - Spa Park not as accessible as other locations (e.g. Tachbrook Park), Wolesley are the major occupiers and 20 acres left for development;
 - Heathcote also known as Warwick Gates / Gallagher Park allocated for employment but never been built out. Possibly being held back for future residential use;
 - Sydenham Estate (Leamington) currently occupied but potentially coming forward in the next couple of years for redevelopment (10 hectares);
 - Stoneleigh historically has been allied to the agricultural industry, but potential to expand as an office location if planning policy constraints on the site are relaxed;
 - Site north west of A46, Thickthorn (Kenilworth) green site bounded to the south east by the A46 and north west by existing residential properties. Would make a logical extension of the residential area and could provide some employment land for Kenilworth;
 - Queensway potential redevelopment of former manufacturing site. Site owned by Deeley Properties who are in talks with WDC concerning proposed use of the site;
 - South Learnington Spa / Warwick the area to the south of the existing built up areas
 of Warwick / Learnington Spa would be a possible future location for employment
 development;

- Railway Station Area this site represents one of the few regeneration projects close to the town centre and its redevelopment as employment would provide a significant amount of floorspace within a sustainable location;
- North of the river in Leamington Spa the majority of the area to the north of the River Leam is residential, whilst the majority of employment is located south of the river. This causes a north – south commuting pattern across the town; and

Skills

- 2.91 Stakeholders identified the following key themes in terms of the skills of the workforce population of Warwick (both present and future workforce);
 - Warwick District is seen as the "Engine of Growth" for the County of Warwickshire, mainly due to the concentration of skills in the high technology manufacturing, ICT and gaming sectors;
 - Many sectors present in the economy are the result of the previous recession, which saw large scale redundancies at companies such as Marconi. Workers who were made redundant have diversified their skills and set up their own businesses in other sectors such as ICT / gaming, which have since thrived;
 - Educational institutes in the District, such as Warwickshire College have responded to the
 current economic downturn by assisting those people who are looking for employment to
 gain the appropriate vocational and basic skills. During times of recession this demand
 increases significantly; and
 - It will be important that the future workforce have skills for a "green industrial revolution",
 in particular those skills relating to renewable power and the digital industries.
- 2.92 The next section of this report analyses the property market within Warwick District.

3. PROPERTY MARKET ANALYSIS

Introduction

- 3.1 In this section of the report, we provide an overview of the office and industrial property markets within the study area. For each we examine the following topics:
 - The key locations;
 - Quality of existing stock;
 - New build and pipeline development;
 - Leasehold and freehold values;
 - Availability;
 - Investment/Development market; and
 - Competition.
- 3.2 This section concludes with a summary of the main characteristics of the District's commercial property market.

Office Market

- 3.3 The office market can be divided into two main sub-markets; the town centre market and the out-of-town market. Out of town centre office accommodation in the study area has typically achieved headline rental values in the order of £172 £183 per sq m (£16.50 psf in Town Centre and £17.00 £18.00 psf out of town). In comparison, the town centre markets of Leamington, Warwick and Kenilworth cater towards occupiers of local and sub regional significance. As a result, town centre locations have witnessed little new build development of significance in recent decades.
- 3.4 The out of town office market in the study area has been successful in recent years. Key locations are highlighted below.

Key out of Town Office Locations

Tachbrook Park

- 3.5 This is a large development situated to the south west of Learnington Town Centre with frontages onto Heathcote Lane, Olympus Way. There is approximately 8.09ha (20 acres) of land which remains available for development. The area immediately surrounding the park incorporates mixed use modern development including a Sainsbury's supermarket and a retail park.
- 3.6 Key occupiers of Tachbrook Park include Calor Gas Limited, LUK Leamington Limited, Millward Brown UK Limited, Bridgestone Firestone UK and Spirit Volkswagen. The site is considered suitable for office development from a market perspective.

Spa Park

- 3.7 Spa Park is a 14.16ha (35 acre) site located off Tachbrook Road, some two miles south of Warwick and Leamington centres. There are around 20 acres remaining for development.
- The site consists of open land with existing office (B1), industrial (B2) and distribution (B8) units ranging from 1,858 to 37,160 sq m (20,000 to 400,000 sq ft), although with the exception of Wolseley UK's stand alone office building most of the other units are B2 and B8 industrial units. Spa Park is viewed as an attractive location for employment uses, and it has been successful in attracting a number of B2-B8 industrial occupiers.

Queensway Business Park

Queensway Business Park is 2.63ha (6.5 acres) in size and located to the northern tip of Tachbrook Park and provides an opportunity for development. It is a prominent site and is considered as suitable for office development from a market perspective. The site is owned by Deeley Properties. The majority of surrounding commercial premises comprise B2 and B8 premises.

South West Warwick (Tournament Fields)

3.10 This development fronts the A429 Stratford Road some 0.8 km (1.3 miles) to the south west of Warwick Town Centre and has excellent connections to Junction 15 of the M40. It is 22.66ha (56 acres) in size, although 1.01 – 1.21ha (2.5-3 acres) have already been developed. It is set to provide 65,000 sq m (700,000 sq ft) of bespoke office accommodation.

- 3.11 The first phase of development, Tournament Court, was built on a speculative basis by Sackville Properties. It comprises 17 self-contained offices arranged around a central courtyard. Accommodation comprises brick built units of steel portal frame construction with communal parking facilities, three pipe comfort cooling, raised access floors, LG3 compliant lighting and fully managed environments. Key occupiers include a pre-let agreement to GEBERIT, who are to occupy a stand alone unit. There are a number of units providing space in the order of 344 to 372 sq m (3,700 4,000 sq ft).
- 3.12 The site is currently greenfield with a business park development. In the vicinity, the masterplan for the area envisages a new residential development providing a total of 1,200 homes, some of which have been recently completed.

Warwick Gates (Gallagher Business Park)

- 3.13 Warwick Gates is located immediately south of Tachbrook Park fronting onto Heathcote Lane approximately 1.6 km (2.5 miles) from the centre of Leamington Spa Town Centre.
- 3.14 The site is 2.96ha (7.31 acres), although part has been developed. The remainder of the site is open land with one office building, a crèche and health and fitness centre. The entire site is owned by Gallagers.

Stoneleigh Business Park (National Agricultural Centre)

3.15 Stoneleigh Business Park is located to the north west of Warwick close to the A46. Historically, uses within the site have been restricted to those associated with agriculture. A key office occupier is the National Farmer's Union (NFU). It is approximately 16.19ha (40 acres) in size and comprises agricultural and showground uses as well as two new office buildings, exhibition and conferencing facilities. It is also the venue for a number of national shows throughout the year, including the Royal Agricultural Show.

Stoneleigh Deer Park

3.16 Stoneleigh Deer Park is distinct from the Business Park, and is situated just to the east of the hamlet of Stareton, to the south of Stoneleigh Golf Course. The park comprises a number of modern office buildings and areas of cleared land which have development potential. In addition, there are a number of older buildings on the site, however the use of these buildings is unknown. DTZ currently have 21,475 sq ft (2,020 sq. m) of new Grade A office space with parking available to let. Key occupiers are the British Horse Society, AGCO, Basi, Trett Consulting and British Association of British Dairy Farmers.

OPUS 40 (IBM Warwick)

3.17 OPUS 40 is located off the A46 north west of Warwick Town Centre, two miles from J15 M40. The site is approximately 14.16ha (35 acres) in size and comprises three existing office buildings which total approximately 27,870 sq m (300,000 sq ft) in size and a large amount of mature open space. IBM occupy two of the buildings whilst the third building 'Point 3' is occupied by Telent, and comprises 7,757 sq m (83,498 sq ft) of office space. Four additional buildings could be accommodated, or one larger building could be provided on a design and build basis.

Warwick Technology Park

3.18 Warwick Technology Park (WTP) is seen as one of the highest profile out of town office schemes in the study area. This is due to its strategic location between Leamington Spa and Warwick, whilst still being close to the motorway network. The mature site benefits from critical mass created by a number of buildings constructed throughout the 1990's, and has been successful in attracting major corporate occupiers including National Grid and ICENI Centre.

Locations for Short-Term Future Development

- 3.19 There is no further land immediately available at WTP for future development, which will curtail supply in the short term at this location.
- 3.20 Over the last five years the majority of development (and letting activity) has occurred at Tournament Fields, where some 7,897 sq m (85,000 sq ft) has been constructed. Market activity would suggest that Tournament Fields is now perceived as the favoured location by occupiers. However, it is more likely that a readily available supply of development land has increased the attractiveness of the site to potential occupiers. This factor has facilitated the site's development, rather than any location benefits that the site provides.
- 3.21 In addition, a high level of B1, B2 and B8 activity has been witnessed over last 20 years at Tachbrook Park, which has attracted some larger corporate 'footloose' office occupiers such as Calor Gas and Wright Hassell. The mix of uses surrounding the park makes it marginally less desirable than WTP from a market perspective but unlike WTP, it does have land which is capable of immediate development.

- 3.22 Spa Park is located in close proximity to Tachbrook Park, but with the exception of the 6,782 sq m (73,000 sq ft) Wolseley office building, is B2/B8 focussed. The Wolseley office building was built as part of Wolseley's larger site, which comprises a national distribution centre.
- 3.23 Warwick Gates (Gallagher Business Park) which extends to some 18.21ha (45 acres) is also perceived to be one of the premier locations in the study area but to date has only been successful in attracting a health club, day nursery and office building occupied by Gallagher. There has been little development activity over the last seven years and this is unlikely to change.
- 3.24 Two key sites are ideally suited to medium term development and are highlighted below as follows:
 - A46 (IBM site) where development potential exists for four office buildings totalling 27,870 sq m (300,000 sq ft); and
 - The Old Warwick Road site, owned by Ford, where the recently adopted Planning Brief for Learnington Train Station area envisages a mixed use office led scheme. This site is likely to offer larger, corporate style office buildings given the close proximity to the rail link and amenities in Learnington Spa town centre.

Competition

3.25 The following section discusses competition that the study area experiences from key office locations in the wider area, and then focuses on both the out of town and the town centre office markets within the study area.

Competition from Outside the Study Area

Occupational demand in the study area is predominantly indigenous and reflective of existing companies looking to expand, contract or enhance their property assets due to age and obsolescence. The study area does not compete with central Birmingham which is typically 50% more expensive in terms of occupational costs. Footloose occupiers typically focus on the southern M42 office market (which has a high concentration of development between J4-6 M42) for reasons of transport connectivity and labour availability. However, some of these occupiers often widen their search criteria to include northern M40 locations and locations in the vicinity of Warwick/Leamington. In many instances, occupiers will also consider Coventry which has a similar rent profile and labour pool to the study area.

Out of Town Centre

- 3.27 One main market exists and the key locations highlighted in paragraphs 3.5 3.15 above generally compete directly with one another in attempts to attract pre-let office activity. Sites which have been most successful in recent years are those where speculative office development has been prevalent. Most activity has occurred at Tournament Fields where some 7,897 sq m (85,000 sq ft) has been constructed on a speculative basis. The majority of this has now been let or sold.
- 3.28 Experience suggests that the office market in Warwick / Leamington is a 'supply led' market. In the past, developers that have built speculatively have been successful in attracting occupiers. Competition is prevalent between key locations where a readily available supply exists. However, more recently, pre-let activity has been relatively subdued and it is likely that this will remain the case in the current economic climate.

Town Centre

- 3.29 With issues of sustainability becoming of increasing importance to occupiers, the market is now experiencing a greater demand for town centre locations compared to the traditional out of town business parks. Town centre locations are also becoming of greater focus due to better retail and supporting amenities and transport infrastructure, particularly in view of the Governments focus away from the car towards more sustainable forms of travel, such as public transport.
- 3.30 However, due to the scarcity of immediately available land, town centre locations are rarely able to provide sites capable of development of the type and style required by larger corporate occupiers (particularly in light of issues which constrain supply, such as conservation and site assembly). For these reasons, business parks are anticipated to remain the focus for larger occupiers within the study area. Furthermore, national and international corporate occupiers often favour business park locations, due to increased connectivity with motorways and ease of access to nearby airports.

New Build Development - Key Locations

- 3.31 The key locations for new office development within the study area are highlighted below as follows:
 - Tournament Fields 7,897 sq m (85,000 sq ft) has been constructed over the last three years, the first phase of which is Tournament Court;

- Iceni, Warwick Technology Park A 7,153 sq m (77,000 sq ft) building was constructed in 2001. Since then, approximately 2,323 sq m (25,000 sq ft) has been let, with the remainder of the building still vacant. This has deterred developers from progressing with other large scale speculative office development in this location and the surrounding area. In view of the current poor economic climate, this is unlikely to change in the immediate future; and
- Athena Court Some small scale construction activity has been witnessed at Athena Court, close to Tachbrook Park.

Pipeline Development

3.32 GVA Grimley office surveyors are not aware of any speculative or pre-let office development currently proposed on any of the development sites within the study area, perhaps as a consequence of the current economic climate. The pipeline development is therefore quite simply the list of key sites outlined at the beginning of this section, many of which are available on a 'design and build' basis should an office occupiers have a specific requirement for new build premises.

Market Conditions

- 3.33 Occupational demand in town centre locations in Warwick and Learnington Spa has remained relatively healthy since 2000. Demand is typically from indigenous smaller professional and business services which have until recently, been expanding and replacing their office accommodation over time either due to lease events (such as lease expiry or break clauses) and / or the need to improve the working environment for staff.
- 3.34 The out of town office market has historically been dominated by larger corporate occupiers seeking higher quality, modern accommodation providing larger floor-plates. Activity within this sector was relatively strong in the subject location until the 'DOT COM' crash in 2001. Since that time, demand from corporate occupiers has been muted, resulting in limited speculative and pre-let development activity both in the study area and the wider M42 office corridor. This is unlikely to change in the short to medium term. As a consequence, rental values have therefore remained static at £172 £183 per sq m (£17.00 £18.00 per sq ft) over the last seven years.

Rental Values

3.35 Prime rental values for business park accommodation within the study area typically range between £172 - £183 per sq m (£17.00 - £18.00 per sq ft). This rent profile would be

appropriate for locations such as Warwick Technology Park, Tachbrook Park and Abbey Park, Stoneleigh. In comparison, GVA Grimley in house research indicates that prime office rents are in the order of £226 per sq metre (£21 per sq ft) at Solihull and £183 per sq metre (£17 per sq ft) in Coventry.

3.36 Less established office locations would command rental levels in the order of £161 – £172 per sq m (£15.00 - £16.00 per sq ft) rental. Older secondary accommodation which is prevalent in town centres such as Warwick and Leamington would typically command £129 - £151 per sq m (£12.00 - £14.00 per sq ft) depending upon location, specification and lease terms.

Recent Transactions

3.37 The headline rental values quoted above are supported by the following rental transactions as highlighted below:

Table 3.1 - Office Market - Recent Transactions

Location	Occupier / Tenant	Area	Value per sq m (per sq ft)	Transaction date
Tournament Fields	Geberit	1,300 sq m (14,000 sq ft)	£204.50 psm (£19.00 psf) pre- let	May 2008
Tournament Court, Tournament Fields	Sandstone Group, Care Works and Maplevale Securities	Freehold sales of various small units	£2,260.31 psm (£210 psf) (Freehold)	2007/08
Tournament Court, Tournament Fields	NAEA	874 sq m (9,408 sq ft)	£2,260.31 psm (£210 psf) (Freehold)	June 2007
OPUS 40, Warwick	Telent	7,896.5 sq m (85,000 sq ft)	£164.14 psm (£15.25 psf)	July 2007
Tournament Court, Tournament Fields	Premier MSS	590 sq m (6,350 sq ft)	£182.97 psm (£17.00 psf)	November 2007
C&G Building, Leamington Spa	Wright Hassell	4,180 sq m (45,0000 sq ft)	£172.21 psm (£16.00 psf)	October 2006
Iceni, Warwick Technology Park	McKesson	1,161 sq m (12,500 sq ft)	£188.35 psm (£17.50 psf)	October 2006
Tournament Court, Tournament Fields	Laing Homes	929 sq m (10,000 sq ft)	£150.68 psm (£14 psf)	November 2006
Abbey Park, Stoneleigh	Adco	7,525 sq m (81,000 sq ft)	Pre-let	June 2005

Source: GVA Grimley, 2008

Availability

- 3.38 Land availability is outlined at the start of this section. In summary, in view of the relatively muted occupational demand experienced over the last five years and the current economic climate, GVA Grimley office surveyors believe there is no shortage of office development sites over the short to medium term.
- 3.39 The availability of existing out of town office space is limited with only a few vacant small units at Tournament Fields, 4,645 sq m (50,000 sq ft) at Iceni, Warwick Technology Park and 2,415 sq m (26,000 sq ft) at Alpha House, Warwick Technology Park.
- 3.40 A range of smaller office suites which are likely to suit occupiers of local significance are available within Leamington Spa centre.

Yields

- 3.41 A property 'yield' (or capitalisation rate) is the relationship between the income received from a property investment (i.e. rent) and the overall value of the property investment. The yield is usually expressed as a percentage.
- 3.42 An increase in property yields will, all other things remaining equal, decrease the capital value of the property investment. Secondary office investments will achieve yields in excess of prime yields, and as a consequence much lower capital values will be achievable.
- 3.43 The impact of the market downturn has seen investment yields for prime office premises increase dramatically. In December prime 2006 office yields were 5.25% in the wider Coventry/Solihull area according to GVA Grimley in house research. However, by December 2008 they were estimated to be in the order of 7.00%. As with all property sub-markets, the outward shift in investment yields is a consequence of the credit crunch and indicates the severity of the current downturn in the property investment market. In addition, it is likely that the 7% yield estimated in December 2008 has increased further, as the downturn/recession has continued into 2009.
- 3.44 Turning to the study area, it is important to consider the current conditions in the property investment market, when uncertainties are widespread and pricing is difficult. Investors are reluctant and evidence is therefore limited. Whilst the cost of finance is declining, margins have increased due to the 'credit crunch'. This has resulted in market inactivity amongst the finance buyers. In addition, the Institutional investors (such as pension funds) have a much weaker presence in the current market.

3.45 GVA Grimley believe that a yield of between 8 – 8.5% is appropriate for an investment let on institutional terms (i.e. a 10 year lease to a tenant of good covenant strength) in the current market conditions. The first quarter of 2009 may see increasing flows of credit and therefore more investment activity, but there is scope for further correction throughout 2009 and therefore the yields anticipated above should be viewed with extreme caution.

Land Values

- 3.46 Transactional evidence of land values within the study area is extremely limited. This is partly due to many of the larger sites being under the control of the same developers for significant periods of time, with sites rarely changing ownership. In addition, estimates of land value are particularly difficult given the current deterioration in property market conditions. This has created both uncertainty in estimating investment yields and more muted occupational demand.
- 3.47 However, based on occupational market evidence, rental values achieved for modern offices are in the region of £1.39 £1.58 per sq m (£15.00 £17.00 per sq ft). We would anticipate that sites ready for development would command between £1,235,500 and £1,729,700 per net hectare developable (£500,000 and £700,000 per net acre developable), dependant upon the precise location and profile of the site.

Summary - Offices

- 3.48 The office market is concentrated into two main sub-markets in the study area; the town centre market and the out of town market. The out of town office market have achieved the highest rental values and have attracted occupiers of national significance. Key locations in the study area include Tachbrook Park, South West Warwick (Tournament Fields), Warwick Gates, OPUS 40 and Warwick Technology Park. In comparison, the town centre markets of Leamington, Warwick and Kenilworth cater towards occupiers of local and sub regional significance.
- 3.49 The key locations for new build office development include Tournament Fields, Iceni (Warwick Technology Park), and Athena Court. The majority of development and letting activity has occurred at Tournament Fields, where a readily available supply of development land has increased the attractiveness of this location to potential occupiers.
- 3.50 Experience suggests that the office market in Warwick/Leamington is a 'supply led' market. In the past, developers that have built speculatively have been successful in attracting occupiers. However, pre-let activity has been relatively subdued and it is likely that this will

remain the case in the current economic climate. GVA Grimley are not aware of any speculative or pre-let office development currently proposed on any of the development sites within the study area.

- 3.51 Two key sites are ideally suited to medium term development and are highlighted below as follows:
 - OPUS 40, A46 (IBM site) where development potential exists for four office buildings totalling 27,870 sq m (300,000 sq ft); and
 - The Old Warwick Road site, owned by Ford, where the emerging master plan for Leamington Train Station area envisages a mixed use office led scheme.
- 3.52 The impact of the market downturn has seen investment yields for prime office premises increase dramatically. As with all property sub-markets, the outwards shift in investment yields is a consequence of the credit crunch and indicates the severity of the current downturn in the property investment market. In addition, the wider market downturn has affected the demand for existing office stock and new build premises, but also the demand for development land.

Industrial / Distribution Market

Key Industrial / Distribution Locations

3.53 This section highlights key locations and discusses the industrial/distribution market conditions. Industrial accommodation in the study area is less prevalent when compared to offices, and as such, there are fewer key locations to consider.

Tachbrook Park

- 3.54 Tachbrook Park is an 8.09ha (20 acre), mixed use development situated to the south west of Learnington town centre with frontage onto Heathcote Lane and Olympus Way. The existing site incorporates a mix of office, industrial and other commercial development.
- 3.55 There is a large area of undeveloped land which will become available in the short to medium term. However, GVA Grimley believe that the developers are seeking higher value uses and as such, speculative development for industrial/distribution purposes is unlikely to occur at this location.

Spa Park

- 3.56 The site is located off Tachbrook Road, approximately two miles form Warwick and Learnington centres. It is approximately 14.15ha (35 acres) in size comprising B1, B2 and B8 units ranging from 1,858 to 37,160 sq m (20,000 to 400,000 sq ft) in size. Key occupiers include Plastic Engineering Limited, Millward Brown, Woodhouse Plc and Wolseley UK.
- 3.57 The site has around 20 acres remaining for development on two plots with one likely to come forward in the future. The majority of existing units have been developed within the last five to seven years, although there is a large section of older 1930s buildings currently occupied by Delphi and AP Automotive. These sites may come forward for development in the future, either due to economic difficulties in the automotive industry or if these buildings are deemed obsolete by the current occupiers.
- 3.58 To the rear of Spa Park there are a number of industrial areas including Sparten Close, which was developed throughout the 1980's and 1990's era. Occupiers include Adetias, the Environment Agency and Plumb, Parts and Electric Centres (Wolseley UK).

Queensway Business Park

- 3.59 The 2.63ha (6.5 acres) site is located to the northern tip of Tachbrook Park and provides an opportunity for industrial development. It is in a prominent location and is owned by Deeleys Properties. There are a number of new units of steel portal frame construction which are occupied by AGA and Timber Space.
- 3.60 Surrounding buildings on the site are older, and are likely to be in fragmented ownership. As such, these areas are unlikely to be assembled for development in the future. Units typically comprise older industrial buildings of red brick construction under corrugated asbestos roofs.

Other Industrial/Distribution Locations

3.61 There are a number of other smaller industrial developments located throughout the study area.

Kenilworth

3.62 The concentration of industrial units in Kenilworth is to the north of the town centre. Key industrial locations are Common Lane Industrial Estate and Princes' Drive Industrial Estate. These comprise small industrial estates providing older brick built accommodation typically under corrugate asbestos roofs with some new units of portal frame construction. Access and

egress is constrained by local roads, and both estates adjoin (or are in close proximity to) residential areas. The main access is via the A429 Coventry Road. However, both estates appear to be well used by occupiers of local significance, with few vacant units at present.

Warwick / Leamington

- 3.63 In and around Warwick itself, most existing industrial estates appear well occupied with few voids available at present. However, the majority of units are reaching the end of their economic life without major refurbishment programmes being undertaken.
- 3.64 Specific sites throughout the study are likely to come forward as larger manufacturing operations close or are relocated. However, the majority are within urban locations that may not necessarily offer the ideal location for industrial/distribution users in the future.
- 3.65 Key industrial areas in Warwick/Leamington include:
 - Budbrook Industrial Estate Located to the north of Warwick in close proximity to the A46, to the south of Opus 40 off the A425 Birmingham Road. This estate comprises a number of office buildings at the front of the estate, which date from the 1970s to 1990s. In addition, there are a number of smaller industrial units which are in average condition, are of brick construction part clad in brick and part plastic coated metal sheeting;
 - Harris Road Industrial Estate Located off Wedgnock Lane just to the south of Opus 40, and provides a mix of older units of brick construction with some more modern units of better specification and of steel portal frame construction. Units date from the 1980-1990s, are in average condition and cater towards the need of local occupiers;
 - In the vicinity other commercial uses are present in the Rothwell Road area, such as a Volvo garage and Warwick Police. Other industrial occupiers are located in this area, including Speedy Hire and Gunn JCB;
 - Miller's Road Industrial Estate Provides a mix of industrial units which are in average to poor condition. Units are typically of brick built construction with corrugated asbestos roofs. This estate is accessed via local roads (Cape Road and Millers Road). The site adjoins a residential area to the south and the canal to the north; and
 - Sydenham Estate Is an industrial area to the east of Leamington Spa. The area is defined by the railway line to the south and west, the Grand Union Canal to the north, and Sydenham Drive to the east. The estate comprises industrial units dating from the 1970's and 1980's era, typically of steel portal frame construction; clad in part brick and part profile metal sheeting. This estate attracts occupiers of local and sub-regional

significance, who seek modern but cost effective industrial premises. Occupiers of regional/national significance seeking low cost distribution/manufacturing premises to conduct regional activities/operations, may also be attracted. Key occupiers include Heinz Frozen And Chilled Foods Limited, Box Factory Limited, CLS Fabrication Limited and Circost Electronics Limited.

Coventry

3.66 Potential new development could occur in the Siskin Drive area close to Coventry Airport. Over the last 10 years, a number of large distribution units have been built with few current vacant units available. This location offers excellent access to the A46 and the M45 and on to the M6/M1 motorways, as well as Coventry Airport itself.

Market Conditions

- 3.67 The local market has demonstrated healthy levels of take up over the last five to 10 years and demand has generally come from local/regional companies trading up to larger / newer properties. Any new speculative development has been taken up by occupiers relatively quickly, and the vacancy levels across the study area are relatively low when compared with estates in Coventry and Solihull, which experienced greater levels of supply of units of all size ranges.
- 3.68 GVA Grimley note that a few larger corporate occupiers have located in the study area. An example is Wolseley UK, who located their headquarter office function and their UK distribution hub to Spa Park four years ago. This unit comprises a 41,805 sq m (450,000 sq ft) facility. It is interesting to note that if a similar sized occupier wished to locate within the study area, no plots could be made available to them immediately to accommodate their requirement.

Rental Values

- 3.69 GVA Grimley research shows that prime industrial rents have remained relatively static over three to five years being in the order of £67 psm (£6.25 psf) for the Solihull area and £62 psm (£5.75 psf) in the Coventry area.
- 3.70 The prime rent achievable depends upon the specification and size of the units. In general, smaller units of up to 93 sq m (1,000 sq ft) are best placed to achieve higher rents. As with land values, pressure is now being applied to rents given the current economic conditions, as occupiers consider their property requirements in light of the downturn in the UK Economy.

- GVA Grimley in house research suggests a reduction in Solihull to £65 psm (£6 psf) in December 2008.
- 3.71 Turning to the study area, the prime rental values of new build industrial accommodation, if any were available, would probably be in the region of £59 £62 psm (£5.50 £5.75 psf), with rents of secondary accommodation (depending on exact condition, specification and size ranging from £32 £46 psm (£3.00 to £4.25 psf). Freehold values lie in the order of £323 £753 psm (£35 £70 psf), but the latter are rarely available in the study area.

Recent Transactions

- 3.72 The majority of recent transactions have been within the Distribution sector as opposed to the Industrial / manufacturing sector. This reflects the national picture which has, over the last five to 10 years, shown a reduction in the fortunes of the UK's manufacturing base as a whole.
- 3.73 Recent industrial transactions in the locality are outlined as follows:

Table 3.2 - Industrial Market - Recent Transactions

Location	Tenant	Type/ Quality of Stock	Area	Value per sq m	Transac- tion Date
55/56 Bird Road, Warwick	Jaguar Land Rover	Second hand light industrial property built in the mid 1980's. Utilised as a training centre	4,658 sq m (50,139 sq ft)	£53.82 psm (£5.00 psf)	October 2008
2 Lammas Centre, Budbrooke Industrial Estate, Warwick	Confidential	Traditionally constructed warehouse unit	2,643 sq m (28,444 sq ft)	Confident-ial	July 2008
Juno Drive, Leamington Spa	AGA Rangemaster	1990's modern warehouse facility	9,873 sq m (106,271 sq ft)	£55.43 psm (£5.15 psf)	June 2008
Unit 18 Heathcote Industrial Estate, Warwick	Polti - (furniture manufacturer)	Second hand warehouse of steel frame construction bought on a freehold basis	1,723 sq m (18,548 sq ft)	£1million (This equates to £580 psm/ £53.91 psf)	February 2008
Unit D, Welton Road, Warwick	Grupo Antlin	Warehouse/industrial unit	1,128 sq m (12,140 sq ft)	£51.12 psm (£4.75 psf)	January 2008
Unit A, Welton	Nuffield	To be used as a facility	1,145 sq m	£69,950	Unknown
Road, Warwick	Hospitals	to sterilize surgical instruments	(12,327 sq ft)	(This equates to £54.57 psm/ £5.07 psf)	

Source: GVA Grimley Analysis, 2008

3.74 It is worth noting that the average time that these units were on the market before being sold or let was 415 days and all the properties highlighted above were second hand buildings rather than new properties.

Investment Market

- 3.75 Prime industrial yields in the wider Coventry and Solihull area are in the order of 7.75%, according to GVA Grimley in house research. In the current market uncertainty, it is likely that investment yields in 2009 will be in the order of 8.5% to 9%, as a slight premium to office yields is usual.
- 3.76 As with the office market, yields have seen a sharp rise in the last year as a consequence of the 'credit crunch' and the subsequence downturn in the property investment market. The current climate has seen the flight of both institutional and debt backed investors from the property investment market, with a corresponding fall in capital values.
- 3.77 In addition, yields have seen a further rise throughout 2008 as market conditions have deteriorated after the near collapse of a number of the UK's leading financial institutions in the third quarter of 2008. Prior to the downturn, GVA Grimley research indicated that prime industrial yields were as low as 5.75% in the West Midlands, with correspondingly high capital values achievable for such investments. As such, the yields quoted above are based upon limited investment evidence, and should be viewed with a high degree of caution.

Competition

- 3.78 The majority of accommodation is located on the edge of the main centres of Leamington and, to a lesser degree, Warwick.
- 3.79 The majority of accommodation is older in nature and in some cases units are in excess of 50 years old. Whilst there has been some clearance of older accommodation to create developments such as Spa Park, other cleared sites remain undeveloped possibly due to owners having higher value aspirations for higher value uses on the land than industrial/distribution uses.
- 3.80 The supply of new industrial units is limited at present, with few units under development and the majority of developers with B1 / B2 / B8 sites seeking pre let agreements/pre sales on a design and build, rather than providing units speculatively to the market.

3.81 Other regional locations with a supply of existing modern units are likely to attract 'footloose' regional occupiers who need units immediately rather than waiting nine to 12 months for units to be built.

Land Values

- As with other sectors of the property market, downwards pressures on industrial land values have been experienced in the current market conditions. This is due to increases in investment yields (discussed at paragraphs 3.42 to 3.45) which have lowered the value of the end product, and increases in developer's margins to reflect risk and return. In addition, the shortage of debt finance and deterioration of wider economic conditions have subdued the appetite of industrial developers for speculative industrial development. Factors such as the changes to Empty Rates liability and introduction of Energy Performance Certificates (EPC) have been additional concerns throughout 2008.
- 3.83 In the study area, very few land sales have occurred in the last 12-18 months and, as is the case within the office market, a number of sites have been controlled by a range of developers for some time. These developer's aspirations are typically for higher value uses, as apposed to industrial/warehouse uses.
- 3.84 GVA Grimley industrial surveyors estimate that a cleared site with planning consent for B1 / B2 / B8 uses would achieve a land value in the order of £617,750 £679,525 per hectare (£250 -£275,000 per acre). There are few transactions to support this view, as potential purchasers are struggling to raise finance in order to complete sales. Therefore, the land values quoted should be viewed with caution in light of current market conditions.

Summary – Industrial / Distribution

- 3.85 Industrial accommodation in the study area is less prevalent when compared to the offices market, and as such, there are fewer key locations to consider. Key locations include Tachbrook Park, Spa Park and Queensway Business Park, all of which are situated to the south of Leamington centre. In addition, there are a number of smaller estates in the study area which cater towards occupiers of local / sub-regional significance. These include:
 - Common Lane Industrial Estate and Princes' Drive Industrial Estate, Kenilworth;
 - Budbrook Industrial Estate, Harris Road Industrial Estate and Miller's Road Industrial
 Estate, Warwick / Leamington; and
 - Siskin Drive, Coventry.

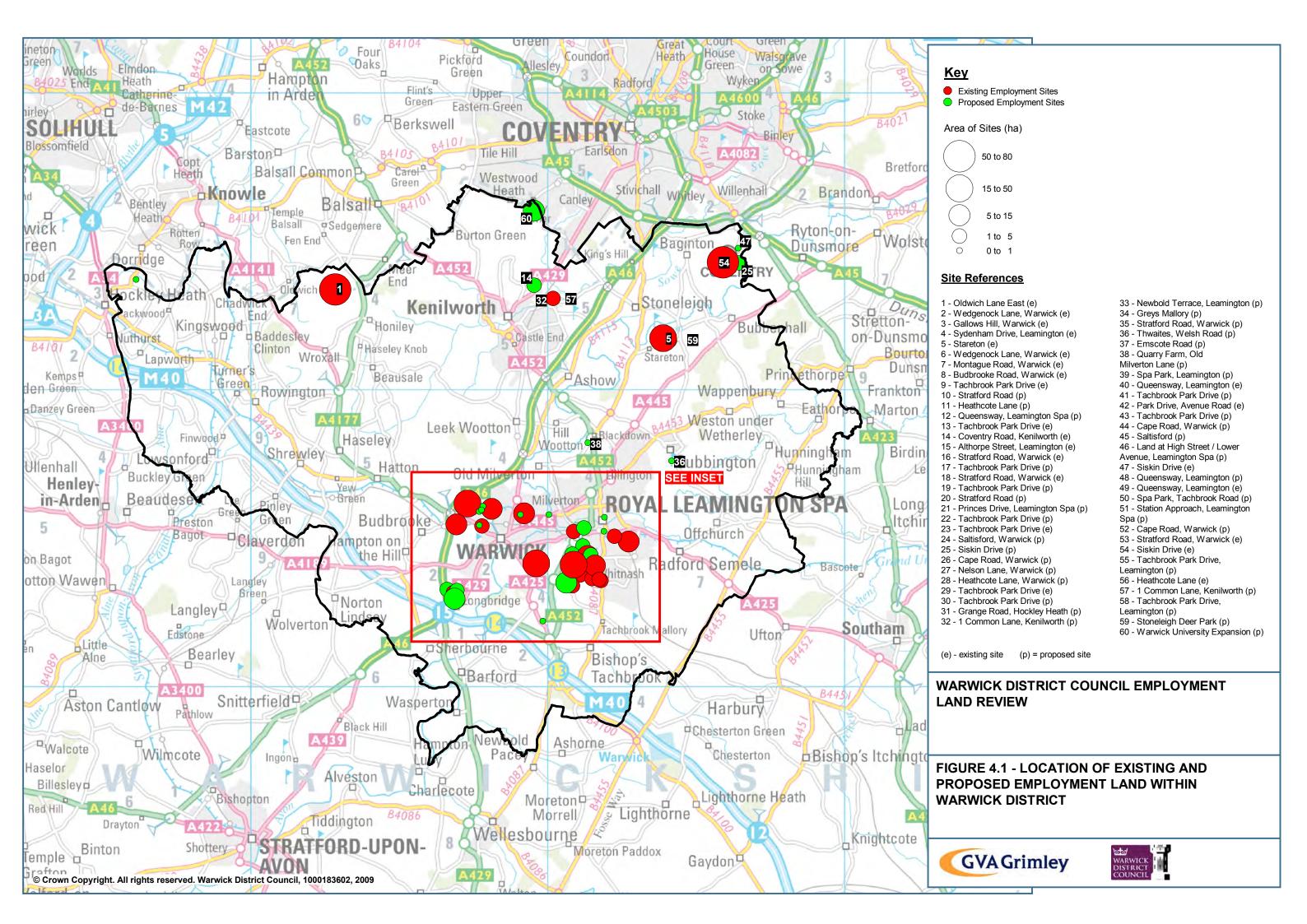
- 3.86 However, the majority of accommodation is older and in some cases units are in excess of 50 years old. Whilst there has been some clearance of older accommodation to create developments such as Spa Park, other cleared sites remain undeveloped, possibly due to owners having higher value aspirations for the land.
- 3.87 The local market has demonstrated healthy levels of take up over the last five to 10 years and demand has generally come from local/regional companies trading up to larger / newer properties. Any new speculative development has been taken by occupiers relatively quickly, and vacancy levels across the study area are relatively low when compared to estates in areas outside the study area, such as Coventry and Solihull.
- 3.88 GVA Grimley research shows that prime industrial rents have remained relatively static over three to five years being in the order of £67 psm (£6.25 psf) for the Solihull area and £62 psm (£5.75 psf) in the Coventry area (December 2008). Prime rents in the study area are in the order of £59 £62 psm (£5.50 £5.75 psf), which shows that rental values in the study area are in line with competing locations such as Coventry, and at a slight discount to prime industrial space in the M42 corridor.
- 3.89 As with the office sector, investment yields have seen a sharp rise in the last year as a consequence of the 'credit crunch' and the subsequent downturn in the property investment market. This has caused a corresponding fall in investment capital values. In addition, yields have seen a further rise throughout 2008 as market conditions have deteriorated after the near collapse of a number of the UK's leading financial institutions in the third quarter of 2008. In addition, the shortage of debt finance and deterioration of wider economic conditions have subdued the appetite of industrial developers for speculative industrial development.
- 3.90 The next section reviews the existing and proposed supply of employment land within Warwick.

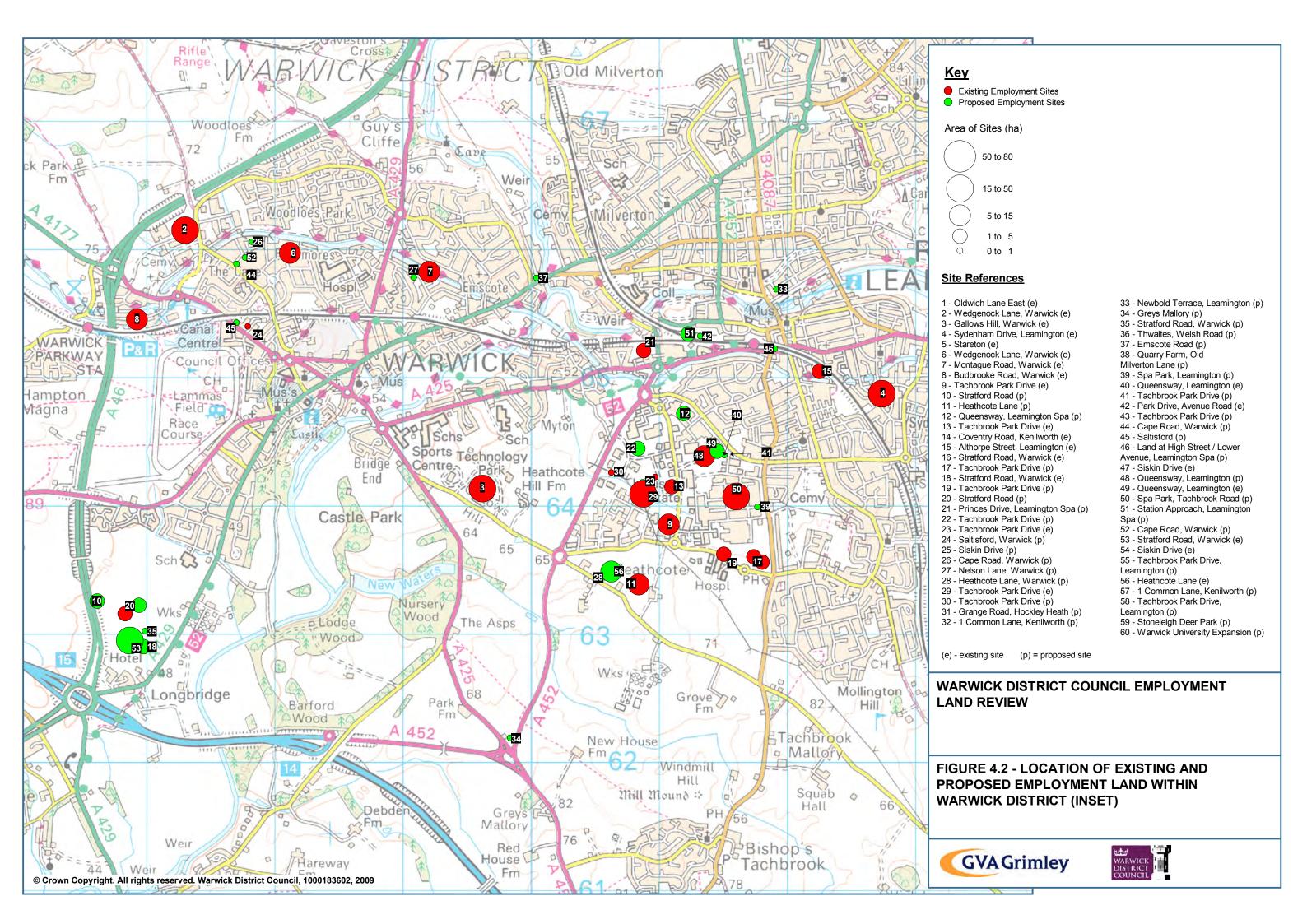
REVIEW OF EMPLOYMENT LAND SUPPLY

- 4.1 This section of the report provides a review of the existing supply of employment land within the Warwick District Council administrative area. The review comprises three elements:
 - i. A quantitative and qualitative assessment of employment land supply;
 - ii. Recommendations for a new portfolio of employment land; and
 - iii. A capacity assessment.
- 4.2 The supply of employment land in Warwick consists of two components:
 - Existing employment land which will continue to serve the needs of businesses within the area throughout the Plan period. This category includes employment land that was currently in use at the time of the study; and
 - ii. Committed employment sites that may be developed within the Plan period and contribute to meeting future employment land requirements. This categorisation includes employment sites that were under construction at the time of the study, those with planning permission for employment uses, or employment allocations within the Local Plan.
- 4.3 The review of these components includes both quantitative and qualitative elements (in accordance with ODPM guidance).

i) Existing Employment Land within Warwick

- 4.4 This definition includes existing employment land that was in use at the time of the study. Data on these sites was supplied by Warwick District Council to GVA Grimley. A total of 23 sites, comprising 238.26 ha were identified. These sites are spread across the District, as shown on the plans at Figure 4.1 and Figure 4.2.
- 4.5 GVA Grimley have subsequently undertaken an independent assessment of each site, based upon site visits by surveyors from GVA Grimley. This assessment included a range of market, sustainability and physical assessment criteria using a standard proforma to record details of each area. Details of the proforma can be found at Appendix A.





Quantitative Assessment

- As mentioned above, GVA Grimley have undertaken independent site assessments of each employment site in the Study area, using the information supplied by the Client as a base. We have added value in terms of providing Agency and Planning advice to the assessments which were undertaken by surveyors from our team. It should be borne in mind that this analysis reflects existing baseline conditions for the sites assessed and does not take into account any proposed improvements / investment to any of these areas of existing employment activity.
- 4.7 Using the scores from the proforma (detailed at Appendix A) we have been able to undertake some quantitative analysis of the scores, which is detailed below. A more qualitative assessment, considering each site's strengths and weaknesses, can be found in the Property Market Review (Section 3).

Market Assessment

- 4.8 Detailed site assessments are provided at Appendix B, here we have summarised the market based characteristics of the employment land supply. The market assessment takes account of the following characteristics:
 - Access:
 - Prominence:
 - Site Layout;
 - Character of Area;
 - Economic Constraints;
 - Strategic Location; and
 - Market Attractiveness.
- 4.9 The scores are then ranked into a number of categories which determine how well the site scored. Full details of this methodology are detailed at Appendix C. Table 4.1 below shows the results of this analysis.

Table 4.1 – Summary of Market Scores of the Existing Employment Land Supply

	No of Sites	% of Sites	Total Land (ha)
Poor	0	0%	0.00
Average	5	22%	41.30
Good	16	70%	113.54
Excellent	2	9%	83.42
Total	23	100%	238.26

Source: GVA Grimley, 2009

4.10 As can be seen in Table 4.1 above, a total of 16 sites (70%) were scored as good quality in terms of their market attractiveness. This 70% of sites creates a total land supply of 113.54ha, which represents just over half the total land supply. Just 9% (two sites) were scored as being excellent in terms of their market attractiveness – these were Siskin Drive and Wedgenock Lane. This amounts to a total of 83.42a of land being considered excellent in terms of market opportunity in the future. The remaining 22% (five sites) were considered to be average in terms of their market attractiveness – these were Montague Road Industrial Estate, Althorpe Industrial Estate, Common Lane, Kenilworth, Stoneleigh Deer Park and Former Honiley Airfield.

Physical Assessment

- 4.11 Detailed site assessments can be seen at Appendix B, here we have summarised the physical based characteristics of the employment land supply. The physical assessment takes account of the following characteristics:
 - Building Age;
 - Building Quality;
 - General External Environment; and
 - Local Access.
- 4.12 The scores are then ranked into a number of categories which determine how well the site scored. Full details of this methodology are detailed at Appendix C. Table 4.2 below shows the results of this analysis.

Table 4.2 – Summary of Physical Scores of the Existing Employment Land Supply

	No of Sites	% of Sites	Total Land (ha)
Poor	0	0%	0.00
Average	4	17%	31.30
Good	11	48%	72.79
Excellent	8	35%	134.17
Total	23	100%	238.26

Source: GVA Grimley, 2009

- 4.13 As can be seen above in Table 4.2, 35% (eight sites) were scored as excellent, in terms of their physical characteristics, providing a total land supply of 134.17ha, which represents over half of the existing employment land supply.
- 4.14 A total of 48% (11 sites) were scored as good in terms of their physical characteristics, while these 11 sites accounted for a further 72.79ha. The remaining 17% (four sites) were marked as average a total of 31.30ha. These sites were Montague Road Industrial Estate, Althorpe Industrial Estate, Stoneleigh Deer Park² and Common Lane, Kenilworth.

Sustainability Assessment

- 4.15 Detailed site assessments can be seen at Appendix B, here we have summarised the sustainability based characteristics of the employment land supply. The sustainability assessment takes account of the following characteristics:
 - Public Transport;
 - Local Amenities; and
 - Strategic Location.
- 4.16 The scores are then ranked into a number of categories which determine how well the site scored. Full details of this methodology are detailed at Appendix C. Table 4.3 below shows the results this analysis.

Table 4.3 – Summary of Sustainability Scores of the Existing Employment Land Supply

	No of Sites	% of Sites	Total Land (ha)
Poor	2	9%	27.94
Average	15	65%	96.58
Good	5	22%	112.57
Excellent	1	4%	1.17

² This includes Stoneleigh Deer Park (17.94ha), which is currently being redeveloped and will create an additional 1.6ha of employment land once completed.

Total	23	100%	238.26	

Source: GVA Grimley, 2008

4.17 As can be seen in Table 4.3 above, in terms of the sustainability assessment 65% (15 sites) were scored as average providing a total of 96.58ha of land. Just two sites were scored as being poor – these two sites were Stoneleigh Deer Park and the former Honiley Airfield and account for 27.94ha of land. The majority of land, in terms of area, was scored as being good, with just one site (Saltisford Depot) being scored as excellent.

ii) Potential Employment Land Supply in Warwick

- 4.18 This definition includes allocations of employment land as identified in Policy SSP1 of the current Warwick Local Plan, as well as employment land that was under construction at the time of the study and committed sites with planning permission (either outline or full). Data on these sites was supplied by Warwick District Council to GVA Grimley. Two sites were excluded from this analysis, as they are located within Leamington town centre boundary. These were the Land at High Street / Lower Avenue and the Combined Justice Centre, which total around 0.79ha. Demand within town centres is not dealt with as part of this study, therefore so as not to double count we have chosen not to include sites within centres as part of the supply. A total of 33 sites, comprising 59.58ha were identified.
- 4.19 GVA Grimley surveyors have subsequently undertaken an independent assessment of each site, which has included a range of market, sustainability and physical assessment criteria using a standard proforma to record details of each area. Details of the proforma can be found at Appendix D.

Quantitative Assessment

- 4.20 GVA Grimley has undertaken independent site assessments of each employment site in the Study area, using the information supplied by the Client as a base. It should be borne in mind that this analysis reflects existing baseline conditions for the sites assessed and does not take into account any proposed improvements/investment to any of these areas of proposed employment activity.
- 4.21 Using the scores from the proforma (detailed at Appendix D) we have been able to undertake some quantitative analysis of the scores, which is detailed below. A more qualitative assessment of the key locations within the District can be found in the Property Market Review (Section 3).

Market Assessment

- 4.22 Detailed site assessments can be seen at Appendix E, here we have summarised the market based characteristics of the proposed employment land supply. The market assessment takes account of the following characteristics:
 - Access;
 - Prominence;
 - Site Layout;
 - Character of Area;
 - Economic Constraints;
 - Strategic Location; and
 - Market Attractiveness.
- 4.23 The scores are then ranked into a number of categories which determine how well the site scored. Full details of this methodology are detailed at Appendix F. Table 4.4 below shows the results this analysis.

Table 4.4 – Summary of Market Scores of the Proposed Employment Land Supply

	No of Sites	% of Sites	Total Land (ha)
Poor	0	0%	0.00
Average	12	36%	10.63
Good	10	30%	14.03
Excellent	11	33%	34.93
Total	33	100%	59.58

Source: GVA Grimley, 2009

4.24 As can be seen in Table 4.4 above, a total of 12 sites (36%) were scored as average quality in terms of their market attractiveness, with a further 63% (21 sites) being scored as good and excellent. None of the sites were scored as being poor in terms of their market attractiveness. From our analysis it would appear that Warwick has a supply of potential employment land that would be relatively attractive to the market. Gallagher's Business Park, Tournament Fields and Siskin Drive (adjacent to Coventry Airport) were the highest scoring sites in terms of marketability.

Physical Assessment

- 4.25 Detailed site assessments can be seen at Appendix E, here we have summarised the physical based characteristics of the proposed employment land supply. The physical assessment takes account of the following characteristics:
 - Local Access; and
 - Site Layout
- 4.26 The scores are then ranked into a number of categories which determine how well the site scored. Full details of this methodology are detailed at Appendix F. Table 4.5 below shows the results of this analysis.

Table 4.5 – Summary of Physical Scores of the Proposed Employment Land Supply

	No of Sites	% of Sites	Total Land (ha)
Poor	0	0%	0.00
Average	11	33%	10.69
Good	10	30%	13.66
Excellent	12	36%	35.23
Total	33	100%	59.58

Source: GVA Grimley, 2009

4.27 As can be seen above in Table 4.5, 36% (12 sites) were scored as excellent, amounting to around 35ha of land, which represents over half of the total land supply. A further 63% (21 sites) were scored as average and good, in terms of their physical characteristics, providing a total land supply of 24.35ha. According to our analysis, Warwick has a large supply of potential employment land that has excellent physical characteristics. The sites that scored the highest in terms of the physical assessment were Gallagher's Business Park, Tournament Fields and Siskin Drive.

Sustainability Assessment

- 4.28 Detailed site assessments can be seen at Appendix E, here we have summarised the sustainability based characteristics of the employment land supply. The sustainability assessment takes account of the following characteristics:
 - Public Transport;
 - Local Amenities; and
 - Strategic Location.

4.29 The scores are then ranked into a number of categories which determine how well the site scored. Full details of this methodology are detailed at Appendix F. Table 4.6 below shows the results this analysis.

Table 4.6 – Summary of Sustainability Scores of the Proposed Employment Land Supply

	No of Sites	% of Sites	Total Land (ha)
Poor	2	6%	2.00
Average	4	12%	3.53
Good	25	76%	53.40
Excellent	2	6%	0.66
Total	33	100%	59.58

Source: GVA Grimley, 2008

4.30 As can be seen in Table 4.6 above, in terms of the sustainability assessment 76% (25 sites) were scored as good providing a total of 53.40ha of land, or around 88% of the total potential supply. A further two sites were scored as being excellent – these were Park Drive and Saltisford Depot. The remaining 18% (six sites) were scored as being average or poor – the two sites that were scored as poor being Ivy House and Stoneleigh Deer Park.

Recommendations for a new Portfolio of Employment Land

- 4.31 The supply of employment land within Warwick has been assessed in terms of the existing portfolio of sites, and future supply which has the potential to come forward to meet future demand. This assessment has been undertaken both quantitatively and qualitatively, taking into account a range of planning, economic and property market influences. The Employment Land Review Guidance advises that recommendations are made to the local planning authority regarding the stock of employment land and its suitability for employment use in the future. These recommendations must take account of local planning influences, economic factors and market conditions.
- 4.32 According to our quantitative assessments, the existing portfolio of employment land scores well, with the majority of existing sites being scored average or better. In terms of the overall score the best scoring employment areas are Gallagher's Business Park, Saltisford, Wedgenock Lane, Budbrook Road and Siskin Drive, all of which achieved at least two excellent rankings. The sites that were scored as average are those located at Common Lane (Kenilworth), the former Honiley Airfield, Stoneleigh Deer Park, Althorpe Industrial Estate and Montague Road.

- 4.33 The future supply of employment land in the District was found to be of average to good quality in terms of the market and physical assessments. In terms of sustainability, around three quarters of sites were scored as good, with just two sites (Ivy House located north east of Hockley Heath and Stoneleigh Deer Park) scoring poorly.
- 4.34 In terms of recommending a new portfolio of employment land, it is necessary to take into account both the qualitative assessments contained within the property market review and stakeholder interviews and the quantitative assessments contained within this chapter. Existing areas of employment land that scored poorly in the quantitative assessment were Common Lane (Kenilworth), the former Honiley Airfield, Stoneleigh Deer Park, Althorpe Industrial Estate and Montague Road. Taking each of these in turn:

Common Lane (Kenilworth)

4.35 This area of employment is located to the north east of Kenilworth town centre and is located off Common Lane, shown in Figure 4.3 below.

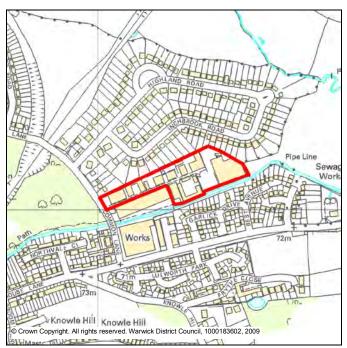


Figure 4.3 - Location of Common Lane

Source: GVA Grimley, 2009

4.36 The surrounding area is predominantly residential and open space, with the closest industrial units being at Princes Drive, which are located at the northern end of Common Lane, approximately ½ mile away. The units at Common Lane are predominantly older and of brick built construction with asbestos roofs. Access to the estate is via Common Lane and is not

- suited to large vehicles, and there are limited areas for vehicles to turn around in order to depart the site onto Common Lane.
- 4.37 Notwithstanding this, the Common Lane area provides low cost accommodation, suited to certain types of industry and the site is well used, with low levels of vacancy. This type of site is required within all local economies to accommodate those uses that do not require expensive, well located premises and therefore we recommend that the site is kept in the portfolio.

Former Honiley Airfield

4.38 This site is located approximately 4 miles west of Kenilworth and 2 miles south of Balsall Common, close to the settlements of Honiley and Baddesley Clinton, shown in Figure 4.4 below.

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Figure 4.4 – Location of the Former Honiley Airfield

Source: GVA Grimley, 2009

4.39 The site is owned and occupied by Prodrive, who employ around 180 staff from the site. The site is a former airfield that was occupied by the RAF up until the 1950's, then by Lucas until the mid 1990's before being bought by its current owners in 2000. The site houses a test track, offices, and caters for other corporate events such as driving experiences. Given the confidential nature of work that takes place on site (car testing), the Former Honiley Airfield is

- well suited to its use, being located away from built up areas and having the existing infrastructure from its days as an airfield to assist with security.
- 4.40 The current owners of this site have indicated a requirement for further space and have recently (October 2007) gained planning permission for a scheme know as "The Fulcrum". This is expected to deliver a further 360,000 370,000 sq ft of light manufacturing / office floorspace on the existing site. It is clear that the current owners have ambitions to increase employment on this site, and therefore despite its relatively poor score as part of our independent assessments, we recommend that it is kept in the portfolio.

Stoneleigh Deer Park

4.41 Stoneleigh Deer Park is located midway between Learnington Spa and Coventry, east of the village of Stoneleigh, shown in Figure 4.5 below.

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Figure 4.5 – Location of Stoneleigh Deer Park

Source: GVA Grimley, 2009

4.42 The site is currently being redeveloped for continued employment use as an office location and to date some new office buildings have been constructed. Once completed the site could strengthen the office market in this part of the District. The redevelopment will deliver an additional 1.6ha (net) of employment land on the existing site, therefore we would recommend that this site be kept in the portfolio.

Althorpe Industrial Estate

4.43 This industrial estate is located to the south of Learnington town centre and is bounded by the railway line to the north and east, and by the Grand Union Canal to the south. Its location is shown in Figure 4.6 below.

Figure 4.6 - Location of Althorpe Industrial Estate

Source: GVA Grimley, 2009

4.44 This site is characterised by small – medium sized units of brick construction with asbestos roofs. These accommodate a number of predominantly light manufacturing / automotive uses with some storage at the end of Althorpe Street. Access to the site is restricted to the entrances at the junctions of Althorpe Street and Court Street with the A425 High Street. The estate does not present a positive image, particularly given its location close to the town centre. Notwithstanding this, it is one of the few locations in Leamington that offers cheap accommodation and a variety of unit sizes. This means that it is well occupied and its redevelopment would involve a number of businesses having to be relocated. Therefore, we would recommend that this site is kept in the portfolio.

Montague Road

4.45 This estate is located north of Warwick town centre, as shown in Figure 4.7 below, and comprises predominantly industrial and ancillary office uses, which are located opposite residential uses. The buildings comprise brick built units with portal roofs, and are generally in

an average condition. The site is currently well used and occupied by a range of local / regional businesses. It is clear that there is a potential issue with the relationship the site has with adjacent residential uses, however at present, the site is well used and provides average quality accommodation to the economy. Based on this, we recommend that the site is retained in the portfolio.

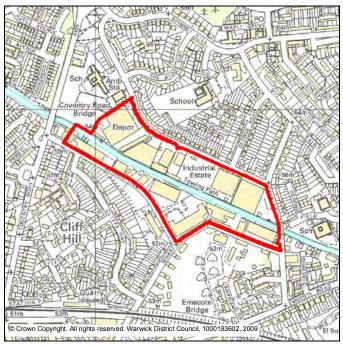


Figure 4.7 - Location of Montague Road

Source: GVA Grimley, 2009

Capacity Assessment

- 4.46 In order to determine the capacity of sites to accommodate employment floorspace, we have undertaken an assessment of their suitability for different land uses and the amount of employment floorspace that could be accommodated within them.
- 4.47 In order to assess the types of land uses that could be accommodated within each of the proposed employment sites in the portfolio of land, we have used a number of existing sources of information. Where a site has an existing planning permission in place for employment we have assumed that the site is suitable for the uses listed in the permission. Where sites do not have planning permission in place, we have used information from the Local Plan (in terms of allocated sites) and our professional judgement, based on the size, location, condition and adjacent land uses to guide the typology of each site. Where a site is

suitable for more than one use, we have assumed an equal split of land uses across the site, as detailed in Table 4.7 below.

Table 4.7 – Assumptions used in Capacity Assessment

	Split of Land Uses				
Typology	B1	B2	B8		
B1	100%	0%	0%		
B1/B2	50%	50%	0%		
B1/B2/B8	33%	33%	33%		
B2	0%	100%	0%		
B2/B8	0%	50%	50%		
B8	0%	0%	100%		

Source: GVA Grimley analysis, 2009

4.48 Using the assumptions shown in Table 4.7 above we have determined the capacity of each proposed employment site in the portfolio. A summary of the capacity assessment is shown in Table 4.8 below. A more detailed breakdown, on a site by site basis is shown at Appendix G.

Table 4.8 - Summary of Capacity Assessment

		Ca			
Typology	No. of Sites	B1	B2	B8	Total
B1	5	1.77	0.00	0.00	1.77
B1/B2	5	2.66	2.66	0.00	5.32
B1/B2/B8	16	15.83	15.83	15.83	47.48
B2	2	0.00	2.43	0.00	2.43
B2/B8	3	0.00	0.80	0.80	1.60
B8	2	0.00	0.00	0.99	0.99
Total	33	20.25	21.71	17.61	59.58

Source: GVA Grimley analysis, 2009

4.49 The capacity assessment work has shown that Warwick has a total capacity of around 59.58ha outside the centres, and that this is split 20.25 for B1 uses, 21.71ha for B2 and 17.61ha for B8. There are a number of sites that have open B1 / B2 / B8 allocations or planning permissions, and these account for around 47.48ha of the total supply. It has been assumed that capacity within these sites would be split equally between the different land use classes, however it may be possible to shift some of this supply between land use classes in order to accommodate the predicted demand in the most economical fashion.

Conclusions

- 4.50 In this section we have reviewed the existing and potential supply of employment land located within Warwick District in terms of its market attractiveness, physical characteristics and sustainability. Our independent reviews of the existing employment land supply has shown Warwick's portfolio as generally being above average when measured against our three indicators. Five sites were considered to be of poor to average quality and their potential to be removed from the portfolio in the next plan period is discussed above. It was decided, however, that these five sites should remain in the employment land portfolio.
- 4.51 With regard to proposed employment sites (those under construction, with planning permission or allocations within the Local Plan), it was determined that sites that have already obtained planning permission, or were under construction, would remain in the portfolio for the next plan period. The allocated sites all scored above average and therefore these have also remained in the portfolio.
- 4.52 The next section of this report sets out the forecasts of future employment demand within Warwick district over the period 2006 2026.

5. DEMAND SCENARIOS

Economic Projections and Scenarios

- 5.1 This section sets out the methodology underpinning the preparation of the employment demand forecasting component of the study and the resulting forecasts of floorspace and land requirements. It provides a clear audit trail of the methods, assumptions and stages of work. This includes the use of employment forecasts and the development of alternative forecasting scenarios, their translation into floorspace forecasts and subsequently into estimates of future land requirements.
- One of the principal tasks has been to provide forecasts of employment demand by linking the property and economic analysis. This employment land study addresses the area within Warwick District Council's jurisdiction and there has been a considerable amount of work in identifying the priority sectors of the economy within Warwick District, both now and in the future. Furthermore, an analysis was carried out to determine the most appropriate sectoral groupings for the local economy, which is sufficiently robust as a basis for the economic forecasting of future floorspace needs and their use in the spatial modelling of employment land scenarios.
- 5.3 The employment land projections produced in this study were based on economic projections produced by the Cambridge Econometrics (CE) Local Economy Forecasting Model (LEFM), which provides projections at district level. With regard to translating employment forecasts into floorspace and land use classes/property types, we have noted that the DCLG Guidance acknowledges that this is also "difficult and to some extent a matter of professional judgement." This is best achieved by grouping SIC data into around 25 sectoral groupings appropriate for the study area and the employment property product types available and is discussed in greater detail below.

Approach

- Based on the principles above, the methodology for the employment land forecasts is set out in five steps:
 - Source economic/employment projections;
 - Formulate appropriate alternative scenarios;
 - Create appropriate sector groupings and match to land use class categories;
 - Create worker density assumptions for converting employment to floorspace and prepare floorspace requirement forecasts;
 - Convert floorspace to land estimates and forecast land requirements.
- 5.5 The sources, assumptions and analysis made in each step are set out in the following five sections and a series of Appendices are attached setting out the detailed results of the key steps.

Step 1: Source Employment Projections

The baseline employment projections used in this study utilised the CE LEFM model which aggregates 2-digit SIC activity groupings into 41 industrial sectors, as shown in Table 5.1 below. The projections are sufficiently disaggregated to use as a basis for employment land forecasting and include historical data from 1981 to 2006 with projections from 2007 to 2026 for Warwick District. They represent the results of model-based analysis, focusing on the future performance of the existing industrial structure in Warwick, and have not been refined in light of any qualitative information, legislative changes or other 'soft' information.

Table 5.1 – Cambridge Econometrics' Industries in terms of the 2003 Standard Industrial Classification

Industry	SIC2003 definition
1 Agriculture etc	01, 02, 05
2 Coal	10
3 Oil & Gas etc	11. 12
4 Other Mining	13, 14
5 Food, Drink & Tobacco	15, 16
6 Textiles, Clothing & Leather	17, 18, 19
7 Wood & Paper	20, 21
8 Printing & Publishing	20, 21
9 Manufactured Fuels	23
10 Pharmaceuticals	24 4
11 Chemicals nes	24 (ex24.4)
12 Rubber & Plastics	25
13 Non-Metallic Mineral Products	26
14 Basic Metals	27
15 Metal Goods	28
16 Mechanical Engineering	29
17 Electronics	30. 32
18 Electronics 18 Electrical Engineering & Instruments	31, 33
19 Motor Vehicles	31, 33
20 Other Transport Equipment	35
21 Manufacturing nes	36, 37
22 Electricity	40.1
23 Gas Supply	40.2, 40.3
24 Water Supply	40.2, 40.3
25 Construction	45
26 Distribution	50, 51
27 Retailing	50, 51
28 Hotels & Catering	52 55
29 Land Transport etc	60, 63
30 Water Transport	60, 63
31 Air Transport	62
32 Communications	64
33 Banking & Finance	65, 67
34 Insurance	66
35 Computing Services	72
36 Professional Services	70, 71, 73, 74.1-74.4
37 Other Business Services	74.5-74.8
38 Public Administration & Defence	74.5-74.0 75
39 Education	75 80
40 Health & Social Work	85
40 Health & Social Work 41 Miscellaneous Services	90 - 99
41 Miscellaneous Services 42 Unallocated	90 - 99
42 Offallocated	

Source: Cambridge Econometrics, 2009

Step 2: Formulate Appropriate Alternative Scenarios

5.7 This sub-section outlines the methodology used to formulate the alternative scenarios for economic growth within Warwick. They are based on baseline data for Warwick District, regional and local planning policy and past trends.

Baseline

5.8 It was decided, in consultation with the client group, that the CE reference-case employment projections discussed above would form the baseline projections for this study, whilst alternative economic scenarios would also be formulated to take account of recent economic

trends, local economic development aspirations and policies and the impact of proposed housing growth in the district – issues which are not reflected in the LEFM projections. The baseline scenario uses the projected employment growth rates produced for Warwick District by the CE LEFM model and applies these to historic employment data sourced from the Annual Business Inquiry (ABI) for each sector in the District. In each scenario the base year is 2006 as this is the most recent year for which historic ABI employment data is available. Each scenario is therefore based on the same historic ABI data, disaggregated between 55 sectors (based on 2 digit SIC data), and includes projections from 2007 to 2026.

RSS Based Scenarios

- 5.9 The Regional Spatial Strategy (RSS) for the West Midlands underpins and guides the level of new housing and the development of the economy within the Region. Determining the relationship between the predicted growth of the local population (through housing growth) and future levels of employment is essential in predicting the quantity, type and location of new employment land.
- 5.10 The Phase 2 Revision identifies an average growth of around 540 new homes per year for the period 2006 to 2026, thereby outlining a total growth of 10,800 new homes within Warwick District. We have therefore modelled housing growth using the target of 10,800 new homes for Warwick by 2026 as part of our RSS Based Scenario.
- 5.11 Since the release of the Phase 2 Revision, the consultation period was extended to 8th December 2008 by the West Midlands Regional Assembly, following a study, commissioned by Government Office for the West Midlands (GOWM), into options for delivering higher housing numbers. The study was carried out by planning consultants, Nathaniel Lichfield and Partners (NLP), and the final report was published on 7th October 2008.
- 5.12 The NLP Report considers a range of options and presents three potential growth scenarios proposing between 417,100 and 445,600 housing units up to 2026. These represent housing allocations which build on and are between 51,500 and 80,000 higher than the Phase 2 Revision to the RSS.
- 5.13 The NLP Report appraises a number of options, based on different growth scenarios taking into account both the quantum and spatial distribution of growth within the Region. For Warwick, the NLP Report concludes that the District could accommodate an additional 5,000 or 10,000 units. Therefore we have used the higher revised RSS target of 20,800 (10,800+10,000) new homes as an alternative RSS based scenario.

- 5.14 These two alternative options for new dwellings in Warwick form the basis of two alternative 'policy-on' scenarios for this study, where Scenario A-1 is based on an additional 10,800 new dwellings in Warwick between 2006 and 2026, and Scenario A-2 is based on an additional 20,800 new dwellings. The process of converting the projected number of additional dwellings into employment projections is discussed below and then presented in Table 5.2.
- 5.15 The increase in dwellings from 2006 to 2026 implies an increase in in-migrant population assumed at an average rate of 2.3 persons per dwelling based on 2001 Census data. This estimates additional populations of 24,840 (Scenario A-1) and 47,840 (Scenario A-2) on the assumption that all new dwellings are taken up by in-migrants.
- 5.16 The Warwickshire Observatory has provided latest estimates of working age population as a percentage of the total Warwick District population in 2006 (59.5%) for this study. It was not possible to source projected estimates of the economically active Warwick population in 2026. Instead, the latest available estimate of the economically active population as a percentage of working age population (78.8% from the period July 2007 to June 2008, according to the ONS Annual Population Survey) has been assumed for 2026. These estimates have been applied to the population estimates to provide estimates of the working age and economically active populations in 2026 of 14,780 and 11,646 respectively for Scenario A-1, and 28,465 and 22,430 respectively for Scenario A-2.
- 5.17 The forecasts of additional economically active people in 2026 have been used to develop the two alternative scenarios for the additional number of jobs to be generated in Warwick between 2006 and 2026. These scenarios set targets for total additional jobs in Warwick in 2026 by maintaining the existing level of "Job Balance" (106.5% based on 2001 Census data). Job Balance is defined as jobs in Warwick divided by the number of economically active residents. The same ratio, calculated using ABI employment data and the ONS Annual Population Survey for 2006, estimates a Job Balance Ratio of 108.5%. While this provides a similar result, the assumption based on Census data is considered more robust and has been used for this study. Applying the Job Balance ratio of 106.5% provides jobs targets for 2026 of 12,404 (Scenario A-1) and 23,888 (Scenario A-2), as presented in Table 5.2.

Table 5.2 – Conversion of RSS Housing Targets to Employment Growth

	Scenario A-1	Scenario A-2
Potential New Dwellings (2006-2026)	10,800	20,800
Implied Population Increase (2006-2026)	24,840	47,840
Implied Increase in Working Age Population (2006-2026)	14,780	28,465
Implied Increase in Economically Active (2006-2026)	11,646	22,430
Total Additional Jobs (2006-2026)	12,404	23,888

Sources: West Midlands RSS (Phase 2 Revision), 2007; Development of Options for the West Midlands RSS in Response to the NHPAU Report, NLP, 2008; Warwickshire Observatory; 2001 Census data; and GHK analysis, 2009

- 5.18 Whilst these scenarios provide an overall reference point for job growth to 2026, they do not provide any estimate of how the sectoral structure of the economy could be expected to change during this period. For the baseline scenario the projected LEFM sectoral structure is adopted but, as the analysis of past sectoral trends indicates, the local Warwick economy has recently experienced strong growth in excess of that projected by the LEFM model.
- 5.19 The future structure of the economy can also be expected to reflect the significant increase in dwellings and resident population expected by 2026. It was therefore recommended that the projected <u>distribution</u> of the target jobs for Warwick between sectors should be based on the impact of additional dwellings, policy aspirations for sectoral development and on the changing sectoral trends from the period 1998 to 2006 set out in Appendix H the longest period over which consistent employment data by sector is available as well as on the LEFM projections.
- 5.20 The distribution of growth has been carried out in four steps as follows:

1 – An Economic Base Projection of Non Basic Service Employment

- 5.21 The first step in defining the sectoral distribution of the target jobs directly examines the relationship between housing growth and the demand for so called "non-basic" local service jobs expected to result in the growth of local service employment in, for example, education, health services, retailing, personal services, etc with or without any aspirations or policy targets for employment growth in these sectors. Economic Base Analysis has been used to define and measure the size of these sectors and examine the relationship between these sectors and the growth of housing using the RSS housing targets to 2026 set out in Table 5.2 above.
- 5.22 The relationship between the growth of new dwellings and local service employment was previously analysed by GHK at a national level, using a cross sectional regression analysis based on 2001 Census and ABI data for every local authority in England. The analysis tested

the relationship between the number of dwellings and individual local service sectors defined using 2-digit SIC data. It examined the relationship between the number of dwellings and the level of employment in 18 potentially non-basic sectors and found a statistically significant relationship in 11 local service sectors where nearly all employment can normally be classified as non-basic. The findings show that the relationship is significant and remarkably consistent across the sample of towns and cities such that an increase of one dwelling is associated with an increase of 0.59 jobs in these 11 sectors in total.

- 5.23 In fact the analysis measures the number of jobs generated by the addition of one dwelling in each individual sector. These sectors are:
 - Construction:
 - Sale (and repair) of motor vehicles and fuel;
 - Retail trade:
 - Hotels and restaurants;
 - Real estate activities;
 - Public administration, defence and social security;
 - Education;
 - Health and social work;
 - Activities of membership organisations;
 - Recreational, cultural and sporting activities; and
 - Other service activities.
- 5.24 These ratios were therefore used to estimate the growth in employment in these sectors of the projected increase in dwellings in Warwick to 2026 for each scenario. The Economic Base projection, as noted above, focuses only on the non-basic local service sectors identified (no change is predicted by this method in the other 'basic' service and manufacturing sectors) but shows that, if the effect of simply increasing the number of dwellings is as analysed, then total employment in these 11 local service sectors can be expected to rise "automatically" by 0.59 times the number of new dwellings.

2 - Projection of Priority Sectors

5.25 Warwick District Council has identified a number of key priority sectors, which are expected to be targeted by economic development policy in the future. Some of these sectors are expected to perform better than the LEFM projections would suggest, others are expected to

reverse declining trends by 2026, while growth of other sectors is likely to be more restricted in the future. In forecasting these key sectors, a range of different treatments were considered: (1) applying an historic trend as described under the Past Trends Scenario below, (2) applying the appropriate dwellings-to-job ratio, (3) keeping the LEFM projection, or (4) maintaining current (2006) employment levels.

5.26 In total, 18 sectors were identified as priority sectors, including one primary, four manufacturing and 13 service sectors. For each priority sector, Table 5.3 outlines the relevant LEFM growth rate for Warwick, the chosen methodology for each priority sector and the equivalent growth rate applied under each of the two RSS-based scenarios.

Table 5.3 – Selection of Appropriate Projections for Priority Sectors

				Equivalent Applied Growth per annum^		
Sector	Industry	Warwick LEFM	Chosen Methodology	Scenario A-1 (10,800 New Dwellings)	Scenario A-2 (20,800 New Dwellings)	
Primary	01 : Agriculture and hunting	-3.4%	Past Trend – ½ Average Percentage Growth p.a.	-1.1%	-1.1%	
Manufacturing	30 : Manufacture of office machinery & computers	-3.4%	Past Trend – ½ Average Absolute Change p.a.	3.8%	3.8%	
Manufacturing	31 : Manufacture of other electrical machinery & apparatus	-6.7%	Maintain Current Employment	0.0%	0.0%	
Manufacturing	32 : Manufacture of radio, TV & communication equipment	-3.4%	Maintain Current Employment	0.0%	0.0%	
Manufacturing	33 : Manufacture of medical, precision & optical instruments	-6.7%	Maintain Current Employment	0.0%	0.0%	
Service	45 : Construction	0.4%	Dwellings-to-Job Ratio	1.0%	1.8%	
Service	50 : Sale (and repair) of motor vehicles & fuel	0.0%	Dwellings-to-Job Ratio	0.5%	0.8%	
Service	51 : Wholesale trade	0.0%	Warwick LEFM Projection	0.0%	0.0%	
Service	52 : Retail trade	0.2%	Dwellings-to-Job Ratio	0.8%	1.5%	
Service	55 : Hotels & restaurants	1.0%	Dwellings-to-Job Ratio	0.5%	1.0%	
Service	65 : Financial intermediation	-0.3%	Maintain Current Employment	0.0%	0.0%	
Service	67 : Activities auxiliary to finance	-0.3%	Past Trend – ¾ Average Percentage Growth p.a.	1.8%	1.8%	
Service	72 : Computer and related activities	2.3%	Past Trend – ½ Average Absolute Change p.a.	3.1%	3.1%	
Service	73 : Research and development	1.3%	Past Trend – Average Rate of Annual Change*		13.0%	
Service	74 : Other business activities	1.8%	Past Trend – Full Average Absolute Change p.a.	2.0%	2.0%	

				Equivalent Applied Growth per annum^		
Sector	Industry	Warwick LEFM	Chosen Methodology	Scenario A-1 (10,800 New Dwellings)	Scenario A-2 (20,800 New Dwellings)	
Service	80 : Education	0.5%	Dwellings-to-Job Ratio	1.1%	2.0%	
Service	85 : Health & social work	0.3%	Dwellings-to-Job Ratio	0.7%	1.3%	
Service	92 : Recreational, cultural & sporting activities	0.9%	Dwellings-to-Job Ratio	0.8%	1.4%	

Source: GHK analysis, 2009

Notes: ^ Equivalent growth rate of applied percentage or absolute change.

* Average rate of annual change is the average of the eight individual growth rates – 1998-99, 1999-00, 2000-01, 2001-02, 2002-03, 2003-04, 2004-05, 2005-06

- 5.27 After examining the alternative treatment options, the most appropriate growth rate was selected for each priority sector. The growth rates were selected to:
 - Project strong growth in high-value, innovative, research and development sectors, much
 of which is expected to be strongly linked to the local universities;
 - Maintain the previous strong growth in the business services sector;
 - Project growth in tourism-related sectors (i.e. retail, hotels, restaurants, recreational, cultural and sporting activities);
 - Minimise the projected employment decline in agriculture, hi-technology manufacturing, and financial services sectors;
 - Project minimal growth in distribution.

3 - Projection of Employment in 'Non-Priority' Sectors

5.28 For the projections of all other primary, manufacturing and basic service sectors ('non-priority' sectors), the LEFM projections are considered to provide the best indicator of employment change and have been used to generate projections to 2026.

4 – Adjustment to Control Employment Totals

5.29 Lastly, each sector total was adjusted either up or down in proportion to the distribution of total employment in 2006 in order to control these sectoral changes proportionately back to the respective jobs target for 2026 under Scenarios A-1 and A-2. A straight line trend was then assumed in all sectors from 2006 to 2026.

Past Trends Scenario

- 5.30 The 'Past Trends' Scenario is based on an analysis of recent past economic trends to set overall employment growth targets for 2026. The Scenario projects employment growth, using trends in ABI employment data for Warwick from 1998 to 2006, without reference to either RSS or local economic development policies. The analysis indicates that Warwick has had a relatively dynamic and changing economic structure which has performed better than the LEFM forecasts project. Total employment in Warwick increased from 70,017 jobs in 1998 to 75,865 jobs in 2006 according to ABI data. This represents total employment growth of 1% per annum over the eight year period compared with the LEFM projected growth of 0.6% per annum between 2006 and 2026.
- 5.31 There are clearly uncertainties whether this recent level of growth will be sustained in the period to 2026, particularly when projecting over 20 years on the basis of past performance during a relatively short eight year period. However, for scenario building and testing purposes it was decided to examine the impact of assuming that employment would continue to grow at this historic rate of 1% per annum during the period from 2006 to 2026.
- 5.32 The analysis determined that it was unreliable to use this approach to project employment in each individual sector in Warwick because large fluctuations in smaller sectors at district level predict irrationally high growth rates and the projection is based on a relatively short period with volatile changes in employment in some sectors. Therefore, the past trend forecasts are based on an analysis of average annual trends, using a combination of percentage and absolute changes, over the period 1998 to 2006, as explained below.

Primary and Manufacturing Sectors

- 5.33 National and regional trends show that Primary and Manufacturing sectors are declining consistently across most individual sub-sectors. This is also the case in Warwick, although there are also some Primary and Manufacturing sectors that have experienced employment growth between 1998 and 2006, according to ABI data. These include the manufacture of wood and wood products, manufacture of chemicals and chemical products, manufacture of office machinery and computers, manufacture of transport equipment and recycling sectors.
- 5.34 Two of these sectors (manufacture of office machinery and computers and manufacture of wood and wood products) have experienced strong employment growth in excess of 10% per annum. This strong growth is partly due to the relatively small employment base within these sectors, while projecting such rates to 2026 generate unrealistic and unsustainably high employment totals. It was therefore decided that an average annual 'absolute' trend (also

based on past performance between 1998 and 2006) would be applied to these sectors, while employment in all other Primary and Manufacturing sectors was assumed to grow at the average annual percentage growth rate.

Basic and Non-Basic Service Sectors

- 5.35 The service sectors in Warwick have experienced significant employment growth over the period 1998 to 2006, increasing at an average of 2.3% per annum. However, the past performance of individual service sectors has been highly variable. For example, employment in transportation and financial services has declined over the period, while the professional, business and 'other' services sectors have been driving this strong growth trend. The highly variable growth rates are also common amongst the smaller service sectors in Warwick, where a relatively small change in the number of people employed can represent a significant change in percentage terms, which can forecast exponential employment growth when projecting to 2026. Therefore, the past trends of many of the service sectors generate exceptionally high growth rates which cannot be sustained in the long-term.
- 5.36 For each service sector, with an unrealistic or unsustainable rate of projected employment growth, the average annual percentage growth rate from 1998 to 2006 was replaced with a more appropriate projection for the sector concerned, based on either:
 - Half or three-quarter trend of the average annual percentage growth rate;
 - Half, three-quarter or full trend of the average annual absolute change.
- 5.37 These rates were selected and applied such that total employment in Warwick is projected to grow at the historic average annual percentage growth rate of 1% per annum. The chosen methodology for each relevant service sector is shown in Table 5.4 below.

Table 5.4 – Selection of Appropriate Past Trends Projections for Service Sectors

Industry	Chosen 'Past Trends' Methodology (based on 19982006 ABI data)	Applied growth or change per annum
40 : Electricity, gas, & water supply	Half average annual absolute change	+36.6 jobs p.a.
41 : Water collection, purification & distribution	Half average annual absolute change	+22.6 jobs p.a.
45 : Construction	Half average annual percentage growth	+0.5% p.a.
50 : Sale and repair of motor vehicles & fuel	Half average annual percentage growth	+1.2% p.a.
51 : Wholesale trade	Half average annual percentage growth	+0.3% p.a.
52 : Retail trade	Half average annual percentage growth	-0.1% p.a.
55 : Hotels & restaurants	Half average annual percentage growth	-0.2% p.a.
63 : Supporting transport activities	Half average annual percentage growth	+0.8% p.a.
64 : Post & telecommunications	Half average annual percentage growth	+4.7% p.a.
65 : Financial intermediation	Half average annual percentage growth	-1.1% p.a.
67 : Auxiliary financial activities	Three-quarter average annual percentage growth	+1.8% p.a.
70 : Real estate activities	Half average annual percentage growth	+0.1% p.a.
71 : Renting of machinery & equipment	Half average annual absolute change	+18.8 jobs p.a.
72 : Computer & related activities	Half average annual absolute change	+167.9 jobs p.a.
74 : Other business activities	Half average annual percentage growth	+1.4% p.a.
75 : Public administration & defence	Half average annual percentage growth	-1.8% p.a.
80 : Education	Half average annual percentage growth	+1.8% p.a.
85 : Health & social work	Half average annual absolute change	+83.3 jobs p.a.
90 : Sewage & refuse disposal	Full average annual absolute change	+23.8 jobs p.a.
91 : Activities of membership organisations	Half average annual percentage growth	+3.8% p.a.
92 : Recreational, cultural & sporting activities	Half average annual percentage growth	+1.3% p.a.
93 : Other service activities	Half average annual percentage growth	+4.8% p.a.

Source: GHK analysis, 2009

Results of the Employment Scenario Projections

5.38 The four economic scenarios introduced above have been summarised below. It should be noted that each scenario is based on the same historic data (up to and including 2006) and includes projections from 2007 to 2026.

SCENARIOS

The 'Baseline' Scenario, using the employment projections produced for Warwick District by the CE LEFM model and applying these to ABI employment data for each sector.

The 'RSS-based' Scenarios (A-1 and A-2), projects the employment growth that would be required as a result of the increasing number of dwellings, and therefore an increasing number of people seeking employment, in the District. The distribution of this additional employment between sectors takes into account the additional demand for specific local services (e.g. health, education) from the new dwellings, as well as the policy aspirations for key priority sectors. Scenario A-1 is based on the 10,800 additional dwellings target for Warwick as stated in the RSS, while Scenario A-2 assumes the number of dwellings will increase by 20,800, which represents the higher target from the NLP report.

The 'Past Trends' Scenario, which applies an historic eight year trend (from 1998 to 2006) to generate projections to 2026. The projected growth of individual sectors is based on a range of absolute and percentage trends from the period 1998 to 2006, as the projections generated using the full percentage rates of historic employment growth were considered too high in many sectors. These trends were applied in order that overall employment in Warwick is assumed to grow, on average, at the historic rate of 1% per annum.

5.39 Summaries of the resulting employment forecasts in 2026 under each scenario are presented in Table 5.5 below. Detailed tables for each individual scenario can be found at Appendix I, providing employment totals at five year intervals for 2006, 2011, 2016, 2021 and 2026.

Table 5.5 - Summary of Employment Projections based on Economic Scenarios

			20	26	
	2006 Actual	Baseline		Scenario A-2 (20,800 New Dwellings)	Past Trends
01 : Agriculture/Hunting, etc.	447	224	337	370	284
02 : Forestry, logging etc.	4	2	2	2	4
05 : Fishing, fish farms etc.	11	6	5	6	11
10 : Coal Mining, Peat Extraction	0	0	0	0	0
11 : Petroleum, Oil/Gas Services	0	0	0	0	0
14 : Other mining and quarry	29	29	28	30	29
15 : Manf food and beverages	969	872	830	902	818
17 : Manf textiles	48	0	0	0	2
18 : Manf wearing apparel	9	0	0	0	0
19 : Tanning and dressing of leather	3	0	0	0	0
20 : Manf wood products	195	65	57	71	475
21 : Manf pulp and paper products	81	27	23	29	18
22 : Publishing and Printing	579	414	389	431	344
23 : Manf coke, petroleum products	0	0	0	0	0
24: Manf chemicals and chemical products	158	158	151	163	248
25 : Manf rubber and plastic products	203	102	93	108	6
26: Manf other non-metallic mineral products	10	10	10	10	0
27 : Manf. basic metals	445	356	337	370	114
28 : Manf fabricated metal products	576	384	359	402	28
29 : Manf other machinery	1,424	1,044	983	1,088	592
30 : Manf office machinery and computers	71	36	145	151	226
31 : Manf other electrical machinery	153	38	146	158	16
32: Manf communication equipment	91	46	87	94	40
33 : Manf medical instruments	176	44	168	181	43
34 : Manf motor vehicles, trailers	1,505	1,129	1,064	1,175	254
35 : Manf transport equipment	100	100	96	103	7
36: Manf furniture; manufacturing n.e.c.	238	317	307	325	350
37 : Recycling	42	56	54	57	106
40 : Electricity, gas, steam and hot water supply	639	639	611	658	1,372
41 : Collection, purification and distribution of water	647	555	527	574	1,098
45 : Construction	2,259	2,464	2,680	3,326	2,516
50 : Sale and repair of motor vehicles and fuel	2,266	2,266	2,384	2,751	2,866
51 : Wholesale trade	3,914	3,914	3,745	4,033	4,194
52 : Retail trade	6,658	6,928	7,569	9,169	6,473
55 : Hotels and restaurants	5,230	6,392	5,609	6,554	5,069
60 : Land transport	468	520	500	534	170
61 : Water transport	0	0	0	0	0
62 : Air transport	127	254	249	258	100
63 : Supporting transport activities/travel agencies	1,018	1,131	1,087	1,162	1,205
64 : Post and telecommunications	2,125	1,417	1,325	1,481	5,322
65 : Financial intermediation	1,317	1,244	1,260	1,357	1,064
66 : Insurance and pension funding	14	14	13	14	0
67 : Auxiliary financial activities	296	280	413	435	426
70 : Real estate activities	1,102	1,440	1,216	1,448	1,120
71 : Renting of machinery and equipment	606	792	765	810	981
72 : Computer and related activities	3,939	6,165	7,126	7,416	7,297
73 : Research and development	15	20	172	173	21
74 : Other business activities	15,587	22,160	22,428	23,576	20,410
75 : Public administration and defence 80 : Education	2,880	2,880	3,414	4,236	2,006
	4,410	4,900	5,343	6,707	6,326
85 : Health and social work	8,156	8,619	9,099	10,900	9,822
90 : Sewage and refuse disposal	236	280	270	287	711
91 : Activities of membership organisations	1,318	1,564	1,391	1,608	2,791
92 : Recreational, cultural and sporting activities	1,979	2,348	2,228	2,684	2,562
93 : Other service activities	1,092	1,296	1,174	1,375	2,779
Total	75,865	85,937	88,269	99,753	92,712

Source: Reference-case projections supplied by Cambridge Econometrics, and GHK analysis, 2009

5.40 The four scenarios concur that there is likely to be strong employment growth in Warwick District over the next 20 years, although the extent of these projections also varies considerably between the scenarios. The baseline scenario projects the smallest employment growth of just over 10,000 additional jobs, followed by the RSS-based scenario, based on

10,800 new dwellings, which projects employment to increase by 12,400. If overall employment in the District was to continue increasing at the recent historic rate of 1% per annum (based on past performance between 1998 and 2006), then employment in 2026 would have increased by 16,850. Interestingly, the analysis also suggests that to meet the higher target of 20,800 new dwellings by 2026, employment growth would have to accelerate in the future, to create an additional 23,900 jobs. This represents significant growth, with employment in Warwick projected to increase by almost one-third over the period to 2026, and is considered unlikely to be achievable.

5.41 All four scenarios project declining employment in primary and manufacturing sectors and employment growth in the service sectors, which is consistent with national and regional trends, as well as local past trends in Warwick. The two RSS-based scenarios project smaller declines in primary and manufacturing sectors overall, primarily as a result of stronger employment projections in hi-technology manufacturing activities, and also forecast particularly strong employment growth in the high-value, knowledge-intensive, service sectors.

Step 3: Employment and Land Categorisation

Create Appropriate Sector Groupings

- 5.42 The next step was to identify appropriate sector groupings for Warwick, which reflect the local structure and spatial distribution of employment and different land use types. This requires the selection and aggregation of the 41 CE sectors and 55 ABI sectors (based on 2 digit SIC data) to develop a shortlist of around 25 sector groupings, based on an analysis of sector size, growth and local concentrations / competitive advantages. It is important that there are a sufficient number of sector groups to provide an accurate representation of the local economy but should not be too disaggregated as to make the analysis unmanageable.
- 5.43 In general there are some clear groupings of manufacturing activities, such as Motor Vehicles and Other Transport Equipment, whilst the growing service sectors should remain sufficiently disaggregated to reflect the different land use types associated with them.
- 5.44 Some 26 groups 8 manufacturing groups and 18 service groups were adopted for forecasting purposes. The groupings are set out below in Table 5.6, together with the corresponding CE industrial sectors and the 2-digit SIC categories for each. It should be noted that **not all** CE sectors and 2-digit categories are included primary agricultural and extractive industries are for example excluded since they do not directly give rise to demand for employment land. Furthermore, employment in some sectors in Warwick is very low or non-existent and the manufactured fuels, manufacture of tobacco, and water and air transport

sectors have therefore also been excluded. In addition, employment in the following SIC categories was moderated to the following percentages of employment, which were assumed to give rise to demand for employment land:

- Utilities (Electricity, gas and water): 30% of employment assumed to be in headquarters and other office premises.
- Construction: 33.3% of employment assumed to be located in fixed employment premises.
- Education: 10% of employment assumed to be in non-educational mainly office premises.
- Health and social work: 15% assumed to be in headquarters, back-office and other office premises.

Table 5.6 – Selected Sector Groups and Corresponding CE and SIC Sectors

	Sector Groupings	CE Definition	SIC 2003	
М1	Food & Beverages	5 Food, Drink & Tobacco	15	
M2	Printing & Publishing	8 Printing & Publishing	22	
М3	Chemical, Plastic & Non-Metallic	10 Pharmaceuticals	24.4	
	Materials/Products	11 Chemicals nes		
		12 Rubber & Plastics	25	
		13 Non-Metallic Mineral Products	26	
M4	Metals & Metal Products	14 Basic Metals	27	
		15 Metal Goods	28	
M5	Mechanical Engineering	16 Mechanical Engineering	29	
М6	Electronics, Electrical Engineering &	17 Electronics	30, 32	
	Instruments	18 Electrical Engineering & Instruments	31, 33	
М7	Motor Vehicles & Other Transport Equipment	19 Motor Vehicles	34	
		20 Other Transport Equipment	35	
M8	Manufacturing nes	6 Textiles, Clothing & Leather	17, 18, 19	
		7 Wood & Paper	20, 21	
		21 Manufacturing nes	36, 37	
S1	Utilities	22 Electricity	40.1	
		23 Gas Supply	40.2	
		24 Water Supply	40.3	
		41 Other Services (Part of)	90	
S2	Construction	25 Construction	45	
S3	Wholesale Distribution	26 Distribution (Part of)	51	
S4	Sale and Repair of Motor Vehicles and Fuel	26 Distribution (Part of)	50	
S5	Retailing	27 Retailing	52	
S6	Hotels & Catering	28 Hotels & Catering	55	
S7	Land Transport	29 Land Transport etc	60, 63	
S8	Communications	32 Communications	64	
S9	Insurance, Banking & Finance	33 Banking & Finance	65, 67	
		34 Insurance	66	
S10	Computing Services	35 Computing Services	72	
S11	Research & Development	36 Professional Services (Part of)	73	
S12	Real Estate & Professional Services	36 Professional Services (Part of) 70		
S13	Other Business Services	37 Other Business Services 74		
S14	Public Administration & Defence	38 Public Administration & Defence	75	
S15	Education	39 Education	80	
S16	Health & Social Work	40 Health & Social Work	85	
S17	Recreational, Cultural & Sporting Activities	41 Other Services (Part of)	92	
S18	Other Services	36 Professional Services (Part of)	71	
		41 Other Services (Part of)	91,93	

Source: Cambridge Econometrics and GHK analysis, 2009

5.45 Table 5.7 provides the total and sector breakdown of employment for these 26 sector groups under each scenario. It should be noted that the employment figures presented in Table 5.7 have not been moderated. For each of these 26 individual sectors (M1-M8 and S1-S18) retained in the analysis, either 100% or the moderated percentage of employment set out in

Table 5.6 above is then used to calculate the employment land demand projections in our conversion model.

Table 5.7 - Employment in Selected Sector Groups

			2026			
		Actual 2006	Baseline	Scenario A-1 (10,800 New Dwellings)	Scenario A-2 (20,800 New Dwellings)	Past Trends
M1	Food & Beverages	969	872	830	902	818
M2	Printing & Publishing	579	414	389	431	344
M3	Chemical, Plastic & Non-Metallic Materials/Products	371	270	253	281	254
M4	Metals & Metal Products	1,021	740	696	771	142
M5	Mechanical Engineering	1,424	1,044	983	1,088	592
M6	Electronics, Electrical Engineering & Instruments	491	163	547	583	324
M7	Motor Vehicles & Other Transport Equipment	1,605	1,229	1,159	1,278	261
M8	Manufacturing nes	616	465	441	482	951
S1	Utilities	1,522	1,474	1,408	1,520	3,181
S2	Construction	2,259	2,464	2,680	3,326	2,516
S3	Wholesale Distribution	3,914	3,914	3,745	4,033	4,194
S4	Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	2,266	2,266	2,384	2,751	2,866
S5	Retailing	6,658	6,928	7,569	9,169	6,473
S6	Hotels & Catering	5,230	6,392	5,609	6,554	5,069
S7	Land Transport	1,486	1,651	1,587	1,696	1,375
S8	Communications	2,125	1,417	1,325	1,481	5,322
S9	Insurance, Banking & Finance	1,627	1,537	1,686	1,806	1,490
S10	Computing Services	3,939	6,165	7,126	7,416	7,297
S11	Research & Development	15	20	172	173	21
S12	Real Estate & Professional Services	1,102	1,440	1,216	1,448	1,120
S13	Other Business Services	15,587	22,160	22,428	23,576	20,410
S14	Public Administration & Defence	2,880	2,880	3,414	4,236	2,006
S15	Education	4,410	4,900	5,343	6,707	6,326
S16	Health & Social Work	8,156	8,619	9,099	10,900	9,822
S17	Recreational, Cultural & Sporting Activities	1,979	2,348	2,228	2,684	2,562
S18	Other Services	3,016	3,651	3,330	3,793	6,551
	Total	75,247	85,423	87,648	99,087	92,285

Source: GHK analysis, 2009

Match to Land Use Class Categories

This step goes on to allocate all or divide parts of these employment sector groups between the standard land use categories. These were allocated on the basis of professional judgement and experience of the consultants' team, but have remained disaggregated as far as possible in order to narrow the range of the judgement to be made for any individual employment group or land use category. Thus the full breakdown of land use classes (e.g. A1, A2a,b,c etc., A3, B1a,b,c etc., B2, B8, C1) is used together with the 26 sector groups. Where an employment group is allocated to more than one land use class, the percentage of employment assumed to be in each land use class has been identified. Wherever possible this has been determined using 2, 3 or even 4-digit SIC data (2006 ABI data) to determine the proportions of employees in each relevant sub-sector, for example to reflect the split between employment in hotels and employment in restaurants for the study area.

5.47 Appendix J shows how the 26 sectors and the proportion of employment in each sector are allocated to the land use categories. All further aggregations of employment, floorspace and employment land use categories are based on this disaggregation.

Step 4: Employment Densities and Floorspace Requirements

- 5.48 Employment densities are a key link between employment change and land use, and need to be applied in the model to convert the employment forecasts to floorspace requirements. The DCLG Guidance cites a number of comparative density analyses of which the most detailed are those prepared by Arup Economics and Planning based on original survey data. We have re-examined these and compared them with those also cited in the Guidance. The variation in the key sectors such as office, warehousing and industrial are limited and the Arup densities cited are the most disaggregated and therefore adaptable for use in the disaggregated model form adopted for this study. We therefore recommend the use of the Arup estimates as the most authoritative and fit for purpose, and these are summarised in Table 5.8 below.
- 5.49 It should be noted that most of the Arup densities are quoted as gross internal floorspace per worker and that these have been converted to gross external rates by increasing all business and industrial classes (B1 and B2) by +3.5% and increasing all shops, financial and professional services, hotels and catering premises (A1, A2, A3 and C1) by +10%, whilst the densities for storage and distribution (B8) have remained unchanged.

Table 5.8 - Worker Densities Adopted for Warwick Sectors

Activity	Sector Group	Land Use Category	Density (sq. m / worker)
Manufacturing	General & Specialist Manufacturing: M1, M2, M3, M4, M5, M8	B2	34
	Electronics, Electronic Engineering & Instruments: M6	B1c	34 / 29
	Transport Equipment: M7	B2	34
Logistics &	Land Transport: S7	B8	80
Distribution	Wholesale Distribution / Transport & Communications: S3, S7, S8	B8	50
Automotive	Motor Distribution & Fuel: S4		34
Offices	Various: S1, S2, S5, S9, S10, S12, S13, S14, S15, S16, S18	B1a	19
	Research & Development: S11	B1b	29
Retail	Retail Shops / Computer Services: S5, S10	A1	19
	Insurance, Banking & Finance: S9	A2a	20
	Retailing / Computing / Other Services: S5, S10, S18	A2a/b	19
	Recreational, Cultural, Sporting & Other Services: S17, S18	A2c	20
	Hotels & Catering: S6	A3 / C1	13

Source: Arup Economics and Planning employment densities produced for English Partnerships and RDAs, 2001, and GHK analysis, 2009

- 5.50 The density assumptions used are based on current worker/floorspace densities. There are factors impacting on future employment densities which may move towards lower overall densities or less reliance upon traditional forms of employment floorspace to meet economic needs. This study has not made adjustments for such changes because we believe it is better to use consistent and well understood national estimates for long term forecasting, whilst recognising that these should be monitored.
- 5.51 These employment densities have been applied in each sector and land use category using the consultant's transformation model and the resulting estimates of floorspace requirements for 2026 are summarised in Table 5.9 below. Detailed tables for each individual scenario can be found at Appendix K.

Table 5.9 – Warwick Floorspace Requirements by Land Use Class (sq. m): Total Requirement 2026 and Change in Requirement 2006 – 2026, by Scenario

		Warwick – Total Floorspace Requirement 2026				
	2006	Baseline	Policy-On (10,800 New Dwellings)	Policy-On (20,800 New Dwellings)	Past Trends	
A1*	54,612	61,145	67,619	79,374	60,340	
A2*	197,942	239,068	245,932	279,291	301,755	
A3*	59,831	73,127	64,163	74,977	57,984	
B1a	535,834	695,707	724,575	795,003	661,145	
B1b	450	588	5,170	5,203	644	
B1c	16,389	5,449	18,267	19,475	10,812	
B2	311,467	256,870	251,095	280,924	219,118	
B8	389,624	363,949	347,102	375,806	556,966	
C1	14,958	18,282	16,041	18,744	14,496	
Total	1,581,107	1,714,186	1,739,964	1,928,799	1,883,260	
	Warwi	ck – Absolute Cha	nge in Floorspace	Requirement 2001	- 2026	
		Baseline	Policy-On (10,800 New Dwellings)	Policy-On (20,800 New Dwellings)	Past Trends	
A1		Baseline 6,533	(10,800 New	(20,800 New	Past Trends 5,728	
A1 A2			(10,800 New Dwellings)	(20,800 New Dwellings)		
		6,533	(10,800 New Dwellings) 13,007	(20,800 New Dwellings) 24,762	5,728	
A2		6,533 41,126	(10,800 New Dwellings) 13,007 47,990	(20,800 New Dwellings) 24,762 81,349	5,728 103,813	
A2 A3		6,533 41,126 13,296	(10,800 New Dwellings) 13,007 47,990 4,332	(20,800 New Dwellings) 24,762 81,349 15,146	5,728 103,813 -1,848	
A2 A3 B1a		6,533 41,126 13,296 159,873	(10,800 New Dwellings) 13,007 47,990 4,332 188,742	(20,800 New Dwellings) 24,762 81,349 15,146 259,170	5,728 103,813 -1,848 125,311	
A2 A3 B1a B1b		6,533 41,126 13,296 159,873 138	(10,800 New Dwellings) 13,007 47,990 4,332 188,742 4,720	(20,800 New Dwellings) 24,762 81,349 15,146 259,170 4,753	5,728 103,813 -1,848 125,311 194	
A2 A3 B1a B1b B1c		6,533 41,126 13,296 159,873 138 -10,940	(10,800 New Dwellings) 13,007 47,990 4,332 188,742 4,720 1,878	24,762 81,349 15,146 259,170 4,753 3,086	5,728 103,813 -1,848 125,311 194 -5,577	
A2 A3 B1a B1b B1c B2		6,533 41,126 13,296 159,873 138 -10,940 -54,597	(10,800 New Dwellings) 13,007 47,990 4,332 188,742 4,720 1,878 -60,372	(20,800 New Dwellings) 24,762 81,349 15,146 259,170 4,753 3,086 -30,543	5,728 103,813 -1,848 125,311 194 -5,577 -92,348	

Source: GHK analysis, 2009

^{*}Whilst the CE data forecasts changes in job / floorspace requirements for these use classes, more accurate figures for the retail use classes will be produced as part of the emerging Town Centres Study.

- 5.52 Table 5.9 summarises the floorspace requirements for each scenario in 2026 and the change between 2006 and 2026. In line with the overall employment projections, the baseline scenario projects the smallest increase of 133,000 square metres of floorspace required by 2026, followed by the RSS-based scenario (10,800 new dwellings), which projects a requirement for an additional 159,000 square metres. The other RSS-based scenario (20,800 new dwellings) again projects the largest growth in demand, suggesting that almost 350,000 square metres of additional floorspace will be required by 2026, exceeding the additional 300,000 square metres projected based on past employment growth.
- 5.53 This growth is being driven, under each scenario by significant increases in demand for office space (B1a). It is important to note the substantial increase in demand for office space projected by the RSS-based scenario (20,800 new dwellings) of almost 260,000 square metres. This is more than double the increase in demand projected based on past employment trends and is considered unlikely to be sustainable within the District.
- 5.54 All four scenarios also concur that there will be a greater requirement for retail (A1), financial and professional services (A2) and research and development (B1b) space, and a lesser requirement for manufacturing (B2) space by 2026. However, the projections are more varied for food and drink (A3), hotels (C1), light industrial (B1c) and storage and distribution (B8) floorspace. In most of these cases, the past trends scenario differs from the other three scenarios. For example, employment in hotels and restaurants has declined in Warwick over the last eight years, while employment in distribution, transport and communications sectors has increased. Conversely, the other three scenarios project employment growth in hotels and restaurants in line with the wider tourism offer but suggest employment on B8 land will decline slightly, or any future growth will be restricted, which explains this variance in projections of demand for the different types of floorspace. Furthermore, both the baseline and past trends scenarios project declining demand for light industrial (B1c) floorspace, while the two RSS-based scenarios suggest demand will increase, driven by growing employment in hi-technology manufacturing activities. There is also significant variation in the projected increase in demand for research and development (B1b) space. The RSS-based scenarios have projected stronger employment growth in this sector, based on local aspirations and expectations.

Step 5: Forecasting Land Requirements

5.55 This section details how we have converted the estimates of floorspace required in Table 5.9 above into estimates of land.

Churn / Leakage

Churn

5.56 Employment driven floorspace demand is likely to be the significant driver of the demand for additional floorspace in a local economy. However, it is also true that an element of demand will arise from companies moving, either due to obsolescence of their existing property, the desire for a lower or higher cost location, or simply for strategic reasons. Furthermore, the regeneration process will give rise to business relocations which creates further demand for employment land. This form of demand is called 'churn' and it represents a general level of turnover in property requirements. Churn can have a significant effect on the amount of employment land and floorspace that is required in order to meet the predicted demand. The basis of calculating Churn is to look at the existing amount of stock in the district. This data is shown in Table 5.10 below.

Table 5.10 - Baseline Amount of Floorspace in Warwick

	Bulk Class	Land Use Designation	Floorspace (m ²)
<u> </u>	Offices	B1	908,000
Nic.	Factories	B2	519,000
Warwick	Warehouses	B8	457,000
>	Total		1,884,000

Source: DCLG, 2005

5.57 Estimating churn and its relationship to employment driven demand is not straightforward. Both employment churn and property churn factors are drivers of demand for business floorspace. For example, premises that are vacated by declining sectors can, subject to planning and suitability, be occupied by expanding sectors. GVA Grimley has used knowledge from previous studies (Redditch, Worcestershire, South Worcestershire and the Black Country) to devise a set of assumptions regarding the level of churn for different land use classes. These assumptions are in line with other studies and are set out in Table 5.11 below. Churn figures are then applied to the stock figures in Table 5.10 above.

Table 5.11 – Churn Factors

Land Use Class	Churn Factor
B1a/B1b	0.5% per year
B1c/B2	0.5% per year
B8	0.5% per year

GVA Grimley analysis, 2008

- 5.58 In arriving at the churn figures detailed in Table 5.11 above we have taken into account a number of significant factors. We have reviewed inward investment queries and take up data to gain an understanding of where companies are moving to and the types of employment land that are being completed recently.
- 5.59 As can be seen in Table 5.12 below the effect of churn in creating additional demand to be added to that coming from the model is approximately 50ha over 20 years.

floorspace (m² (ha)) 11 Year **Designation** Churn (land (ha)) 21 Year Churn (land Churn (land **Bulk Class** (ha / year)) Land Use Churn Offices **B1** 908,000 4,540 1.40 13.97 27.94 Narwick 519,000 **Factories** B2 2,595 0.65 6.49 12.98 Warehouses 457,000 **B8** 2.285 0.46 4.57 9.14 9,420 **Total** 2.50 25.03 50.05 1,884,000

Table 5.12 - Overall Effects of Churn

Source: DCLG, 2005 and GVA Grimley analysis, 2009

Leakage

- 5.60 We have also considered the effect of leakage from employment areas to other employment locations such as town centres and other places not classified as employment land. This includes in local centres, above shops, people's spare rooms and garages. Leakage has a more noticeable effect on the demand for office space, simply because offices can be located in a wider range of locations, not just recognised employment areas.
- In terms of offices, we have assumed that 65% of office jobs are likely to locate on employment sites and that the remaining 35% are likely to locate elsewhere within Warwick. Of the 35%, we have assumed that around half of this will be located in Leamington Spa town centre with the remaining half locating in other centres, such as Warwick and Kenilworth and other areas not recognised as employment land. In coming to this view we have been guided by Policy PA13A of the WMRSS Preferred Options, which highlights that around 45,000sq m of new office development will be built in, or adjoining Leamington town centre over the period 2006 2026. This amounts to around two thirds of the total floorspace demand that is accounted for through leakage under the Baseline Scenario.
- 5.62 For industrial and distribution type premises, the amount of leakage is much lower and the situation slightly less complex. Industrial and distribution developments have a much stronger

reliance on allocated employment land, and therefore, in line with assumptions we have used in previous studies, we have assumed that for industrial demand, a general leakage figure of 10% will apply.

- 5.63 This is reflective of the fact that it is unlikely that any new development in the B2 / B8 use classes would be on non-employment land and is more likely to be on designated employment sites and takes account of the fact that some B8 storage uses can be accommodated in existing redundant buildings that were formerly used as factories.
- 5.64 We would expect very few new B2 / B8 developments to be on land that is not designated employment land. Notwithstanding this we have made an allowance for instances of leakage to non-employment designations, an example of which would be the re-use / intensification of existing employment areas. The leakage figure of 10% therefore implies that 90% of all demand for industrial type premises will be located in employment areas, and the rest will be absorbed by other locations.

Plot Ratios

- 5.65 The amount of floorspace that is built per net hectare is an important factor to consider when predicting employment land requirements. We have used experience from other Employment Land Review projects that we have undertaken, to ascertain the average amount of floorspace being built per hectare. This enables floorspace requirements (sq.m) to be converted into estimates of employment land (ha).
- 5.66 Table 5.13 below summarises the average plot ratios we have used for this study. These are in line with the guidance on plot ratios as set out in Box D.7 of the ODPM ELR guidance.

Table 5.13 - Plot Ratio Assumptions

Land Use Class	Average Plot Ratio (sq.m per ha)
B1a / B1b	3,250
B1c / B2	4,000
B8	5,000

Source: GVA Grimley analysis, 2008

Completions of Employment Land

5.67 The demand forecasts we have prepared run from 2006 – 2026. However, this study has taken a snapshot of supply in 2008 and therefore needs to take account of any completions made between 2006 – 2008 and deduct these from the demand forecasts. We have reviewed

the Annual Monitoring Reports, produced by Warwick District Council, from 2006 – 2008 in order to determine the level of completions in that time. This information is shown in Table 5.14 below.

Table 5.14 – Employment Completions within Warwick from 2006 – 2008

	Completions by Land Use Class (sq m)					
Year	B1a / B1b	B1c / B2	B8			
2006/07	9,671	2,052	2,052			
2007/08	6,898	493	493			
Total	16,569	2,544	2,544			

Source, WDC Annual Monitoring Reports 2006/07 & 2007/08

5.68 As can be seen in Table 5.14 above, there has been around 16,500 sq m of office space completed in the last two years and around 5,000 of factories / distribution (the Annual Monitoring Reports do not give individual totals for these two land use classes, therefore we have split the total for general industrial and warehouses equally between them).

Net to Gross Ratios

- 5.69 We have applied a net to gross ratio of 10% to account for miscellaneous land uses (such as landscaping, car parking and major infrastructure) that cannot be used for development of employment premises, but are essential within any site. This factor is based on past experience in the locality and a review of recent planning applications.
- 5.70 The next section outlines the forecasts of employment land demand within Warwick, based on the employment projections and assumptions detailed in this section.

6. FORECASTS OF FUTURE EMPLOYMENT LAND DEMAND

6.1 This section details the demand forecasts based on the scenarios and assumptions detailed in Section 5. We have presented demand forecasts for each scenario, in terms of floorspace (sq.m) and land (ha) requirements. More detailed tables can be found at Appendix L.

Baseline Scenario

6.2 The total floorspace and land requirements under the Baseline Scenario are shown in Table 6.1 below. They show a requirement of around 49.57ha B1a, 12.15ha B2 and 8.49ha B8, giving an overall requirement of around 70ha to 2026. This takes into account the impact of churn and leakage, and completions from 2006 - 2008. More detailed tables can be found at Appendix L.

Table 6.1 – Baseline Scenario - Floorspace and Land Requirements to 2026

Use Class	2006	2011	2016	2021	2026
B1a / B1b	0	42,461	80,251	122,016	163,027
B1c / B2	0	11,678	23,355	35,033	46,710
B8	0	10,283	20,565	30,848	41,130
Total	0	64,421	124,171	187,896	250,867

Use Class	2006	2011	2016	2021	2026
B1a / B1b	0.00	8.76	21.55	35.69	49.57
B1c / B2	0.00	2.51	5.72	8.93	12.15
B8	0.00	1.70	3.96	6.23	8.49
Total	0.00	12.98	31.24	50.85	70.21

Source: GVA Grimley analysis, 2009

RSS Scenario (based on 10,800 new homes)

6.3 The total floorspace and land requirements under the RSS Scenario based on 10,800 new homes are shown in Table 6.2 below. They show a requirement of around 56.93ha B1a, 12.15ha B2 and 8.49ha B8, giving an overall requirement of around 77.56ha to 2026, which is slightly higher than the Baseline scenario. This takes into account the impact of churn and leakage, which for B1c / B2 and B8 are the same as the Baseline scenario, as the sectors that

create demand for these land uses have an overall negative trend in terms of employment, therefore all the demand for these land uses comes through churn. More detailed tables can be found at Appendix L.

Table 6.2 – RSS Scenario (10,800 new homes) - Floorspace and Land Requirements to 2026

Use Class	2006	2011	2016	2021	2026
B1a / B1b	0	41,552	85,870	133,402	184,770
B1c / B2	0	11,678	23,355	35,033	46,710
В8	0	10,283	20,565	30,848	41,130
Total	0	63,512	129,790	199,282	272,610

Use Class	2006	2011	2016	2021	2026
B1a / B1b	0.00	8.46	23.46	39.54	56.93
B1c / B2	0.00	2.51	5.72	8.93	12.15
В8	0.00	1.70	3.96	6.23	8.49
Total	0.00	12.67	33.14	54.70	77.56

Source: GVA Grimley analysis, 2009

RSS Scenario (based on 20,800 new homes)

6.4 The total floorspace and land requirements under the RSS Scenario based on 20,800 new homes are shown in Table 6.3 below. They show a requirement of around 72.43ha B1a, 12.15ha B2 and 8.49ha B8, giving an overall requirement of around 93.07ha to 2026. This takes into account the impact of churn and leakage, and completions from 2006 - 2008. More detailed tables can be found at Appendix L.

Table 6.3 – RSS Scenario (20,800 new homes) - Floorspace and Land Requirements to 2026

Use Class	2006	2011	2016	2021	2026
B1a / B1b	0	50,760	105,583	165,257	230,570
B1c / B2	0	11,678	23,355	35,033	46,710
В8	0	10,283	20,565	30,848	41,130
Total	0	72,720	149,503	231,137	318,410

Use Class	2006	2011	2016	2021	2026
B1a / B1b	0.00	11.57	30.13	50.33	72.43
B1c / B2	0.00	2.51	5.72	8.93	12.15
В8	0.00	1.70	3.96	6.23	8.49
Total	0.00	15.79	39.82	65.49	93.07

Source: GVA Grimley analysis, 2009

Past Trends Scenario

The total floorspace and land requirements under the Past Trends Scenario are shown in Table 6.4 below. They show a requirement of around 41.98ha B1a, 12.15ha B2 and 41.62ha B8, giving an overall requirement of around 95.75ha to 2026, which is the highest of all four scenarios. This takes into account the impact of churn and leakage, and completions from 2006 - 2008. More detailed tables can be found at Appendix L.

Table 6.4 – Past Trends Scenario - Floorspace and Land Requirements to 2026

Use Class	2006	2011	2016	2021	2026
B1a / B1b	0	14,922	48,723	85,011	124,029
B1c / B2	0	9,134	20,811	32,489	44,166
B8	0	32,261	74,824	126,515	189,194
Total	0	56,317	144,358	244,015	357,389

Use Class	2006	2011	2016	2021	2026
B1a / B1b	0.00	5.05	16.49	28.77	41.98
B1c / B2	0.00	2.51	5.72	8.93	12.15
B8	0.00	7.10	16.46	27.83	41.62
Total	0.00	14.66	38.68	65.54	95.75

Source: GVA Grimley analysis, 2009

Summary

This section has shown that there is predicted to be a requirement for employment land of between 70-96ha of employment land within Warwick to 2026, as shown in Table 6.5 below.

Table 6.5 - Summary of Employment Land Requirements in Warwick 2006 - 2026

Scenario	Employment Land Demand 2006 to 2026 (ha)			
Scenario	B1a / B1b	B1c / B2	B8	Total
Baseline	49.57	12.15	8.49	70.21
RSS Scenario - 10,800 New Homes	56.93	12.15	8.49	77.56
RSS Scenario - 20,800 New Homes	72.43	12.15	8.49	93.07
Past Trends	41.98	12.15	41.62	95.75

Source, GVA Grimley analysis, 2009

6.7 Table 6.5 above shows that if Warwick were to continue at the baseline level over the period to 2026, the overall requirement for employment land would be around 70ha. If the RSS scenario based on 10,800 new homes were chosen as the preferred scenario, there would be

- a requirement of 77.56ha of employment land, with around 56.93ha (73%) being for offices, 12.15ha (16%) for manufacturing and 8.49ha (11%) for distribution.
- The RSS scenario, based on 20,800 shows a requirement of 93.07ha, whilst the past Trends scenario predicts employment land demand of 95.75ha. Comparison of these figures shows that if the figures in the NLP report for accommodating higher housing figures in Warwick were adopted, Warwick would need to continue to grow in employment terms at the same rate as it has grown in the last nine years, in order to accommodate the high level of housing growth.
- 6.9 The figures for manufacturing and distribution are consistent across all of the scenarios (aside from distribution in the Past Trends scenario) because these sectors have been predicted to have negative growth in terms of employment. Therefore, the only demand for these types of premises will come from churn.

Comparison with the West Midlands RSS

6.10 The Phase 2 Revision of the WMRSS identifies a rolling five year reservoir of employment land for Warwick of 30ha, with an element to be provided at the University of Warwick and a longer term requirement (to 2026) of 90ha. A comparison of the demand forecasts produced as part of this study and the WMRSS figures is shown in Table 6.6 below.

Table 6.6 – Comparison of Demand Forecasts and WMRSS Figures

Scenario	Requirement to 2026 (ha)
Baseline	70.21
RSS Scenario - 10,800 New Homes	77.56
RSS Scenario - 20,800 New Homes	93.07
Past Trends	95.75
compared to MMPSS	

compared to WMRSS

WMRSS Requirement 90

Source: GVA Grimley analysis, 2009

6.11 Table 6.6 above shows that the Baseline and RSS Scenario (10,800 new homes) both predict demand that is lower than that required by the WMRSS, whilst the RSS Scenario (20,800 new homes) and the Past Trends scenario both predict demand for employment land that is above the WMRSS requirement. Comparing these figures back to those produced as part of the CSW employment land review (shown in Table 2.2), this report predicted a requirement for Warwick of between 31.5ha – 124ha, a range of some 92.5ha. The figures produced as part

of this study have a range of around 25.5ha, indicating a much more focussed set of requirements.

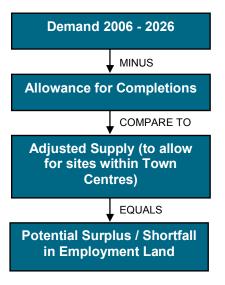
- 6.12 These comparisons to other studies and emerging policy give some confidence that the figures produced as part of this study are in the right ballpark. Differences may be attributed to a number of factors including methodology used, assumptions made and the data used. In this study, as has been previously indicated, we have used the CE LEFM data from December 2008, which has been revised to take into account the current downturn in the global economy and thus the knock on effects this has on the growth of the economy. This may explain why the figures for the RSS scenario (10,800 new homes) are lower than the figures in the WMRSS, however we feel that taking account of the current market conditions in predicting employment land demand provides a much more robust set of requirements. We would therefore advise the Core Strategy uses the RSS Scenario 10,800 New Homes as the basis for employment land requirements up to 2026.
- 6.13 The next section of this report compares the anticipated demand for employment land, with the identified supply to come forward over the period 2006 2026.

7. COMPARISON OF DEMAND & SUPPLY

Introduction

- 7.1 This chapter reviews the demand forecasts presented in Section 6 and compares these against the supply of employment land, which is detailed in Section 4.
- 7.2 We have adhered to the guidance produced by ODPM in preparing employment land studies in this work. In order to compare demand and potential supply of employment land we have adopted the methodology set out below.

Figure 7.1 - Gap Analysis Approach



Source: GVA Grimley, 2008

- 7.3 Each of these elements is discussed briefly below:
 - Demand 2006 2026. This reflects the demand forecasts developed in Section 5 and summarised at Table 5.5. These reflect a range of alternative outcomes and include both predictions of employment demand based on economic modelling and extrapolation of past trends in terms of employment change:

- Allowance for Completions. This takes account of completions of employment land from 2006 – 2008, as detailed in Table 5.14, an adjustment we have made in order to align the supply with the demand scenarios which run from 2006 – 2026;
- Adjusted Supply. This reflects our analysis of capacity in Section 4 and summarised at Table 4.8. This is termed adjusted supply since we have removed sites that are located within Leamington town centre, as they are outside of the remit of this particular study. We have not included the expansion land at the University of Warwick (around 12.55ha) in the supply tables, as the application for expansion is still subject to a s106 agreement. We do however, take this into account in the explanatory text; and
- Potential Shortfall / Surplus in Employment. The outcome of this analysis is presented in terms of the significant use classes Offices (B1/a/b), Factories (B1/c/B2) and Warehouses (B8). A surplus indicates that there is sufficient supply already identified to meet predicted needs, a shortfall identifies that additional employment land will need to be identified to meet future needs.

Demand v Supply

7.4 Table 7.1 below compares the predicted demand for employment land with the identified supply.

Table 7.1 – Comparison of Employment Land Demand and Supply within Warwick

	Scenario	Offices	Factories	Warehouses	Total
Demand (2006 – 2026)	Baseline	49.57	12.15	8.49	70.21
	RSS Scenario - 10,800 New Homes	56.93	12.15	8.49	77.56
	RSS Scenario - 20,800 New Homes	72.43	12.15	8.49	93.07
	Past Trends	41.98	12.15	41.62	95.75
	Supply	20.25	21.71	17.61	59.58
Difference between Supply & Demand	Baseline	-29.32	9.57	9.12	-10.63
	RSS Scenario - 10,800 New Homes	-36.68	9.57	9.12	-17.99
	RSS Scenario - 20,800 New Homes	-52.18	9.57	9.12	-33.49
	Past Trends	-21.73	9.57	-24.01	-36.17

Source: GVA Grimley analysis, 2009

Baseline Scenario

7.5 Under the Baseline Scenario the model predicts a total demand of 70.21ha, of which 49.57ha would be for Offices, 12.15ha would be for Factories and 8.49ha for Warehouses. The total supply of employment land within Warwick is 59.58ha. Therefore under the Baseline Scenario there is an overall deficit of 10.63ha. Of this there is a large deficit of 29.32ha for Offices, with a surplus of 9.57ha for Factories and a further surplus of 9.12ha for Warehouses. There may be some scope to reduce the deficit in offices through re-allocation of existing open employment allocations to B1a only, for example the site at Queensway. In addition, the expansion at the University of Warwick could provide around 12.55ha to the office supply.

RSS Scenario - 10,800 New Homes

7.6 Under the RSS Scenario (10,800 new homes) the model predicts a total demand of 77.56ha, of which 56.93ha would be for Offices, 12.15ha would be for Factories and 8.49ha for Warehouses. The total supply of employment land within Warwick is 59.58ha. Therefore under the RSS Scenario (10,800 new homes) there is an overall deficit of 17.99ha. Of this there is a large deficit of 36.68ha for Offices, with a surplus of 9.57ha for Factories and a further surplus of 9.12ha for Warehouses. There may be some scope to reduce the deficit in offices through re-allocation of existing open employment allocations to B1a only and taking into account the expansion land at Warwick University.

RSS Scenario - 20,800 New Homes

7.7 Under the RSS Scenario (20,800 new homes) the model predicts a total demand of 93.07ha, of which 72.43ha would be for Offices, 12.15ha would be for Factories and 8.49ha for Warehouses. The total supply of employment land within Warwick is 59.58ha. Therefore under the RSS Scenario (20,800 new homes) there is an overall deficit of 33.49ha. Of this there is a large deficit of 52.18ha for Offices, with a surplus of 9.57ha for Factories and a further surplus of 9.12ha for Warehouses.

Past Trends Scenario

7.8 Under the Past Trends Scenario the model predicts a total demand of 95.75ha, of which 41.98ha would be for Offices, 12.15ha would be for Factories and 41.62ha for Warehouses. The total supply of employment land within Warwick is 59.58ha. Therefore under the Past Trends Scenario there is an overall deficit of 36.17ha. Of this there is a large deficit of 21.73ha

for Offices, and a further surplus of 24.01ha for Warehouses. There is a surplus of 9.57ha for Factories.

Summary

- 7.9 In summary, we have identified that across all four scenarios, there is a deficit of employment land suitable for offices in all scenarios. Under the RSS Scenario based on 10,800 new homes the deficit for offices is around 21ha. Under the Past Trends scenario there is also a deficit of employment suitable for B8 uses, which amount to around 21.65ha.
- 7.10 In terms of recommending a preferred scenario, we would suggest that the RSS Scenario, based on 10,800 new homes is adopted as a result of the analysis we have undertaken. This is because this scenario reflects the latest adopted planning and economic policy guidance at the regional level, and has been tailored to meet the realistic growth aspirations of Warwick District Council. The addition of 10,800 new homes to the District would result in further allocations of employment land being required in order to meet the anticipated demand, in particular for offices and research and development. This reflects the growth aspirations of Warwick District Council which focus on the knowledge based, advanced engineering and research and development sectors. These sectors have a reliance on office accommodation and this is reflected in the high demand forecasts for B1a / B1b.
- 7.11 We have chosen to recommend this scenario ahead of the RSS scenario based on 20,800 new homes as this predicts a level of employment growth similar to that seen over the last nine years in Warwick, which has been at a rate of around 4.78ha per annum. We feel that this level of growth, coupled with the pressure to find sites to accommodate an additional 10,000 new homes (on top of the 10,800 identified in the RSS) would be extremely challenging and potentially undeliverable, given the current market conditions. This has already had an impact on levels of completions, which have seen a noticeable drop since the peak of 2005/06, as shown in Figure 7.2 below.

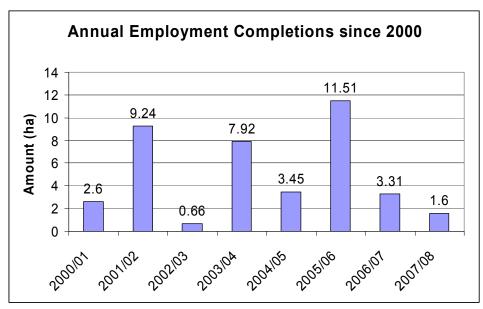


Figure 7.2 - Completions of Employment Land - Warwick 2000/01 - 2007/08

Source: Warwick District Council Annual Monitoring Report, 2008

- 7.12 Given the current global market conditions and the effects these have had on investor confidence, the time taken for the market to recover to the levels of growth seen pre-November 2007 could be longer than first anticipated. This has already had, and will continue to have, a limiting effect on the development rates within the district for at least the next few years until the property market improves and investor confidence returns.
- 7.13 The next section of this report looks to identify potential locations where the deficit of employment land supply could be met within the District.

8. FUTURE DIRECTION OF EMPLOYMENT LAND GROWTH

- 8.1 In this section we consider and recommend future areas of employment growth within Warwick. In coming to these recommendations we have taken the following into account:
 - Emerging policy work prepared by WDC officers;
 - The suitability of sites for employment uses;
 - The attractiveness of sites from a market perspective; and
 - The views of stakeholders interviewed as part of the ELR process.
- 8.2 The previous section has highlighted a further requirement of around 21ha of land suitable for offices to accommodate predicted demand up to 2026. This is based on the RSS scenario with 10,800 new homes over the plan period. There also needs to be some consideration given to the supply needs of Coventry, which as identified in their ELR, will need to accommodate some of their employment land needs within Warwick (though no figure is provided as to how much this could be).
- 8.3 As part of the preparation of the WDC Local Development Framework, officers have produced the Core Strategy: Options Paper, which was released for consultation in May 2008 and sets out the framework for a spatial strategy that seeks to:
 - Direct development to where it can bring the greatest benefits to the District;
 - Meet identified local needs;
 - Protect the District's key assets; and
 - Support the development of a sustainable District.
- 8.4 As part of the consideration of a number of options for growth in the district, possible directions of growth have been considered. These are shown in Figure 8.1 below.

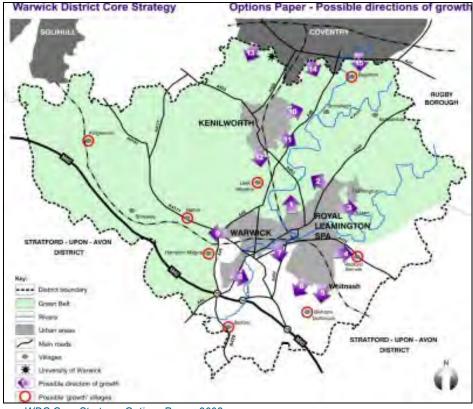
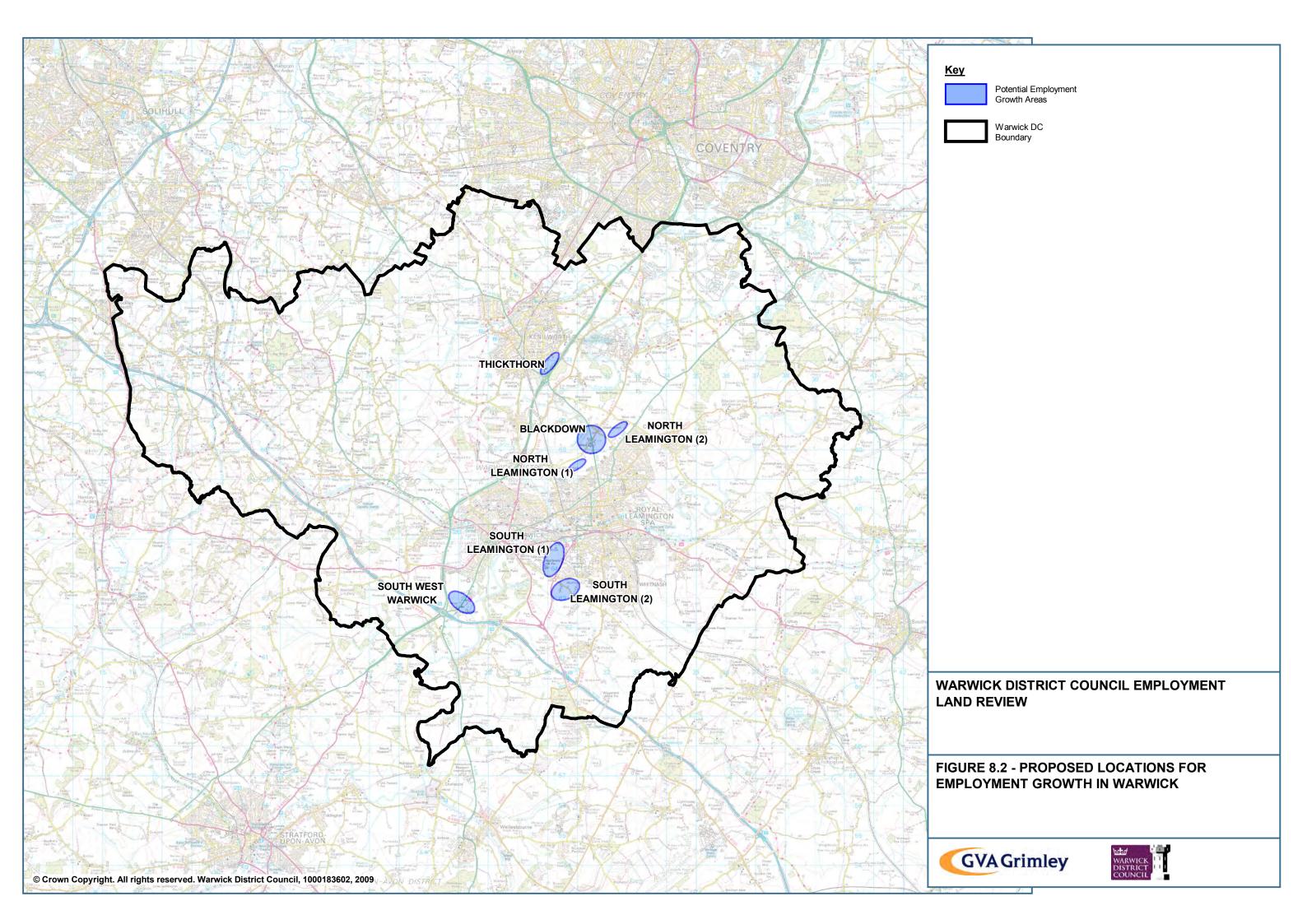


Figure 8.1 – WDC Core Strategy: Options Paper - Possible Directions of Growth

Source: WDC Core Strategy: Options Paper, 2008

- 8.5 Figure 8.1 above shows that WDC have considered the main potential directions of growth to be focussed around the urban areas of Warwick, Leamington Spa, Kenilworth and south of Coventry. Using these potential directions of growth as a starting point we have sought to identify broad areas of land (not specific sites at this stage) that would be suitable for employment use from a planning, physical, market and sustainability point of view. We have also used the knowledge we have gained from interviewing stakeholders (such as County Council officers, local agents and inward investment agencies) to focus on the most suitable locations for employment growth.
- 8.6 It is important to consider the characteristics of such sites when proposing allocations. These in our view are:
 - Location agents have identified that employment sites should be well located with regard to existing areas of employment activity, and the major highway network. In addition, sites should be located having regard to surrounding land uses (e.g. existing employment and residential);

- Strategic Access agents have identified that sites having a drive time of less than 10 minutes to the major highway network (e.g. the M40 and A46 corridors) will be more attractive for businesses who wish to locate themselves out of town;
- Sustainability new locations for employment should be located close to existing services and amenities, and in terms of public transport, they should be located in locations that are close to public transport networks in order to reduce the reliance on the use of the private car. The ability to access sites by road but also by public transport is important and increasingly so. Labour markets and the ability to attract and retain employees are a key consideration for occupiers;
- Profile and Accessibility occupiers generally prefer sites with visibility and good access by road;
- Environment a key driver for office occupiers is the environmental quality of the site
 and surrounding area. Whilst larger sites can to some extent create their own
 environment, the approach to a site will clearly have a bearing on market demand;
- Deliverability whilst at the development plan stage it is difficult to undertake a detailed analysis on assessment of constraints to development, both offsite and onsite assessments should be undertaken as part of identifying individual sites. New employment locations must be viable for development in order that the market will bring them forward. In identifying potential sites for development it is important to take in account the potential costs of development (e.g. demolition, flooding, access, remediation); and
- Attractiveness sites that will be attractive to the market will have greater potential for development. This takes account of the factors highlighted above, but also regional and sub-regional factors such as the CSW HTC and investment corridors (motorsport valley and heart of medical technologies).
- 8.7 We have identified a total of seven locations within the District, some of which we have grouped together, that could be viewed as potential areas for employment growth. These are shown on Figure 8.2 overleaf.



8.8 Taking each of the locations in turn, we highlight the characteristics of each below.

South West Warwick

8.9 This area, shown in Figure 8.3 below, has been a prime location for employment over the last five years, shown by the success of Tournament Fields. The area is attractive to the market, particularly footloose businesses, such as those in the IT, utilities and high tech manufacturing/office sectors that do not wish to be located within town centres.

Bubbrooke

PARKWAY

Council Of residence

Hampton

Magna

Hampton

On the
Hill

Hampton

Lodge

Sherbourne G

Sherbourne G

Octown Copyright. All rights reserved. Warwick District Council, 1000183602, 2009

Teway

Figure 8.3 – South West Warwick

Source: GVA Grimley, 2009

- 8.10 The area is accessible from the M40 at Junction 15, which provides access to the wider Midlands motorway network and Birmingham International Airport. The site is also just a few miles from Warwick town centre, therefore giving it reasonable access to a range of facilities. Despite the recent downturn in the market there is expected to be demand for premises in this area and rental levels in this location are likely to be in the region of £17 per sq ft (£182.99 per sq. m) for offices.
- 8.11 In planning terms, this area is classed as a greenfield site, although it is not in the Green Belt. However, this location is not as sustainable as locations within or on the edge of centres, and development in this area would lead to increased traffic flows on the local and strategic highway network, particularly around Junction 15 of the M40. This location is adjacent to some existing residential therefore, we would consider that this location would only be suitable

for office development. This would need to be given consideration through the Local Development Framework.

South Leamington

8.12 This area is to the south of Leamington town centre, shown in Figure 8.4 below. The surrounding area is dominated by employment and retail uses, notably at Tachbrook Park, Spa Park and Warwick Technology Park, all of which have been successful in attracting occupiers.

Figure 8.4 – South Learnington

Source: GVA Grimley, 2009

- 8.13 In a similar way to the area around south west Warwick, this area has been a prime location for footloose businesses, particularly those on Tachbrook Park and Warwick Technology Park. The area is an established, out-of-town business park location, with excellent potential for growth given the existing critical mass of development and infrastructure.
- 8.14 Whilst this area is located further from the motorway than South West Warwick, it is closer to Learnington Spa town centre, which fulfils many business' requirements of being in a sustainable location. Rental levels in this area are likely to be around £17 per sq ft (£182.99 per sq. m) for offices.

8.15 In planning terms this area is classed as greenfield, although it is not in the Green Belt. The area forms a natural extension to the existing built up area, and development for employment in this area is likely to increase pressure on the transport network, particularly around Leamington town centre and the roads to / from the M40 at Junctions 13 and 14.

North Leamington

8.16 This area is located to the north of the existing built up area of Learnington, as shown in Figure 8.5 below. The area forms a natural extension to the northern fringes of Learnington, which is dominated by residential uses.



Figure 8.5 – North Leamington

Source: GVA Grimley, 2009

- 8.17 From a market point of view, developing a commercial market in this area would be challenging, given the lack of existing commercial development in the area (aside from that in Leamington town centre) and the difficulties in accessing this part of Leamington from the strategic highway network.
- 8.18 Notwithstanding this, there would be, in the view of GVA Grimley office agency surveyors, some potential for demand in this location, particularly for indigenous businesses and there could be potential for some clustering. Due to the issues of access to the strategic highway network and lack of prominence, this area is likely to attract lower rents at around £15 per sq ft (£161.46 per sq. m).

8.19 There would be issues to address in planning terms with commercial development in this location. Firstly the area is within the Green Belt, therefore any development would lead to a loss of Green Belt land. However, there are currently a dearth of employment locations north of Leamington town centre and this causes transport issues, as the main commute within Leamington is from north to south, across the River Leam. This area could therefore provide some much needed employment space in the northern part of the town and help to alleviate the impacts on the transport network that these existing commuting patterns have.

Blackdown

8.20 Blackdown is located to the north, but just outside the existing built up area of Leamington, shown in Figure 8.6 below. It is an area located on the A452 which runs from Leamington to Kenilworth and links to the A46 dual carriageway.

Figure 8.6 – Blackdown



Source: GVA Grimley, 2009

8.21 The Blackdown area has a limited existing commercial market, with a hotel / leisure club and the Warwickshire Nuffield Hospital being the two main employers in this location. This area is slightly more accessible than North Learnington as it is located directly on the main road, and at a natural junction, therefore there could be an opportunity for some small scale office type development in this area. Demand would be limited, however it would be an attractive location for indigenous businesses looking for cheaper accommodation than is currently available in /

edge of town centres and the main business parks. As it would be competing with the business parks on the southern side of Learnington, rental levels here would be in the region of £15 per sq ft (£161.46 per sq. m).

8.22 In planning terms, this location would represent development in the Green Belt and therefore a loss of Green Belt land. The area is also within the floodplain, therefore it would be important to assess the impacts of flooding on the site, and any knock on effects of mitigating against these.

Thickthorn

8.23 This area is located to the south east of Kenilworth, adjacent to the A46, as shown in Figure 8.7 below.

Figure 8.7 - Thickthorn



Source: GVA Grimley, 2009

8.24 This location represents an excellent opportunity to provide some employment floorspace in Kenilworth, that would be well located, having excellent access to the A46 and could be developed as part of a mixed use scheme with residential also a viable use on the site. In market terms, the A46 corridor would be a popular location for indigenous businesses to locate, and this area would have the potential to accommodate small – medium sized office units. Currently, Kenilworth has a limited supply of employment space, although the town is

home to a number of highly skilled workers and therefore the opportunity to provide some employment floorspace within the town would be welcomed.

- 8.25 In planning terms, this location would represent development in the Green Belt and therefore a loss of Green Belt land. The area benefits from an existing access to the A452, which in turn links to the A46. We feel as though the area, which is bounded by existing residential uses, would be viable mixed use development opportunity with an extension of the existing residential areas, screened from the A46 by the employment uses.
- 8.26 The final section of our report provides our conclusions to the study.

9. CONCLUSIONS

9.1 This section concludes the employment land review and addresses key points of the Brief.

Overall Employment Land Requirements

9.2 We have focussed our analysis and recommendations on the RSS scenario, based on 10,800 new homes being delivered within Warwick. The additional employment land requirements (on top of those sites that are already identified in the supply) are set out below in Table 9.1.

Table 9.1 - Additional Employment Land Requirements to 2026

	Requirement (ha)						
Scenario	B1a / B1b	B1c / B2	B8				
RSS Scenario - 10,800 New Homes	36.68	0.00	0.00				

Source: GVA Grimley analysis, 2009

- 9.3 Our conclusions from the above are that:
 - There is an oversupply of land suitable for the development of general industry / distribution that is already committed / allocated in the current Local Plan to accommodate demand within these sectors;
 - There is a potential deficit of around 36.68ha of land suitable for office / R&D employment. It may be possible for the local authority to re-allocate some allocations in order to reduce this shortfall. Furthermore, with the inclusion of the expansion land at the University of Warwick (12.55ha) there is the potential to reduce this deficit to around 21ha; and
 - There is an identified requirement for additional employment land for offices over and above existing allocations / proposals. Should existing sites within the portfolio be lost to other uses or fail to come forward, additional land will be required.
- 9.4 Taking this into account, it is our opinion that in preparing its LDF, the District Council should seek to identify at least a further 21ha of employment land suitable for offices.

Growth in Town Centres

9.5 This study has highlighted the potential growth in floorspace requirements in town centres including both the retail (A1-A3) and office (B1a) use classes (see Table 5.9). GVA Grimley understands that a Town Centres Study is currently being undertaken on behalf of Warwick

District Council. We would advise that the figures produced as part of this study (particularly relating to retail) are compared with the emerging Town Centres Study to ensure a consistent and robust programme of growth for the town centres within Warwick District.

Future Directions of Growth

- 9.6 We have identified a total of seven locations that could be suitable for future employment land use. These are located in five broad areas, these being:
 - South West Warwick;
 - South Leamington;
 - North Leamington;
 - Blackdown; and
 - Thickthorn.
- 9.7 We have summarised some of the key characteristics of these areas, both in terms of their attractiveness to the commercial market and planning policy. Below, we have ranked these broad areas, based on their ability to fulfil the criteria outlined at paragraph 8.6, where 1 represents the best ranking area and 6 the poorest ranking area.

Table 9.2 - Ranking of Broad Future Employment Areas

	Location	Strategic Access	Sustainability	Profile and Accessibility	Environment	Deliverability	Attractiveness
South West Warwick	1	1	4	1	1	1	1
South Leamington	2	5	1	2	2	2	2
North Leamington	5	5	2	5	3	5	5
Blackdown	4	4	5	4	4	4	4
Thickthorn	3	3	3	3	5	3	3

Source: GVA Grimley analysis, 2009

- 9.8 Based on the analysis above, the areas around South West Warwick and South Leamington are the most attractive both in market and planning terms and we would urge the local authority to consider identifying sites suitable for office development within these areas.
- 9.9 The area at Thickthorn would suit smaller scale employment development and provide some much needed commercial development to Kenilworth, building on the wealth that already exists within the town.

9.10 The locations at Blackdown and North Learnington are more challenging, and whilst we anticipate that some demand may exist at Blackdown, the North Learnington area is unlikely to be suitable for employment due to the poor accessibility, lack of prominence and existing critical mass of employment. Based on our assessments, we would not advise the local authority to pursue identification of sites in the North Learnington area. With regard to Blackdown, there may some potential for small scale employment, however we would advise that further work is done in this area to identify whether any potential sites exist and the viability of bringing these forward.

Monitoring and Review

Review of Employment Sites

9.11 Given the complexity of issues on many of the employment sites within the portfolio it will be important to review the employment land supply at regular intervals, preferably within the context of the annual monitoring report. Assumptions regarding the supply of employment land including the potential yield of employment land from mixed use sites should be addressed as part of this review.

Monitoring a Supply of Readily Available Land

- 9.12 Our analysis looks at the total demand for employment floorspace and land to 2026. In order to ensure that businesses have a range of locations to choose from and that the employment land supply is flexible (in line with Draft PPS4), we would advise that a test of readily available land is used as a more refined analysis and also to inform development control decisions.
- 9.13 Readily Available Land can mean different things, and may mean simply being actively marketed, evidenced by sign boards, preparation of particulars. At a broader level, it could include other aspects such as sites with planning consent or sites with no apparently physical obstacles to development such as remediation, access. The West Midlands Regional Employment Land Study defines Readily Available Land as meeting all of the following conditions:
 - No major problems of physical condition;
 - No major infrastructure problems; and
 - On the market with a willing seller.

9.14 This, in our view, is a reasonable definition. With regard to the word "major" as a term we would regard this as the constraint being capable of being addressed and removed within 12 months. This includes gaining planning consent (if required) and undertaking the works required. Therefore if a site needs a new access road for which no planning consent had been submitted and the works would take in excess of 9 months to complete, this would fall outside the definition of a readily available site.

Viability and Delivery

9.15 This report has assumed that the all of the future supply of employment land will come forward over the Plan period to 2026. We have also identified a number of potential future locations for employment growth to meet the anticipated demand. We would suggest that the local authority undertakes a study of a sample of employment sites to ensure that they are deliverable both in planning and economic terms. This could include a broad assessment of costs required for improvements to access, flood mitigation measures, contamination and demolition. This would provide the local authority with a more robust evidence base when identifying individual sites for future employment use within the District.

APPENDIX A – EXISTING EMPLOYMENT SITES PROFORMA

Existing Em	oloyment Areas Proforma
Site Ref No	
Address	
Criteria	Score Notes
Typology	1 – An industrial estate owned and managed as an investment likely to have similar types of buildings, etc. 2 – Other industrial areas dominated by owner occupiers interwoven with other small industrial estates.
Building Age	1 – Pre 1945 2 – 1945 – 1960, post war but likely to have similar characteristics 3 – 1960-1980 more modern buildings portal frame with modern car parkin emerging 4 – 1980-2006 modern buildings good specification and car parking
Building Quality	5 - Good condition - lower than normal level of maintenance requirement within medium term. 4 - Satisfactory condition - normal level of maintenance and repair requirement within the medium term. 3 - Fair condition - capable of attracting satisfactory condition rating but with notable backlog of maintenance and /or technical upgrading works required within the medium term. 2 - Poor condition - major repair and /or technical work required in the short term but capable of attaining with expenditure that does not exceed 50% of replacement cost. 1 - Very poor condition - as per as poor condition but level of expenditure required to obtain satisfactory condition exceeds 50% of replacement cost.
General External Environment	5 – Excellent quality environment – extensive external public realm areas well maintained, road maintenance no issues, buildings of high quality external appearance for use, no derelict sites, vacant plots maintained. 4 – High quality – less extensive landscaping but public realm maintained, road maintenance adequate but minor defects, buildings of appropriate quality, no derelict sites but vacant plots need some maintenance. 3 – Average quality – few landscaped areas, and where present maintenance required. Buildings of average quality for use. Road maintenance some significant repairs needed, some derelict sites but not highly visible, vacant plots untidy and requiring major improvement. 2 – Below average quality – maintenance of public realm poor, extensive repairs needed to roads, some open storage uses – vacant plots appear abandoned, buildings of below average quality. 1 – Very poor /poor quality – evidence of fly tipping in public areas, roads system in need of complete overhaul, major /derelict sites, buildings of very poor /poor quality even taking use. Numerous open storage uses presenting poor image.
Level of Visible Voids	5 – 90 – 100% of buildings occupied 4 – 80% – 90% of buildings occupied 3 – 60 – 80% of buildings occupied 2 – 40% - 60% of buildings occupied 1 – less than 40% of buildings occupied
Nature of Existing Tenants	5 - National /international names: significant presence. 4 - Some national /international names present, but majority of occupiers from drawn from regional companies. 3 - No national /international names companies exclusively Warwickshire based. 2 - Companies drawn from local area but could be seen as having choice of locations in local area. 1 - Very local companies who by nature of their business would be expected to have very limited choices in terms of alternative location.
Market Attractiveness	Site attractive to National companies Site attractive to Sub-regional companies Site attractive to Local companies
Accessibility Strategic	5 – 0 -5 minutes drive time 4 – 5-10 minutes drive time 3 – 10-20 minutes drive time 2 – 20-30 minutes drive time 1 – 30 minutes plus
Access Local	5 - easy site access no issues available public transport 4 - No access for issues for vehicles but no public transport 3 - Easy immediate site access but wider issues on link to strategic highway net work 2 - Restricted access for HGV's and restricted access to major road network 1 - restricted access by all commercial vehicles not public transport

Local Amenities	5. Close to a town centre with a wide range of services (5 different services or more) 4. Close to local centre with a reasonable range of services (4 different services) 3. Close to a limited range of basic services (3 different services) 2. Close to one or two services 1. No services in close proximity NB1: Employment related services such as banks, travel agents, shops, leisure/recreation, pubs/restaurants. NB2: "Close" = within about 10 minutes walk
Public Transport	5. Close to a station, peak time bus route and cycle route; on a pedestrian route 4. Close to a station or peak time bus route, close to cycle route, on a pedestrian route 3. Close to either a station or peak time bus route or cycle route; on a pedestrian route 2. Not near a station, peak time bus route or cycle route; on a pedestrian route 1. Not on a pedestrian route; not near a station, peak time bus route or cycle route or cycle route NB1. "Close" = within about 10 minutes walk NB2. Peak time bus route defined as being a frequency of 2 buses per hour or more (Mon – Fri).

APPENDIX B – EXISTING EMPLOYMENT SITE SCORES

Site Scoring - Existing Employment Areas

Ref	WDC Ref	Status	Total Site Area (from GIS)	Usable Area	Typology	Building Age	Building Quality	General External Environment	Level of Visible Voids	Nature of Existing Tennants	Market Attractiveness	Accessibility Strategic	Access Local	Local Amenities	Public Transport	Market score Physical score Sustainability score Total Score	Market Ranking	Physical Ranking	Sustainability Ranking
1	Former Honiley Airfield	OP	78.61	10.00	2	3	3	3	5	4	1	1	2	1	1	19 11 3 33		Good	Poor
2	Wedgenock Lane / Millers Road	COMP	30.12	30.12	1	4	5	4	5	4	3	5	5	3	4		Excellent		
3	Warwick Technology Park	COMP	22.07	22.07	1	4	5	5	3	4	3	4	5	2	3	29 19 9 57		Excellent	Average
4	Sydenham Industrial Estate	COMP	14.63	14.63	2	3	3	3	5	4	2	3	5	4	4	25 14 11 50		Good	Good
5	Stoneleigh Deer Park	COMP	17.94	17.94	1	3	2	3	2	3	1	1	2	1	1	14 10 3 27		Average	Poor
6	Wedgenock Lane / Millers Road Indu		8.36	8.36	2	3	3	2	4	2	1	5	4	3	4	21 12 12 45		Good	Good
7	Montague Road Industrial Estate	COMP	9.13	9.13	1	3	3	2	4	2	1	2	2	3	4	16 10 9 35		Average	Average
8	Budbrooke Industrial Estate	COMP	6.16	6.16	1	4	5	5	4	3	2	5	5	3	4	29 19 12 60		Excellent	Good
9	Tachbrook Park	COMP	5.08	5.08	1	3	4	4	4	3	2	4	5	2	3	26 16 9 51		Good	Average
13	Tachbrook Park	COMP	3.36	3.36	1	3	4	4	4	3	2	4	5	2	3	26 16 9 51		Good	Average
15	Althorpe Industrial Estate	COMP	2.07	2.07	2	3	3	2	3	2	1	2	2	3	4	15 10 9 34		Average	Average
16	4A	COMP	1.52	1.52	1	4	5	5	3	4	3	5	4	2	2	29 18 9 56		Excellent	Average
17	Tachbrook Park	COMP	2.35	2.35	1	3	4	4	4	3	2	4	5	2	3	26 16 9 51		Good	Average
19	Tachbrook Park	COMP	1.60	1.60	1	3	4	4	4	3	2	4	5	2	3	26 16 9 51		Good	Average
24	Saltisford	COMP	1.17	1.17	1	5	5	5	5	3	3	4	4	4	5	29 19 13 61		Excellent	Excellent
30	Tachbrook Park	COMP	0.71	0.71	1	3	4	4	4	3	2	4	5	2	3	26 16 9 51		Good	Average
41	Tachbrook Park	COMP	0.48	0.48	1	3	4	4	4	3	2	4	5	2	3	26 16 9 51		Good	Average
43	Tachbrook Park	COMP	0.30	0.30	1	3	4	4	4	3	2	4	5	2	3	26 16 9 51		Good	Average
48	Queensway	COMP	5.46	5.46	1	4	5	4	4	4	2	4	5	2	3	28 18 9 55		Excellent	Average
50	Spa Park	COMP	14.37	14.37	1	4	5	5	5	4	3	3	3	2	3	28 17 8 53		Excellent	Average
54	Siskin Drive	COMP	53.30	53.30	1	4	5	5	3	5	3	5	4	2	3		Excellent	Excellent	Good
55	Tachbrook Park	COMP	25.90	25.90	1	3	4	4	4	3	2	4	5	2	3	26 16 9 51		Good	Average
57	Common Lane, Kenilworth	COMP	2.16	2.16	1	2	4	2	5	2	2	3	1	1	2	19 9 6 34	Average	Average	Average

APPENDIX C – METHODOLOGY FOR RANKING OF EXISTING EMPLOYMENT SITES

Methodology for Ranking of Existing Employment Sites

Introduction

This note outlines the methodology we have used to rank each of the existing employment sites within Warwick, as part of the baseline study for the Warwick District Employment Land Review.

The key steps and assumptions are outlined below. For each we describe the methodology for ranking each site or area, and explain the assumptions we have made.

This note accompanies the schedules of sites and areas, which detail how we have scored each site and its subsequent rank.

Existing Employment Sites

For existing employment sites, the factors we have taken into account are detailed in Table 1.1 below, together with our notes for scoring them.

Table 1.1 - Employment Area Scoring Criteria

Criteria	Reference	Notes for scoring
Typology	A1	1 – An industrial estate owned and managed as an investment likely to have similar types of buildings, etc.
		2 – Other industrial areas dominated by owner occupiers interwoven with other
		small industrial estates.
Building Age	A2	1 – Pre 1945 2 – 1945 – 1960, post war but likely to have similar characteristics
		3 – 1960-1980 more modern buildings portal frame with modern car parking
		emerging
Duilding Quality	A3	4 – 1980-2006 modern buildings good specification and car parking 5 – Good condition – lower than normal level of maintenance requirement within
Building Quality	A3	medium term.
		4 - Satisfactory condition - normal level of maintenance and repair requirement
		within the medium term. 3 – Fair condition – capable of attracting satisfactory condition rating but with a
		notable backlog of maintenance and /or technical upgrading works required within
		the medium term.
		2 – Poor condition – major repair and /or technical work required in the short term but capable of attaining with expenditure that does not exceed 50% of replacement
		cost.
		1 – Very poor condition – as per as poor condition but level of expenditure required
General External Environment	A4	to obtain satisfactory condition exceeds 50% of replacement cost. 5 – Excellent quality environment – extensive external public realm areas well
General External Environment	A4	maintained, road maintenance no issues, buildings of high quality external
		appearance for use, no derelict sites, vacant plots maintained. 4 – High quality – less extensive landscaping but public realm maintained, road
		maintenance adequate but minor defects, buildings of appropriate quality, no
		derelict sites but vacant plots need some maintenance.
		3 – Average quality – few landscaped areas, and where present maintenance required. Buildings of average quality for use. Road maintenance some
		significant repairs needed, some derelict sites but not highly visible, vacant plots
		untidy and requiring major improvement.
		2 – Below average quality – maintenance of public realm poor, extensive repairs needed to roads, some open storage uses – vacant plots appear abandoned,
		buildings of below average quality.
		1 – Very poor /poor quality – evidence of fly tipping in public areas, roads system
		in need of complete overhaul, major /derelict sites, buildings of very poor /poor quality even taking use. Numerous open storage uses presenting poor image.
Level of Visible Voids	A5	5 – 90 – 100% of buildings occupied
2010. 0. 1.0.0.0	1.0	4 – 80% - 90% of buildings occupied
		3 – 60 – 80% of buildings occupied 2 – 40% - 60% of buildings occupied
		1 – less than 40% of buildings occupied
Nature of Existing Tenants	A6	5 – National /international names: significant presence. 4 – Some national /international names present, but majority of occupiers from
		drawn from regional companies.
		3 – No national /international names companies exclusively Warwickshire based.
		Companies drawn from local area but could be seen as having choice of locations in local area.
		1 - Very local companies who by nature of their business would be expected to
		have very limited choices in terms of alternative location.
Market Attractiveness	A7	5 – National /international companies 4 – National and regional companies
		3 – Regional companies
		2 – Local but district wide companies 1 – Companies with a very local limited choice of locations
Accessibility Strategic	A8	5 – 0 -5 minutes drive time
Accessionity Strategic	70	4 – 5-10 minutes drive time
		3 – 10-20 minutes drive time 2 – 20-30 minutes drive time
		2 – 20-30 minutes drive time 1 – 30 minutes plus
Access Local	A9	5 – easy site access no issues public transport within 400m
	-	4 – No access issues for vehicles but no public transport within 400m 3 – Easy immediate site access but wider issues on link to strategic highway
		network
		2 - Restricted access for HGV's and restricted access to major road network
	1	1 – restricted access by all commercial vehicles no public transport

Criteria	Reference	Notes for scoring
Local Amenities	A10	5. Close to a town centre with a wide range of services (5 different services or more) 4. Close to local centre with a reasonable range of services (4 different services) 3. Close to a limited range of basic services (3 different services) 2. Close to one or two services 1. No services in close proximity NB1: Employment related services such as banks, travel agents, shops, leisure/recreation, pubs/festaurants. NB2: "Close" = within about 10 minutes walk
Public Transport	A11	5. Close to a station, peak time bus route and cycle route; on a pedestrian route 4. Close to a station or peak time bus route, close to cycle route, on a pedestrian route 3. Close to either a station or peak time bus route or cycle route; on a pedestrian route 2. Not near a station, peak time bus route or cycle route; on a pedestrian route 1. Not on a pedestrian route; not near a station, peak time bus route or cycle route NB1. "Close" = within about 10 minutes walk NB2. Peak time bus route defined as being a frequency of 2 buses per hour or more (Mon – Fri).

In order to rank the employment areas we have assessed various criteria together in order to come up with a "market lead" rank, a "physical lead" rank and a "sustainability lead" rank. This allows different aspects of the employment areas to be assessed against each other. The criteria that we have used to come up with each rank are detailed below.

Existing Employment Site Assessments

Market Factors: A3, A4, A5, A6, A7, A8, A9

Max score: 35

Scores / Ranking

Ranking	Score
Poor	0 – 10
Average	11 – 19
Good	20 – 29
Excellent	30 – 35

Physical Factors: A2, A3, A4, A9

Max Score: 19

Scores / Ranking

Ranking	Score
Poor	0 - 5
Average	6 – 10
Good	11 – 16
Excellent	17 – 19

Sustainability Factors: A8, A10, A11

Max score: 15

Scores / Ranking

Ranking	Score
Poor	0 – 4
Average	4 – 9
Good	10 – 12
Excellent	12 – 15

APPENDIX D – POTENTIAL EMPLOYMENT SITES PROFORMA

_	Employment Sites F	Proforma	
Site Ref No			
Address			
Criteria	Score	Notes	
Availability		Yes – Site is advertised as being available, or there are no obvious obstructions to immediately develop the site. No – Site is not immediately available (please state reason why in space below)	
Site Ownership		Please note Site Ownership Details if available	
Market Activity (any in last 5 years)		Yes – Evidence of recent development in the immediate surrounding area (e.g. on the same part of an estate or road) No – No evidence of recent development. If the site is a new (Greenfield) site please state below whether it would be attractive to the market at present	
Access		5. Either adjoining main road or motorway junction with easy site access for all vehicles or access to rail, air and sea networks 4. Close to major road network; easy site access for all vehicles 3. Easy site access for all vehicles; indirect or restricted access to major road network 2. Restricted access for HGVs; restricted access to major road network 1. Restricted access for all commercial vehicles, severely restricted access to major road network	
Public Transport		5. Close to a station, peak time bus route and cycle route; on a pedestrian route 4. Close to a station or peak time bus route, close to cycle route, on a pedestrian route 3. Close to either a station or peak time bus ro	
Prominence		5. Gateway site to a prominent estate, visible from major road network 4. Visible site, on a main road or prominent estate 3. On a main road or prominent estate, tucked away from view 2. Visible, on a minor road or estate 1. On a minor road or estate, tucked away from view	
Local Amenities		Close to a town centre with a wide range and quantity of services Close to local centre with a reasonable range and quantity of services Close to a limited range and quantity of basic services Close to one or two services No services in close proximity NB1: Employment related services such as banks, travel agents, shops, leisure/recreation, pubs/restaurants NB2: "Close" = within about 10 minutes walk	
Site Layout		5. Clear plot, no obstructions 4. Regular shaped plot, robstructed 3. Regular shaped plot, fragmented 2. Irregular shaped plot, obstructed 1. Irregular shaped plot, fragmented	
Character of Area		Well established commercial area Established commercial area, with residential area or rural area nearby Missed commercial and residential area Mainly residential or rural area with few commercial uses Mainly residential or rural area with no existing commercial uses	
Planning Status		Detailed planning permission Outline planning permission Published development biref Local Plan allocation Allocation in Deposit Draft Local Plan, or reserve site	
Economic Constraints		No obstacles to development Minor obstacles to development; relatively easy, quick and cheap to resolve Minor obstacles to development; more difficult, expensive and time-consuming to resolve Major obstacles to development; very difficult, expensive and time-consuming to resolve Major obstacles to development; extremely difficult, expensive and time-consuming to resolve Ns: Obstacles to development would include access difficulties, infrastructure requirements, contamination remediation costs, multiple ownership etc.	
Strategic Location		Motorway Corridor Other Strategic Roads Elsewhere in Built up Area All other sites	
Greenfield / Brownfield		Site is on Greenfield Land Site is on Brownfield Land	
Market Attractiveness		Site attractive to National companies Site attractive to Sub-regional companies Site attractive to Local companies	

APPENDIX E – POTENTIAL EMPLOYMENT SITE SCORES

Warwick Employment Land Review Employment Sites Survey

Ref	WDC Ref	Status	Total Site Area (from GIS)	Usable Area	Availability	Market Activity (any in last 5 years)	Access	Public Transport	Prominence	Local Amenities	Site Layout	Character of Area	Planning Status	Economic Constraints	Strategic Location	Greenfield / Brownfield	Market Attractiveness	Market sco Physical s Sustainabi	Total Score Market Ranking	Physical Ranking	Sustainability Ranking
32	1 Common Lane	FP	0.63	0.63	Yes	No	2	2	1	2	4	2	5	2	2	2	1		26 Average	Average	Average
26	Cape Road	OP	0.79	0.79	No	Yes	2	4	3	3	4	3	4	3	2	2	1		33 Average	Average	Good
44	Cape Road	COMP	0.24	0.24	Yes	Yes	2	4	3	3	4	3	4	3	2	2	1		33 Average	Average	Good
52	Cape Road	OP	0.80	0.80	No	Yes	2	4	3	3	4	3	4	3	2	2	1	18 6 9		Average	Good
37	Pottertons	UC	0.41	0.41	Yes	Yes	3	4	2	3	5	2	5	5	2	1	1		37 Good	Good	Good
31	Ivy House Farm	FP	0.40	0.40	No	No	2	1		1	4		5	3		2	1	13 6 3		Average	Poor
34	Police Depot	FP OP	0.62	0.30	No	No	5	3	4	•	4	2	5	4	4	2	2		42 Good	Excellent	Good
56 28	Warwick Gates Warwick Gates	FP FP	8.31 0.79	8.31 0.79	Yes	Yes	5 5	4	4	3	5 5	5 5	5	5	3	1	3	30 10 10		Excellent	Good
		ALLOCATION	0.79	0.79	Yes	Yes	2	4	4 1	3 1	2	3	2	5 4	2	1	3	30 10 10 1 15 4 7		Excellent	Good
27 42	Land at Nelson Lane Park Drive	FP	0.46	0.46	No No	No No	3	5	3	5	4	2	5	3	2	2	1	18 7 12		Average Good	Average Excellent
21	Land Rear of Homebase	ALLOCATION	1.80	1.80	Yes	Yes	3	4	3	1	5	4	2	3	2	2	2	22 8 7		Good	
38		FP	0.35	0.35	No	No	4	4	3	1	4	2	5	3	3	2	1			Good	Average Good
40	Quarry Farm Queensway	FP FP	0.39	0.39	Yes	Yes	3	4	4	4	4	4	2	2	2	2	2	21 7 10		Good	Good
49	Queensway	OP OP	1.49	1.49	Yes	Yes	3	4	4	4	4	4	2	2	2	2	2	21 7 10 3		Good	Good
12	Land at Queensway	ALLOCATION	3.20	3.20	Yes	Yes	3	4	4	4	4	4	2	2	2	2	2	21 7 10 3		Good	Good
45	Saltisford	FP	0.20	0.20	Yes	Yes	4	5	4	4	5	4	5	5	4	2	3	29 9 13		Excellent	Excellent
25	Siskin Drive	UC	1.02	1.02	Yes	Yes	4	4	4	2	5	5	5	5	3	2	2		46 Excellent	Excellent	Good
47	Siskin Drive	FP	0.11	0.11	Yes	Yes	4	4	4	2	5	5	5	5	3	2	2		46 Excellent	Excellent	Good
39	Spa Park	FP	0.11	1.15	Yes	Yes	3	3	3	3	3	4	4	4	3	2	2		37 Good	Average	Good
51	Station Goods Yard	ALLOCATION	1.89	1.89	No	No	2	3	1	5	2	3	3	3	2	2	1		28 Average	Average	Good
10	South West Warwick (3)	OP	2.33	2.33	Yes	Yes	4	4	4	1	5	2	4	5	4	1	3		45 Excellent	Excellent	Good
20	South West Warwick (2)	OP	1.54	1.54	Yes	Yes	4	4	4	1	5	2	4	5	4	1	3		45 Excellent	Excellent	Good
18	South West Warwick 1	FP	1.76	1.76	Yes	Yes	4	4	4	1	5	2	4	5	4	1	3		45 Excellent	Excellent	Good
35	South West Warwick 1	FP	0.69	0.69	Yes	Yes	4	4	4	1	5	2	4	5	4	1	3		45 Excellent	Excellent	Good
53	South West Warwick (1)	OP	13.87	13.87	Yes	Yes	4	4	4	1	5	2	5	5	4	1	3		45 Excellent	Excellent	Good
22	Tachbrook Park	OP	1.59	1.59	Yes	Yes	2	4	2	2	2	5	5	4	2	1	2		31 Average	Average	Good
23	Tachbrook park	OP	1.14	1.14	Yes	Yes	2	4	2	2	2	5	5	4	2	1	2	19 4 8		Average	Good
29	Tachbrook Park	FP	0.92	0.92	Yes	No	3	4	2	2	5	5	4	5	2	1	2		40 Good	Good	Good
58	Tachbrook Park	OP	4.02	4.02	Yes	No	3	4	2	2	5	5	4	5	2	1	2		40 Good	Good	Good
36	Thwaites	FP	0.63	0.63	Yes	No	2	3	2	2	5	2	5	5	1	1	1		31 Average	Good	Average
11	Warwick Gates	FP	4.31	4.31	Yes	Yes	5	4	4	3	5	5	4	5	3	1	3	30 10 10		Excellent	Good
59	Stoneleigh Deer Park	UC	1.60	1.60	Yes	Yes	2	1	1	1	4	3	5	4	1	2	1	16 6 3	25 Average	Average	Poor

APPENDIX F – METHODOLOGY FOR RANKING OF POTENTIAL EMPLOYMENT SITES

Methodology for Ranking of Proposed Employment Sites

Introduction

This note outlines the methodology we have used to rank each of the proposed employment sites within Warwick, as part of the baseline study for the Warwick District Employment Land Review.

The key steps and assumptions are outlined below. For each we describe the methodology for ranking each site or area, and explain the assumptions we have made.

This note accompanies the schedule of proposed employment sites, which details how we have scored each site and its subsequent rank.

Proposed Employment Sites

For proposed employment sites, the factors we have taken into account are detailed in Table 1.1 below, together with our notes for scoring them.

Table 1.1 - Employment Site Scoring Criteria

Criteria	Reference	Notes
Availability	A1	Yes – Site is advertised as being available, or there are no obvious obstructions to immediately develop the site. No – Site is not immediately available (please state reason why in space below)
Site Ownership	A2	Please note Site Ownership Details if available
Market Activity (any in last 5 years)	A3	Yes – Evidence of recent development in the immediate surrounding area (e.g. on the same part of an estate or road) No – No evidence of recent development. If the site is a new (Greenfield) site please state below whether it would be attractive to the market at present
Access	A4	5. Either adjoining main road or motorway junction with easy site access for all vehicles or access to rail, air and sea networks 4. Close to major road network; easy site access for all vehicles 3. Easy site access for all vehicles; indirect or restricted access to major road network 2. Restricted access for HGVs; restricted access to major road network 1. Restricted access for all commercial vehicles, severely restricted access to major road network
Public Transport	A5	5. Close to a station, peak time bus route and cycle route; on a pedestrian route 4. Close to a station or peak time bus route, close to cycle route, on a pedestrian route 3. Close to either a station or peak time bus route or cycle route; on a pedestrian route 2. Not near a station, peak time bus route or cycle route; on a pedestrian route 1. Not on a pedestrian route; not near a station, peak time bus route or cycle route NB1. "Close" = within about 10 minutes walk NB2. Peak time bus route defined as being a frequency of 2 buses per hour or more (Mon – Fri).
Prominence	A6	5. Gateway site to a prominent estate, visible from major road network 4. Visible site, on a main road or prominent estate 3. On a main road or prominent estate, tucked away from view 2. Visible, on a minor road or estate 1. On a minor road or estate, tucked away from view
Local Amenities	A7	5. Close to a town centre with a wide range of services (5 different services or more) 4. Close to local centre with a reasonable range of services (4 different services) 3. Close to a limited range of basic services (3 different services) 2. Close to one or two services 1. No services in close proximity NB1: Employment related services such as banks, travel agents, shops, leisure/recreation, pubs/restaurants. NB2: "Close" = within about 10 minutes walk
Site Layout	A8	5. Clear plot, no obstructions 4. Regular shaped plot, obstructed 3. Regular shaped plot, fragmented 2. Irregular shaped plot, fragmented 1. Irregular shaped plot, fragmented NB1. "Obstructed" = physical obstruction running through the site (e.g. watercourse, ditch, overhead power lines) NB2. "Fragmented" = site is fragmented by other uses or via a road.
Character of Area	A9	5. Well established commercial area 4. Established commercial area, with residential area or rural area nearby 3. Mixed commercial and residential area 2. Mainly residential or rural area with few commercial uses 1. Mainly residential or rural area with no existing commercial uses
Planning Status	A10	5. Detailed planning permission 4. Outline planning permission 3. Published development brief 2. Allocated / Protected in Local Plan 1. Allocation in Deposit Draft Local Plan, or reserve site
Economic Constraints	A11	5. No obstacles to development 4. Minor obstacles to development; relatively easy, quick and cheap to resolve 3. Minor obstacles to development; more difficult, expensive and time-consuming to resolve 2. Major obstacles to development; very difficult, expensive and time-consuming to resolve 1. Major obstacles to development; extremely difficult, expensive and time-consuming to resolve NB: Obstacles to development would include access difficulties, infrastructure requirements, contamination remediation costs, topography etc.

Criteria	Reference	Notes
Strategic Location	A12	5. Motorway Corridor (within 5 minutes of a junction) 4. Other Strategic Roads (within 5 minute drive time) 3. Sub-regional Centres (Learnington Spa / Warwick) 2. Other Large Towns (Kenilworth) 1. All other sites
Greenfield / Brownfield	A13	Site is on Greenfield Land Site is on Brownfield Land
Market Attractiveness	A14	Site attractive to National companies Site attractive to Sub-regional companies Site attractive to Local companies

In order to rank the proposed employment sites we have assessed various criteria together in order to come up with a "market lead" rank, a "sustainability lead" and a "physical lead" rank. This allows different aspects of the employment areas to be assessed against each other. The criteria that we have used to come up with each rank are detailed below.

Proposed Employment Sites Assessments

Market Factors: A4, A6, A8, A9, A11, A12, A14

Max score: 35

Scores / Ranking

Ranking	Score
Poor	0 – 10
Average	11 – 19
Good	20 – 29
Excellent	30 – 35

Physical Factors: A4, A8

Max Score: 10

Scores / Ranking

Ranking	Score
Poor	0 – 3
Average	4 – 6
Good	7 – 8
Excellent	9 – 10

Sustainability Factors: A5, A7, A12

Max score: 15

Scores / Ranking

Ranking	Score
Poor	0 – 4
Average	5 – 9
Good	10 – 12
Excellent	13 – 15

APPENDIX G – CAPACITY OF POTENTIAL EMPLOYMENT SITES

Warwick Employment Land Review Employment Sites Survey

Ref	WDC Ref	Status	Total Site Area (from GIS)	Usable Area	Typology	Office / Technology Capacity (ha)	Industrial Capacity (ha)	Distribution Capacity (ha)	Total Land (ha)
32	1 Common Lane	FP	0.63	0.63	B8	0.00	0.00	0.63	0.63
26	Cape Road	OP	0.79	0.79	B1/B2	0.40	0.40	0.00	0.79
44	Cape Road	COMP	0.24	0.24	B1/B2	0.12	0.12	0.00	0.24
52	Cape Road	OP	0.80	0.80	B1/B2	0.40	0.40	0.00	0.80
37	Pottertons	UC	0.41	0.41	B1	0.41	0.00	0.00	0.41
31	Ivy House Farm	FP	0.40	0.40	B1	0.40	0.00	0.00	0.40
34	Police Depot	FP	0.62	0.30	B1	0.30	0.00	0.00	0.30
56	Warwick Gates	OP	8.31	8.31	B1/B2/B8	2.77	2.77	2.77	8.31
28	Warwick Gates	FP	0.79	0.79	B1/B2/B8	0.26	0.26	0.26	0.79
27	Land at Nelson Lane	ALLOCATION	0.46	0.46	B2/B8	0.00	0.23	0.23	0.46
42	Park Drive	FP	0.46	0.46	B1	0.46	0.00	0.00	0.46
21	Land Rear of Homebase	ALLOCATION	1.80	1.80	B2	0.00	1.80	0.00	1.80
38	Quarry Farm	FP	0.35	0.35	B8	0.00	0.00	0.35	0.35
40	Queensway	FP	0.39	0.39	B1/B2/B8	0.13	0.13	0.13	0.39
49	Queensway	OP	1.49	1.49	B1/B2/B8	0.50	0.50	0.50	1.49
12	Land at Queensway	ALLOCATION	3.20	3.20	B1/B2/B8	1.07	1.07	1.07	3.20
45	Saltisford	FP	0.20	0.20	B1	0.20	0.00	0.00	0.20
25	Siskin Drive	UC	1.02	1.02	B2/B8	0.00	0.51	0.51	1.02
47	Siskin Drive	FP	0.11	0.11	B2/B8	0.00	0.05	0.05	0.11
39	Spa Park	FP	0.54	1.15	B1/B2/B8	0.38	0.38	0.38	1.15
51	Station Goods Yard	ALLOCATION	1.89	1.89	B1/B2	0.94	0.94	0.00	1.89
10	South West Warwick (3)	OP	2.33	2.33	B1/B2/B8	0.78	0.78	0.78	2.33
20	South West Warwick (2)	OP	1.54	1.54	B1/B2/B8	0.51	0.51	0.51	1.54
18	South West Warwick 1	FP	1.76	1.76	B1/B2/B8	0.59	0.59	0.59	1.76
35	South West Warwick 1	FP	0.69	0.69	B1/B2/B8	0.23	0.23	0.23	0.69
53	South West Warwick (1)	OP	13.87	13.87	B1/B2/B8	4.62	4.62	4.62	13.87
22	Tachbrook Park	OP	1.59	1.59	B1/B2/B8	0.53	0.53	0.53	1.59
23	Tachbrook park	OP	1.14	1.14	B1/B2/B8	0.38	0.38	0.38	1.14
29	Tachbrook Park	FP	0.92	0.92	B1/B2/B8	0.31	0.31	0.31	0.92
58	Tachbrook Park	OP	4.02	4.02	B1/B2/B8	1.34	1.34	1.34	4.02
36	Thwaites	FP	0.63	0.63	B2	0.00	0.63	0.00	0.63
11	Warwick Gates	FP	4.31	4.31	B1/B2/B8	1.44	1.44	1.44	4.31
59	Stoneleigh Deer Park	UC	1.60	1.60	B1/B2	0.80	0.80	0.00	1.60

APPENDIX H – SECTORAL TRENDS, ABI DATA, 1998-2006

INDUSTRY	1998	1999	2000	2001	2002	2003	2004	2005	2006
01 : Agriculture/Hunting, etc.	536	520	560	570	503	427	437	436	447
02 : Forestry, logging etc.	0	0	3	0	6	2	10	4	4
05 : Fishing, fish farms etc.	0	0	0	0	0	0	0	0	11
10 : Coal Mining, Peat Extraction	3	0	0	0	0	0	0	3	0
11 : Petroleum, Oil/Gas Services	0	0	0	0	0	27	0	0	0
14 : Other mining and quarry	0	0	0	0	0	28	38	40	29
15 : Manf food and beverages	1,037	1,024	1,077	841	743	920	837	813	969
17 : Manf textiles	187	160	91	62	56	48	41	41	48
18 : Manf wearing apparel	93	39	25	21	79	78	54	42	9
19 : Tanning and dressing of leather	33	30 77	38	8	9	15	6 91	73	3 195
20 : Manf wood products 21 : Manf pulp and paper products	83 148	142	74	43 70	68 75	105 90	51	45	81
22 : Publishing and Printing	713	820	485	477	438	514	460	455	579
23 : Manf coke, petroleum products	0	020	0	4//	0	0	0	0	0
24 : Manf chemicals and chemical products	132	301	303	265	362	121	154	171	158
25 : Manf rubber and plastic products	827	535	411	266	216	169	303	215	203
26 : Manf other non-metallic mineral products	50	38	42	42	31	13	24	20	10
27 : Manf. basic metals	767	681	635	497	432	436	455	439	445
28 : Manf fabricated metal products	1,941	1,516	1,293	732	666	651	667	609	576
29 : Manf other machinery	2,023	1,939	1,677	1,644	1,482	1,930	2,112	1,337	1,424
30 : Manf office machinery and computers	9	3	2	13	7	49	88	91	71
31 : Manf other electrical machinery	381	187	190	168	180	189	177	184	153
32 : Manf communication equipment	127	136	19	33	125	140	171	154	91
33 : Manf medical instruments	310	293	296	231	266	275	257	201	176
34 : Manf motor vehicles, trailers	3,066	1,971	6,228	2,718	1,986	1,677	1,722	1,978	1,505
35 : Manf transport equipment	291	293	307	320	289	264	303	160	100
36 : Manf furniture; manufacturing n.e.c.	204	183	110	166	140	155	233	183	238
37 : Recycling	29	27	13	26	29	28	30	36	42
40 : Electricity, gas, steam and hot water supply	53	49	66	0	19	1,433	650	1,158	639
41 : Collection, purification and distribution of water	286 2.073	163	299	351	612	633 1,707	655	294 2.066	647 2,259
45 : Construction 50 : Sale and repair of motor vehicles and fuel	1,880	2,736 2,104	1,535 2,076	2,481 1,790	2,670 1,636	2,284	1,768 2,476	1,756	2,259
51 : Wholesale trade	3,704	4.592	4.877	4.879	5.752	3.564	3,200	3,569	3.914
52 : Retail trade	6,810	6,499	6.845	7,510	7.643	7.491	6.943	6,936	6,658
55 : Hotels and restaurants	5,363	4,466	4,771	6,182	5,276	4,853	5.712	5,535	5,230
60 : Land transport	701	545	1.055	832	625	463	528	656	468
61 : Water transport	0	2	2	0	6	11	6	11	0
62 : Air transport	140	193	195	192	213	270	86	172	127
63 : Supporting transport activities/travel agencies	890	1,127	883	864	1,269	1,669	2,701	2,318	1,018
64 : Post and telecommunications	1,036	931	976	713	617	1,530	1,351	1,852	2,125
65 : Financial intermediation	1,563	1,789	1,278	1,097	1,085	1,028	1,173	1,209	1,317
66 : Insurance and pension funding	135	120	184	145	123	81	80	59	14
67 : Auxiliary financial activities	244	237	235	211	224	369	240	267	296
70 : Real estate activities	1,088	1,049	926	950	1,109	984	992	1,484	1,102
71 : Renting of machinery and equipment	306	434	390	386	390	495	472	652	606
72 : Computer and related activities	1,253	1,450	1,613	1,806	2,196	3,709	3,538	3,922	3,939
73 : Research and development	13	11 12 151	24	16	28	10 242	17	20	15
74 : Other business activities 75 : Public administration and defence	12,581 3.857	12,451 3,048	9,539 3,023	11,216 2,930	10,998 2,919	10,343 2.917	12,590 3,228	14,380 3,277	15,587 2,880
80 : Education	3,313	3,513	3,680	4,070	4,315	4,258	3,963	4,105	4,410
85 : Health and social work	6,823	7,615	6,671	7,197	7,281	7,695	8,193	7,944	8,156
90 : Sewage and refuse disposal	46	54	65	105	64	7,033	112	171	236
91 : Activities of membership organisations	731	973	920	1.089	1,122	1,231	1,345	1,184	1,318
92 : Recreational, cultural and sporting activities	1,612	2,072	1,839	1,855	2,050	1,995	1,851	1,762	1,979
93 : Other service activities	526	791	593	841	992	1,120	974	957	1,092
Total	70,017	69,929	68,441	68,925	69,422	70,570	73,565	75,450	75,865

APPENDIX I – DETAILED EMPLOYMENT FORECASTS

Employment Projections - Warwick Baseline Employment Projections

Baseline Employment Projections					
	2006 Actual	2011	2016	2021	2026
01 : Agriculture/Hunting, etc.	447	447	358	268	224
02 : Forestry, logging etc.	4	4	3	2	2
05 : Fishing, fish farms etc.	11	11	9	7	6
10 : Coal Mining, Peat Extraction	0	0	0	0	0
11 : Petroleum, Oil/Gas Services	0	0	0	0	0
14 : Other mining and quarry	29	29	29	29	29
15 : Manf food and beverages	969	969	872	872	872
17 : Manf textiles	48	0	0	0	0
18 : Manf wearing apparel	9	0	0	0	0
19 : Tanning and dressing of leather	3	0	0	0	0
20 : Manf wood products	195	130	130	130	65
21 : Manf pulp and paper products	81	54	54	54	27
22 : Publishing and Printing	579	496	496	496	414
23 : Manf coke, petroleum products	0	0	0	0	0
24 : Manf chemicals and chemical products	158	158	158	158	158
25 : Manf rubber and plastic products	203	102	102	102	102
26 : Manf other non-metallic mineral products	10	10	10	10	10
27 : Manf basic metals	445	356	356	356	356
28 : Manf fabricated metal products	576	480	384	384	384
29 : Manf other machinery	1,424	1,329	1,234	1,234	1,044
30 : Manf office machinery and computers	71	36	36	36	36
31 : Manf other electrical machinery	153	115	77	77	38
32 : Manf communication equipment	91	46	46	46	46
33 : Manf medical instruments	176	132	88	88	44
34 : Manf motor vehicles, trailers	1,505	1,317	1,223	1,129	1,129
35 : Manf transport equipment	100	100	100	100	100
36 : Manf furniture; manufacturing n.e.c.	238	238	317	317	317
37 : Recycling	42	42	56	56	56
40 : Electricity, gas, steam and hot water supply	639	730	730	639	639
41 : Collection, purification and distribution of water	647	647	647	555	555
45 : Construction	2,259	2,259	2,396	2,464	2,464
50 : Sale and repair of motor vehicles and fuel	2,266	2,234	2,234	2,266	2,266
51 : Wholesale trade	3,914	3,858	3,858	3,914	3,914
52 : Retail trade	6,658	6,568	6,658	6,838	6,928
55 : Hotels and restaurants	5,230	5,230 416	5,714 468	6,102 494	6,392
60 : Land transport	468 0	416	466	494	520 0
61 : Water transport 62 : Air transport	127	127	191	191	254
	1.018	905	1.018	1.075	1,131
63 : Supporting transport activities/travel agencies 64 : Post and telecommunications	2,125	1.720	1,720	1,075	1,131
65 : Financial intermediation	1,317	1,720	1,720	1,244	1,417
66 : Insurance and pension funding	1,317	1, 17 1	1,244	1,244	1,244
67 : Auxiliary financial activities	296	263	280	280	280
70 : Real estate activities	1.102	1.231	1.261	1.271	1.440
71 : Renting of machinery and equipment	606	677	693	699	792
72 : Computer and related activities	3.939	4.025	4.710	5.480	6.165
73 : Research and development	3,939	4,025	4,710	17	20
74 : Other business activities	15,587	17,653	18,967	20,657	22.160
75 : Public administration and defence	2.880	2.880	2.880	2.880	2,880
80 : Education	4,410	4.508	4.606	4.802	4,900
85 : Health and social work	8,156	8,249	8,341	8,434	8,619
90 : Sewage and refuse disposal	236	236	252	268	280
91 : Activities of membership organisations	1,318	1.318	1.407	1,497	1,564
92 : Recreational, cultural and sporting activities	1,979	1,979	2.113	2.247	2,348
93 : Other service activities	1,092	1,092	1,166	1,240	1,296
Total	75,865	76,605	79,722	83,035	85,937
Total	73,003	70,000	19,122	03,033	00,937

Projected Growth Rates (% pa)

Projected Growth Rates (% pa)				
	2006-	2011-	2016-	2021-
	2011	2016	2021	2026
01 : Agriculture/Hunting, etc.	0.0%	-4.4%	-5.6%	-3.6%
02 : Forestry, logging etc.	0.0%	-4.4%	-5.6%	-3.6%
05 : Fishing, fish farms etc.	0.0%	-4.4%	-5.6%	-3.6%
10 : Coal Mining, Peat Extraction	NA	NA	NA	NA
11 : Petroleum, Oil/Gas Services	NA	NA	NA	NA
14 : Other mining and quarry	0.0%	0.0%	0.0%	0.0%
15 : Manf food and beverages	0.0%	-2.1%	0.0%	0.0%
17 : Manf textiles	-100.0%	NA	NA	NA
18 : Manf wearing apparel	-100.0%	NA	NA	NA
19 : Tanning and dressing of leather	-100.0%	NA	NA	NA
20 : Manf wood products	-7.8%	0.0%	0.0%	-12.9%
21 : Manf pulp and paper products	-7.8%	0.0%	0.0%	-12.9%
22 : Publishing and Printing	-3.0%	0.0%	0.0%	-3.6%
23 : Manf coke, petroleum products	NA	NA	NA	NA.
24 : Manf chemicals and chemical products	0.0%	0.0%	0.0%	0.0%
25 : Manf rubber and plastic products	-12.9%	0.0%	0.0%	0.0%
26 : Manf other non-metallic mineral products	0.0%	0.0%	0.0%	0.0%
27 : Manf basic metals	-4.4%	0.0%	0.0%	0.0%
28 : Manf fabricated metal products	-3.6%	-4.4%	0.0%	0.0%
29 : Manf other machinery	-1.4%	-1.5%	0.0%	-3.3%
30 : Manf office machinery and computers	-12.9%	0.0%	0.0%	0.0%
31 : Manf other electrical machinery	-5.6%	-7.8%	0.0%	-12.9%
32 : Manf communication equipment	-12.9%	0.0%	0.0%	0.0%
33 : Manf communication equipment	-5.6%	-7.8%	0.0%	-12.9%
34 : Manf motor vehicles, trailers	-2.6%	-1.5%	-1.6%	0.0%
35 : Manf transport equipment	0.0%	0.0%	0.0%	0.0%
36 : Manf furniture; manufacturing n.e.c.	0.0%	5.9%	0.0%	0.0%
37 : Recycling	0.0%	5.9%	0.0%	0.0%
40 : Electricity, gas, steam and hot water supply	2.7%	0.0%	-2.6%	0.0%
41 : Collection, purification and distribution of water	0.0%	0.0%	-3.0%	0.0%
45 : Construction	0.0%	1.2%	0.6%	0.0%
50 : Sale and repair of motor vehicles and fuel	-0.3%	0.0%	0.3%	0.0%
51 : Wholesale trade	-0.3%	0.0%	0.3%	0.0%
52 : Retail trade	-0.3%	0.3%	0.5%	0.3%
55 : Hotels and restaurants	0.0%	1.8%	1.3%	0.9%
60 : Land transport	-2.3%	2.4%	1.1%	1.0%
61 : Water transport	NA	NA	NA	NA
62 : Air transport	0.0%	8.4%	0.0%	5.9%
63 : Supporting transport activities/travel agencies	-2.3%	2.4%	1.1%	1.0%
64 : Post and telecommunications	-4.1%	0.0%	-2.5%	-1.4%
65 : Financial intermediation	-2.3%	1.2%	0.0%	0.0%
66 : Insurance and pension funding	0.0%	0.0%	0.0%	0.0%
67 : Auxiliary financial activities	-2.3%	1.2%	0.0%	0.0%
70 : Real estate activities	2.2%	0.5%	0.2%	2.5%
71 : Renting of machinery and equipment	2.2%	0.5%	0.2%	2.5%
72 : Computer and related activities	0.4%	3.2%	3.1%	2.4%
73 : Research and development	2.2%	0.5%	0.2%	2.5%
74 : Other business activities	2.5%	1.4%	1.7%	1.4%
75 : Public administration and defence	0.0%	0.0%	0.0%	0.0%
80 : Education	0.4%	0.4%	0.8%	0.4%
85 : Health and social work	0.2%	0.2%	0.2%	0.4%
90 : Sewage and refuse disposal	0.0%	1.3%	1.2%	0.9%
91 : Activities of membership organisations	0.0%	1.3%	1.2%	0.9%
92 : Recreational, cultural and sporting activities	0.0%	1.3%	1.2%	0.9%
93 : Other service activities	0.0%	1.3%	1.2%	0.9%
Total	0.2%	0.8%	0.8%	0.7%

Employment Projections - Warwick

Baseline Employment Projections - Selected Sectors Only

	cline Employment Pojections - delected dectors of	2006	2011	2016	2021	2026
		Actual				
M1	Food & Beverages	969	969	872	872	872
M2	Printing & Publishing	579	496	496	496	414
М3	Chemical, Plastic & Non-Metallic Materials/Products	371	270	270	270	270
M4	Metals & Metal Products	1,021	836	740	740	740
M5	Mechanical Engineering	1,424	1,329	1,234	1,234	1,044
M6	Electronics, Electrical Engineering & Instruments	491	328	246	246	163
М7	Motor Vehicles & Other Transport Equipment	1,605	1,417	1,323	1,229	1,229
M8	Manufacturing nes	616	464	557	557	465
S1	Utilities	1,522	1,613	1,629	1,462	1,474
S2	Construction	2,259	2,259	2,396	2,464	2,464
S3	Wholesale Distribution	3,914	3,858	3,858	3,914	3,914
S4	Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	2,266	2,234	2,234	2,266	2,266
S5	Retailing	6,658	6,568	6,658	6,838	6,928
S6	Hotels & Catering	5,230	5,230	5,714	6,102	6,392
S7	Land Transport	1,486	1,321	1,486	1,569	1,651
S8	Communications	2,125	1,720	1,720	1,518	1,417
S9	Insurance, Banking & Finance	1,627	1,448	1,537	1,537	1,537
S10	Computing Services	3,939	4,025	4,710	5,480	6,165
S11	Research & Development	15	17	17	17	20
S12	Real Estate & Professional Services	1,102	1,231	1,261	1,271	1,440
S13	Other Business Services	15,587	17,653	18,967	20,657	22,160
S14	Public Administration & Defence	2,880	2,880	2,880	2,880	2,880
S15	Education	4,410	4,508	4,606	4,802	4,900
S16	Health & Social Work	8,156	8,249	8,341	8,434	8,619
	Recreational, Cultural & Sporting Activities	1,979	1,979	2,113	2,247	2,348
S18	Other Services	3,016	3,087	3,267	3,436	3,651
	Total	75,247	75,987	79,133	82,538	85,423

Projected Growth Rates (% pa)

Projected Growth Rates (76 pa)	2006-	2011-	2016-	2021-
	2011	2016	2010-	2026
M1 Food & Beverages	0.0%	-2.1%	0.0%	0.0%
M2 Printing & Publishing	-3.0%	0.0%	0.0%	-3.6%
M3 Chemical, Plastic & Non-Metallic Materials/Products	-6.2%	0.0%	0.0%	0.0%
M4 Metals & Metal Products	-3.9%	-2.4%	0.0%	0.0%
M5 Mechanical Engineering	-1.4%	-1.5%	0.0%	-3.3%
M6 Electronics, Electrical Engineering & Instruments	-7.8%	-5.6%	0.0%	-7.8%
M7 Motor Vehicles & Other Transport Equipment	-2.5%	-1.4%	-1.5%	0.0%
M8 Manufacturing nes	-5.5%	3.7%	0.0%	-3.5%
S1 Utilities	1.2%	0.2%	-2.1%	0.2%
S2 Construction	0.0%	1.2%	0.6%	0.0%
S3 Wholesale Distribution	-0.3%	0.0%	0.3%	0.0%
S4 Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	-0.3%	0.0%	0.3%	0.0%
S5 Retailing	-0.3%	0.3%	0.5%	0.3%
S6 Hotels & Catering	0.0%	1.8%	1.3%	0.9%
S7 Land Transport	-2.3%	2.4%	1.1%	1.0%
S8 Communications	-4.1%	0.0%	-2.5%	-1.4%
S9 Insurance, Banking & Finance	-2.3%	1.2%	0.0%	0.0%
S10 Computing Services	0.4%	3.2%	3.1%	2.4%
S11 Research & Development	2.2%	0.5%	0.2%	2.5%
S12 Real Estate & Professional Services	2.2%	0.5%	0.2%	2.5%
S13 Other Business Services	2.5%	1.4%	1.7%	1.4%
S14 Public Administration & Defence	0.0%	0.0%	0.0%	0.0%
S15 Education	0.4%	0.4%	0.8%	0.4%
S16 Health & Social Work	0.2%	0.2%	0.2%	0.4%
S17 Recreational, Cultural & Sporting Activities	0.0%	1.3%	1.2%	0.9%
S18 Other Services	0.5%	1.1%	1.0%	1.2%
Total	0.2%	0.8%	0.8%	0.7%

Employment Projections - Warwick Scenario A-1 (10,800 New Dwellings)

	2006 Actual	2011	2016	2021	2026
01 : Agriculture/Hunting, etc.	447	417	388	362	337
02 : Forestry, logging etc.	4	3	3	2	2
05 : Fishing, fish farms etc.	11	9	7	6	2 5
10 : Coal Mining, Peat Extraction	0	0	0	0	0
11 : Petroleum, Oil/Gas Services	0	0	0	0	0
14 : Other mining and quarry	29	29	28	28	28
15 : Manf food and beverages	969	932	897	863	830
17 : Manf textiles	48	0	0	0	0
18 : Manf wearing apparel	9	0	0	0	0
19 : Tanning and dressing of leather	3	0	0 105	0	0
20 : Manf wood products	195 81	143 59	105 44	77 32	57 23
21 : Manf pulp and paper products 22 : Publishing and Printing	579	59 524	44	32 429	389
23 : Manf coke, petroleum products	0	0 0	4/4	429	309
24 : Manf chemicals and chemical products	158	156	155	153	151
25 : Manf rubber and plastic products	203	167	137	113	93
26 : Manf other non-metallic mineral products	10	10	10	10	10
27 : Manf. basic metals	445	415	387	361	337
28 : Manf fabricated metal products	576	512	455	404	359
29 : Manf other machinery	1,424	1,298	1,183	1,078	983
30 : Manf office machinery and computers	71	85	102	122	145
31 : Manf other electrical machinery	153	151	150	148	146
32 : Manf communication equipment	91	90	89	88	87
33 : Manf medical instruments	176	174	172	170	168
34 : Manf motor vehicles, trailers	1,505	1,380	1,265	1,160	1,064
35 : Manf transport equipment	100	99	98	97	96
36 : Manf furniture; manufacturing n.e.c.	238	254	270	288	307
37 : Recycling	42	45	48	51	54
40 : Electricity, gas, steam and hot water supply	639 647	632 615	625 584	618 554	611 527
41 : Collection, purification and distribution of water 45 : Construction	2.259	2.358	2.460	2.568	2.680
50 : Sale and repair of motor vehicles and fuel	2,255	2,336	2,400	2,354	2,000
51 : Wholesale trade	3,914	3,871	3.828	3,786	3,745
52 : Retail trade	6,658	6.875	7.099	7.330	7,569
55 : Hotels and restaurants	5.230	5.322	5.416	5.511	5,609
60 : Land transport	468	476	484	492	500
61 : Water transport	0	0	0	0	0
62 : Air transport	127	150	178	210	249
63 : Supporting transport activities/travel agencies	1,018	1,035	1,052	1,069	1,087
64 : Post and telecommunications	2,125	1,888	1,678	1,491	1,325
65 : Financial intermediation	1,317	1,303	1,288	1,274	1,260
66 : Insurance and pension funding	14	14	14	14	13
67 : Auxiliary financial activities	296	322	350	380	413
70 : Real estate activities	1,102	1,130	1,158	1,187	1,216
71 : Renting of machinery and equipment	606	642	681	722	765
72 : Computer and related activities	3,939	4,568	5,298	6,145	7,126
73 : Research and development	15	28	51	94	172
74 : Other business activities 75 : Public administration and defence	15,587 2,880	17,071 3,005	18,697 3,136	20,478 3,272	22,428 3,414
80 : Education	4,410	4,627	4,854	5,092	5,343
85 : Health and social work	8,156	8,382	8,615	8,854	9,099
90 : Sewage and refuse disposal	236	244	252	261	270
91 : Activities of membership organisations	1.318	1.336	1.354	1.372	1.391
92 : Recreational, cultural and sporting activities	1,979	2,039	2,100	2.163	2.228
93 : Other service activities	1,092	1,112	1,132	1,153	1,174
Total	75,865	78,290	81,174	84,486	88,269

Projected Growth Rates (% pa)				
	2006-	2011-	2016-	2021-
	2011	2016	2021	2026
01 : Agriculture/Hunting, etc.	-1.4%	-1.4%	-1.4%	-1.4%
02 : Forestry, logging etc.	-3.8%	-3.8%	-3.8%	-3.8%
05 : Fishing, fish farms etc.	-3.8%	-3.8%	-3.8%	-3.8%
10 : Coal Mining, Peat Extraction	NA	NA	NA	NA
11 : Petroleum, Oil/Gas Services	NA	NA	NA	NA
14 : Other mining and quarry	-0.2%	-0.2%	-0.2%	-0.2%
15 : Manf food and beverages	-0.8%	-0.8%	-0.8%	-0.8%
17 : Manf textiles	-100.0%	#DIV/0!	#DIV/0!	#DIV/0!
18 : Manf wearing apparel	-100.0%	#DIV/0!	#DIV/0!	#DIV/0!
19 : Tanning and dressing of leather	-100.0%	#DIV/0!	#DIV/0!	#DIV/0!
20 : Manf wood products	-6.0%	-6.0%	-6.0%	-6.0%
21 : Manf pulp and paper products	-6.0%	-6.0%	-6.0%	-6.0%
22 : Publishing and Printing	-2.0%	-2.0%	-2.0%	-2.0%
23 : Manf coke, petroleum products	NA	NA	NA	NA
24 : Manf chemicals and chemical products	-0.2%	-0.2%	-0.2%	-0.2%
25 : Manf rubber and plastic products	-3.8%	-3.8%	-3.8%	-3.8%
26 : Manf other non-metallic mineral products	-0.2%	-0.2%	-0.2%	-0.2%
27 : Manf. basic metals	-1.4%	-1.4%	-1.4%	-1.4%
28 : Manf fabricated metal products	-2.3%	-2.3%	-2.3%	-2.3%
29 : Manf other machinery	-1.8%	-1.8%	-1.8%	-1.8%
30 : Manf office machinery and computers	3.7%	3.7%	3.7%	3.7%
31 : Manf other electrical machinery	-0.2%	-0.2%	-0.2%	-0.2%
32 : Manf communication equipment	-0.2%	-0.2%	-0.2%	-0.2%
33 : Manf medical instruments	-0.2%	-0.2%	-0.2%	-0.2%
34 : Manf motor vehicles, trailers	-1.7% -0.2%	-1.7% -0.2%	-1.7%	-1.7%
35 : Manf transport equipment	1.3%	1.3%	-0.2% 1.3%	-0.2% 1.3%
36 : Manf furniture; manufacturing n.e.c. 37 : Recycling	1.3%	1.3%	1.3%	1.3%
40 : Electricity, gas, steam and hot water supply	-0.2%	-0.2%	-0.2%	-0.2%
41 : Collection, purification and distribution of water	-1.0%	-1.0%	-1.0%	-1.0%
45 : Construction	0.9%	0.9%	0.9%	0.9%
50 : Sale and repair of motor vehicles and fuel	0.3%	0.3%	0.3%	0.3%
51 : Wholesale trade	-0.2%	-0.2%	-0.2%	-0.2%
52 : Retail trade	0.6%	0.6%	0.6%	0.6%
55 : Hotels and restaurants	0.4%	0.4%	0.4%	0.4%
60 : Land transport	0.3%	0.3%	0.3%	0.3%
61 : Water transport	NA	NA	NA	NA
62 : Air transport	3.4%	3.4%	3.4%	3.4%
63 : Supporting transport activities/travel agencies	0.3%	0.3%	0.3%	0.3%
64 : Post and telecommunications	-2.3%	-2.3%	-2.3%	-2.3%
65 : Financial intermediation	-0.2%	-0.2%	-0.2%	-0.2%
66 : Insurance and pension funding	-0.2%	-0.2%	-0.2%	-0.2%
67 : Auxiliary financial activities	1.7%	1.7%	1.7%	1.7%
70 : Real estate activities	0.5%	0.5%	0.5%	0.5%
71 : Renting of machinery and equipment	1.2%	1.2%	1.2%	1.2%
72 : Computer and related activities	3.0%	3.0%	3.0%	3.0%
73 : Research and development	13.0%	13.0%	13.0%	13.0%
74 : Other business activities	1.8%	1.8%	1.8%	1.8%
75 : Public administration and defence	0.9%	0.9%	0.9%	0.9%
80 : Education	1.0%	1.0%	1.0%	1.0%
85 : Health and social work	0.5%	0.5%	0.5%	0.5%
90 : Sewage and refuse disposal	0.7%	0.7%	0.7%	0.7%
91 : Activities of membership organisations	0.3%	0.7%	0.3%	0.7%
92 : Recreational, cultural and sporting activities	0.6%	0.6%	0.5%	0.6%
93 : Other service activities	0.4%	0.4%	0.4%	0.4%
Total	0.6%	0.7%	0.4%	0.9%
Total	0.070	U.176	0.076	0.376

Employment Projections - Warwick

Scenario A-1 (10,800 New Dwellings) - Selected Sectors Only

		2006	2011	2016	2021	2026
		Actual				
M1	Food & Beverages	969	932	897	863	830
M2	Printing & Publishing	579	524	474	429	389
M3	Chemical, Plastic & Non-Metallic Materials/Products	371	333	302	275	253
M4	Metals & Metal Products	1,021	927	842	765	696
M5	Mechanical Engineering	1,424	1,298	1,183	1,078	983
M6	Electronics, Electrical Engineering & Instruments	491	500	512	528	547
M7	Motor Vehicles & Other Transport Equipment	1,605	1,479	1,363	1,257	1,159
M8	Manufacturing nes	616	501	467	448	441
S1	Utilities	1,522	1,491	1,461	1,433	1,408
S2	Construction	2,259	2,358	2,460	2,568	2,680
S3	Wholesale Distribution	3,914	3,871	3,828	3,786	3,745
S4	Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	2,266	2,295	2,324	2,354	2,384
S5	Retailing	6,658	6,875	7,099	7,330	7,569
S6	Hotels & Catering	5,230	5,322	5,416	5,511	5,609
S7	Land Transport	1,486	1,511	1,536	1,561	1,587
S8	Communications	2,125	1,888	1,678	1,491	1,325
S9	Insurance, Banking & Finance	1,627	1,638	1,651	1,668	1,686
S10	Computing Services	3,939	4,568	5,298	6,145	7,126
S11	Research & Development	15	28	51	94	172
S12	Real Estate & Professional Services	1,102	1,130	1,158	1,187	1,216
S13	Other Business Services	15,587	17,071	18,697	20,478	22,428
	Public Administration & Defence	2,880	3,005	3,136	3,272	3,414
	Education	4,410	4,627	4,854	5,092	5,343
	Health & Social Work	8,156	8,382	8,615	8,854	9,099
	Recreational, Cultural & Sporting Activities	1,979	2,039	2,100	2,163	2,228
S18	Other Services	3,016	3,090	3,167	3,247	3,330
	Total	75,247	77,682	80,569	83,877	87,648

Projected Growth Rates (% pa)

1 Tojected Growth Rates (70 pa)	2006-	2011-	2016-	2021-
	2011	2016	2021	2026
M1 Food & Beverages	-0.8%	-0.8%	-0.8%	-0.8%
M2 Printing & Publishing	-2.0%	-2.0%	-2.0%	-2.0%
M3 Chemical, Plastic & Non-Metallic Materials/Products	-2.1%	-2.0%	-1.8%	-1.6%
M4 Metals & Metal Products	-1.9%	-1.9%	-1.9%	-1.9%
M5 Mechanical Engineering	-1.8%	-1.8%	-1.8%	-1.8%
M6 Electronics, Electrical Engineering & Instruments	0.4%	0.5%	0.6%	0.7%
M7 Motor Vehicles & Other Transport Equipment	-1.6%	-1.6%	-1.6%	-1.6%
M8 Manufacturing nes	-4.0%	-1.4%	-0.8%	-0.3%
S1 Utilities	-0.4%	-0.4%	-0.4%	-0.4%
S2 Construction	0.9%	0.9%	0.9%	0.9%
S3 Wholesale Distribution	-0.2%	-0.2%	-0.2%	-0.2%
S4 Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	0.3%	0.3%	0.3%	0.3%
S5 Retailing	0.6%	0.6%	0.6%	0.6%
S6 Hotels & Catering	0.4%	0.4%	0.4%	0.4%
S7 Land Transport	0.3%	0.3%	0.3%	0.3%
S8 Communications	-2.3%	-2.3%	-2.3%	-2.3%
S9 Insurance, Banking & Finance	0.1%	0.2%	0.2%	0.2%
S10 Computing Services	3.0%	3.0%	3.0%	3.0%
S11 Research & Development	13.0%	13.0%	13.0%	13.0%
S12 Real Estate & Professional Services	0.5%	0.5%	0.5%	0.5%
S13 Other Business Services	1.8%	1.8%	1.8%	1.8%
S14 Public Administration & Defence	0.9%	0.9%	0.9%	0.9%
S15 Education	1.0%	1.0%	1.0%	1.0%
S16 Health & Social Work	0.5%	0.5%	0.5%	0.5%
S17 Recreational, Cultural & Sporting Activities	0.6%	0.6%	0.6%	0.6%
S18 Other Services	0.5%	0.5%	0.5%	0.5%
Total	0.6%	0.7%	0.8%	0.9%

Employment Projections - Warwick Scenario A-2 (20,800 New Dwellings)

Name						Scenario A-2 (20,800 New Dwellings)
11	2026	2021	2016	2011		
10 10 10 10 10 10 10 10	070		107	100		
15 Fishing, fish farms etc.	370					
10 - Coal Mining, Peat Extraction 0	2					
11 : Petroleum, Oil/Gas Services	6		_	_		
14 : Other mining and quarry 29 29 29 30 30 15 : Manf took and beverages 969 952 935 918 17 : Manf textiles 48 0 0 0 0 0 18 : Manf wearing apparel 9 0 0 0 0 0 19 : Tanning and dressing of leather 3 0 0 0 0 0 10 11 11	0				-	
15 : Manf food and beverages	-	•	•	•	·	
17 : Manf wearing apparel	30 902					
18 : Manf wearing apparel 9 0 0 0 19 : Tranning and dressing of leather 3 0 0 0 20 : Manf wood products 195 151 118 91 21 : Manf pulp and paper products 81 63 49 38 22 : Publishing and Printing 579 538 500 464 23 : Manf coke, petroleum products 0 0 0 0 24 : Manf chemicals and chemical products 158 159 160 162 25 : Manf other nor metallic mineral products 10 10 10 10 26 : Manf other machinery 1424 1331 1244 1,63 29 : Manf other machinery 1424 1,331 1,244 1,33 29 : Manf other electrical machinery 153 154 155 156 21 : Manf other electrical machinery 153 154 155 156 21 : Manf tomorunication equipment 176 177 179 180 31 : Manf trans	902					
193 Tanning and dressing of leather 3	0	_	-	-		
20 : Manf wood products	0	-	_	_	-	
21 : Manf pulp and paper products	71	-	-	-		
22 : Publishing and Printing 579 538 500 464 43 43 44 44 44 44 4	29					
23 Manf coke, petroleum products	431					
24 : Manf chemicals and chemical products 158 159 160 162 25 : Manf rubber and plastic products 203 173 148 126 26 : Manf other non-metallic mineral products 10 10 10 10 27 : Manf. basic metals 445 425 406 387 28 : Manf fabricated metal products 576 526 481 439 29 : Manf other machinery 1,424 1,331 1,244 1,63 30 : Manf office machinery and computers 71 86 103 125 31 : Manf other electrical machinery 153 154 155 156 32 : Manf communication equipment 91 92 93 33 : Manf medical instruments 176 177 179 180 34 : Manf turniture; manufacturing n.e.c. 238 257 278 300 37 : Recycling 42 45 49 63 41 : Collection, purification and distribution of water 647 628 610 592	401					
25 : Manf rubber and plastic products 203 173 148 126 26 : Manf other non-metallic mineral products 10	163	_			-	
26 : Manf other non-metallic mineral products 10 10 10 10 10 27 : Manf. basic metals 445 425 406 387 28 : Manf fabricated metal products 576 526 481 439 29 : Manf other machinery 1,424 1,331 1,244 1,163 30 : Manf other electrical machinery 153 154 155 156 31 : Manf other electrical machinery 153 154 155 156 32 : Manf communication equipment 91 92 92 93 33 : Manf medical instruments 1,605 1,415 1,330 1,250 34 : Manf transport equipment 100 101 102 102 35 : Manf furniture; manufacturing n.e.c. 238 257 278 300 37 : Recycling 42 45 49 53 40 : Electricity, gas, steam and hot water supply 639 644 649 654 41 : Collection, purification and distribution of water 647 628 610 592 45 : Construction 2,259 2,488 <t< th=""><th>108</th><th></th><th></th><th></th><th></th><th></th></t<>	108					
27 : Manf. basic metals 445 425 406 387 28 : Manf fabricated metal products 576 526 481 439 29 : Manf other machinery 1,424 1,331 1,244 1,163 30 : Manf office machinery and computers 71 86 103 125 31 : Manf other electrical machinery 153 154 155 156 32 : Manf communication equipment 91 92 93 33 : Manf medical instruments 176 177 179 180 34 : Manf motor vehicles, trailers 1,505 1,415 1,330 1,250 35 : Manf transport equipment 100 101 102 102 36 : Manf furniture; manufacturing n.e.c. 238 257 278 300 37 : Recycling 42 45 49 63 40 : Electricity, gas, steam and hot water supply 639 644 649 654 41 : Collection, purification and distribution of water 647 628 610 592 45 : Construction 2,269 2,488 2,741 3,020 <th>10</th> <th></th> <th></th> <th></th> <th></th> <th></th>	10					
28 : Manf fabricated metal products 576 526 481 439 29 : Manf other machinery 1,424 1,331 1,244 1,163 30 : Manf office machinery and computers 71 86 103 125 31 : Manf other electrical machinery 153 154 155 156 32 : Manf communication equipment 91 92 92 93 33 : Manf medical instruments 176 177 179 180 34 : Manf motor vehicles, trailers 1,505 1,415 1,330 1,250 35 : Manf furniture; manufacturing n.e.c. 238 257 278 300 36 : Manf furniture; manufacturing n.e.c. 238 257 278 300 37 : Recycling 42 45 49 654 41 : Collection, purification and distribution of water 647 628 610 592 45 : Construction 2,259 2,488 2,741 3,020 50 : Sale and repair of motor vehicles and fuel 2,266 2,379 2,497	370					
29 Manf other machinery 1,424 1,331 1,244 1,163 30 Manf office machinery and computers 71 86 103 125 155 156 155	402					
30 : Manf office machinery and computers 71 86 103 125 156 15	1,088	1.163	1.244	1.331	1.424	
31: Manf cother electrical machinery 153 154 155 156 32: Manf communication equipment 91 92 92 93 33: Manf motor vehicles, trailers 176 177 179 180 35: Manf motor vehicles, trailers 1,505 1,415 1,330 1,250 35: Manf transport equipment 100 101 102 102 36: Manf furniture; manufacturing n.e.c. 238 257 278 300 37: Recycling 42 45 49 65 43 41: Collection, purification and distribution of water 647 628 610 592 45: Construction 2,259 2,488 2,741 3,020 50: Sale and repair of motor vehicles and fuel 2,266 2,379 2,497 2,621 51: Wholesale trade 3,914 3,943 3,973 4,003 52: Retail trade 6,658 7,213 7,813 8,464 55: Hotels and restaurants 5,230 5,534 5,855 6,194 60: Land transport 468 484 500 517	151			86	71	
32 : Manf communication equipment 91 92 92 93 33 : Manf medical instruments 176 177 179 180 34 : Manf motor vehicles, trailers 1,505 1,415 1,330 1,250 35 : Manf transport equipment 100 101 102 102 36 : Manf furniture; manufacturing n.e.c. 238 257 278 300 37 : Recycling 42 45 49 53 40 : Electricity, gas, steam and hot water supply 639 644 649 654 41 : Collection, purification and distribution of water 647 628 610 592 45 : Construction 2,269 2,488 2,741 3,020 50 : Sale and repair of motor vehicles and fuel 2,266 2,379 2,497 2,621 51 : Wholesale trade 6,658 7,213 7,813 8,064 52 : Retail trade 6,658 7,213 7,813 8,664 55 : Hotels and restaurants 5,230 5,534 5,855 6,194	158	156	155	154	153	
34: Manf motor vehicles, trailers 1,505 1,415 1,330 1,250 35: Manf transport equipment 100 101 102 102 36: Manf furniture; manufacturing n.e.c. 238 257 278 300 37: Recycling 42 45 49 63 40: Electricity, gas, steam and hot water supply 639 644 649 654 41: Collection, purification and distribution of water 647 628 610 592 45: Construction 2,259 2,488 2,741 3,020 50: Sale and repair of motor vehicles and fuel 2,266 2,379 2,497 2,661 51: Wholesale trade 3,914 3,943 3,973 4,003 52: Retail trade 6,658 7,213 7,813 8,464 55: Hotels and restaurants 5,230 5,534 5,855 6,194 60: Land transport 468 484 500 517 61: Water transport 0 0 0 0 0 62: Air tr	94	93	92	92	91	
35: Manf transport equipment 100 101 102 102 36: Manf furniture; manufacturing n.e.c. 238 257 278 300 37: Recycling 42 45 49 53 40: Electricity, gas, steam and hot water supply 639 644 649 654 41: Collection, purification and distribution of water 647 628 610 592 45: Construction 2,259 2,488 2,741 3,020 50: Sale and repair of motor vehicles and fuel 2,266 2,379 2,497 2,621 51: Wholesale trade 6,658 7,213 7,813 8,464 55: Retail trade 6,658 7,213 7,813 8,464 55: Hotels and restaurants 5,230 5,534 5,855 6,194 60: Land transport 468 484 500 517 61: Water transport 127 152 181 216 63: Supporting transport activities/travel agencies 1,018 1,052 1,088 1,124 64: Po	181	180	179	177	176	33 : Manf medical instruments
36 : Manf furniture; manufacturing n.e.c. 238 257 278 300 37 : Recycling 42 45 49 53 40 : Electricity, gas, steam and hot water supply 639 644 649 654 41 : Collection, purification and distribution of water 647 628 610 592 45 : Construction 2,259 2,488 2,741 3,020 50 : Sale and repair of motor vehicles and fuel 2,266 2,379 2,497 2,621 51 : Wholesale trade 6,658 7,213 7,813 8,464 52 : Retail trade 6,658 7,213 7,813 8,464 55 : Hotels and restaurants 5,230 5,534 5,855 6,194 60 : Land transport 0	1,175	1,250	1,330	1,415	1,505	34 : Manf motor vehicles, trailers
37 : Recycling	103					35 : Manf transport equipment
40 : Electricity, gas, steam and hot water supply 639 644 649 654 41 : Collection, purification and distribution of water 647 628 610 592 45 : Construction 2 259 2 248 2 741 3 020 50 : Sale and repair of motor vehicles and fuel 2 266 2 379 2 2497 2 621 51 : Wholesale trade 3 3 4 3 3 3 3 3 3 3	325	300	278	257	238	36 : Manf furniture; manufacturing n.e.c.
41 : Collection, purification and distribution of water 647 628 610 592 45 : Construction 2,259 2,488 2,741 3,020 50 : Sale and repair of motor vehicles and fuel 2,266 2,379 2,497 2,621 51 : Wholesale trade 3,914 3,943 3,973 4,003 52 : Retail trade 6,658 7,213 7,813 8,464 55 : Hotels and restaurants 5,230 5,534 5,855 6,194 60 : Land transport 468 484 500 517 61 : Water transport 0 0 0 0 0 62 : Air transport 1,27 152 181 216 63 : Supporting transport activities/travel agencies 1,018 1,052 1,088 1,124 64 : Post and telecommunications 2,125 1,942 1,774 1,621 65 : Financial intermediation 13,17 1,327 1,337 1,347 66 : Insurance and pension funding 14 14 14 14 67 : Real estate activities 296 326 359 395 </th <th>57</th> <th></th> <th></th> <th></th> <th></th> <th></th>	57					
45 : Construction 2,259 2,488 2,741 3,020 50 : Sale and repair of motor vehicles and fuel 2,266 2,379 2,497 2,621 51 : Wholesale trade 3,914 3,943 3,973 4,003 52 : Retail trade 6,658 7,213 7,813 8,464 55 : Hotels and restaurants 5,230 5,534 5,855 6,194 60 : Land transport 468 484 500 517 61 : Water transport 0 0 0 0 0 62 : Air transport 127 152 181 216 63 : Supporting transport activities/travel agencies 1,018 1,052 1,088 1,124 64 : Post and telecommunications 2,125 1,942 1,774 1,621 65 : Financial intermediation 13,17 1,327 1,337 1,347 66 : Insurance and pension funding 14 14 14 14 67 : Auxiliary financial activities 296 326 359 395 70 : Real estate activities 1,102 1,180 1,263 1,352 71 : Renting of machinery and equipment 606 652 701 753 72 : Computer and related activities 3,339 <	658					
50 : Sale and repair of motor vehicles and fuel 2,266 2,379 2,497 2,621 51 : Wholesale trade 3,914 3,943 3,973 4,003 52 : Retail trade 6,658 7,213 7,813 8,464 55 : Hotels and restaurants 5,230 5,534 5,855 6,194 60 : Land transport 468 484 500 517 61 : Water transport 127 152 181 216 63 : Supporting transport activities/travel agencies 1,018 1,052 1,088 1,124 64 : Post and telecommunications 2,125 1,942 1,774 1,621 65 : Financial intermediation 1,317 1,327 1,337 1,347 66 : Insurance and pension funding 14 14 14 14 67 : Real estate activities 296 326 359 395 70 : Real estate activities 1,102 1,180 1,263 1,352 71 : Renting of machinery and equipment 606 662 701 753	574					
51: Wholesale trade 3,914 3,943 3,973 4,003 52: Retail trade 6,658 7,213 7,813 8,464 55: Hotels and restaurants 5,230 5,534 5,855 6,194 60: Land transport 468 484 500 517 61: Water transport 10 0 0 0 0 62: Air transport 127 152 181 216 63: Supporting transport activities/travel agencies 1,018 1,052 1,088 1,124 64: Post and telecommunications 2,125 1,942 1,774 1,621 65: Financial intermediation 1,317 1,327 1,337 1,347 66: Insurance and pension funding 14 14 14 14 67: Auxiliary financial activities 296 326 359 395 70: Real estate activities 1,102 1,180 1,263 1,352 71: Renting of machinery and equipment 606 652 701 753 72: Computer and related activities 3,939 4,614 5,405 6,331	3,326					
52 : Retail trade 6,658 7,213 7,813 8,464 55 : Hotels and restaurants 5,230 5,534 5,855 6,194 60 : Land transport 468 484 500 517 61 : Water transport 0 0 0 0 62 : Air transport 127 152 181 216 63 : Supporting transport activities/travel agencies 1,018 1,052 1,088 1,124 64 : Post and telecommunications 2,125 1,942 1,774 1,621 65 : Financial intermediation 1,317 1,327 1,337 1,347 66 : Insurance and pension funding 14 14 14 14 67 : Auxiliary financial activities 296 326 359 395 70 : Real estate activities 1,102 1,180 1,263 1,352 71 : Renting of machinery and equipment 606 652 701 753 72 : Computer and related activities 3,339 4,614 5,405 6,331 73 : Research and dev	2,751					
55: Hotels and restaurants 5,230 5,534 5,855 6,194 60: Land transport 468 484 500 517 61: Water transport 0 0 0 0 0 62: Air transport 127 152 181 216 63: Supporting transport activities/travel agencies 1,018 1,052 1,088 1,124 64: Post and telecommunications 2,125 1,942 1,774 1,621 65: Financial intermediation 1,317 1,327 1,337 1,347 66: Insurance and pension funding 14 14 14 14 67: Real estate activities 296 326 359 395 70: Real estate activities 1,102 1,180 1,263 1,352 71: Renting of machinery and equipment 606 652 701 753 72: Computer and related activities 3,939 4,614 5,405 6,331 73: Research and development 15 28 51 94 74: Other business acti	4,033	-,	-,	-,		
60 : Land transport	9,169					
61: Water transport 0 0 0 0 62: Air transport 127 152 181 216 63: Supporting transport activities/travel agencies 1,018 1,052 1,088 1,124 64: Post and telecommunications 2,125 1,942 1,774 1,621 65: Financial intermediation 1,317 1,327 1,337 1,347 66: Insurance and pension funding 14 14 14 14 14 14 14 14 14 14 1,182 1,352 395 395 70: Real estate activities 1,102 1,180 1,263 1,352 71: Renting of machinery and equipment 606 652 701 753 72: Computer and related activities 3,939 4,614 5,405 6,331 73: Research and development 15 28 51 94 74: Other business activities 15,587 17,286 19,170 21,259	6,554					
62 : Air transport 127 152 181 216 63 : Supporting transport activities/travel agencies 1,018 1,052 1,088 1,124 64 : Post and telecommunications 2,125 1,942 1,774 1,621 65 : Financial intermediation 1,317 1,327 1,337 1,347 66 : Insurance and pension funding 14 14 14 14 14 14 14 14 14 14 162 1,621 395 395 395 395 70 : Real estate activities 1,102 1,180 1,263 1,352 1,728 1,728 395 71 : Renting of machinery and equipment 606 652 701 753 72 : Computer and related activities 3,939 4,614 5,405 6,331 73 : Research and development 15 28 51 94 74 : Other business activities 15,587 17,286 19,170 21,259	534					
63 : Supporting transport activities/travel agencies 1,018 1,052 1,088 1,124 64 : Post and telecommunications 2,125 1,942 1,774 1,621 65 : Financial intermediation 1,317 1,327 1,337 1,347 66 : Insurance and pension funding 14 14 14 14 67 : Auxiliary financial activities 296 326 359 395 70 : Real estate activities 1,102 1,180 1,263 1,352 71 : Renting of machinery and equipment 606 652 701 753 72 : Computer and related activities 3,939 4,614 5,405 6,331 73 : Research and development 15 28 51 94 74 : Other business activities 15,587 17,286 19,170 21,259	050	_	_	_	-	
64 : Post and telecommunications 2,125 1,942 1,774 1,621 65 : Financial intermediation 1,317 1,327 1,337 1,347 66 : Insurance and pension funding 14 14 14 14 67 : Auxiliary financial activities 296 326 359 395 70 : Real estate activities 1,102 1,180 1,263 1,352 71 : Renting of machinery and equipment 606 652 701 753 72 : Computer and related activities 3,939 4,614 5,405 6,331 73 : Research and development 15 28 51 94 74 : Other business activities 15,587 17,286 19,170 21,259	258					
65 : Financial intermediation 1,317 1,327 1,337 1,347 66 : Insurance and pension funding 14 14 14 14 67 : Auxiliary financial activities 296 326 359 395 70 : Real estate activities 1,102 1,180 1,263 1,352 71 : Renting of machinery and equipment 606 652 701 753 72 : Computer and related activities 3,939 4,614 5,405 6,331 73 : Research and development 15 28 51 94 74 : Other business activities 15,587 17,286 19,170 21,259	1,162	.,	.,		1,000	
66: Insurance and pension funding 14 14 14 14 67: Auxiliary financial activities 296 326 359 395 70: Real estate activities 1,102 1,180 1,263 1,352 71: Renting of machinery and equipment 606 652 701 753 72: Computer and related activities 3,939 4,614 5,405 6,331 73: Research and development 15 28 51 94 74: Other business activities 15,587 17,286 19,170 21,259	1,481 1,357					
67 : Auxiliary financial activities 296 326 359 395 70 : Real estate activities 1,102 1,180 1,263 1,352 71 : Renting of machinery and equipment 606 652 701 763 72 : Computer and related activities 3,939 4,614 5,405 6,331 73 : Research and development 15 28 51 94 74 : Other business activities 15,587 17,286 19,170 21,259	1,357					
70 : Real estate activities 1,102 1,180 1,263 1,352 71 : Renting of machinery and equipment 606 652 701 753 72 : Computer and related activities 3,939 4,614 5,405 6,331 73 : Research and development 15 28 51 94 74 : Other business activities 15,587 17,286 19,170 21,259	435					
71: Renting of machinery and equipment 606 652 701 753 72: Computer and related activities 3,939 4,614 5,405 6,331 73: Research and development 15 28 51 94 74: Other business activities 15,587 17,286 19,170 21,259	1.448					
72 : Computer and related activities 3,939 4,614 5,405 6,331 73 : Research and development 15 28 51 94 74 : Other business activities 15,587 17,286 19,170 21,259	810					
73 : Research and development 15 28 51 94 74 : Other business activities 15,587 17,286 19,170 21,259	7,416					
74 : Other business activities 15,587 17,286 19,170 21,259	173					
	23,576					
75 : Public administration and defence 2 880 3 172 3 493 3 847	4,236	3,847	3,493	3,172	2,880	75 : Public administration and defence
80 : Education 4.410 4.897 5.439 6.040	6.707					
	10,900					
90 : Sewage and refuse disposal 236 248 260 273	287					
91 : Activities of membership organisations 1,318 1,385 1,456 1,530	1,608					
92 : Recreational, cultural and sporting activities 1,979 2,136 2,305 2,487	2,684					
93 : Other service activities 1,092 1,157 1,225 1,298	1,375					
	99,753					

Projected Growth Rates (% pa)				
rejected creman range (se pay	2006-	2011-	2016-	2021-
	2011	2016	2021	2026
01 : Agriculture/Hunting, etc.	-0.9%	-0.9%	-0.9%	-0.9%
02 : Forestry, logging etc.	-3.1%	-3.1%	-3.1%	-3.1%
05 : Fishing, fish farms etc.	-3.1%	-3.1%	-3.1%	-3.1%
10 : Coal Mining, Peat Extraction	NA	NA	NA	NA
11 : Petroleum, Oil/Gas Services	NA 0.2%	NA 0.2%	NA 0.2%	NA 0.2%
14 : Other mining and quarry 15 : Manf food and beverages	-0.4%	-0.4%	-0.4%	-0.4%
17 : Manf textiles	-100.0%	#DIV/0!	#DIV/0!	#DIV/0!
18 : Manf wearing apparel	-100.0%	#DIV/0!	#DIV/0!	#DIV/0!
19 : Tanning and dressing of leather	-100.0%	#DIV/0!	#DIV/0!	#DIV/0!
20 : Manf wood products	-4.9%	-4.9%	-4.9%	-4.9%
21 : Manf pulp and paper products	-4.9%	-4.9%	-4.9%	-4.9%
22 : Publishing and Printing	-1.5%	-1.5%	-1.5%	-1.5%
23 : Manf coke, petroleum products	NA	NA	NA	NA
24 : Manf chemicals and chemical products	0.2%	0.2%	0.2%	0.2%
25 : Manf rubber and plastic products	-3.1%	-3.1%	-3.1%	-3.1%
26 : Manf other non-metallic mineral products	0.2%	0.2%	0.2%	0.2%
27 : Manf. basic metals	-0.9%	-0.9%	-0.9%	-0.9%
28 : Manf fabricated metal products	-1.8%	-1.8%	-1.8%	-1.8%
29 : Manf other machinery	-1.3%	-1.3%	-1.3%	-1.3%
30 : Manf office machinery and computers	3.8%	3.8%	3.8%	3.8%
31 : Manf other electrical machinery	0.2%	0.2%	0.2%	0.2%
32 : Manf communication equipment	0.2%	0.2%	0.2%	0.2%
33 : Manf medical instruments	0.2%	0.2%	0.2%	0.2%
34 : Manf motor vehicles, trailers	-1.2%	-1.2%	-1.2%	-1.2%
35 : Manf transport equipment	0.2%	0.2%	0.2%	0.2%
36 : Manf furniture; manufacturing n.e.c. 37 : Recycling	1.6% 1.6%	1.6% 1.6%	1.6% 1.6%	1.6% 1.6%
40 : Electricity, gas, steam and hot water supply	0.2%	0.2%	0.2%	0.2%
41 : Collection, purification and distribution of water	-0.6%	-0.6%	-0.6%	-0.6%
45 : Construction	2.0%	2.0%	2.0%	2.0%
50 : Sale and repair of motor vehicles and fuel	1.0%	1.0%	1.0%	1.0%
51 : Wholesale trade	0.2%	0.2%	0.2%	0.2%
52 : Retail trade	1.6%	1.6%	1.6%	1.6%
55 : Hotels and restaurants	1.1%	1.1%	1.1%	1.1%
60 : Land transport	0.7%	0.7%	0.7%	0.7%
61 : Water transport	NA	NA	NA	NA
62 : Air transport	3.6%	3.6%	3.6%	3.6%
63 : Supporting transport activities/travel agencies	0.7%	0.7%	0.7%	0.7%
64 : Post and telecommunications	-1.8%	-1.8%	-1.8%	-1.8%
65 : Financial intermediation	0.2%	0.2%	0.2%	0.2%
66 : Insurance and pension funding	0.2%	0.2%	0.2%	0.2%
67 : Auxiliary financial activities	1.9%	1.9%	1.9%	1.9%
70 : Real estate activities	1.4%	1.4%	1.4%	1.4%
71 : Renting of machinery and equipment	1.5%	1.5%	1.5%	1.5%
72 : Computer and related activities	3.2%	3.2%	3.2%	3.2%
73 : Research and development	13.0%	13.0%	13.0%	13.0%
74 : Other business activities	2.1%	2.1%	2.1%	2.1%
75 : Public administration and defence 80 : Education	1.9% 2.1%	1.9% 2.1%	1.9% 2.1%	1.9% 2.1%
85 : Health and social work	1.5%	1.5%	1.5%	1.5%
90 : Sewage and refuse disposal	1.5%	1.5%	1.5%	1.5%
91 : Activities of membership organisations	1.0%	1.0%	1.0%	1.0%
92 : Recreational, cultural and sporting activities	1.5%	1.5%	1.5%	1.5%
93 : Other service activities	1.2%	1.2%	1.2%	1.2%
Total	1.3%	1.3%	1.4%	1.5%
i vai	1.370	1.370	1.470	1.370

Employment Projections - Warwick

Scenario A-2 (20,800 New Dwellings) - Selected Sectors Only

	2006	2011	2016	2021	2026
	Actual				
M1 Food & Beverages	969	952	935	918	902
M2 Printing & Publishing	579	538	500	464	431
M3 Chemical, Plastic & Non-Metallic Materials/Products	371	343	318	298	281
M4 Metals & Metal Products	1,021	951	886	827	771
M5 Mechanical Engineering	1,424	1,331	1,244	1,163	1,088
M6 Electronics, Electrical Engineering & Instruments	491	509	530	554	583
M7 Motor Vehicles & Other Transport Equipment	1,605	1,515	1,431	1,352	1,278
M8 Manufacturing nes	616	517	493	483	482
S1 Utilities	1,522	1,520	1,519	1,519	1,520
S2 Construction	2,259	2,488	2,741	3,020	3,326
S3 Wholesale Distribution	3,914	3,943	3,973	4,003	4,033
S4 Retail of Automotive Fuel and Motor Vehicles (incl. Repair	2,266	2,379	2,497	2,621	2,751
S5 Retailing	6,658	7,213	7,813	8,464	9,169
S6 Hotels & Catering	5,230	5,534	5,855	6,194	6,554
S7 Land Transport	1,486	1,536	1,588	1,641	1,696
S8 Communications	2,125	1,942	1,774	1,621	1,481
S9 Insurance, Banking & Finance	1,627	1,667	1,710	1,756	1,806
S10 Computing Services	3,939	4,614	5,405	6,331	7,416
S11 Research & Development	15	28	51	94	173
S12 Real Estate & Professional Services	1,102	1,180	1,263	1,352	1,448
S13 Other Business Services	15,587	17,286	19,170	21,259	23,576
S14 Public Administration & Defence	2,880	3,172	3,493	3,847	4,236
S15 Education	4,410	4,897	5,439	6,040	6,707
S16 Health & Social Work	8,156	8,769	9,429	10,138	10,900
S17 Recreational, Cultural & Sporting Activities	1,979	2,136	2,305	2,487	2,684
S18 Other Services	3,016	3,193	3,382	3,581	3,793
Total	75,247	80,151	85,743	92,027	99,087

Projected Growth Rates (% pa)

1 10	ecteu Growth Rates (70 pa)				
		2006-	2011-	2016-	2021-
		2011	2016	2021	2026
M1	Food & Beverages	-0.4%	-0.4%	-0.4%	-0.4%
M2	Printing & Publishing	-1.5%	-1.5%	-1.5%	-1.5%
M3	Chemical, Plastic & Non-Metallic Materials/Products	-1.6%	-1.5%	-1.3%	-1.2%
M4	Metals & Metal Products	-1.4%	-1.4%	-1.4%	-1.4%
M5	Mechanical Engineering	-1.3%	-1.3%	-1.3%	-1.3%
M6	Electronics, Electrical Engineering & Instruments	0.7%	0.8%	0.9%	1.0%
M7	Motor Vehicles & Other Transport Equipment	-1.1%	-1.1%	-1.1%	-1.1%
M8	Manufacturing nes	-3.4%	-0.9%	-0.4%	0.0%
S1	Utilities	0.0%	0.0%	0.0%	0.0%
S2	Construction	2.0%	2.0%	2.0%	2.0%
S3	Wholesale Distribution	0.2%	0.2%	0.2%	0.2%
S4	Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	1.0%	1.0%	1.0%	1.0%
S5	Retailing	1.6%	1.6%	1.6%	1.6%
S6	Hotels & Catering	1.1%	1.1%	1.1%	1.1%
S7	Land Transport	0.7%	0.7%	0.7%	0.7%
S8	Communications	-1.8%	-1.8%	-1.8%	-1.8%
S9	Insurance, Banking & Finance	0.5%	0.5%	0.5%	0.6%
S10	Computing Services	3.2%	3.2%	3.2%	3.2%
S11	Research & Development	13.0%	13.0%	13.0%	13.0%
S12	Real Estate & Professional Services	1.4%	1.4%	1.4%	1.4%
S13	Other Business Services	2.1%	2.1%	2.1%	2.1%
S14	Public Administration & Defence	1.9%	1.9%	1.9%	1.9%
S15	Education	2.1%	2.1%	2.1%	2.1%
S16	Health & Social Work	1.5%	1.5%	1.5%	1.5%
S17	Recreational, Cultural & Sporting Activities	1.5%	1.5%	1.5%	1.5%
S18	Other Services	1.1%	1.2%	1.2%	1.2%
	Total	1.3%	1.4%	1.4%	1.5%

80 : Education 85 : Health and social work

Total

90 : Sewage and refuse disposal
91 : Activities of membership organisations
92 : Recreational, cultural and sporting activities
93 : Other service activities

Employment Projections - Warwick Past Trends Scenario

Past Trends Scenario	2006	2011	2016	2021	2026
	Actual	2011	2010	2021	2020
01 : Agriculture/Hunting, etc.	447	399	356	318	284
02 : Forestry, logging etc.	4	4	4	4	4
05 : Fishing, fish farms etc.	11	11	11	11	11
10 : Coal Mining, Peat Extraction	0	0	0	0	0
11 : Petroleum, Oil/Gas Services	0	0	0	0	0
14 : Other mining and quarry	29	29	29	29	29
15 : Manf food and beverages	969	929	890	853	818
17 : Manf textiles	48	21	9	4	2
18 : Manf wearing apparel	9	2	0	0	0
19 : Tanning and dressing of leather	3	1	0	0	0
20 : Manf wood products	195	244	304	380	475
21 : Manf pulp and paper products	81	56	38	26	18
22 : Publishing and Printing	579 0	508 0	446 0	392 0	344 0
23 : Manf coke, petroleum products 24 : Manf chemicals and chemical products	158	177	198	221	248
25 : Manf rubber and plastic products	203	84	35	15	6
26 : Manf other non-metallic mineral products	10	4	1	0	0
27 : Manf. basic metals	445	317	225	160	114
28 : Manf fabricated metal products	576	270	126	59	28
29 : Manf other machinery	1,424	1,143	918	737	592
30 : Manf office machinery and computers	71	95	127	169	226
31 : Manf other electrical machinery	153	87	49	28	16
32 : Manf communication equipment	91	74	60	49	40
33 : Manf medical instruments	176	124	87	61	43
34 : Manf motor vehicles, trailers	1,505	965	618	396	254
35 : Manf transport equipment	100	51	26	13	7
36 : Manf furniture; manufacturing n.e.c.	238	262	289	318	350
37 : Recycling	42	53	67	84	106
40 : Electricity, gas, steam and hot water supply	639	773	936	1,133	1,372
41 : Collection, purification and distribution of water	647	739	843	962	1,098
45 : Construction	2,259	2,321	2,384	2,449	2,516
50 : Sale and repair of motor vehicles and fuel	2,266	2,403	2,548	2,702	2,866
51 : Wholesale trade 52 : Retail trade	3,914 6,658	3,982 6,611	4,051 6,565	4,122 6,519	4,194 6,473
55 : Hotels and restaurants	5,230	5,189	5,149	5,108	5.069
60 : Land transport	5,230 468	364	282	219	170
61 : Water transport	0	0	0	0	1/0
62 : Air transport	127	119	112	106	100
63 : Supporting transport activities/travel agencies	1,018	1,062	1.108	1.155	1,205
64 : Post and telecommunications	2,125	2,673	3,363	4,231	5,322
65 : Financial intermediation	1,317	1,249	1,184	1.123	1,064
66 : Insurance and pension funding	14	3	1	0	0
67 : Auxiliary financial activities	296	324	355	389	426
70 : Real estate activities	1,102	1,106	1,111	1,115	1,120
71 : Renting of machinery and equipment	606	684	771	870	981
72 : Computer and related activities	3,939	4,595	5,361	6,254	7,297
73 : Research and development	15	16	18	20	21
74 : Other business activities	15,587	16,674	17,836	19,080	20,410
75 : Public administration and defence	2,880	2,631	2,403	2,196	2,006
80 : Education	4,410	4,826	5,282	5,780	6,326
85 : Health and social work	8,156	8,544	8,950	9,376	9,822
90 : Sewage and refuse disposal	236	311	410	540	711
91 : Activities of membership organisations	1,318	1,590	1,918	2,314	2,791
92 : Recreational, cultural and sporting activities	1,979	2,111	2,252	2,402	2,562
93 : Other service activities	1,092	1,379	1,742	2,200	2,779
Total	75,865	78,187	81,850	86,693	92,712

	2006-	2011-	2016-	2021-
	2011	2016	2021	2026
01 : Agriculture/Hunting, etc.	-2.2%	-2.2%	-2.2%	-2.2%
02 : Forestry, logging etc.	0.0%	0.0%	0.0%	0.0%
05 : Fishing, fish farms etc.	0.0%	0.0%	0.0%	0.0%
10 : Coal Mining, Peat Extraction	NA	NA	NA	NA
11 : Petroleum, Oil/Gas Services	NA	NA	NA	NA
14 : Other mining and quarry	0.0%	0.0%	0.0%	0.0%
15 : Manf food and beverages	-0.8%	-0.8%	-0.8%	-0.8%
17 : Manf textiles	-15.6%	-15.6%	-15.6%	-15.6%
18 : Manf wearing apparel	-25.3%	-25.3%	-25.3%	-25.3%
19 : Tanning and dressing of leather	-25.9%	-25.9%	-25.9%	-25.9%
20 : Manf wood products	4.6%	4.6%	4.6%	4.6%
21 : Manf pulp and paper products	-7.3%	-7.3%	-7.3%	-7.3%
22 : Publishing and Printing	-2.6%	-2.6%	-2.6%	-2.6%
23 : Manf coke, petroleum products	NA	NA	NA	NA
24 : Manf chemicals and chemical products	2.3%	2.3%	2.3%	2.3%
25 : Manf rubber and plastic products	-16.1%	-16.1%	-16.1%	-16.1%
26 : Manf other non-metallic mineral products	-18.2%	-18.2%	-18.2%	-18.2%
27 : Manf. basic metals	-6.6%	-6.6%	-6.6%	-6.6%
28 : Manf fabricated metal products	-14.1%	-14.1%	-14.1%	-14.1%
29 : Manf other machinery	-4.3%	-4.3%	-4.3%	-4.3%
80 : Manf office machinery and computers	6.0%	6.0%	6.0%	6.0%
1 : Manf other electrical machinery	-10.8%	-10.8%	-10.8%	-10.8%
2 : Manf communication equipment	-4.1%	-4.1%	-4.1%	-4.1%
33 : Manf medical instruments	-6.8%	-6.8%	-6.8%	-6.8%
34 : Manf motor vehicles, trailers	-8.5%	-8.5%	-8.5%	-8.5%
35 : Manf transport equipment	-12.5%	-12.5%	-12.5%	-12.5%
36 : Manf furniture; manufacturing n.e.c.	1.9%	1.9%	1.9%	1.9%
37 : Recycling	4.7%	4.7%	4.7%	4.7%
10 : Electricity, gas, steam and hot water supply	3.9%	3.9%	3.9%	3.9%
11 : Collection, purification and distribution of water	2.7%	2.7%	2.7%	2.7%
15 : Construction	0.5%	0.5%	0.5%	0.5%
50 : Sale and repair of motor vehicles and fuel	1.2%	1.2%	1.2%	1.2%
51 : Wholesale trade	0.3%	0.3%	0.3%	0.3%
52 : Retail trade	-0.1%	-0.1%	-0.1%	-0.1%
55 : Hotels and restaurants	-0.2%	-0.2%	-0.2%	-0.2%
50 : Land transport	-4.9%	-4.9%	-4.9%	-4.9%
51 : Water transport	NA	NA	NA	NA
52 : Air transport	-1.2%	-1.2%	-1.2%	-1.2%
63 : Supporting transport activities/travel agencies	0.8%	0.8%	0.8%	0.8%
64 : Post and telecommunications	4.7%	4.7%	4.7%	4.7%
55 : Financial intermediation	-1.1%	-1.1%	-1.1%	-1.1%
66 : Insurance and pension funding	-24.7%	-24.7%	-24.7%	-24.7%
67 : Auxiliary financial activities	1.8%	1.8%	1.8%	1.8%
70 : Real estate activities	0.1%	0.1%	0.1%	0.1%
71 : Renting of machinery and equipment	2.4%	2.4%	2.4%	2.4%
72 : Computer and related activities	3.1%	3.1%	3.1%	3.1%
73 : Research and development	1.8%	1.8%	1.8%	1.8%
74 : Other business activities	1.4%	1.0%	1.4%	1.4%
74 : Other business activities 75 : Public administration and defence	-1.8%	-1.8%	-1.8%	-1.8%
73 : Public administration and defence	-1.0%	-1.0%	-1.0%	-1.070

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4.8%

1.4%

Employment Projections - Warwick

Past Trends Scenario - Selected Sectors Only

		2006	2011	2016	2021	2026
		Actual				
M1 Food	& Beverages	969	929	890	853	818
M2 Printir	ng & Publishing	579	508	446	392	344
M3 Chemi	ical, Plastic & Non-Metallic Materials/Products	371	265	234	236	254
M4 Metals	s & Metal Products	1,021	586	351	219	142
M5 Mecha	anical Engineering	1,424	1,143	918	737	592
M6 Electro	onics, Electrical Engineering & Instruments	491	379	322	306	324
M7 Motor	Vehicles & Other Transport Equipment	1,605	1,016	645	410	261
M8 Manuf	acturing nes	616	637	707	812	951
S1 Utilitie	es	1,522	1,823	2,189	2,635	3,181
S2 Constr	ruction	2,259	2,321	2,384	2,449	2,516
S3 Whole	esale Distribution	3,914	3,982	4,051	4,122	4,194
S4 Retail	of Automotive Fuel and Motor Vehicles (incl. Repair)	2,266	2,403	2,548	2,702	2,866
S5 Retail	ing	6,658	6,611	6,565	6,519	6,473
S6 Hotels	& Catering	5,230	5,189	5,149	5,108	5,069
S7 Land	Transport	1,486	1,425	1,390	1,375	1,375
S8 Comm	nunications	2,125	2,673	3,363	4,231	5,322
S9 Insura	nce, Banking & Finance	1,627	1,576	1,540	1,512	1,490
	uting Services	3,939	4,595	5,361	6,254	7,297
S11 Resea	rch & Development	15	16	18	20	21
S12 Real E	state & Professional Services	1,102	1,106	1,111	1,115	1,120
S13 Other	Business Services	15,587	16,674	17,836	19,080	20,410
	: Administration & Defence	2,880	2,631	2,403	2,196	2,006
S15 Educa		4,410	4,826	5,282	5,780	6,326
S16 Health	n & Social Work	8,156	8,544	8,950	9,376	9,822
S17 Recre	ational, Cultural & Sporting Activities	1,979	2,111	2,252	2,402	2,562
S18 Other	Services	3,016	3,653	4,431	5,384	6,551
Total		75,247	77,625	81,338	86,225	92,285

Projected Growth Rates (% pa)

() ()	2006- 2011	2011- 2016	2016- 2021	2021- 2026
M1 Food & Beverages	-0.8%	-0.8%	-0.8%	-0.8%
M2 Printing & Publishing	-2.6%	-2.6%	-2.6%	-2.6%
M3 Chemical, Plastic & Non-Metallic Materials/Products	-6.5%	-2.4%	0.2%	1.4%
M4 Metals & Metal Products	-10.5%	-9.7%	-9.0%	-8.4%
M5 Mechanical Engineering	-4.3%	-4.3%	-4.3%	-4.3%
M6 Electronics, Electrical Engineering & Instruments	-5.1%	-3.2%	-1.0%	1.1%
M7 Motor Vehicles & Other Transport Equipment	-8.7%	-8.7%	-8.7%	-8.6%
M8 Manufacturing nes	0.7%	2.1%	2.8%	3.2%
S1 Utilities	3.7%	3.7%	3.8%	3.8%
S2 Construction	0.5%	0.5%	0.5%	0.5%
S3 Wholesale Distribution	0.3%	0.3%	0.3%	0.3%
S4 Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	1.2%	1.2%	1.2%	1.2%
S5 Retailing	-0.1%	-0.1%	-0.1%	-0.1%
S6 Hotels & Catering	-0.2%	-0.2%	-0.2%	-0.2%
S7 Land Transport	-0.8%	-0.5%	-0.2%	0.0%
S8 Communications	4.7%	4.7%	4.7%	4.7%
S9 Insurance, Banking & Finance	-0.6%	-0.5%	-0.4%	-0.3%
S10 Computing Services	3.1%	3.1%	3.1%	3.1%
S11 Research & Development	1.8%	1.8%	1.8%	1.8%
S12 Real Estate & Professional Services	0.1%	0.1%	0.1%	0.1%
S13 Other Business Services	1.4%	1.4%	1.4%	1.4%
S14 Public Administration & Defence	-1.8%	-1.8%	-1.8%	-1.8%
S15 Education	1.8%	1.8%	1.8%	1.8%
S16 Health & Social Work	0.9%	0.9%	0.9%	0.9%
S17 Recreational, Cultural & Sporting Activities	1.3%	1.3%	1.3%	1.3%
S18 Other Services	3.9%	3.9%	4.0%	4.0%
Total	0.6%	0.9%	1.2%	1.4%

APPENDIX J – EMPLOYMENT SECTOR AND LAND USE GROUPINGS

Sec	tor Group	Land Use Class (% of land required for employment)	Gross Internal Density (m2 per employee)	Conversion Factor: Internal to External	Gross External Density (m2 per employee)
M1	Food & Beverages	B2	34	1.035	35.19
M2	Printing & Publishing	B2	34	1.035	35.19
M3	Chemical, Plastic & Non-Metallic Materials/Products	B2	34	1.035	35.19
M4	Metals & Metal Products	B2	34	1.035	35.19
	Mechanical Engineering	B2	34	1.035	35.19
M6	Electronics, Electrical Engineering & Instruments	B1c (35%)	29	1.035	30.02
M6	Electronics, Electrical Engineering & Instruments	B1c (65%)	34	1.035	35.19
M7	Motor Vehicles & Other Transport Equipment	B2	34	1.035	35.19
M8	Manufacturing nes	B2	34	1.035	35.19
S1	Utilities	B1a (30%)	19	1.035	19.67
S2	Construction	B1a (33.3%)	19	1.035	19.67
S3	Wholesale Distribution	B8	50	1	50.00
S4	Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	B2	34	1.035	35.19
S5	Retailing	A1 (33.3%)	19	1.1	20.90
S5	Retailing	B1a (33.3%)	19	1.035	19.67
S5	Retailing	A2 (33.3%)	19	1.1	20.90
S6	Hotels & Catering	C1 (20%)	13	1.1	14.30
S6	Hotels & Catering	A3 (80%)	13	1.1	14.30
S7	Land Transport	B8 (30%)	80	1	80.00
S7	Land Transport	B8 (70%)	50	1	50.00
S8	Communications	B8	50	1	50.00
S9	Insurance, Banking & Finance	A2a (50%)	20	1.1	22.00
S9	Insurance, Banking & Finance	B1a (50%)	19	1.035	19.67
	Computing Services	B1a (45%)	19	1.035	19.67
S10	Computing Services	A2b (45%)	19	1.1	20.90
S10	Computing Services	A1 (10%)	19	1.1	20.90
	Research & Development	B1b	29	1.035	30.02
S12	Real Estate & Professional Services	B1a	19	1.035	19.67
S13	Other Business Services	B1a	19	1.035	19.67
S14	Public Administration & Defence	B1a	19	1.035	19.67
S15	Education	B1a (10%)	19	1.035	19.67
S16	Health & Social Work	B1a (15%)	19	1.035	19.67
S17	Recreational, Cultural & Sporting Activities	A2c	20	1.1	22.00
	Other Services	A2c (80%)	20	1.1	22.00
S18	Other Services	B1a (10%)	19	1.035	19.67
S18	Other Services	A2a/b (10%)	19	1.1	20.90

APPENDIX K – FLOORSPACE FORECASTS

BASELINE SCENARIO Floorspace requirements by land use class and year

	2006	2011	2016	2021	2026
A1	54,612	54,164	56,223	59,087	61,145
A2	197,942	197,399	211,570	225,995	239,068
A3	59,831	59,831	65,371	69,803	73,127
B1a	535,834	578,405	613,832	655,382	695,707
B1b	450	503	515	519	588
B1c	16,389	10,940	8,194	8,194	5,449
B2	311,467	282,025	271,871	269,700	256,870
B8	389,624	356,849	366,590	364,138	363,949
C1	14,958	14,958	16,343	17,451	18,282
Total	1,581,107	1,555,073	1,610,509	1,670,268	1,714,186

Floorspace requirements for different land-use categories: % change compared to 2006

NB shows the change for each year compared to the base year of 2005 (not compared to preceding year in table)

	2006	2011	2016	2021	2026
A1		99%	103%	108%	112%
A2		100%	107%	114%	121%
A3		100%	109%	117%	122%
B1a		108%	115%	122%	130%
B1b		112%	114%	115%	131%
B1c		67%	50%	50%	33%
B2		91%	87%	87%	82%
B8		92%	94%	93%	93%
C1		100%	109%	117%	122%
Total		98%	102%	106%	108%

Floorspace requirements for different land-use categories: absolute change compared to 2006

	2006	2011	2016	2021	2026
A1		-448	1,611	4,475	6,533
A2		-544	13,627	28,052	41,126
A3		0	5,540	9,972	13,296
B1a		42,571	77,999	119,548	159,873
B1b		53	65	69	138
B1c		-5,449	-8,194	-8,194	-10,940
B2		-29,442	-39,596	-41,767	-54,597
B8		-32,775	-23,034	-25,486	-25,675
C1		0	1,385	2,493	3,324
Total		-26,033	29,402	89,162	133,079

SCENARIO A-1 (10,800 NEW DWELLINGS) Floorspace requirements by land use class and year

	2006	2011	2016	2021	2026
A1	54,612	57,438	60,524	63,903	67,619
A2	197,942	208,111	219,389	231,935	245,932
A3	59,831	60,886	61,959	63,052	64,163
B1a	535,834	576,680	621,467	670,610	724,575
B1b	450	829	1,526	2,809	5,170
B1c	16,389	16,700	17,104	17,620	18,267
B2	311,467	291,750	276,300	262,858	251,095
B8	389,624	377,086	365,915	355,964	347,102
C1	14,958	15,221	15,490	15,763	16,041
Total	1,581,107	1,604,702	1,639,673	1,684,513	1,739,964

Floorspace requirements for different land-use categories: % change compared to 2006

NB shows the change for each year compared to the base year of 2005 (not compared to preceding year in table)

	2006	2011	2016	2021	2026
A1		105%	111%	117%	124%
A2		105%	111%	117%	124%
A3		102%	104%	105%	107%
B1a		108%	116%	125%	135%
B1b		184%	339%	624%	1148%
B1c		102%	104%	108%	111%
B2		94%	89%	84%	81%
B8		97%	94%	91%	89%
C1		102%	104%	105%	107%
Total		101%	104%	107%	110%

Floorspace requirements for different land-use categories: absolute change compared to 2006

	2006	2011	2016	2021	2026
A1		2,826	5,912	9,292	13,007
A2		10,168	21,446	33,993	47,990
A3		1,055	2,128	3,220	4,332
B1a		40,847	85,633	134,776	188,742
B1b		379	1,075	2,358	4,720
B1c		311	715	1,231	1,878
B2		-19,717	-35,167	-48,608	-60,372
B8		-12,538	-23,709	-33,660	-42,522
C1		264	532	805	1,083
Total		23,595	58,566	103,406	158,858

SCENARIO A-2 (20,800 NEW DWELLINGS) Floorspace requirements by land use class and year

	2006	2011	2016	2021	2026
A1	54,612	59,886	65,725	72,195	79,374
A2	197,942	215,902	234,289	255,569	279,291
A3	59,831	63,304	66,977	70,865	74,977
B1a	535,834	590,846	651,788	719,604	795,003
B1b	450	830	1,531	2,822	5,203
B1c	16,389	17,116	17,683	18,504	19,475
B2	311,467	298,571	292,251	285,934	280,924
B8	389,624	385,483	381,040	378,034	375,806
C1	14,958	15,826	16,744	17,716	18,744
Total	1,581,107	1,647,764	1,728,028	1,821,243	1,928,799

Floorspace requirements for different land-use categories: % change compared to 2006

NB shows the change for each year compared to the base year of 2005 (not compared to preceding year in table)

	2006	2011	2016	2021	2026
A1		110%	120%	132%	145%
A2		109%	118%	129%	141%
A3		106%	112%	118%	125%
B1a		110%	122%	134%	148%
B1b		184%	340%	627%	1156%
B1c		104%	108%	113%	119%
B2		96%	94%	92%	90%
B8		99%	98%	97%	96%
C1		106%	112%	118%	125%
Total		104%	109%	115%	122%

Floorspace requirements for different land-use categories: absolute change compared to 2006

	2006	2011	2016	2021	2026
A1		5,274	11,113	17,583	24,762
A2		17,959	36,347	57,627	81,349
A3		3,472	7,146	11,033	15,146
B1a		55,013	115,955	183,770	259,170
B1b		380	1,080	2,372	4,753
B1c		727	1,294	2,116	3,086
B2		-12,896	-19,215	-25,533	-30,543
B8		-4,141	-8,584	-11,590	-13,818
C1		868	1,787	2,758	3,787
Total		66,658	146,922	240,136	347,692

PAST TRENDS SCENARIO Floorspace requirements by land use class and year

	2006	2011	2016	2021	2026
A1	54,612	55,658	56,935	58,481	60,340
A2	197,942	217,339	240,607	268,442	301,755
A3	59,831	59,364	58,900	58,440	57,984
B1a	535,834	561,539	590,795	623,872	661,145
B1b	450	492	538	589	644
B1c	16,389	12,643	10,758	10,229	10,812
B2	311,467	263,505	237,199	223,897	219,118
B8	389,624	416,871	452,738	498,748	556,966
C1	14,958	14,841	14,725	14,610	14,496
Total	1,581,107	1,602,253	1,663,197	1,757,308	1,883,260

Floorspace requirements for different land-use categories: % change compared to 2006

NB shows the change for each year compared to the base year of 2005 (not compared to preceding year in table)

	2006	2011	2016	2021	2026
A1		102%	104%	107%	110%
A2		110%	122%	136%	152%
A3		99%	98%	98%	97%
B1a		105%	110%	116%	123%
B1b		109%	120%	131%	143%
B1c		77%	66%	62%	66%
B2		85%	76%	72%	70%
B8		107%	116%	128%	143%
C1		99%	98%	98%	97%
Total		101%	105%	111%	119%

Floorspace requirements for different land-use categories: absolute change compared to 2006

	2006	2011	2016	2021	2026
A1		1,046	2,323	3,869	5,728
A2		19,396	42,665	70,500	103,813
A3		-467	-931	-1,391	-1,848
B1a		25,706	54,962	88,038	125,311
B1b		42	88	139	194
B1c		-3,746	-5,631	-6,160	-5,577
B2		-47,961	-74,267	-87,570	-92,348
B8		27,247	63,114	109,124	167,342
C1		-117	-233	-348	-462
Total		21,146	82,090	176,201	302,153

APPENDIX L – EMPLOYMENT FLOORSPACE AND LAND REQUIREMENTS

Baseline

Baseline - Total Floorspace Requirement 2006-2026

	2006	2011	2016	2021	2026
A1	54,612	54,164	56,223	59,087	61,145
A2	197,942	197,399	211,570	225,995	239,068
A3	59,831	59,831	65,371	69,803	73,127
B1a	535,834	578,405	613,832	655,382	695,707
B1b	450	503	515	519	588
B1c	16,389	10,940	8,194	8,194	5,449
B2	311,467	282,025	271,871	269,700	256,870
B8	389,624	356,849	366,590	364,138	363,949
C1	14,958	14,958	16,343	17,451	18,282
Total	1,581,107	1,555,073	1,610,509	1,670,268	1,714,186

Baseline - Absolute Change in Floorspace Requirement 2006-2026

	2006	2011	2016	2021	2026
A1	0	-448	1,611	4,475	6,533
A2	0	-544	13,627	28,052	41,126
A3	0	0	5,540	9,972	13,296
B1a	0	42,571	77,999	119,548	159,873
B1b	0	53	65	69	138
B1c	0	-5,449	-8,194	-8,194	-10,940
B2	0	-29,442	-39,596	-41,767	-54,597
B8	0	-32,775	-23,034	-25,486	-25,675
C1	0	0	1,385	2,493	3,324
Total	0	-26,033	29,402	89,162	133,079

Adjusted to Fit Churn Model

Bulk Class	2006	2011	2016	2021	2026
Offices	0	42,624	78,064	119,617	160,011
Factories	0	0	0	0	0
Warehouses	0	0	0	0	0
Total	0	42,624	78,064	119,617	160,011

Addition of Churn (0.5% per annum)

Bulk Class	2006	2011	2016	2021	2026
Offices	0	65.324	123,464	187.717	250.811
	0	,	-, -	,	, -
Factories	0	12,975	25,950	38,925	51,900
Warehouses	0	11,425	22,850	34,275	45,700
Total	0	89,724	172,264	260,917	348,411

Removal of Leakage (to Non Employment Areas)

Bulk Class	2006	2011	2016	2021	2026
Offices	0	42,461	80,251	122,016	163,027
Factories	0	11,678	23,355	35,033	46,710
Warehouses	0	10,283	20,565	30,848	41,130
Total	0	64,421	124,171	187,896	250,867

Allowance for Completions

Bulk Class	2006	2011	2016	2021	2026
Offices	0	25,892	63,682	105,447	146,458
Factories	0	9,134	20,811	32,489	44,166
Warehouses	0	7,739	18,021	28,304	38,586
Total	0	42,764	102,514	166,239	229,210

Bulk Class	2006	2011	2016	2021	2026
Offices	0.00	8.76	21.55	35.69	49.57
Factories	0.00	2.51	5.72	8.93	12.15
Warehouses	0.00	1.70	3.96	6.23	8.49
Total	0.00	12.98	31.24	50.85	70.21

RSS Scenario - 10,800 New Homes - Total Floorspace Requirement 2006-2026

1100 Occident	10,000 1101	111011100	otal i loolo	pace requi	TOTTICTIC ZOO
	2006	2011	2016	2021	2026
A1	54,612	57,438	60,524	63,903	67,619
A2	197,942	208,111	219,389	231,935	245,932
A3	59,831	60,886	61,959	63,052	64,163
B1a	535,834	576,680	621,467	670,610	724,575
B1b	450	829	1,526	2,809	5,170
B1c	16,389	16,700	17,104	17,620	18,267
B2	311,467	291,750	276,300	262,858	251,095
B8	389,624	377,086	365,915	355,964	347,102
C1	14,958	15,221	15,490	15,763	16,041
Total	1,581,107	1,604,702	1,639,673	1,684,513	1,739,964

RSS Scenario - 10,800 New Homes - Absolute Change in Floorspace Requirement 2006-2026

	2006	2011	2016	2021	2026
A1	0	2,826	5,912	9,292	13,007
A2	0	10,168	21,446	33,993	47,990
A3	0	1,055	2,128	3,220	4,332
B1a	0	40,847	85,633	134,776	188,742
B1b	0	379	1,075	2,358	4,720
B1c	0	311	715	1,231	1,878
B2	0	-19,717	-35,167	-48,608	-60,372
B8	0	-12,538	-23,709	-33,660	-42,522
C1	0	264	532	805	1,083
Total	0	23,595	58,566	103,406	158,858

Adjusted to Fit Churn Model

Bulk Class	2006	2011	2016	2021	2026
Offices	0	41,225	86,708	137,134	193,462
Factories	0	0	0	0	0
Warehouses	0	0	0	0	0
Total	0	41,225	86,708	137,134	193,462

Addition of Churn (0.5% per annum)

Bulk Class	2006	2011	2016	2021	2026
Offices	0	63,925	132,108	205,234	284,262
Factories	0	12,975	25,950	38,925	51,900
Warehouses	0	11,425	22,850	34,275	45,700
Total	0	88,325	180,908	278,434	381,862

Removal of Leakage (to Non Employment Areas)

Bulk Class	2006	2011	2016	2021	2026
Offices	0	41,552	85,870	133,402	184,770
Factories	0	11,678	23,355	35,033	46,710
Warehouses	0	10,283	20,565	30,848	41,130
Total	0	63,512	129,790	199,282	272,610

Allowance for Completions

Bulk Class	2006	2011	2016	2021	2026
Offices	0	24,983	69,301	116,833	168,201
Factories	0	9,134	20,811	32,489	44,166
Warehouses	0	7,739	18,021	28,304	38,586
Total	0	41,855	108,133	177,625	250,953

Bulk Class	2006	2011	2016	2021	2026
Offices	0.00	8.46	23.46	39.54	56.93
Factories	0.00	2.51	5.72	8.93	12.15
Warehouses	0.00	1.70	3.96	6.23	8.49
Total	0.00	12.67	33.14	54.70	77.56

RSS Scenario - 20,800 New Homes - Total Floorspace Requirement 2006-2026

1100 Occident	20,000 1101	111011100	otal i loolo	pace requi	TOTHIOTHE 200
	2006	2011	2016	2021	2026
A1	54,612	59,886	65,725	72,195	79,374
A2	197,942	215,902	234,289	255,569	279,291
A3	59,831	63,304	66,977	70,865	74,977
B1a	535,834	590,846	651,788	719,604	795,003
B1b	450	830	1,531	2,822	5,203
B1c	16,389	17,116	17,683	18,504	19,475
B2	311,467	298,571	292,251	285,934	280,924
B8	389,624	385,483	381,040	378,034	375,806
C1	14,958	15,826	16,744	17,716	18,744
Total	1,581,107	1,647,764	1,728,028	1,821,243	1,928,799

RSS Scenario - 20,800 New Homes - Absolute Change in Floorspace Requirement 2006-2026

	2006	2011	2016	2021	2026
A1	0	5,274	11,113	17,583	24,762
A2	0	17,959	36,347	57,627	81,349
A3	0	3,472	7,146	11,033	15,146
B1a	0	55,013	115,955	183,770	259,170
B1b	0	380	1,080	2,372	4,753
B1c	0	727	1,294	2,116	3,086
B2	0	-12,896	-19,215	-25,533	-30,543
B8	0	-4,141	-8,584	-11,590	-13,818
C1	0	868	1,787	2,758	3,787
Total	0	66,658	146,922	240,136	347,692

Adjusted to Fit Churn Model

Bulk Class	2006	2011	2016	2021	2026
Offices	0	55,393	117,035	186,142	263,923
Factories	0	0	0	0	0
Warehouses	0	0	0	0	0
Total	0	55,393	117,035	186,142	263,923

Addition of Churn (0.5% per annum)

Bulk Class	2006	2011	2016	2021	2026
Offices	0	78,093	162,435	254,242	354,723
Factories	0	12,975	25,950	38,925	51,900
Warehouses	0	11,425	22,850	34,275	45,700
Total	0	102,493	211,235	327,442	452,323

Removal of Leakage (to Non Employment Areas)

Bulk Class	2006	2011	2016	2021	2026
Offices	0	50,760	105,583	165,257	230,570
Factories	0	11,678	23,355	35,033	46,710
Warehouses	0	10,283	20,565	30,848	41,130
Total	0	72,720	149,503	231,137	318,410

Allowance for Completions

Bulk Class	2006	2011	2016	2021	2026
Offices	0	34,191	89,014	148,688	214,001
Factories	0	9,134	20,811	32,489	44,166
Warehouses	0	7,739	18,021	28,304	38,586
Total	0	51,063	127,846	209,480	296,753

Bulk Class	2006	2011	2016	2021	2026
Offices	0.00	11.57	30.13	50.33	72.43
Factories	0.00	2.51	5.72	8.93	12.15
Warehouses	0.00	1.70	3.96	6.23	8.49
Total	0.00	15.79	39.82	65.49	93.07

Past Trends

Past Trends - Total Floorspace Requirement 2006-2026

	2006	2011	2016	2021	2026
A1	54,612	55,658	56,935	58,481	60,340
A2	197,942	217,339	240,607	268,442	301,755
A3	59,831	59,364	58,900	58,440	57,984
B1a	535,834	561,539	590,795	623,872	661,145
B1b	450	492	538	589	644
B1c	16,389	12,643	10,758	10,229	10,812
B2	311,467	263,505	237,199	223,897	219,118
B8	389,624	416,871	452,738	498,748	556,966
C1	14,958	14,841	14,725	14,610	14,496
Total	1,581,107	1,602,253	1,663,197	1,757,308	1,883,260

Past Trends - Absolute Change in Floorspace Requirement 2006-2026

Tuot Hondo A	ast frends - Absolute Ghange in Floorspace Requirement 2000-2020							
	2006	2011	2016	2021	2026			
A1	0	1,046	2,323	3,869	5,728			
A2	0	19,396	42,665	70,500	103,813			
A3	0	-467	-931	-1,391	-1,848			
B1a	0	25,706	54,962	88,038	125,311			
B1b	0	42	88	139	194			
B1c	0	-3,746	-5,631	-6,160	-5,577			
B2	0	-47,961	-74,267	-87,570	-92,348			
B8	0	27,247	63,114	109,124	167,342			
C1	0	-117	-233	-348	-462			
Total	0	21,146	82,090	176,201	302,153			

Adjusted to Fit Churn Model

Bulk Class	2006	2011	2016	2021	2026
Offices	0	25,748	55,050	88,177	125,505
Factories	0	0	0	0	0
Warehouses	0	27,247	63,114	109,124	167,342
Total	0	52,995	118,164	197,301	292,847

Addition of Churn (0.5% per annum)

Bulk Class	2006	2011	2016	2021	2026
Offices	0	48,448	100,450	156,277	216,305
Factories	0	12,975	25,950	38,925	51,900
Warehouses	0	38,672	85,964	143,399	213,042
Total	0	100,095	212,364	338,601	481,247

Removal of Leakage (to Non Employment Areas)

Bulk Class	2006	2011	2016	2021	2026
Offices	0	31,491	65,292	101,580	140,598
Factories	0	11,678	23,355	35,033	46,710
Warehouses	0	34,805	77,368	129,059	191,738
Total	0	77,974	166,015	265,672	379,046

Allowance for Completions

Bulk Class	2006	2011	2016	2021	2026
Offices	0	14,922	48,723	85,011	124,029
Factories	0	9,134	20,811	32,489	44,166
Warehouses	0	32,261	74,824	126,515	189,194
Total	0	56,317	144,358	244,015	357,389

Bulk Class	2006	2011	2016	2021	2026
Offices	0.00	5.05	16.49	28.77	41.98
Factories	0.00	2.51	5.72	8.93	12.15
Warehouses	0.00	7.10	16.46	27.83	41.62
Total	0.00	14.66	38.68	65.54	95.75