



Report

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Employment Land Review Addendum

Warwick District Council

January 2011



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Glossary of Terms

ABI	Abbreviation of Annual Business Inquiry – dataset which details the number of jobs within an area and within different employment sectors
Accessibility	The quality of choice for individuals to engage in activities and services with the minimum need to travel
Acre	A measurement of area – equivalent to 4,047m ² and 0.4 ha
Allocations	Areas of land and / or units (e.g. dwellings or factories) to be identified for development in local plans or local development frameworks in order to meet targets set out in regional planning policy.
B1a	Business Land Use Class: Offices, other than a use within A2 Class (Financial Services)
B1b	Business Land Use Class: Research and Development of products or processes.
B1c	Business Land Use Class: Light industry
B2	General Industrial Land Use Class: use for the carrying out of an industrial process other than one falling in Class B1.
B8	Storage and Distribution Land Use Class: Use for storage or distribution centre.
Baseline	The existing situation against which employment forecasts / scenarios may be assessed.
Brownfield Land	Land that has been previously developed or used for purposes other than the growing of agricultural products, including residential, retail, industrial, leisure etc, but has subsequently become redundant and / or surplus to requirements
Commuting	Travelling activity undertaken by persons who live in one area or settlement and work in another.
Core Strategy	A Development Plan Document that forms part of the Local Development Framework. The Core Strategy sets out the vision and strategic spatial objectives for the spatial development of the District. This includes the amount of and broad locations for future housing and employment use. Policies within this document apply to the whole of the local authority area and are not site-specific. Once adopted, all other Development Plan Documents must be in conformity with the Core Strategy
Development	The carrying out of building, engineering, mining or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land.
Development Density	The amount of floorspace that is built per gross hectare.

Economically Active	All persons aged 16 or over who are employed, unemployed or on a Government training scheme. It excludes those who are retired.
Employee	All persons in paid employment working for a Pay As You Earn (PAYE) registered company
Employment Areas	Existing areas of land where employment in the "B" use classes is the primary use, such as industrial estates. It excludes town centres.
Employment Forecasts / Projections	Statistical models produced to calculate the approximate level of employment in different sectors, based on a number of economic, social, environmental and spatial factors.
Employment Land	Existing areas of land that are identified in the Local Development Framework for business (B1), industrial (B2) and storage / distribution (B8) uses.
Employment Scenario	An employment forecast with specific economic, social, environmental and spatial characteristics. A number of scenarios may be produced in order that comparisons can be drawn between them.
Employment Sites	An area of land that has been allocated for future employment use in the Local Development Framework
Floorspace	All the area enclosed by the exterior walls of a building, both finished and unfinished, including indoor parking facilities, basements, hallways, lobbies, stairways, and elevator shafts.
Greenfield Land	Land usually free of built development
Gross Domestic Product	An estimation of the monetary value of the total output of production of all goods and services after the estimated income from foreign inward investment has been deducted.
Gross Hectare	The total area of a site, including land that may not be used as building land, including that used for infrastructure and landscaping, though excluding car parking. (1 gross hectare is equivalent to 2.471 acres)
GVA	Gross Value Added: measures the contribution to the economy of each individual producer, industry or sector in the United Kingdom.
Hectare	A measurement of area – equivalent to 10,000m ²
Index of Multiple Deprivation	IMD is based on the idea of distinct dimensions of deprivation, which can be recognised and measured separately. These are then combined into a single overall measure. The Index is made up of seven distinct dimensions of deprivation called Domain Indices. These relate to income, employment, health and disability, education, skills and training, housing and services, living environment and crime.

Infrastructure	The system of communications and utility services (water supply, electricity, gas, and drainage) required to serve new development. The term can also be extended to refer to the provision of more general services such as schools, shops and public transport.
Job Density	The number of jobs per hectare or number of sq m of floorspace required to house a job
Knowledge Based Industries	Refers to those industries that are relatively intensive in their inputs of technology and / or human capital.
Leakage	The amount of employment that is not accommodated on employment land (i.e. the amount that is "leaked" to other areas such as town centres).
LEFM	Abbreviation of Local Economy Forecasting Model, which is custom built computer package designed to enable users to produce their own economic projections for local areas within the UK. It provides a more complete economic picture of the local area covering various key economic indicators and a number of labour market indicators as well as employment
Local Development Framework	A folder of local development documents that outlines how planning will be managed in a particular area.
Local Plan	A development framework, produced by the Local Planning Authority, which outlines how the area will develop over the next 10 years.
Managed Workspaces	Small industrial and business units developed and managed by the Council or other bodies
Masterplan	A plan, usually for the development of a large site, which sets out the general location of housing, shops, schools and associated infrastructure and community facilities.
Mixed Use Development	Site and / or development proposal with two or more land use activities, such as business, industrial, leisure, residential, retail and warehousing, occurring on it
Net Hectare	The total area of a site, excluding land that may not be used as building land, including that used for infrastructure and landscaping, though excluding car parking.
Property Churn	Demand for new employment premises that is not driven by new employment demand, created by companies moving due to the cessation of their current lease, desire to relocate or current costs being too high.
Proposals Map	Map base upon which Local Plan policies and proposals are illustrated.
psf	Abbreviation for Per Square Foot
RSS	Regional Spatial Strategy: 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.

Sustainable Development	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
Take Up	Land upon which development has taken or is taking place
Typology	A type of employment area / site that has specific characteristics that can be associated with other areas / sites. This may include the density of development, land use classes and type of employment present or proposed on the site.
Use Class	Land use activities with common characteristics as defined by the Town and Country Planning (Use Classes) Order 1997.
Workforce	The total number of residents in a given area aged 16 or over who are employed, unemployed or a Government training scheme. It excludes those who are retired.

1. Introduction

- 1.1 This report forms an Addendum to the 2009 Warwick District Council Employment Land Review ("the 2009 report"), prepared by GVA Grimley (hereafter referred to as GVA). In December 2010, GVA were appointed by Warwick District Council (WDC) to produce an update to the 2009 report in order to model the employment land requirements of the District based upon emerging housing targets produced by WDC. This work will inform the emerging Local Plan being prepared by WDC.

Background and Scope of Work

- 1.2 The 2009 report was produced within the emerging regional planning framework and had regard to the proposed housing targets set out in the West Midlands Regional Spatial Strategy (WMRSS) and the recommendations of the Nathaniel Lichfield report. This report looked to identify options for higher housing numbers in the draft West Midlands Phase 2 RSS Revision in response to the National Housing and Planning Advice Unit (NHPAU) report. The 2009 report informed WDC's work on the (then) emerging Core Strategy for the District and was based upon housing growth of between 10,800 to 20,800 new homes being built between 2006 to 2026.
- 1.3 As a result of the recently published Localism Bill, WDC has ceased work on its Core Strategy and is now working on the preparation of options for a new Local Plan for Warwick District. As part of this process, GVA have been asked to consider the impact of three alternative housing growth scenarios on the employment land requirements of the District from 2011 to 2026, taking into account the housing and employment land which has been developed during the period 2006 to 2011. These housing scenarios are as follows:
- Scenario 1 – 12,000 new homes within the District;
 - Scenario 2 – 7,500 new homes within the District; and
 - Scenario 3 – 4,000 new homes within the District.
- 1.4 The rest of this report presents the findings of our work and is structured as follows:
- Section 2 – Methodology;

- Section 3 – Forecasts of Future Employment Land Demand; and
- Section 4 – Conclusions.

2. Methodology

- 2.1 In order to create the three alternative housing scenarios set out above to examine the employment land requirements arising from the proposed levels of growth, we have undertaken a three stage process to adapt the model used in the 2009 report. This ensures consistency with our previous work and wherever possible, we have ensured that the assumptions made within the model have remained constant. Where any assumptions have been changed, this is clearly indicated. The stages of work we have undertaken are set out below.

Stage 1 – Re-base Employment Growth Assumptions

- 2.2 The employment scenarios developed for the 2009 report were based on 2006 employment data, which was the most up to date ABI data available at the time. Currently, the latest available ABI data is for 2008 and the three new housing-based scenarios have been developed using 2008 ABI data. These scenarios therefore include historical employment data up to 2008 with projections from 2009 to 2026. This historical employment data is presented in Appendix A.
- 2.3 The new scenarios are therefore projecting employment, floorspace and land requirements from a base year of 2008 rather than 2006 and it is important that care is taken in making comparisons between the figures in this report and the 2009 report.

Stage 2 – Create Alternative Housing-Based Scenarios

- 2.4 The latest WDC housing targets described above provide a range of possible scenarios in terms of the number of new dwellings expected to be constructed in Warwick District between 2011 and 2026. Since 2008 is the latest available ABI employment data, it is also important to take account of any dwellings constructed between 2008 and 2011 as part of the projections. Housing completions data is monitored and published by WDC in April each year. We have therefore used the data from the last two full years of monitoring data from 2008/09 and 2009/10. This leaves a "gap" in terms of housing completions, of around eight months at the time of writing, however this does not have a significant impact upon employment forecasts.

2.5 The 2010 Annual Monitoring Report states that there were an additional 427 housing completions in 2008/09 and 188 in 2009/10, totalling 615 completions between April 2008 and April 2010. These dwellings must therefore be added to the future housing targets to enable employment requirements to be projected from 2008 to 2026. The three scenarios therefore assume:

- Scenario 1 – 12,615 new dwellings between 2008 and 2026;
- Scenario 2 – 8,115 new dwellings between 2008 and 2026; and
- Scenario 3 – 4,615 new dwellings between 2008 and 2026.

2.6 The process for converting these housing targets into employment projections is unchanged from the 2009 report, although some of the assumptions have been updated where appropriate. This process has involved:

- Multiplying the projected numbers of additional houses by 2.3 persons per dwelling to provide estimates of the implied increase in population associated with each scenario by 2026;
- Using the latest available estimates of the working age and economically active population in Warwick to estimate the number of additional people available for employment. The latest forecasts from the Warwickshire Observatory suggest that 59.1% of the Warwick population in 2026 is likely to be of working age (this has fallen slightly from 59.5% since the 2009 report). Estimates of economic activity, based on the ONS Annual Population Survey, have also fallen slightly from 78.8% to 76% of the working age population (based on the period from July 2009 to June 2010, which has been assumed for 2026 as in the 2009 report).
- Converting these additional economically active people into the additional number of jobs that will need to be generated in Warwick by 2026 in order to maintain the existing level of “Job Balance” of 106.5% (again based on 2001 Census data). This provides additional jobs targets of 13,879 for Scenario 1, 8,928 for Scenario 2 and 5,078 for Scenario 3, as presented in Table 2.1.

Table 2.1 – Conversion of WDC Housing Targets to Employment Growth

	Scenario 1	Scenario 2	Scenario 3
Potential New Dwellings (2008-2026)	12,615	8,115	4,615
Implied Population Increase (2008-2026)	29,015	18,665	10,615
Implied Increase in Working Age Population (2008-2026)	17,148	11,031	6,273
Implied Increase in Economically Active (2008-2026)	13,032	8,383	4,768
Total Additional Jobs (2008-2026)	13,879	8,928	5,078

Sources: WDC Housing Targets 2011-2026; WDC 2010 Annual Monitoring Report; Warwickshire Observatory; 2001 Census data; and GHK analysis, 2011

- 2.7 The projected distribution of these additional jobs between sectors has remained consistent with the assumptions used in the 2009 report, as much as possible. For instance, the same 'dwellings-to-job' ratios have been applied to the same 'non-basic' sectors such as education, health, retail, where the size of the sector is likely to be closely related to the number of dwellings.
- 2.8 Furthermore, the 'priority' sectors are also consistent with the 2009 report and in most cases the selected 'treatment' of each priority sector is also unchanged, although the past trends applied to the sector are based on 2008 ABI data rather than 2006. There are only two exceptions, where the assumptions from the 2009 report were no longer considered appropriate for the respective priority sectors:
- Employment in the 'Other Business Services' sector has fallen significantly between 2006 and 2008 by 2,500 jobs in Warwick (a 16% decline, according to ABI data). The 2009 report applied an absolute trend, from 1998 to 2006, since employment in this sector was expected to continue to increase at a rate in excess of the Baseline LEFM projections. However, the recent employment decline in this sector means that similar past trends over 1998 to 2008 now indicate weaker growth than that estimated by applying the Baseline LEFM growth rates to 2008 ABI data. As employment in 'Other Business Services' is expected to recover and continue to grow strongly, it has therefore been decided that the Baseline LEFM projections now provide a more accurate projection of future employment and have been selected to generate projections for this sector.

- While employment in the 'Research and Development' sector remains relatively small, it has also fallen significantly between 2006 and 2008 by more than 50% according to ABI data. This has had a considerable impact on the past trends between 1998 and 2008. The 2008 ABI data for this sector appears inconsistent with other years and other sectors and provides an example where a relatively small change in the number of jobs in a sector can have a significant impact on future projections, based on percentage growth rates. As a result, the trend for this sector has been based on the period between 1998 and 2007, omitting the 2008 data which appears to be something of an 'outlier', to maintain stronger growth in this key priority sector.
- 2.9 The projections of all other 'non-priority' sectors are also consistent with the 2009 report and apply the Baseline LEFM projections, although these have also been updated by applying the LEFM growth rates to the latest 2008 ABI data in order to generate projections to 2026.
- 2.10 Finally, each sector total has been adjusted either up or down in proportion to the distribution of total employment in 2008 in order to control the sectoral changes proportionately back to the respective jobs targets for 2026 under each Scenario. This is also consistent with the previous approach as described in the 2009 report, with a straight line trend assumed for all sectors between 2008 and 2026.

Stage 3 – Calculate Employment Floorspace and Land Requirements: 2006 to 2026

Employment Floorspace

- 2.11 The assumptions described above have been applied to generate employment projections for each of the three housing-based scenarios. Although the same assumptions have been applied, the employment projections vary according to the different number of new houses estimated under each scenario. Employment has been projected at the 2 digit SIC level for each scenario over the period 2008 to 2026 and the 2026 figures are presented in Table 2.2. Detailed tables for each individual scenario can be found at Appendix B, providing employment totals for 2008, 2011, 2016, 2021 and 2026.

Table 2.2 – Summary of Employment Projections based on Economic Scenarios

	2008 Actual	2026		
		Scenario 1: (12,000 New Dwellings)	Scenario 2: (7,500 New Dwellings)	Scenario 3: (4,000 New Dwellings)
01 : Agriculture/Hunting, etc.	487	453	439	427
02 : Forestry, logging etc.	4	2	2	2
05 : Fishing, fish farms etc.	0	0	0	0
10 : Coal Mining, Peat Extraction	0	0	0	0
11 : Petroleum, Oil/Gas Services	0	0	0	0
14 : Other mining and quarry	36	36	35	35
15 : Manf.- food and beverages	1,453	1,327	1,283	1,249
17 : Manf. - textiles	36	0	0	0
18 : Manf. - wearing apparel	8	0	0	0
19 : Tanning and dressing of leather	33	0	0	0
20 : Manf. - wood products	108	37	34	32
21 : Manf. - pulp and paper products	81	28	26	24
22 : Publishing and Printing	741	627	605	588
23 : Manf. - coke, petroleum products	0	0	0	0
24 : Manf. - chemicals and chemical products	135	137	133	130
25 : Manf. - rubber and plastic products	238	122	115	109
26 : Manf. - other non-metallic mineral products	19	19	19	18
27 : Manf. basic metals	45	37	35	34
28 : Manf. - fabricated metal products	569	387	370	356
29 : Manf. - other machinery	1,280	955	917	887
30 : Manf. - office machinery and computers	124	229	225	223
31 : Manf. - other electrical machinery	66	67	65	63
32 : Manf. - communication equipment	55	56	54	53
33 : Manf. - medical instruments	167	169	164	160
34 : Manf. - motor vehicles, trailers	1,689	1,373	1,323	1,283
35 : Manf. - transport equipment	120	122	118	115
36 : Manf. - furniture; manufacturing n.e.c.	207	279	273	268
37 : Recycling	6	8	8	8
40 : Electricity, gas, steam and hot water supply	1,118	993	959	933
41 : Collection, purification and distribution of water	559	486	470	457
45 : Construction	2,019	2,621	2,345	2,130
50 : Sale and repair of motor vehicles and fuel	2,266	2,536	2,378	2,255
51 : Wholesale trade	4,641	4,702	4,563	4,455
52 : Retail trade	6,516	7,933	7,239	6,698
55 : Hotels and restaurants	5,338	6,080	5,668	5,348
60 : Land transport	716	852	830	814
61 : Water transport	4	4	4	4
62 : Air transport	248	499	492	486
63 : Supporting transport activities/travel agencies	951	1,131	1,103	1,081
64 : Post and telecommunications	2,060	1,400	1,339	1,291
65 : Financial intermediation	834	845	820	801
66 : Insurance and pension funding	18	18	18	17
67 : Auxiliary financial activities	291	373	364	358
70 : Real estate activities	1,398	1,596	1,487	1,402
71 : Renting of machinery and equipment	998	1,209	1,179	1,156
72 : Computer and related activities	4,340	7,175	7,045	6,944
73 : Research and development	7	143	142	142
74 : Other business activities	13,142	17,596	17,203	16,897
75 : Public administration and defence	2,596	3,362	3,010	2,736
80 : Education	6,646	7,981	7,314	6,795
85 : Health and social work	7,807	9,349	8,575	7,974
90 : Sewage and refuse disposal	173	201	196	192
91 : Activities of membership organisations	1,040	1,198	1,112	1,046
92 : Recreational, cultural and sporting activities	2,026	2,424	2,224	2,069
93 : Other service activities	1,318	1,479	1,386	1,313
Total	76,777	90,656	85,706	81,855

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- 2.12 Since the 2009 report, ABI data suggests that total employment in Warwick increased between 2006 and 2007 before falling back in 2008. The overall effect is that employment in Warwick is slightly higher in 2008 than in 2006, having increased by 0.9%. However, there have been more significant changes in terms of employment in individual sectors. As mentioned above, there has been a significant decline in employment in 'Other Business Services'. Other sectors experiencing particularly large employment declines between 2006 and 2008 include 'Financial Services', 'Construction' and the 'Manufacture of Basic Metals'. The key sectors in terms of employment growth between 2006 and 2008 include 'Education', 'Utilities', 'Manufacture of Food and Beverages', 'Publishing and Printing', 'Wholesale Trade' and 'Computer Services'.
- 2.13 The total employment projections associated with these scenarios appear broadly in line with the RSS-based scenarios in the 2009 report. Table 2.2 shows that Scenario 1 (based on 12,000 new dwellings between 2011 and 2026) projects employment growth of approximately 14,000 between 2008 and 2026, to a total of 90,700 jobs in 2026. This 2026 total is higher than Scenario A-1 in the 2009 report, which projected 88,300 jobs in 2026, but is lower than the 99,800 jobs projected by Scenario A-2. This is to be expected since Scenario A-1 was based on a smaller number of new dwellings (10,800 between 2006 and 2026), while Scenario A-2 was based on a much larger number of new dwellings (20,800 between 2006 and 2026). The new Scenarios 2 and 3, based on 7,500 and 4,000 new dwellings respectively (between 2011 and 2026), project smaller employment growth of almost 9,000 and just over 5,000 jobs.
- 2.14 The broad sector trends are also similar to the 2009 report with the new scenarios continuing to project declining employment in most primary and manufacturing sectors and growth in service sectors. However, the new scenarios, based on an additional two years of historic data, suggest that these trends will be less marked than was suggested in the 2009 report, with smaller declines in agriculture and manufacturing sectors, and slightly smaller growth rates in the service sectors.
- 2.15 There are also some significant differences in the employment projections of some individual sectors, compared to the 2009 report. The largest differences are closely correlated with the sectors described above, that have experienced significant changes in employment between 2006 and 2008. For example, the sectors demonstrating lower employment projections in the new scenarios include: 'Other
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Business Services', 'Computer Services', 'Health and Social Work', 'Financial Services', 'Retail', 'Public Administration and Defence', 'Construction' and the 'Manufacture of Basic Metals'. Similarly, the sectors demonstrating higher employment projections in the new scenarios include: 'Education', 'Wholesale Trade', 'Renting of Machinery and Equipment', 'Manufacture of Food and Beverages' and 'Utilities'.

- 2.16 In order to convert the employment projections into floorspace requirements, the above employment projections have been translated into the same 26 sector groupings as used in the 2009 report. The employment projections associated with the new scenarios are presented in Table 2.3 for the 26 sector groups in 2026.

Table 2.3 – Employment in Selected Sector Groups

	2008 Actual	2026		
		Scenario 1: (12,000 New Dwellings)	Scenario 2: (7,500 New Dwellings)	Scenario 3: (4,000 New Dwellings)
M1 Food & Beverages	1,453	1,327	1,283	1,249
M2 Printing & Publishing	741	627	605	588
M3 Chemical, Plastic & Non-Metallic Materials/Products	392	278	266	257
M4 Metals & Metal Products	614	423	405	391
M5 Mechanical Engineering	1,280	955	917	887
M6 Electronics, Electrical Engineering & Instruments	412	521	509	499
M7 Motor Vehicles & Other Transport Equipment	1,809	1,495	1,441	1,399
M8 Manufacturing nes	479	352	340	331
S1 Utilities	1,850	1,680	1,625	1,582
S2 Construction	2,019	2,621	2,345	2,130
S3 Wholesale Distribution	4,641	4,702	4,563	4,455
S4 Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	2,266	2,536	2,378	2,255
S5 Retailing	6,516	7,933	7,239	6,698
S6 Hotels & Catering	5,338	6,080	5,668	5,348
S7 Land Transport	1,667	1,983	1,933	1,894
S8 Communications	2,060	1,400	1,339	1,291
S9 Insurance, Banking & Finance	1,143	1,236	1,202	1,175
S10 Computing Services	4,340	7,175	7,045	6,944
S11 Research & Development	7	143	142	142
S12 Real Estate & Professional Services	1,398	1,596	1,487	1,402
S13 Other Business Services	13,142	17,596	17,203	16,897
S14 Public Administration & Defence	2,596	3,362	3,010	2,736
S15 Education	6,646	7,981	7,314	6,795
S16 Health & Social Work	7,807	9,349	8,575	7,974
S17 Recreational, Cultural & Sporting Activities	2,026	2,424	2,224	2,069
S18 Other Services	3,356	3,886	3,677	3,515
Total	75,998	89,661	84,734	80,902

Source: GHK analysis, 2011

- 2.17 The consultant's transformation model has been used to apply employment moderators and then allocate employment in each sector group between the standard land use categories. Employment densities have then been applied to convert the employment projections into gross external floorspace requirements. This

is the same approach, and uses the same assumptions, as the 2009 report. The resulting estimates of floorspace requirements for 2026 are summarised in Table 2.4 below. Detailed tables for each individual scenario can be found at Appendix C.

Table 2.4 – Warwick Floorspace Requirements by Land Use Class (sq. m): Total Requirement 2026 and Change in Requirement 2008 – 2026, by Scenario

	2008	Warwick – Total Floorspace Requirement 2026		
		Scenario 1 (12,000 New Dwellings)	Scenario 2 (7,500 New Dwellings)	Scenario 3 (4,000 New Dwellings)
A1	54,461	70,257	65,148	61,174
A2	209,433	266,190	251,247	239,625
A3	61,067	69,552	64,841	61,178
B1a	496,177	649,176	620,186	597,638
B1b	210	4,280	4,273	4,269
B1c	13,752	17,386	16,975	16,655
B2	317,906	281,287	268,687	258,887
B8	433,403	422,087	409,116	399,027
C1	15,267	17,388	16,210	15,294
Total	1,601,675	1,797,603	1,716,684	1,653,746
	Warwick – Absolute Change in Floorspace Requirement 2008- 2026			
		Scenario 1 (12,000 New Dwellings)	Scenario 2 (7,500 New Dwellings)	Scenario 3 (4,000 New Dwellings)
A1		15,797	10,687	6,713
A2		56,758	41,815	30,193
A3		8,485	3,775	111
B1a		152,999	124,009	101,461
B1b		4,070	4,063	4,058
B1c		3,634	3,223	2,903
B2		-36,619	-49,220	-59,020
B8		-11,316	-24,287	-34,376
C1		2,121	944	28
Total		195,928	115,009	52,071

Source: GHK analysis, 2011

2.18 Table 2.4 shows that the total floorspace requirements in 2026, and the change between 2008 and 2026, are consistent with the overall employment projections for

each Scenario. Scenario 1 projects the largest increase of 196,000 additional square metres of floorspace required by 2026, followed by Scenario 2 (115,000 additional square metres), and Scenario 2 (52,000 additional square metres). These are also broadly in line with the RSS-based scenarios in the 2009 report, as the additional floorspace projected by the new Scenario 1 (based on 12,000 new dwellings between 2011 and 2026) is between the 159,000 and 348,000 square metres of additional floorspace projected between 2006 and 2026 by Scenarios A-1 and A-2, based on 10,800 and 20,800 new dwellings respectively.

- 2.19 The overall findings are also broadly consistent with the 2009 report, with all three new scenarios concurring that there will be a greater requirement for retail (A1), financial and professional services (A2), food and drink (A3), office (B1a), research and development (B1b), light industrial (B1c) and hotel (C1) floorspace, and a lesser requirement for manufacturing (B2) and storage and distribution (B8) floorspace by 2026. However, the employment trends of more restrained growth in services and smaller declines in manufacturing and primary industries have resulted in: smaller increases in demand for office (B1a) floorspace; smaller declines in demand for manufacturing (B2) and storage and distribution (B8) floorspace; and slightly stronger growth in demand for light industrial (B1c) floorspace.

Employment Land

- 2.20 The process of converting employment floorspace requirements to estimates of land has involved applying a number of key assumptions relating to churn, leakage, development plot ratios and net to gross ratios to the employment floorspace figures. We have applied the same assumptions as set out in the 2009 report to take account of these factors and these assumptions are set out in paragraphs 5.55 to 5.69 of the 2009 report.

Completions

- 2.21 The demand forecasts we have prepared use the 2008 ABI data as the base date and run to 2026. In order to align these to the present day, we have subtracted the total employment land completions from 2008 to 2011 from the forecasts to take account of development that has already taken place. The total completions of employment land between 2008 to 2011, by use class, are set out in Table 2.5 below.

Table 2.5 – Completions of Employment Land in Warwick: 2008 to 2011

Monitoring Year	Employment Land Completed by Land Use Class (ha) ¹			Total
	B1	B2	B8	
2008 / 09	1.13	0.11	0.11	1.35
2009 / 10	0.30	0.00	0.00	0.30
Total	1.43	0.11	0.11	1.65

Source: Warwick District Council, 2011

- 2.22 Based on the information set out above, we have subtracted a total of 1.65ha of employment land from the demand forecasts, in order to align them to 2011.
- 2.23 The next section of this report details the employment land requirements within Warwick District from 2008 to 2026, based upon the alternative housing scenarios created above.

¹ Where a development comprises more than one land use (e.g. B2 / B8), the total area has been split equally between the land uses

3. Forecasts of Future Employment Land Demand

3.1 This section details the forecasts of future employment land demand based on the scenarios and assumptions detailed in Section 2. 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 D.

Scenario 1 – 12,000 New Homes

3.2 The total floorspace and land requirements under Scenario 1 are shown in Table 3.1 below. They show a requirement of around 52.53ha B1, 11.56ha B2 and 8.14ha B8, giving an overall requirement of around 72ha to 2026. This takes into account the impact of churn and leakage, and completions from 2008 to 2011. More detailed tables can be found at Appendix D.

Table 3.1 – Scenario 1 – Floorspace and Land Requirements: 2008 to 2026

Use Class	2008	2011	2016	2021	2026
B1	0	18,381	59,319	102,991	150,100
B2	0	6,523	18,200	29,878	41,555
B8	0	5,565	15,847	26,130	36,412
Total	0	30,468	93,366	158,998	228,067

Use Class	2008	2011	2016	2021	2026
B1	0.00	7.95	21.81	36.59	52.53
B2	0.00	1.93	5.14	8.35	11.56
B8	0.00	1.36	3.62	5.88	8.14
Total	0.00	11.24	30.57	50.82	72.24

Source: GVA analysis, 2011

Scenario 2 – 7,500 New Homes

3.3 The total floorspace and land requirements under Scenario 2 are shown in Table 3.2 below. They show a requirement of around 46.15ha B1, 11.56ha B2 and 8.14ha B8, giving an overall requirement of around 66ha to 2026. This takes into account the

impact of churn and leakage, and completions from 2008 to 2011. More detailed tables can be found at Appendix D.

Table 3.2 – Scenario 2 – Floorspace and Land Requirements: 2008 to 2026

Use Class	2008	2011	2016	2021	2026
B1	0	15,688	51,836	90,130	131,253
B2	0	6,523	18,200	29,878	41,555
B8	0	5,565	15,847	26,130	36,412
Total	0	27,775	85,883	146,137	209,220

Use Class	2008	2011	2016	2021	2026
B1	0.00	7.04	19.27	32.24	46.15
B2	0.00	1.93	5.14	8.35	11.56
B8	0.00	1.36	3.62	5.88	8.14
Total	0.00	10.32	28.03	46.47	65.86

Source: GVA analysis, 2011

Scenario 3 – 4,000 New Homes

- 3.4 The total floorspace and land requirements under Scenario 3 are shown in Table 3.3 below. They show a requirement of around 41.19ha B1, 11.56ha B2 and 8.14ha B8, giving an overall requirement of around 61ha to 2026. This takes into account the impact of churn and leakage, and completions from 2008 to 2011. More detailed tables can be found at Appendix D.

Table 3.3 – Scenario 3 – Floorspace and Land Requirements: 2008 to 2026

Use Class	2008	2011	2016	2021	2026
B1	0	13,511	45,792	79,938	116,593
B2	0	6,523	18,200	29,878	41,555
B8	0	5,565	15,847	26,130	36,412
Total	0	25,598	79,839	135,945	194,560

Use Class	2008	2011	2016	2021	2026
B1	0.00	6.30	17.23	28.79	41.19
B2	0.00	1.93	5.14	8.35	11.56
B8	0.00	1.36	3.62	5.88	8.14
Total	0.00	9.59	25.99	43.02	60.90

Source: GVA analysis, 2011

Summary

- 3.5 This section has shown that there is predicted to be a requirement for employment land of between 61ha to 72ha of employment land within Warwick to 2026, as shown in Table 3.4 below.

Table 3.4 – Summary of Employment Land Requirements in Warwick: 2008 to 2026

Scenario	Employment Land Demand 2008 to 2026 (ha)			
	B1a / B1b	B1c / B2	B8	Total
Scenario 1 – 12,000 New Homes	52.53	11.56	8.14	72.24
Scenario 2 – 7,500 New Homes	46.15	11.56	8.14	65.86
Scenario 3 – 4,000 New Homes	41.19	11.56	8.14	60.90

Source: GVA analysis, 2011

- 3.6 Table 3.4 above shows that based on Scenario 1, there would be a requirement for employment land of 72.24ha, which is the largest of the three scenarios. Based on Scenario 2, the employment land requirement falls to around 65.86ha, whilst Scenario 3 has the smallest employment land requirement, around 60.90ha.

4. Conclusions and Next Steps

Employment Land Demand

- 4.1 The analysis set out in this report has updated the 2009 ELR undertaken for Warwick District Council. It has demonstrated that based upon the Council's emerging housing targets for the forthcoming Local Plan, there is likely to be subsequent demand for employment land of between 61ha to 72ha to 2026. Table 4.1 below compares the results of this work with the results of the 2009 report.

Table 4.1 – Comparison of Total Employment Land Demand within Warwick District: 2009 ELR and 2011 ELR Update

2009 Employment Land Review

Scenario	Employment Land Demand 2006 to 2026 (ha)			
	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

2011 Employment Land Review Update

Scenario	Employment Land Demand 2008 to 2026 (ha)			
	B1a / B1b	B1c / B2	B8	Total
Scenario 1 - 12,000 New Homes	52.53	11.56	8.14	72.24
Scenario 2 - 7,500 New Homes	46.15	11.56	8.14	65.86
Scenario 3 - 4,000 New Homes	41.19	11.56	8.14	60.90

Source: GVA analysis, 2011

- 4.2 We note in paragraph 2.3 above that comparison of the two sets of figures requires careful consideration, due to the change in base year for the figures produced as part of this report from 2006 to 2008. Therefore in order to provide a more meaningful comparison, we have looked at the annual average demand arising, by use class for each set of forecasts. This is shown in Table 4.2 below.

Table 4.2 – Comparison of Annual Average Employment Land Demand within Warwick District: 2009 ELR and 2011 ELR Update

2009 Employment Land Review

Scenario	Annual Employment Land Demand 2006 to 2026 (ha)			
	B1a / B1b	B1c / B2	B8	Total
Baseline	2.48	0.61	0.42	3.51
RSS Scenario - 10,800 New Homes	2.85	0.61	0.42	3.88
RSS Scenario - 20,800 New Homes	3.62	0.61	0.42	4.65
Past Trends	2.10	0.61	2.08	4.79

2011 Employment Land Review Update

Scenario	Annual Employment Land Demand 2011 to 2026 (ha)			
	B1a / B1b	B1c / B2	B8	Total
Scenario 1 - 12,000 New Homes	3.50	0.77	0.54	4.82
Scenario 2 - 7,500 New Homes	3.08	0.77	0.54	4.39
Scenario 3 - 4,000 New Homes	2.75	0.77	0.54	4.06

Source: GVA analysis, 2011

4.3 The forecasts produced as part of this report are broadly in line with the 2009 report, however we would note the following:

- Whilst overall employment land demand has decreased (refer to Table 4.1), the limited completions of employment land between 2008 to 2010 (refer to Table 2.5) have resulted in an increase in annual employment land demand across all land uses from 2011 to 2026 to meet this, as yet, unmet demand;
- The downturn in the economy has resulted in more restrained growth in the service sector, which has had a knock on effect on demand for office (B1a) floorspace; and
- Continued declines in demand for manufacturing (B2) and storage and distribution (B8) floorspace have meant that demand is of a similar level to the 2009 report, despite lower housing figures – this is as a result of churn.

Five Year Supply

4.4 Our analysis has demonstrated an overall requirement for employment land of between 61ha to 72ha from 2011 to 2026. In order to maintain a range and choice of

readily available employment sites, we would recommend that WDC are able to identify at least a five year supply of employment land at any one time. Based upon our analysis, this would equate to a requirement of between 20ha to 24ha, as shown in Table 4.3 below.

Table 4.3 – Five Year Rolling Supply of Employment Land for Warwick District – 2011 to 2026

	Total (ha)	Annual Requirement (ha)	Five Year Supply (ha)
Scenario 1 - 12,000 New Homes	72.24	4.82	24.08
Scenario 2 – 7,500 New Homes	65.86	4.39	21.95
Scenario 3 – 4,000 New Homes	60.90	4.06	20.30

Source: GVA analysis, 2011

Next Steps

- 4.5 We understand that WDC are to consult with the public on the proposed levels of new housing and associated employment growth set out in this report. Once this period statutory consultation has been undertaken and a preferred option is agreed, we would recommend that further work is undertaken to assess the suitability of the District's employment land portfolio to accommodate the requirements of the economy, including the availability of a five year supply of employment land to meet the requirements set out in Table 4.3 above. This could include an assessment of employment sites in the District, taking into account the existing and proposed portfolio of employment land.

Appendix A – Sectoral Trends, ABI Data, 1998-2008

INDUSTRY	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
01 : Agriculture/Hunting, etc.	536	520	560	570	503	427	437	436	586	487	487
02 : Forestry, logging etc.	0	0	3	0	6	2	10	4	4	11	4
05 : Fishing, fish farms etc.	0	0	0	0	0	0	0	0	11	0	0
10 : Coal Mining, Peat Extraction	3	0	0	0	0	0	0	3	0	0	0
11 : Petroleum, Oil/Gas Services	0	0	0	0	0	27	0	0	0	0	0
14 : Other mining and quarry	0	0	0	0	0	28	38	40	29	35	36
15 : Manf. - food and beverages	1,037	1,024	1,077	841	743	920	837	813	969	1,413	1,453
17 : Manf. - textiles	187	160	91	62	56	48	41	41	48	23	36
18 : Manf. - wearing apparel	93	39	25	21	79	78	54	42	9	21	8
19 : Tanning and dressing of leather	33	30	2	8	9	15	6	4	3	11	33
20 : Manf. - wood products	83	77	38	43	68	105	91	73	195	102	108
21 : Manf. - pulp and paper products	148	142	74	70	75	90	51	45	81	64	81
22 : Publishing and Printing	713	820	485	477	438	514	460	455	579	543	741
23 : Manf. - coke, petroleum products	0	0	0	4	0	0	0	0	0	0	0
24 : Manf. - chemicals and chemical products	132	301	303	265	362	121	154	171	158	133	135
25 : Manf. - rubber and plastic products	827	535	411	266	216	169	303	215	203	211	238
26 : Manf. - other non-metallic mineral products	50	38	42	42	31	13	24	20	10	31	19
27 : Manf. - basic metals	767	681	635	497	432	436	455	439	445	46	45
28 : Manf. - fabricated metal products	1,941	1,516	1,293	732	666	651	667	609	576	642	569
29 : Manf. - other machinery	2,023	1,939	1,677	1,644	1,482	1,930	2,112	1,337	1,424	1,388	1,280
30 : Manf. - office machinery and computers	9	3	2	13	7	49	88	91	71	112	124
31 : Manf. - other electrical machinery	381	187	190	168	180	189	177	184	153	89	66
32 : Manf. - communication equipment	127	136	19	33	125	140	171	154	91	115	55
33 : Manf. - medical instruments	310	293	296	231	266	275	257	201	176	181	167
34 : Manf. - motor vehicles, trailers	3,066	1,971	6,228	2,718	1,986	1,677	1,722	1,978	1,508	1,575	1,689
35 : Manf. - transport equipment	291	293	307	320	289	264	303	160	100	93	120
36 : Manf. - furniture; manufacturing n.e.c.	204	183	110	166	140	155	233	183	238	243	207
37 : Recycling	29	27	13	26	29	28	30	36	42	19	6
40 : Electricity, gas, steam and hot water supply	53	49	66	0	19	1,433	650	1,158	639	1,113	1,118
41 : Collection, purification and distribution of water	286	163	299	351	612	633	655	294	647	509	559
45 : Construction	2,073	2,736	1,535	2,481	2,670	1,707	1,768	2,066	2,259	2,118	2,019
50 : Sale and repair of motor vehicles and fuel	1,880	2,104	2,076	1,790	1,636	2,284	2,476	1,756	2,268	2,060	2,266
51 : Wholesale trade	3,704	4,592	4,877	4,879	5,752	3,564	3,200	3,569	3,915	5,381	4,641
52 : Retail trade	6,810	6,499	6,845	7,510	7,643	7,491	6,943	6,936	6,633	6,362	6,516
55 : Hotels and restaurants	5,363	4,466	4,771	6,182	5,276	4,853	5,712	5,535	5,248	5,219	5,338
60 : Land transport	701	545	1,055	832	625	463	528	656	468	392	716
61 : Water transport	0	2	2	0	6	11	6	11	0	8	4
62 : Air transport	140	193	195	192	213	270	86	172	127	51	248
63 : Supporting transport activities/travel agencies	890	1,127	883	864	1,269	1,669	2,701	2,318	1,019	1,246	951
64 : Post and telecommunications	1,036	931	976	713	617	1,530	1,351	1,852	2,126	2,553	2,060
65 : Financial intermediation	1,563	1,789	1,278	1,097	1,085	1,028	1,173	1,209	1,318	957	834
66 : Insurance and pension funding	135	120	184	145	123	81	80	59	14	14	18
67 : Auxiliary financial activities	244	237	235	211	224	369	240	267	296	219	291
70 : Real estate activities	1,088	1,049	926	950	1,109	984	992	1,484	1,110	1,342	1,398
71 : Renting of machinery and equipment	306	434	390	386	390	495	472	652	606	691	998
72 : Computer and related activities	1,253	1,450	1,613	1,806	2,196	3,709	3,538	3,922	3,940	4,347	4,340
73 : Research and development	13	11	24	16	28	15	17	20	15	24	7
74 : Other business activities	12,581	12,451	9,539	11,216	10,998	10,343	12,590	14,380	15,629	15,900	13,142
75 : Public administration and defence	3,857	3,048	3,023	2,930	2,919	2,917	3,228	3,277	2,886	3,131	2,596
80 : Education	3,313	3,513	3,680	4,070	4,315	4,258	3,963	4,105	4,411	4,730	6,646
85 : Health and social work	6,823	7,615	6,671	7,197	7,281	7,695	8,193	7,944	8,158	7,670	7,807
90 : Sewage and refuse disposal	46	54	65	105	64	71	112	171	236	228	173
91 : Activities of membership organisations	731	973	920	1,089	1,122	1,231	1,345	1,184	1,318	1,292	1,040
92 : Recreational, cultural and sporting activities	1,612	2,072	1,839	1,855	2,050	1,995	1,851	1,762	1,980	1,805	2,026
93 : Other service activities	526	791	593	841	992	1,120	974	957	1,092	1,180	1,318
Total	70,017	69,929	68,441	68,925	69,422	70,570	73,565	75,450	76,067	78,130	76,777

Appendix B – Detailed Employment Forecasts

**Employment Projections - Warwick
Scenario 1 (12,000 New Dwellings)**

	2008 Actual	2011	2016	2021	2026
01 : Agriculture/Hunting, etc.	487	481	472	462	453
02 : Forestry, logging etc.	4	4	3	2	2
05 : Fishing, fish farms etc.	0	0	0	0	0
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	36	36	36	36	36
15 : Manf. - food and beverages	1,453	1,431	1,395	1,361	1,327
17 : Manf. - textiles	36	0	0	0	0
18 : Manf. - wearing apparel	8	0	0	0	0
19 : Tanning and dressing of leather	33	0	0	0	0
20 : Manf. - wood products	108	91	67	50	37
21 : Manf. - pulp and paper products	81	68	51	38	28
22 : Publishing and Printing	741	721	688	657	627
23 : Manf. - coke, petroleum products	0	0	0	0	0
24 : Manf. - chemicals and chemical products	135	135	136	136	137
25 : Manf. - rubber and plastic products	238	213	177	147	122
26 : Manf. - other non-metallic mineral products	19	19	19	19	19
27 : Manf. basic metals	45	43	41	39	37
28 : Manf. - fabricated metal products	569	534	479	431	387
29 : Manf. - other machinery	1,280	1,219	1,124	1,036	955
30 : Manf. - office machinery and computers	124	137	163	193	229
31 : Manf. - other electrical machinery	66	66	66	67	67
32 : Manf. - communication equipment	55	55	55	56	56
33 : Manf. - medical instruments	167	167	168	169	169
34 : Manf. - motor vehicles, trailers	1,689	1,632	1,541	1,455	1,373
35 : Manf. - transport equipment	120	120	121	121	122
36 : Manf. - furniture; manufacturing n.e.c.	207	218	236	257	279
37 : Recycling	6	6	7	7	8
40 : Electricity, gas, steam and hot water supply	1,118	1,096	1,061	1,026	993
41 : Collection, purification and distribution of water	559	546	526	506	486
45 : Construction	2,019	2,109	2,267	2,438	2,621
50 : Sale and repair of motor vehicles and fuel	2,266	2,309	2,382	2,458	2,536
51 : Wholesale trade	4,641	4,651	4,668	4,685	4,702
52 : Retail trade	6,516	6,733	7,112	7,511	7,933
55 : Hotels and restaurants	5,338	5,455	5,656	5,864	6,080
60 : Land transport	716	737	773	812	852
61 : Water transport	4	4	4	4	4
62 : Air transport	248	279	338	411	499
63 : Supporting transport activities/travel agencies	951	979	1,027	1,078	1,131
64 : Post and telecommunications	2,060	1,932	1,735	1,559	1,400
65 : Financial intermediation	834	836	839	842	845
66 : Insurance and pension funding	18	18	18	18	18
67 : Auxiliary financial activities	291	303	325	348	373
70 : Real estate activities	1,398	1,429	1,483	1,539	1,596
71 : Renting of machinery and equipment	998	1,030	1,087	1,146	1,209
72 : Computer and related activities	4,340	4,719	5,427	6,240	7,175
73 : Research and development	7	12	27	62	143
74 : Other business activities	13,142	13,797	14,962	16,226	17,596
75 : Public administration and defence	2,596	2,710	2,912	3,129	3,362
80 : Education	6,646	6,852	7,209	7,585	7,981
85 : Health and social work	7,807	8,045	8,458	8,892	9,349
90 : Sewage and refuse disposal	173	177	185	193	201
91 : Activities of membership organisations	1,040	1,065	1,107	1,152	1,198
92 : Recreational, cultural and sporting activities	2,026	2,088	2,194	2,307	2,424
93 : Other service activities	1,318	1,344	1,387	1,433	1,479
Total	76,777	78,651	82,215	86,199	90,656

Projected Growth Rates (% pa)

	2008- 2011	2011- 2016	2016- 2021	2021- 2026
01 : Agriculture/Hunting, etc.	-0.4%	-0.4%	-0.4%	-0.4%
02 : Forestry, logging etc.	-4.1%	-4.1%	-4.1%	-4.1%
05 : Fishing, fish farms etc.	NA	NA	NA	NA
10 : Coal Mining, Peat Extraction	NA	NA	NA	NA
11 : Petroleum, Oil/Gas Services	NA	NA	NA	NA
14 : Other mining and quarry	0.1%	0.1%	0.1%	0.1%
15 : Manf. - food and beverages	-0.5%	-0.5%	-0.5%	-0.5%
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	-5.7%	-5.7%	-5.7%	-5.7%
21 : Manf. - pulp and paper products	-5.7%	-5.7%	-5.7%	-5.7%
22 : Publishing and Printing	-0.9%	-0.9%	-0.9%	-0.9%
23 : Manf. - coke, petroleum products	NA	NA	NA	NA
24 : Manf. - chemicals and chemical products	0.1%	0.1%	0.1%	0.1%
25 : Manf. - rubber and plastic products	-3.6%	-3.6%	-3.6%	-3.6%
26 : Manf. - other non-metallic mineral products	0.1%	0.1%	0.1%	0.1%
27 : Manf. basic metals	-1.1%	-1.1%	-1.1%	-1.1%
28 : Manf. - fabricated metal products	-2.1%	-2.1%	-2.1%	-2.1%
29 : Manf. - other machinery	-1.6%	-1.6%	-1.6%	-1.6%
30 : Manf. - office machinery and computers	3.5%	3.5%	3.5%	3.5%
31 : Manf. - other electrical machinery	0.1%	0.1%	0.1%	0.1%
32 : Manf. - communication equipment	0.1%	0.1%	0.1%	0.1%
33 : Manf. - medical instruments	0.1%	0.1%	0.1%	0.1%
34 : Manf. - motor vehicles, trailers	-1.1%	-1.1%	-1.1%	-1.1%
35 : Manf. - transport equipment	0.1%	0.1%	0.1%	0.1%
36 : Manf. - furniture; manufacturing n.e.c.	1.7%	1.7%	1.7%	1.7%
37 : Recycling	1.7%	1.7%	1.7%	1.7%
40 : Electricity, gas, steam and hot water supply	-0.7%	-0.7%	-0.7%	-0.7%
41 : Collection, purification and distribution of water	-0.8%	-0.8%	-0.8%	-0.8%
45 : Construction	1.5%	1.5%	1.5%	1.5%
50 : Sale and repair of motor vehicles and fuel	0.6%	0.6%	0.6%	0.6%
51 : Wholesale trade	0.1%	0.1%	0.1%	0.1%
52 : Retail trade	1.1%	1.1%	1.1%	1.1%
55 : Hotels and restaurants	0.7%	0.7%	0.7%	0.7%
60 : Land transport	1.0%	1.0%	1.0%	1.0%
61 : Water transport	0.0%	0.0%	0.0%	0.0%
62 : Air transport	4.0%	4.0%	4.0%	4.0%
63 : Supporting transport activities/travel agencies	1.0%	1.0%	1.0%	1.0%
64 : Post and telecommunications	-2.1%	-2.1%	-2.1%	-2.1%
65 : Financial intermediation	0.1%	0.1%	0.1%	0.1%
66 : Insurance and pension funding	0.1%	0.1%	0.1%	0.1%
67 : Auxiliary financial activities	1.4%	1.4%	1.4%	1.4%
70 : Real estate activities	0.7%	0.7%	0.7%	0.7%
71 : Renting of machinery and equipment	1.1%	1.1%	1.1%	1.1%
72 : Computer and related activities	2.8%	2.8%	2.8%	2.8%
73 : Research and development	18.2%	18.2%	18.2%	18.2%
74 : Other business activities	1.6%	1.6%	1.6%	1.6%
75 : Public administration and defence	1.4%	1.4%	1.4%	1.4%
80 : Education	1.0%	1.0%	1.0%	1.0%
85 : Health and social work	1.0%	1.0%	1.0%	1.0%
90 : Sewage and refuse disposal	0.8%	0.8%	0.8%	0.8%
91 : Activities of membership organisations	0.8%	0.8%	0.8%	0.8%
92 : Recreational, cultural and sporting activities	1.0%	1.0%	1.0%	1.0%
93 : Other service activities	0.6%	0.6%	0.6%	0.6%
Total	0.8%	0.9%	1.0%	1.0%

Employment Projections - Warwick

Scenario 1 (12,000 New Dwellings) - Selected Sectors Only

	2008	2011	2016	2021	2026
	Actual				
M1 Food & Beverages	1,453	1,431	1,395	1,361	1,327
M2 Printing & Publishing	741	721	688	657	627
M3 Chemical, Plastic & Non-Metallic Materials/Products	392	367	332	302	278
M4 Metals & Metal Products	614	577	520	469	423
M5 Mechanical Engineering	1,280	1,219	1,124	1,036	955
M6 Electronics, Electrical Engineering & Instruments	412	426	453	484	521
M7 Motor Vehicles & Other Transport Equipment	1,809	1,752	1,661	1,576	1,495
M8 Manufacturing nes	479	382	361	352	352
S1 Utilities	1,850	1,820	1,771	1,724	1,680
S2 Construction	2,019	2,109	2,267	2,438	2,621
S3 Wholesale Distribution	4,641	4,651	4,668	4,685	4,702
S4 Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	2,266	2,309	2,382	2,458	2,536
S5 Retailing	6,516	6,733	7,112	7,511	7,933
S6 Hotels & Catering	5,338	5,455	5,656	5,864	6,080
S7 Land Transport	1,667	1,716	1,801	1,890	1,983
S8 Communications	2,060	1,932	1,735	1,559	1,400
S9 Insurance, Banking & Finance	1,143	1,157	1,182	1,208	1,236
S10 Computing Services	4,340	4,719	5,427	6,240	7,175
S11 Research & Development	7	12	27	62	143
S12 Real Estate & Professional Services	1,398	1,429	1,483	1,539	1,596
S13 Other Business Services	13,142	13,797	14,962	16,226	17,596
S14 Public Administration & Defence	2,596	2,710	2,912	3,129	3,362
S15 Education	6,646	6,852	7,209	7,585	7,981
S16 Health & Social Work	7,807	8,045	8,458	8,892	9,349
S17 Recreational, Cultural & Sporting Activities	2,026	2,088	2,194	2,307	2,424
S18 Other Services	3,356	3,439	3,581	3,730	3,886
Total	75,998	77,847	81,361	85,283	89,661

Projected Growth Rates (% pa)

	2008-2011	2011-2016	2016-2021	2021-2026
M1 Food & Beverages	-0.5%	-0.5%	-0.5%	-0.5%
M2 Printing & Publishing	-0.9%	-0.9%	-0.9%	-0.9%
M3 Chemical, Plastic & Non-Metallic Materials/Products	-2.1%	-2.0%	-1.8%	-1.7%
M4 Metals & Metal Products	-2.0%	-2.0%	-2.0%	-2.0%
M5 Mechanical Engineering	-1.6%	-1.6%	-1.6%	-1.6%
M6 Electronics, Electrical Engineering & Instruments	1.1%	1.2%	1.3%	1.5%
M7 Motor Vehicles & Other Transport Equipment	-1.1%	-1.1%	-1.1%	-1.0%
M8 Manufacturing nes	-7.2%	-1.1%	-0.5%	0.0%
S1 Utilities	-0.6%	-0.5%	-0.5%	-0.5%
S2 Construction	1.5%	1.5%	1.5%	1.5%
S3 Wholesale Distribution	0.1%	0.1%	0.1%	0.1%
S4 Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	0.6%	0.6%	0.6%	0.6%
S5 Retailing	1.1%	1.1%	1.1%	1.1%
S6 Hotels & Catering	0.7%	0.7%	0.7%	0.7%
S7 Land Transport	1.0%	1.0%	1.0%	1.0%
S8 Communications	-2.1%	-2.1%	-2.1%	-2.1%
S9 Insurance, Banking & Finance	0.4%	0.4%	0.4%	0.5%
S10 Computing Services	2.8%	2.8%	2.8%	2.8%
S11 Research & Development	18.2%	18.2%	18.2%	18.2%
S12 Real Estate & Professional Services	0.7%	0.7%	0.7%	0.7%
S13 Other Business Services	1.6%	1.6%	1.6%	1.6%
S14 Public Administration & Defence	1.4%	1.4%	1.4%	1.4%
S15 Education	1.0%	1.0%	1.0%	1.0%
S16 Health & Social Work	1.0%	1.0%	1.0%	1.0%
S17 Recreational, Cultural & Sporting Activities	1.0%	1.0%	1.0%	1.0%
S18 Other Services	0.8%	0.8%	0.8%	0.8%
Total	0.8%	0.9%	0.9%	1.0%

**Employment Projections - Warwick
Scenario 2 (7,500 New Dwellings)**

	2008 Actual	2011	2016	2021	2026
01 : Agriculture/Hunting, etc.	487	479	465	452	439
02 : Forestry, logging etc.	4	3	3	2	2
05 : Fishing, fish farms etc.	0	0	0	0	0
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	36	36	36	36	35
15 : Manf. - food and beverages	1,453	1,423	1,375	1,328	1,283
17 : Manf. - textiles	36	0	0	0	0
18 : Manf. - wearing apparel	8	0	0	0	0
19 : Tanning and dressing of leather	33	0	0	0	0
20 : Manf. - wood products	108	89	65	47	34
21 : Manf. - pulp and paper products	81	67	49	35	26
22 : Publishing and Printing	741	716	677	640	605
23 : Manf. - coke, petroleum products	0	0	0	0	0
24 : Manf. - chemicals and chemical products	135	135	134	133	133
25 : Manf. - rubber and plastic products	238	211	172	141	115
26 : Manf. - other non-metallic mineral products	19	19	19	19	19
27 : Manf. basic metals	45	43	40	38	35
28 : Manf. - fabricated metal products	569	530	470	417	370
29 : Manf. - other machinery	1,280	1,211	1,104	1,006	917
30 : Manf. - office machinery and computers	124	137	162	191	225
31 : Manf. - other electrical machinery	66	66	66	65	65
32 : Manf. - communication equipment	55	55	55	54	54
33 : Manf. - medical instruments	167	167	166	165	164
34 : Manf. - motor vehicles, trailers	1,689	1,622	1,515	1,416	1,323
35 : Manf. - transport equipment	120	120	119	119	118
36 : Manf. - furniture; manufacturing n.e.c.	207	217	234	252	273
37 : Recycling	6	6	7	7	8
40 : Electricity, gas, steam and hot water supply	1,118	1,090	1,045	1,001	959
41 : Collection, purification and distribution of water	559	543	517	493	470
45 : Construction	2,019	2,070	2,158	2,249	2,345
50 : Sale and repair of motor vehicles and fuel	2,266	2,284	2,315	2,346	2,378
51 : Wholesale trade	4,641	4,628	4,606	4,584	4,563
52 : Retail trade	6,516	6,631	6,828	7,030	7,239
55 : Hotels and restaurants	5,338	5,392	5,482	5,574	5,668
60 : Land transport	716	734	765	797	830
61 : Water transport	4	4	4	4	4
62 : Air transport	248	278	336	407	492
63 : Supporting transport activities/travel agencies	951	975	1,016	1,058	1,103
64 : Post and telecommunications	2,060	1,917	1,701	1,509	1,339
65 : Financial intermediation	834	832	828	824	820
66 : Insurance and pension funding	18	18	18	18	18
67 : Auxiliary financial activities	291	302	322	342	364
70 : Real estate activities	1,398	1,412	1,437	1,462	1,487
71 : Renting of machinery and equipment	998	1,026	1,075	1,126	1,179
72 : Computer and related activities	4,340	4,705	5,383	6,158	7,045
73 : Research and development	7	12	27	62	142
74 : Other business activities	13,142	13,745	14,813	15,963	17,203
75 : Public administration and defence	2,596	2,661	2,772	2,889	3,010
80 : Education	6,646	6,753	6,935	7,122	7,314
85 : Health and social work	7,807	7,930	8,140	8,355	8,575
90 : Sewage and refuse disposal	173	177	183	189	196
91 : Activities of membership organisations	1,040	1,052	1,072	1,092	1,112
92 : Recreational, cultural and sporting activities	2,026	2,058	2,112	2,167	2,224
93 : Other service activities	1,318	1,329	1,348	1,367	1,386
Total	76,777	77,906	80,164	82,750	85,706

Projected Growth Rates (% pa)

	2008- 2011	2011- 2016	2016- 2021	2021- 2026
01 : Agriculture/Hunting, etc.	-0.6%	-0.6%	-0.6%	-0.6%
02 : Forestry, logging etc.	-4.5%	-4.5%	-4.5%	-4.5%
05 : Fishing, fish farms etc.	NA	NA	NA	NA
10 : Coal Mining, Peat Extraction	NA	NA	NA	NA
11 : Petroleum, Oil/Gas Services	NA	NA	NA	NA
14 : Other mining and quarry	-0.1%	-0.1%	-0.1%	-0.1%
15 : Manf. - food and beverages	-0.7%	-0.7%	-0.7%	-0.7%
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	-6.2%	-6.2%	-6.2%	-6.2%
21 : Manf. - pulp and paper products	-6.2%	-6.2%	-6.2%	-6.2%
22 : Publishing and Printing	-1.1%	-1.1%	-1.1%	-1.1%
23 : Manf. - coke, petroleum products	NA	NA	NA	NA
24 : Manf. - chemicals and chemical products	-0.1%	-0.1%	-0.1%	-0.1%
25 : Manf. - rubber and plastic products	-4.0%	-4.0%	-4.0%	-4.0%
26 : Manf. - other non-metallic mineral products	-0.1%	-0.1%	-0.1%	-0.1%
27 : Manf. basic metals	-1.3%	-1.3%	-1.3%	-1.3%
28 : Manf. - fabricated metal products	-2.4%	-2.4%	-2.4%	-2.4%
29 : Manf. - other machinery	-1.8%	-1.8%	-1.8%	-1.8%
30 : Manf. - office machinery and computers	3.4%	3.4%	3.4%	3.4%
31 : Manf. - other electrical machinery	-0.1%	-0.1%	-0.1%	-0.1%
32 : Manf. - communication equipment	-0.1%	-0.1%	-0.1%	-0.1%
33 : Manf. - medical instruments	-0.1%	-0.1%	-0.1%	-0.1%
34 : Manf. - motor vehicles, trailers	-1.3%	-1.3%	-1.3%	-1.3%
35 : Manf. - transport equipment	-0.1%	-0.1%	-0.1%	-0.1%
36 : Manf. - furniture; manufacturing n.e.c.	1.5%	1.5%	1.5%	1.5%
37 : Recycling	1.5%	1.5%	1.5%	1.5%
40 : Electricity, gas, steam and hot water supply	-0.8%	-0.8%	-0.8%	-0.8%
41 : Collection, purification and distribution of water	-1.0%	-1.0%	-1.0%	-1.0%
45 : Construction	0.8%	0.8%	0.8%	0.8%
50 : Sale and repair of motor vehicles and fuel	0.3%	0.3%	0.3%	0.3%
51 : Wholesale trade	-0.1%	-0.1%	-0.1%	-0.1%
52 : Retail trade	0.6%	0.6%	0.6%	0.6%
55 : Hotels and restaurants	0.3%	0.3%	0.3%	0.3%
60 : Land transport	0.8%	0.8%	0.8%	0.8%
61 : Water transport	0.0%	0.0%	0.0%	0.0%
62 : Air transport	3.9%	3.9%	3.9%	3.9%
63 : Supporting transport activities/travel agencies	0.8%	0.8%	0.8%	0.8%
64 : Post and telecommunications	-2.4%	-2.4%	-2.4%	-2.4%
65 : Financial intermediation	-0.1%	-0.1%	-0.1%	-0.1%
66 : Insurance and pension funding	-0.1%	-0.1%	-0.1%	-0.1%
67 : Auxiliary financial activities	1.3%	1.3%	1.3%	1.3%
70 : Real estate activities	0.3%	0.3%	0.3%	0.3%
71 : Renting of machinery and equipment	0.9%	0.9%	0.9%	0.9%
72 : Computer and related activities	2.7%	2.7%	2.7%	2.7%
73 : Research and development	18.2%	18.2%	18.2%	18.2%
74 : Other business activities	1.5%	1.5%	1.5%	1.5%
75 : Public administration and defence	0.8%	0.8%	0.8%	0.8%
80 : Education	0.5%	0.5%	0.5%	0.5%
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	0.4%	0.4%	0.4%	0.4%
92 : Recreational, cultural and sporting activities	0.5%	0.5%	0.5%	0.5%
93 : Other service activities	0.3%	0.3%	0.3%	0.3%
Total	0.5%	0.6%	0.6%	0.7%

Employment Projections - Warwick

Scenario 2 (7,500 New Dwellings) - Selected Sectors Only

	2008	2011	2016	2021	2026
	Actual				
M1 Food & Beverages	1,453	1,423	1,375	1,328	1,283
M2 Printing & Publishing	741	716	677	640	605
M3 Chemical, Plastic & Non-Metallic Materials/Products	392	364	325	293	266
M4 Metals & Metal Products	614	573	510	454	405
M5 Mechanical Engineering	1,280	1,211	1,104	1,006	917
M6 Electronics, Electrical Engineering & Instruments	412	424	448	475	509
M7 Motor Vehicles & Other Transport Equipment	1,809	1,741	1,634	1,534	1,441
M8 Manufacturing nes	479	379	354	342	340
S1 Utilities	1,850	1,809	1,745	1,683	1,625
S2 Construction	2,019	2,070	2,158	2,249	2,345
S3 Wholesale Distribution	4,641	4,628	4,606	4,584	4,563
S4 Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	2,266	2,284	2,315	2,346	2,378
S5 Retailing	6,516	6,631	6,828	7,030	7,239
S6 Hotels & Catering	5,338	5,392	5,482	5,574	5,668
S7 Land Transport	1,667	1,709	1,780	1,855	1,933
S8 Communications	2,060	1,917	1,701	1,509	1,339
S9 Insurance, Banking & Finance	1,143	1,152	1,167	1,184	1,202
S10 Computing Services	4,340	4,705	5,383	6,158	7,045
S11 Research & Development	7	12	27	62	142
S12 Real Estate & Professional Services	1,398	1,412	1,437	1,462	1,487
S13 Other Business Services	13,142	13,745	14,813	15,963	17,203
S14 Public Administration & Defence	2,596	2,661	2,772	2,889	3,010
S15 Education	6,646	6,753	6,935	7,122	7,314
S16 Health & Social Work	7,807	7,930	8,140	8,355	8,575
S17 Recreational, Cultural & Sporting Activities	2,026	2,058	2,112	2,167	2,224
S18 Other Services	3,356	3,407	3,494	3,584	3,677
Total	75,998	77,107	79,320	81,850	84,734

Projected Growth Rates (% pa)

	2008-2011	2011-2016	2016-2021	2021-2026
M1 Food & Beverages	-0.7%	-0.7%	-0.7%	-0.7%
M2 Printing & Publishing	-1.1%	-1.1%	-1.1%	-1.1%
M3 Chemical, Plastic & Non-Metallic Materials/Products	-2.4%	-2.3%	-2.1%	-1.9%
M4 Metals & Metal Products	-2.3%	-2.3%	-2.3%	-2.3%
M5 Mechanical Engineering	-1.8%	-1.8%	-1.8%	-1.8%
M6 Electronics, Electrical Engineering & Instruments	1.0%	1.1%	1.2%	1.4%
M7 Motor Vehicles & Other Transport Equipment	-1.3%	-1.3%	-1.3%	-1.2%
M8 Manufacturing nes	-7.5%	-1.4%	-0.7%	-0.1%
S1 Utilities	-0.7%	-0.7%	-0.7%	-0.7%
S2 Construction	0.8%	0.8%	0.8%	0.8%
S3 Wholesale Distribution	-0.1%	-0.1%	-0.1%	-0.1%
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	0.3%	0.3%	0.3%	0.3%
S7 Land Transport	0.8%	0.8%	0.8%	0.8%
S8 Communications	-2.4%	-2.4%	-2.4%	-2.4%
S9 Insurance, Banking & Finance	0.3%	0.3%	0.3%	0.3%
S10 Computing Services	2.7%	2.7%	2.7%	2.7%
S11 Research & Development	18.2%	18.2%	18.2%	18.2%
S12 Real Estate & Professional Services	0.3%	0.3%	0.3%	0.3%
S13 Other Business Services	1.5%	1.5%	1.5%	1.5%
S14 Public Administration & Defence	0.8%	0.8%	0.8%	0.8%
S15 Education	0.5%	0.5%	0.5%	0.5%
S16 Health & Social Work	0.5%	0.5%	0.5%	0.5%
S17 Recreational, Cultural & Sporting Activities	0.5%	0.5%	0.5%	0.5%
S18 Other Services	0.5%	0.5%	0.5%	0.5%
Total	0.5%	0.6%	0.6%	0.7%

**Employment Projections - Warwick
Scenario 3 (4,000 New Dwellings)**

	2008 Actual	2011	2016	2021	2026
01 : Agriculture/Hunting, etc.	487	476	459	443	427
02 : Forestry, logging etc.	4	3	3	2	2
05 : Fishing, fish farms etc.	0	0	0	0	0
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	36	36	35	35	35
15 : Manf. - food and beverages	1,453	1,417	1,359	1,303	1,249
17 : Manf. - textiles	36	0	0	0	0
18 : Manf. - wearing apparel	8	0	0	0	0
19 : Tanning and dressing of leather	33	0	0	0	0
20 : Manf. - wood products	108	88	63	45	32
21 : Manf. - pulp and paper products	81	66	47	33	24
22 : Publishing and Printing	741	713	668	627	588
23 : Manf. - coke, petroleum products	0	0	0	0	0
24 : Manf. - chemicals and chemical products	135	134	133	131	130
25 : Manf. - rubber and plastic products	238	209	169	136	109
26 : Manf. - other non-metallic mineral products	19	19	19	18	18
27 : Manf. basic metals	45	43	40	37	34
28 : Manf. - fabricated metal products	569	526	462	406	356
29 : Manf. - other machinery	1,280	1,204	1,088	982	887
30 : Manf. - office machinery and computers	124	137	161	189	223
31 : Manf. - other electrical machinery	66	66	65	64	63
32 : Manf. - communication equipment	55	55	54	53	53
33 : Manf. - medical instruments	167	166	164	162	160
34 : Manf. - motor vehicles, trailers	1,689	1,613	1,495	1,385	1,283
35 : Manf. - transport equipment	120	119	118	117	115
36 : Manf. - furniture; manufacturing n.e.c.	207	216	232	249	268
37 : Recycling	6	6	7	7	8
40 : Electricity, gas, steam and hot water supply	1,118	1,085	1,032	981	933
41 : Collection, purification and distribution of water	559	540	511	483	457
45 : Construction	2,019	2,037	2,068	2,099	2,130
50 : Sale and repair of motor vehicles and fuel	2,266	2,264	2,261	2,258	2,255
51 : Wholesale trade	4,641	4,609	4,557	4,506	4,455
52 : Retail trade	6,516	6,546	6,596	6,647	6,698
55 : Hotels and restaurants	5,338	5,340	5,342	5,345	5,348
60 : Land transport	716	731	758	785	814
61 : Water transport	4	4	4	4	4
62 : Air transport	248	277	334	403	486
63 : Supporting transport activities/travel agencies	951	971	1,007	1,043	1,081
64 : Post and telecommunications	2,060	1,906	1,673	1,470	1,291
65 : Financial intermediation	834	828	819	810	801
66 : Insurance and pension funding	18	18	18	17	17
67 : Auxiliary financial activities	291	301	319	338	358
70 : Real estate activities	1,398	1,399	1,400	1,401	1,402
71 : Renting of machinery and equipment	998	1,023	1,065	1,110	1,156
72 : Computer and related activities	4,340	4,694	5,348	6,094	6,944
73 : Research and development	7	12	27	62	142
74 : Other business activities	13,142	13,704	14,695	15,757	16,897
75 : Public administration and defence	2,596	2,619	2,657	2,696	2,736
80 : Education	6,646	6,671	6,712	6,753	6,795
85 : Health and social work	7,807	7,835	7,881	7,927	7,974
90 : Sewage and refuse disposal	173	176	181	186	192
91 : Activities of membership organisations	1,040	1,041	1,043	1,045	1,046
92 : Recreational, cultural and sporting activities	2,026	2,033	2,045	2,057	2,069
93 : Other service activities	1,318	1,317	1,316	1,314	1,313
Total	76,777	77,294	78,507	80,016	81,855

Projected Growth Rates (% pa)

	2008- 2011	2011- 2016	2016- 2021	2021- 2026
01 : Agriculture/Hunting, etc.	-0.7%	-0.7%	-0.7%	-0.7%
02 : Forestry, logging etc.	-4.8%	-4.8%	-4.8%	-4.8%
05 : Fishing, fish farms etc.	NA	NA	NA	NA
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%	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	-6.6%	-6.6%	-6.6%	-6.6%
21 : Manf. - pulp and paper products	-6.6%	-6.6%	-6.6%	-6.6%
22 : Publishing and Printing	-1.3%	-1.3%	-1.3%	-1.3%
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	-4.2%	-4.2%	-4.2%	-4.2%
26 : Manf. - other non-metallic mineral products	-0.2%	-0.2%	-0.2%	-0.2%
27 : Manf. basic metals	-1.5%	-1.5%	-1.5%	-1.5%
28 : Manf. - fabricated metal products	-2.6%	-2.6%	-2.6%	-2.6%
29 : Manf. - other machinery	-2.0%	-2.0%	-2.0%	-2.0%
30 : Manf. - office machinery and computers	3.3%	3.3%	3.3%	3.3%
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	-1.5%	-1.5%	-1.5%	-1.5%
35 : Manf. - transport equipment	-0.2%	-0.2%	-0.2%	-0.2%
36 : Manf. - furniture; manufacturing n.e.c.	1.4%	1.4%	1.4%	1.4%
37 : Recycling	1.4%	1.4%	1.4%	1.4%
40 : Electricity, gas, steam and hot water supply	-1.0%	-1.0%	-1.0%	-1.0%
41 : Collection, purification and distribution of water	-1.1%	-1.1%	-1.1%	-1.1%
45 : Construction	0.3%	0.3%	0.3%	0.3%
50 : Sale and repair of motor vehicles and fuel	0.0%	0.0%	0.0%	0.0%
51 : Wholesale trade	-0.2%	-0.2%	-0.2%	-0.2%
52 : Retail trade	0.2%	0.2%	0.2%	0.2%
55 : Hotels and restaurants	0.0%	0.0%	0.0%	0.0%
60 : Land transport	0.7%	0.7%	0.7%	0.7%
61 : Water transport	0.0%	0.0%	0.0%	0.0%
62 : Air transport	3.8%	3.8%	3.8%	3.8%
63 : Supporting transport activities/travel agencies	0.7%	0.7%	0.7%	0.7%
64 : Post and telecommunications	-2.6%	-2.6%	-2.6%	-2.6%
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	1.2%	1.2%	1.2%	1.2%
70 : Real estate activities	0.0%	0.0%	0.0%	0.0%
71 : Renting of machinery and equipment	0.8%	0.8%	0.8%	0.8%
72 : Computer and related activities	2.6%	2.6%	2.6%	2.6%
73 : Research and development	18.2%	18.2%	18.2%	18.2%
74 : Other business activities	1.4%	1.4%	1.4%	1.4%
75 : Public administration and defence	0.3%	0.3%	0.3%	0.3%
80 : Education	0.1%	0.1%	0.1%	0.1%
85 : Health and social work	0.1%	0.1%	0.1%	0.1%
90 : Sewage and refuse disposal	0.6%	0.6%	0.6%	0.6%
91 : Activities of membership organisations	0.0%	0.0%	0.0%	0.0%
92 : Recreational, cultural and sporting activities	0.1%	0.1%	0.1%	0.1%
93 : Other service activities	0.0%	0.0%	0.0%	0.0%
Total	0.2%	0.3%	0.4%	0.5%

Employment Projections - Warwick

Scenario 3 (4,000 New Dwellings) - Selected Sectors Only

	2008	2011	2016	2021	2026
	Actual				
M1 Food & Beverages	1,453	1,417	1,359	1,303	1,249
M2 Printing & Publishing	741	713	668	627	588
M3 Chemical, Plastic & Non-Metallic Materials/Products	392	362	320	285	257
M4 Metals & Metal Products	614	569	502	443	391
M5 Mechanical Engineering	1,280	1,204	1,088	982	887
M6 Electronics, Electrical Engineering & Instruments	412	423	444	469	499
M7 Motor Vehicles & Other Transport Equipment	1,809	1,733	1,613	1,502	1,399
M8 Manufacturing nes	479	376	348	334	331
S1 Utilities	1,850	1,801	1,724	1,651	1,582
S2 Construction	2,019	2,037	2,068	2,099	2,130
S3 Wholesale Distribution	4,641	4,609	4,557	4,506	4,455
S4 Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	2,266	2,264	2,261	2,258	2,255
S5 Retailing	6,516	6,546	6,596	6,647	6,698
S6 Hotels & Catering	5,338	5,340	5,342	5,345	5,348
S7 Land Transport	1,667	1,703	1,764	1,828	1,894
S8 Communications	2,060	1,906	1,673	1,470	1,291
S9 Insurance, Banking & Finance	1,143	1,147	1,156	1,165	1,175
S10 Computing Services	4,340	4,694	5,348	6,094	6,944
S11 Research & Development	7	12	27	62	142
S12 Real Estate & Professional Services	1,398	1,399	1,400	1,401	1,402
S13 Other Business Services	13,142	13,704	14,695	15,757	16,897
S14 Public Administration & Defence	2,596	2,619	2,657	2,696	2,736
S15 Education	6,646	6,671	6,712	6,753	6,795
S16 Health & Social Work	7,807	7,835	7,881	7,927	7,974
S17 Recreational, Cultural & Sporting Activities	2,026	2,033	2,045	2,057	2,069
S18 Other Services	3,356	3,381	3,424	3,469	3,515
Total	75,998	76,497	77,671	79,129	80,902

Projected Growth Rates (% pa)

	2008-2011	2011-2016	2016-2021	2021-2026
M1 Food & Beverages	-0.8%	-0.8%	-0.8%	-0.8%
M2 Printing & Publishing	-1.3%	-1.3%	-1.3%	-1.3%
M3 Chemical, Plastic & Non-Metallic Materials/Products	-2.6%	-2.5%	-2.3%	-2.0%
M4 Metals & Metal Products	-2.5%	-2.5%	-2.5%	-2.5%
M5 Mechanical Engineering	-2.0%	-2.0%	-2.0%	-2.0%
M6 Electronics, Electrical Engineering & Instruments	0.9%	1.0%	1.1%	1.3%
M7 Motor Vehicles & Other Transport Equipment	-1.4%	-1.4%	-1.4%	-1.4%
M8 Manufacturing nes	-7.7%	-1.5%	-0.8%	-0.2%
S1 Utilities	-0.9%	-0.9%	-0.9%	-0.9%
S2 Construction	0.3%	0.3%	0.3%	0.3%
S3 Wholesale Distribution	-0.2%	-0.2%	-0.2%	-0.2%
S4 Retail of Automotive Fuel and Motor Vehicles (incl. Repair)	0.0%	0.0%	0.0%	0.0%
S5 Retailing	0.2%	0.2%	0.2%	0.2%
S6 Hotels & Catering	0.0%	0.0%	0.0%	0.0%
S7 Land Transport	0.7%	0.7%	0.7%	0.7%
S8 Communications	-2.6%	-2.6%	-2.6%	-2.6%
S9 Insurance, Banking & Finance	0.1%	0.1%	0.2%	0.2%
S10 Computing Services	2.6%	2.6%	2.6%	2.6%
S11 Research & Development	18.2%	18.2%	18.2%	18.2%
S12 Real Estate & Professional Services	0.0%	0.0%	0.0%	0.0%
S13 Other Business Services	1.4%	1.4%	1.4%	1.4%
S14 Public Administration & Defence	0.3%	0.3%	0.3%	0.3%
S15 Education	0.1%	0.1%	0.1%	0.1%
S16 Health & Social Work	0.1%	0.1%	0.1%	0.1%
S17 Recreational, Cultural & Sporting Activities	0.1%	0.1%	0.1%	0.1%
S18 Other Services	0.2%	0.3%	0.3%	0.3%
Total	0.2%	0.3%	0.4%	0.4%

Appendix C – Floorspace Forecasts

SCENARIO 1 (12,000 NEW DWELLINGS)**Floorspace requirements by land use class and year**

	2008	2011	2016	2021	2026
A1	54,461	56,767	60,880	65,363	70,257
A2	209,433	218,258	232,370	248,493	266,190
A3	61,067	62,405	64,702	67,083	69,552
B1a	496,177	518,564	558,390	601,826	649,176
B1b	210	347	802	1,853	4,280
B1c	13,752	14,385	15,106	16,152	17,386
B2	317,906	306,678	297,850	288,936	281,287
B8	433,403	431,354	426,392	423,660	422,087
C1	15,267	15,601	16,176	16,771	17,388
Total	1,601,675	1,624,360	1,672,669	1,730,137	1,797,603

Floorspace requirements for different land-use categories: % change compared to 2008

NB shows the change for each year compared to the base year of 2008 (not compared to preceding year in table)

	2008	2011	2016	2021	2026
A1		104%	112%	120%	129%
A2		104%	111%	119%	127%
A3		102%	106%	110%	114%
B1a		105%	113%	121%	131%
B1b		165%	382%	882%	2037%
B1c		105%	110%	117%	126%
B2		96%	94%	91%	88%
B8		100%	98%	98%	97%
C1		102%	106%	110%	114%
Total		101%	104%	108%	112%

Floorspace requirements for different land-use categories: absolute change compared to 2008

NB shows the change for each year compared to the base year of 2008 (not compared to preceding year in table)

	2008	2011	2016	2021	2026
A1		2,306	6,420	10,903	15,797
A2		8,825	22,938	39,060	56,758
A3		1,339	3,635	6,016	8,485
B1a		22,387	62,214	105,650	152,999
B1b		137	592	1,643	4,070
B1c		633	1,354	2,400	3,634
B2		-11,228	-20,057	-28,971	-36,619
B8		-2,049	-7,011	-9,743	-11,316
C1		335	909	1,504	2,121
Total		22,685	70,993	128,462	195,928

SCENARIO 2 (7,500 NEW DWELLINGS)**Floorspace requirements by land use class and year**

	2008	2011	2016	2021	2026
A1	54,461	56,026	58,812	61,842	65,148
A2	209,433	215,837	226,285	238,166	251,247
A3	61,067	61,680	62,716	63,770	64,841
B1a	496,177	514,420	546,878	582,042	620,186
B1b	210	347	802	1,851	4,273
B1c	13,752	14,304	14,939	15,869	16,975
B2	317,906	304,120	291,875	279,557	268,687
B8	433,403	428,895	420,387	414,115	409,116
C1	15,267	15,420	15,679	15,943	16,210
Total	1,601,675	1,611,049	1,638,373	1,673,155	1,716,684

Floorspace requirements for different land-use categories: % change compared to 2008

NB shows the change for each year compared to the base year of 2008 (not compared to preceding year in table)

	2008	2011	2016	2021	2026
A1		103%	108%	114%	120%
A2		103%	108%	114%	120%
A3		101%	103%	104%	106%
B1a		104%	110%	117%	125%
B1b		165%	381%	881%	2034%
B1c		104%	109%	115%	123%
B2		96%	92%	88%	85%
B8		99%	97%	96%	94%
C1		101%	103%	104%	106%
Total		101%	102%	104%	107%

Floorspace requirements for different land-use categories: absolute change compared to 2008

NB shows the change for each year compared to the base year of 2008 (not compared to preceding year in table)

	2008	2011	2016	2021	2026
A1		1,565	4,351	7,382	10,687
A2		6,404	16,852	28,734	41,815
A3		614	1,650	2,703	3,775
B1a		18,243	50,701	85,866	124,009
B1b		137	591	1,641	4,063
B1c		552	1,187	2,117	3,223
B2		-13,787	-26,031	-38,349	-49,220
B8		-4,508	-13,016	-19,288	-24,287
C1		153	412	676	944
Total		9,374	36,698	71,480	115,009

SCENARIO 3 (4,000 NEW DWELLINGS)**Floorspace requirements by land use class and year**

	2008	2011	2016	2021	2026
A1	54,461	55,409	57,129	59,041	61,174
A2	209,433	213,663	221,366	229,979	239,625
A3	61,067	61,085	61,116	61,147	61,178
B1a	496,177	511,071	537,580	566,364	597,638
B1b	210	347	801	1,849	4,269
B1c	13,752	14,110	14,807	15,647	16,655
B2	317,906	303,990	287,109	272,170	258,887
B8	433,403	426,219	415,637	406,629	399,027
C1	15,267	15,271	15,279	15,287	15,294
Total	1,601,675	1,601,166	1,610,824	1,628,113	1,653,746

Floorspace requirements for different land-use categories: % change compared to 2008

NB shows the change for each year compared to the base year of 2008 (not compared to preceding year in table)

	2008	2011	2016	2021	2026
A1		102%	105%	108%	112%
A2		102%	106%	110%	114%
A3		100%	100%	100%	100%
B1a		103%	108%	114%	120%
B1b		165%	381%	880%	2032%
B1c		103%	108%	114%	121%
B2		96%	90%	86%	81%
B8		98%	96%	94%	92%
C1		100%	100%	100%	100%
Total		100%	101%	102%	103%

Floorspace requirements for different land-use categories: absolute change compared to 2008

NB shows the change for each year compared to the base year of 2008 (not compared to preceding year in table)

	2008	2011	2016	2021	2026
A1		948	2,668	4,580	6,713
A2		4,230	11,933	20,547	30,193
A3		18	49	80	111
B1a		14,895	41,404	70,188	101,461
B1b		137	591	1,639	4,058
B1c		358	1,055	1,895	2,903
B2		-13,917	-30,797	-45,736	-59,020
B8		-7,184	-17,766	-26,774	-34,376
C1		5	12	20	28
Total		-509	9,149	26,438	52,071

Appendix D – Detailed Employment Floorspace and Land Requirements

Scenario 1 - 12,000 New Homes

Scenario 1 - 12,000 New Homes - Total Floorspace Requirement 2006-2026

	2008	2011	2016	2021	2026
A1	54,461	56,767	60,880	65,363	70,257
A2	209,433	218,258	232,370	248,493	266,190
A3	61,067	62,405	64,702	67,083	69,552
B1a	496,177	518,564	558,390	601,826	649,176
B1b	210	347	802	1,853	4,280
B1c	13,752	14,385	15,106	16,152	17,386
B2	317,906	306,678	297,850	288,936	281,287
B8	433,403	431,354	426,392	423,660	422,087
C1	15,267	15,601	16,176	16,771	17,388
Total	1,601,675	1,624,360	1,672,669	1,730,137	1,797,603

Scenario 1 - 12,000 New Homes - Absolute Change in Floorspace Requirement 2008-2026

	2008	2011	2016	2021	2026
A1	0	2,306	6,420	10,903	15,797
A2	0	8,825	22,938	39,060	56,758
A3	0	1,339	3,635	6,016	8,485
B1a	0	22,387	62,214	105,650	152,999
B1b	0	137	592	1,643	4,070
B1c	0	633	1,354	2,400	3,634
B2	0	-11,228	-20,057	-28,971	-36,619
B8	0	-2,049	-7,011	-9,743	-11,316
C1	0	335	909	1,504	
Total	0	22,685	70,993	128,462	193,807

Adjusted to Fit Churn Model

Bulk Class	2008	2011	2016	2021	2026
Offices	0	22,524	62,805	107,292	157,069
Factories	0	0	0	0	0
Warehouses	0	0	0	0	0
Total	0	22,524	62,805	107,292	157,069

Addition of Churn (0.5% per annum)

Bulk Class	2008	2011	2016	2021	2026
Offices	0	36,144	99,125	166,312	238,789
Factories	0	7,785	20,760	33,735	46,710
Warehouses	0	6,855	18,280	29,705	41,130
Total	0	50,784	138,165	229,752	326,629

Removal of Leakage (to Non Employment Areas)

Bulk Class	2008	2011	2016	2021	2026
Offices	0	23,494	64,432	108,103	155,213
Factories	0	7,007	18,684	30,362	42,039
Warehouses	0	6,170	16,452	26,735	37,017
Total	0	36,670	99,568	165,199	234,269

Allowance for Completions

Bulk Class	2008	2011	2016	2021	2026
Offices	0	18,381	59,319	102,991	150,100
Factories	0	6,523	18,200	29,878	41,555
Warehouses	0	5,565	15,847	26,130	36,412
Total	0	30,468	93,366	158,998	228,067

Conversion to Land Requirement (ha)

Bulk Class	2008	2011	2016	2021	2026
Offices	0.00	7.95	21.81	36.59	52.53
Factories	0.00	1.93	5.14	8.35	11.56
Warehouses	0.00	1.36	3.62	5.88	8.14
Total	0.00	11.24	30.57	50.82	72.24

Scenario 2 - 7,500 New Homes

Scenario 2 - 7,500 New Homes - Total Floorspace Requirement 2006-2026

	2008	2011	2016	2021	2026
A1	54,461	56,026	58,812	61,842	65,148
A2	209,433	215,837	226,285	238,166	251,247
A3	61,067	61,680	62,716	63,770	64,841
B1a	496,177	514,420	546,878	582,042	620,186
B1b	210	347	802	1,851	4,273
B1c	13,752	14,304	14,939	15,869	16,975
B2	317,906	304,120	291,875	279,557	268,687
B8	433,403	428,895	420,387	414,115	409,116
C1	15,267	15,420	15,679	15,943	16,210
Total	1,601,675	1,611,049	1,638,373	1,673,155	1,716,684

Scenario 2 - 7,500 New Homes - Absolute Change in Floorspace Requirement 2008-2026

	2008	2011	2016	2021	2026
A1	0	1,565	4,351	7,382	10,687
A2	0	6,404	16,852	28,734	41,815
A3	0	614	1,650	2,703	3,775
B1a	0	18,243	50,701	85,866	124,009
B1b	0	137	591	1,641	4,063
B1c	0	552	1,187	2,117	3,223
B2	0	-13,787	-26,031	-38,349	-49,220
B8	0	-4,508	-13,016	-19,288	-24,287
C1	0	153	412	676	944
Total	0	9,374	36,698	71,480	115,009

Adjusted to Fit Churn Model

Bulk Class	2008	2011	2016	2021	2026
Offices	0	18,380	51,293	87,506	128,072
Factories	0	0	0	0	0
Warehouses	0	0	0	0	0
Total	0	18,380	51,293	87,506	128,072

Addition of Churn (0.5% per annum)

Bulk Class	2008	2011	2016	2021	2026
Offices	0	32,000	87,613	146,526	209,792
Factories	0	7,785	20,760	33,735	46,710
Warehouses	0	6,855	18,280	29,705	41,130
Total	0	46,640	126,653	209,966	297,632

Removal of Leakage (to Non Employment Areas)

Bulk Class	2008	2011	2016	2021	2026
Offices	0	20,800	56,948	95,242	136,365
Factories	0	7,007	18,684	30,362	42,039
Warehouses	0	6,170	16,452	26,735	37,017
Total	0	33,976	92,084	152,338	215,421

Allowance for Completions

Bulk Class	2008	2011	2016	2021	2026
Offices	0	15,688	51,836	90,130	131,253
Factories	0	6,523	18,200	29,878	41,555
Warehouses	0	5,565	15,847	26,130	36,412
Total	0	27,775	85,883	146,137	209,220

Conversion to Land Requirement (ha)

Bulk Class	2008	2011	2016	2021	2026
Offices	0.00	7.04	19.27	32.24	46.15
Factories	0.00	1.93	5.14	8.35	11.56
Warehouses	0.00	1.36	3.62	5.88	8.14
Total	0.00	10.32	28.03	46.47	65.86

Scenario 3 - 4,000 New Homes

Scenario 3 - 4,000 New Homes - Total Floorspace Requirement 2006-2026

	2008	2011	2016	2021	2026
A1	54,461	55,409	57,129	59,041	61,174
A2	209,433	213,663	221,366	229,979	239,625
A3	61,067	61,085	61,116	61,147	61,178
B1a	496,177	511,071	537,580	566,364	597,638
B1b	210	347	801	1,849	4,269
B1c	13,752	14,110	14,807	15,647	16,655
B2	317,906	303,990	287,109	272,170	258,887
B8	433,403	426,219	415,637	406,629	399,027
C1	15,267	15,271	15,279	15,287	15,294
Total	1,601,675	1,601,166	1,610,824	1,628,113	1,653,746

Scenario 3 - 4,000 New Homes - Absolute Change in Floorspace Requirement 2008-2026

	2008	2011	2016	2021	2026
A1	0	948	2,668	4,580	6,713
A2	0	4,230	11,933	20,547	30,193
A3	0	18	49	80	111
B1a	0	14,895	41,404	70,188	101,461
B1b	0	137	591	1,639	4,058
B1c	0	358	1,055	1,895	2,903
B2	0	-13,917	-30,797	-45,736	-59,020
B8	0	-7,184	-17,766	-26,774	-34,376
C1	0	5	12	20	28
Total	0	-509	9,149	26,438	52,071

Adjusted to Fit Churn Model

Bulk Class	2008	2011	2016	2021	2026
Offices	0	15,032	41,995	71,827	105,519
Factories	0	0	0	0	0
Warehouses	0	0	0	0	0
Total	0	15,032	41,995	71,827	105,519

Addition of Churn (0.5% per annum)

Bulk Class	2008	2011	2016	2021	2026
Offices	0	28,652	78,315	130,847	187,239
Factories	0	7,785	20,760	33,735	46,710
Warehouses	0	6,855	18,280	29,705	41,130
Total	0	43,292	117,355	194,287	275,079

Removal of Leakage (to Non Employment Areas)

Bulk Class	2008	2011	2016	2021	2026
Offices	0	18,624	50,904	85,050	121,706
Factories	0	7,007	18,684	30,362	42,039
Warehouses	0	6,170	16,452	26,735	37,017
Total	0	31,800	86,040	142,146	200,762

Allowance for Completions

Bulk Class	2008	2011	2016	2021	2026
Offices	0	13,511	45,792	79,938	116,593
Factories	0	6,523	18,200	29,878	41,555
Warehouses	0	5,565	15,847	26,130	36,412
Total	0	25,598	79,839	135,945	194,560

Conversion to Land Requirement (ha)

Bulk Class	2008	2011	2016	2021	2026
Offices	0.00	6.30	17.23	28.79	41.19
Factories	0.00	1.93	5.14	8.35	11.56
Warehouses	0.00	1.36	3.62	5.88	8.14
Total	0.00	9.59	25.99	43.02	60.90