Appendix 5:
Detailed growth forecasts

Introduction

1.1 This Technical Appendix sets out the methodology and calculations for forecasting the demand for employment land to 2036.

1.2 The Employment Land Review presents five alternative models for employment growth and the demand for employment land to 2036. None provide a definitive answer, but they represent a range of possible outcomes to be considered. The five models are:

- Model 1. Historic land take-up forecast
- Model 2. Policy off – employment based forecast assuming no Enterprise Zone at Alconbury
- Model 3. Policy on (a) – employment based forecast including the Alconbury Weald Enterprise Zone, assuming high displacement of employment from elsewhere within the district
- Model 4. Policy on (b) – employment based forecast including the Alconbury Weald Enterprise Zone is created at Alconbury, assuming low displacement of employment from elsewhere within the district
- Model 5. Policy on (c) – employment based forecast including the Alconbury Weald Enterprise Zone is created at Alconbury and there is no displacement of employment from elsewhere within the district

1.3 Both the 'policy off' and 'policy on' forecasts have been provided by Cambridgeshire Insight, part of Cambridgeshire County Council, and are based on the East of England Forecasting Model (EEFM) which has been developed by Oxford Economics. The most recent EEFM forecasts are based on Oxford Economics' Spring 2012 economic outlook and a local continuation of past trends.

1.4 The 'policy off' and 'policy on' solutions are added to the EEFM Baseline Employment forecasts. The baseline runs from 2011 and assumes that total FTE employment in Huntingdonshire will increase by 5,000 to 86,400 jobs in 2031.

1.5 To ensure consistency with the emerging Huntingdonshire Local Plan, which runs to 2036, Cambridgeshire Insights have projected forward the EEFM forecasts a further five years, based on average sector growth rates. In addition, the employment impacts associated with the Policy On scenarios are not expected to commence until post-2013. This approach allows employment and associated employment land requirements to be presented for the period 2013-36.

1.6 For all the models we have commented upon the implications in terms of the volume of land required. Where appropriate the options take into account assumptions regarding the built floorspace associated with developable land areas drawn from the consultancy team's experience and application in other Employment Land Review studies. Job related densities used equate to those identified in the Homes and Communities Agency and OFFPAT (Office of Project and Programme Advice and Training) Employment Densities Guide 2nd Edition, published in 2010.

Model 1: Historic Land Take-Up

1.7 Employment land take-up is recorded by the County Council. In Table 1 a schedule of completions between 1999 and 2012 is shown. The 77.2 ha of land developed over this period equates to an annual average take-up of 5.9 ha. Total land take-up is categorised between B Use classes (B1 offices; B1 industrial; B2 industry and B8 warehousing).

Table 1 – Huntingdonshire Employment Land Take-Up 1999-2012

Completion Period	**B Use Land (ha)**				
	Total	**Office**	**B1 (includes office)**	**B2**	**B8**
1999/02*	33.4	8.0	19.3	2.0	12.2
2002/3	1.3	0.9	0.9	0.0	0.4
2003/4	-1.3	0.3	0.8	-1.8	-0.3
2004/5	9.9	-0.1	-1.6	11.6	-0.1
2005/6	6.4	3.9	3.6	2.0	0.8
2006/7	3.3	0.0	0.5	0.2	2.7
2007/8	9.1	3.8	5.6	-3.3	6.7
2008/9	15.3	0.6	2.3	2.3	10.7
2009/10	-1.9	-2.2	-0.4	-1.7	0.1
2010/11	-0.5	-0.0	1.4	-2.1	0.3
2011/12	2.3	1.2	3.2	-1.6	0.7
TOTAL	77.2	16.4	35.4	7.6	34.2
AVERAGE	5.94	1.26	2.73	0.58	2.63

Source: Huntingdonshire DC
**Data for the period 19990-2002 is only available as an aggregate*

1.8 The data in Table 1 is presented graphically for the period 2002/3 to 2011/12 in Graph 1 on the following page.

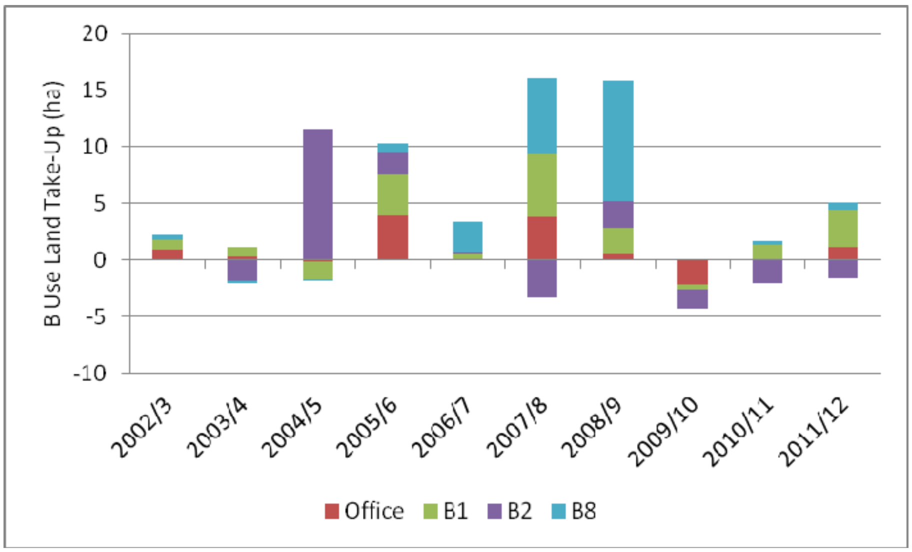
1.9 Analysis reveals an annual average take-up of 5.9 ha since 1999. However, this is due to a faster rate of land take-up at the start of the period for which data is provided. In the period 1999/00-2001/02 average annual land take-up was of 11.1 ha per year. This compares to a figure of 3.9 ha per year between 2002/03 and 2007/08 and 4.8 ha per year in the most recent five year period 2007/08 to 2011/12.

1.10 Much of the land take-up in the five year period 2007/08 to 2011/12 occurred towards the start of this period, with a total land take-up of 9.1 ha in 2007/08 and 2008/09. Total land take-up declined in 2009/10 and 2010/11, reflecting the national recession, however the most recent figures for 2011/12 has reported a return to positive land take-up, at 2.3 ha.

1.11 In four of the five most recent years take-up of B2 land has declined and since 2007/08 there has been a net loss of B2 land in Huntingdonshire. In contrast, over this period there has been a net gain in Huntingdonshire of land for B1 uses and a net gain of 3.7 ha of land for B8 uses.

1.12 Application of the long term take-up figure suggests Huntingdonshire would need 136.5 ha to cater for an expected annual take-up of 5.9 ha for the next 23 years (to the end of the Local Plan period, 2036). However the district should have a buffer of five years supply to reflect a choice of sites by size, quality and location and to provide a continuum of supply beyond the end of the Plan period. Based on the historic take-up trend this would increase the need for developable employment land supply to 166.2 ha.

Figure 1 – Huntingdonshire Employment Land Take-Up 2002-12



Source: Huntingdonshire DC

Model 2: Policy 'off' – Employment Based Forecast

1.13 This scenario uses as its base the East of England Forecasting Model Baseline Scenario referred to above. The EEFM projects employment change through to 2031 and Cambridgeshire Insight have used average sector growth rates for the period 2011-31 to generate projections to 2036.

1.14 The forecasts break down employment to the level of 31 industry sectors, although not all are relevant to this Employment Land review. It should be noted that for this model the forecasts reflect a non-intervention scenario, in that no account is taken of the proposed Enterprise Zone at Alconbury.

1.15 The EEFM Baseline Scenario indicates that over the 23 year from 2013 and 2036, total employment in Huntingdonshire is expected to increase by 5,300 to 87,000.

1.16 However the overall rate of growth is expected to be modest. Total FTE employment growth is expected to be 6.5% over the whole period (2013-36), equivalent to an average annual employment growth rate of 0.2%. This compares to an average annual growth rate of 0.8% for Cambridgeshire (for the period 2013-311).

1.17 Much of the employment growth is projected to occur at the start of the period. The net increase in employment is projected to be 3,400 between 2013 and 2018, falling to 600 for the period 3018-23. After 2020 net employment is projected to increase by around 100 jobs each year. The 'front loading' of net employment gains may reflect a post-recessionary recovery and the Huntingdonshire employment base catching up to its pre-recessionary trend levels.

1.18 This pattern of a positive, but declining, rate of employment growth from 2013 is consistent with the EEFM employment projections for Cambridgeshire however in each year the rate of growth in Cambridgeshire is higher than for Huntingdonshire.

1.19 The figures also suggest that Huntingdonshire is aligned to the general trend taking place across the UK of a decline in manufacturing employment and growth in services – although the growth of services is restricted to the private sector. At 2013 manufacturing employment represented 12 percent of the District's total and this is forecast to reduce to 7 percent by 2036.

1.20 Private Sector Services account for a larger proportion of employment in Huntingdonshire, with the sectors of Computer Related Activity, Finance, Real Estate, Professional Services, Research and Development, and Business Services accounting for 18% of total employment in Huntingdonshire in 2013. This is expected to rise to 22% by 2036.

1.21 The largest private sector in Huntingdonshire, Professional Services, is expected to increase by 2,700 jobs (or 40 percent) between 2013 and 2036, to 10,900 jobs. Significant growth is also projected in the predominantly public Health & Care sector, of 16 percent or 2,000 jobs.

1.22 Conversely, Public Administration and Education sectors are forecast to decline over the same period (by 5 percent and 0.5 percent respectively).

1.23 Table 2 provides a breakdown of the projected sector changes. It should be noted that the figures include non-B use class sectors, such as retailing, to acknowledge their reference as economic activity. Total employment is forecast to increase by 5,300 between 2013 and 2036, despite the decline in manufacturing.

[1] Employment projections to 2036 have only been provided for Huntingdonshire.

Table 2 – Projected Employment Change by Industry Sector, Model 2 (2012-2036)

Industry Sector	**Workforce Change Numbers of Employees**	**Percentage Workforce Change**
Agriculture	-456	-34.2%
Mining & Quarrying	-26	-55.0%
Manufacturing - Food Manufacturing	-304	-31.1%
Manufacturing - General Manufacturing	-1,150	-38.0%
Manufacturing - Chemicals	-763	-45.0%
Manufacturing - Pharmaceuticals	-16	-33.2%
Manufacturing - Metals Manufacturing	-419	-42.0%
Manufacturing - Transport Equipment	-569	-43.6%
Manufacturing - Electronics	-754	-42.0%
Utilities	-339	-29.6%
Waste & Remediation	-47	-15.2%
Construction	973	19.2%
Wholesale	433	7.3%
Retail	709	10.8%
Land Transport	83	2.4%
Water & Air Transport	2	42.1%
Accommodation & Food Services	387	9.5%
Publishing & Broadcasting	14	4.4%
Telecoms	16	7.4%
Computer Related Activity	-15	-0.9%
Finance	5	0.6%
Real Estate	639	38.0%
Professional Services	2,723	39.9%
Research & Development	36	10.0%
Business Services	895	26.7%
Employment Activities	516	27.3%
Public Administration	-276	-5.2%
Education	-19	-0.5%
Health & Care	1,978	15.6%
Arts & Entertainment	712	34.9%
Other Services	358	14.0%
TOTAL	5,328	6.5%

Source: Oxford Economics / Cambridgeshire Insights (2013)

1.24 In terms of future employment land requirements this model is likely to be affected by three key factors:

- The future mix of activities in respect of office, manufacturing and warehousing employment within different sectors. It is not possible to predict the impact of evolving technical change over the Local Plan period, and we have therefore assumed the current split is maintained
- The average space each employee occupies – the employment density. We have assumed no variation in the density rates through to 2036 and as stated earlier we have used those identified in the 2010 published Employment Densities Guide 2nd Edition
- The average development floorspace per hectare for office, manufacturing and warehousing activities. We have applied the uniform ratio of 3,900 sqm of employment floorspace for every hectare of developable land. This is the accepted industry norm.

1.25 In addition to the issues considered above, we have used the assumptions set out in Table 3 to estimate the employment land requirements arising from forecast employment change.

Table 3 – Model Assumptions

Industry Sector	Proportion Occupying B1, B2, B8 Floorspace	Relevant Land Use Classification	Net Internal Area (Floorspace) per Employee (sqm)	Comments
Agriculture	5%	Office	12	Managerial, admin
Mining & Quarrying	0%			
Manufacturing - Food Manufacturing	100%	Industrial	47	
Manufacturing - General Manufacturing	100%	Industrial	36-47	Density range is 36 - 47 sqm. Higher density reflects B2 Lower density B1 light industry
Manufacturing - Chemicals	100%	Industrial	47	
Manufacturing - Pharmaceuticals	100%	Industrial	47	
Manufacturing - Metals Manufacturing	100%	Industrial	47	
Manufacturing - Transport Equipment	100%	Industrial	47	
Manufacturing - Electronics	100%	Industrial	47	
Utilities	0%			Associated with Sui Generis class
Waste & Remediation	100%	Industrial	47	Associated with Sui Generis class
Construction	26%	Office	12	Managerial, admin
Wholesale	100%	Warehousing	70	
Retail	0%			Associated with A1 use classes
Land Transport	48%	Warehousing	70	Proportion of employment linked to storage / warehousing. Standard assumption for transport sector.
Water & Air Transport	48%	Warehousing	70	

Industry Sector	Proportion Occupying B1, B2, B8 Floorspace	Relevant Land Use Classification	Net Internal Area (Floorspace) per Employee (sqm)	Comments
Accommodation & Food Services	0%			Associated with C1 use classes
Publishing & Broadcasting	100%	Office	12	Associated with Sui Generis class
Telecoms	100%	Industrial	47	
Computer Related Activity	100%	Office	12	
Finance	100%	Office	12	
Real Estate	100%	Office	12	
Professional Services	100%	Office	12	
Research & Development	100%	Office	12	
Business Services	100%	Office	12	
Employment Activities	100%	Office	12	
Public Administration	22%	Office	12	
Education	0%			
Health & Care	0%			
Arts & Entertainment	0%			
Other Services	22%	Office	12	

Source: SERPLAN and Employment Densities Guide 2nd Edition, 2010

1.26 The estimated change in demand for Net Internal Area (NIA), by sector, is presented in Table 4. This is converted to employment land space requirements in Table 5, based on the assumption that there will be 3,900 sqm of employment floorspace for every hectare of developable land.

Table 4 – Change in Net Internal Area Demanded, by Sector (2013-36)

	Projected Employment Change (2013-36)	**Proportion Occupying B1, B2 & B8 Uses**	**Primary Land Use Category**	**Employment Density (sqm per employee)**	**Change in Net Internal Area Demand (sqm)**
Agriculture	-456	5%	Office	12	-274
Mining & Quarrying	-26	0%	Other	n/a	0
Manufacturing - Food Manufacturing	-304	100%	Industrial	47	-14,309
Manufacturing - General Manufacturing	-1,150	100%	Industrial	37 / 47	-42,357 / -54,034
Manufacturing - Chemicals	-763	100%	Industrial	47	-35,876
Manufacturing – Pharmaceuticals	-16	100%	Industrial	47	-765
Manufacturing - Metals Manufacturing	-419	100%	Industrial	47	-19,692
Manufacturing - Transport Equipment	-569	100%	Industrial	47	-26,734
Manufacturing - Electronics	-754	100%	Industrial	47	-35,433
Utilities	-339	0%	Other	n/a	0
Waste & Remediation	-47	100%	Industrial	47	-2,208
Construction	973	26%	Office	12	3,036
Wholesale	433	100%	Warehousing	70	30,326
Retail	709	0%	Other	n/a	0
Land Transport	83	48%	Warehousing	70	2,772
Water & Air Transport	2	48%	Warehousing	70	64
Accommodation & Food Services	387	0%	Other	n/a	0
Publishing & Broadcasting	14	100%	Office	12	167
Telecoms	16	100%	Industrial	47	771
Computer Related Activity	-15	100%	Office	12	-185
Finance	5	100%	Office	12	63
Real Estate	639	100%	Office	12	7,672
Professional Services	2,723	100%	Office	12	32,681
Research & Development	36	100%	Office	12	437
Business Services	895	100%	Office	12	10,746
Employment Activities	516	100%	Office	12	6,187
Public Administration	-276	22%	Office	12	-728
Education	-19	0%	Other	n/a	0
Health & Care	1,978	0%	Other	n/a	0
Arts & Entertainment	712	0%	Other	n/a	0
Other Services	358	22%	Office	12	946
Total change in NIA Demanded*	**5,328**				**-82,872 / -94,368**

Source: SERPLAN and Employment Densities Guide 2nd Edition, 2010 / AECOM / Cambridgeshire Insights
* The range provided for the Total Change in NIA Demand reflects the range of possible manufacturing employment densities

Table 5 – Model 2: Overview of Change in Demand for NIA and Employment Land (2013-36)

	Change in Net Internal Area Demanded (sqm)	**Change in Demand for Employment Land (ha)**
Growing Sectors	95,870	24.6
Declining Sectors	-178,742 / -190,238	-45.8 / -48.8
Total Office	60,750	15.6
Total Industrial	-176,784 / -188,281	-45.3 / -48.3
Total Warehousing	33,163	8.5
Total	**-82,873 / -94,368**	**-21.2 / -24.2**

Source: AECOM, 2013
** Where ranges in demand are provided, this reflects the range of possible manufacturing employment densities set out in Table 3.*

1.27 As set out in Table 5, the application of the assumptions for employment land demand suggests the following in terms of future employment land provision:

- From sectors predicted to grow, the need for a further 24.6 ha of employment land.
- From those sectors where employment is forecast to reduce there will be a need for between 48.8 and 45.5 ha less. This range reflects the variance in employment densities between light and general manufacturing.

1.28 Overall this suggests that, by 2036 Huntingdonshire net demand for employment land in the B1, B2 and B8 land use classes would be between 24.2 and 21.2 ha lower than demand in 2013.

1.29 This is most greatly associated with a reduction in the requirement of industrial employment space of between 48.3 and 43 ha. Conversely the demand for developable employment land for office space is expected to increase by 15.6 ha and the demand for land for warehousing is expected to increase by 8.5 ha.

1.30 In addition, it is probable that these land requirements' calculations represent a false position. Irrespective of changes to employment densities, whilst growth sectors seek to expand by taking additional space, declining sectors may actually not release land in line with the above assumptions.

1.31 It is possible the Local Plan period will see further changes in employment densities. For office employment this could be the result of trends towards remote working, hot desking, increased use of ICT and smaller businesses. Densities in manufacturing and distribution may well continue to fall as a result of automation. However, it is impossible to project what the percentage change in densities might be and thus what the impact on future land requirements might be.

Models 3-5: Policy-On – Alconbury Enterprise Zone

1.32 The previous two scenarios do not consider the impact on the demand for employment land associated with the Enterprise Zone at Alconbury. The Alconbury Enterprise Zone is a 150 ha site which is expected to accommodate 8,000 jobs within 290,000 sqm of floor space. The 8,000 jobs / 290,000 sqm of floor space are expected to require less than 150 ha and any excess land may over time be released for alternative uses.

1.33 It is hoped that the Zone will act as a catalyst for economic growth and focus on attracting inward investment into the area and assist in diversifying the local economy.

1.34 Cambridgeshire Insights has produced a series of additional 'Policy-On' employment scenarios for Huntingdonshire in conjunction with Huntingdonshire District Council, which consider the impact of Alconbury. These include a combination of:

- 'Additive' scenarios which assume that the employment accommodated at Alconbury is additional to the employment forecast for the East of England in the baseline EEFM central scenario
- 'Allocative' scenarios which assume that the employment accommodated at Alconbury is re-allocated from the EEFM baseline employment forecasts for other districts within the East of England to Huntingdonshire
- 'Target' scenarios which assume that employment at Alconbury is within one of nine target sectors[2]
- 'Total' scenarios which assume that employment at Alconbury is drawn from the same sectors as the general employment base

1.35 However, in order to provide robust conclusions on the expected impact of Alconbury Enterprise Zone on the demand for employment land in Huntingdonshire it has also been necessary to consider the following issues.

(i) Displacement of Alconbury Enterprise Zone Employment within Huntingdonshire

1.36 The Allocative and Additive 'with Alconbury' scenarios provide an upper and lower bound for displacement of Enterprise Zone employment within the East of England. However, both scenarios effectively assume zero displacement at the district level as, by 2036, both scenarios include 8,000 more jobs in Huntingdonshire within the specified sectors than the baseline scenario. In practice, district level displacement of Enterprise Zone employment to Alconbury Enterprise Zone could reduce the demand for Local Employment Space in other parts of the district.

1.37 Evidence from former Enterprise Zones[3] suggest the local displacement effects (i.e. displacement within a town or district) were in the order of 20-25%.

[2] The nine target industries are chemicals, pharmaceuticals, metals manufacturing, electronics, waste & remediation, telecoms, computer related activity, professional services and research & development. (Population, Housing and Employment Forecasts Technical Report, Cambridgeshire County Council 2013)

[3] Do Enterprise Zones Work? (Ideopolis for the Work Foundation, 2011) and UK Enterprise Zones and the Attraction of Inward Investment (Potter & Moore, 1999)

1.38 Huntingdonshire District Council has agreed a Memorandum of Understanding with the providers of the Enterprise Zone which seeks to limit the extent to which Alconbury may displace existing economic activity within Huntingdonshire. The principles set out in this document should help to avoid the direct displacement of economic activity from one part of Huntingdonshire to another.

1.39 However, for the purposes of the Employment Land Review it is also necessary to consider the displacement of future or potential employment, not just existing employment. In this context, displacement will also include:

- Existing business in Huntingdonshire that out-grow their existing premise and / or need to move to more modern premises and choose to relocate to Alconbury when they would otherwise have located to another premises within Huntingdonshire
- Start-up businesses or businesses that have relocated to Alconbury from outside Huntingdonshire which would have moved to some other premises within the district, in the absence of Alconbury
- The impact of any competitive advantage of Alconbury on businesses located elsewhere in the district – if such an advantage exists, firms located at Alconbury may grow at the expense of firms operating in similar sectors elsewhere in the district.

1.40 The expected level of displacements associated with Alconbury will depend on a number of factors, including the extent to which the Enterprise Zone is successful in attracting genuinely additional businesses operating within the small number of target sectors.

1.41 Given the likelihood that some of the jobs located at Alconbury will have displaced employment from elsewhere in the district, AECOM have identified two alternative Policy-On Scenarios (Models 3 and 4) which incorporate assumptions on within-district displacement. These Scenarios will test the sensitivity of the employment land demand estimates to the level of displacement associated with the Alconbury Enterprise Zone.

(ii) The Proportion of Alconbury Enterprise Zone Employment within the Nine Target Sectors

1.42 The EEFM ‘Target’ and ‘Total’ scenarios described above effectively assume that either (i) 100% of employment at Alconbury is within the nine target sectors, or (ii) the profile of employment at Alconbury is identical to the profile of Huntingdonshire’s existing employment base. These assumptions provide the theoretical upper and lower bounds for the effectiveness of attracting companies to Alconbury that operate within the nine target sectors.

1.43 To test the sensitivity of the employment land recommendations to the achieved level of target sector employment, the two alternative Policy-On Scenarios (Models 3 and 4) also assume upper and lower bounds for the proportion of total employment at Alconbury that is assumed to be from the target sectors.

(iii) Within Sector Multipliers

1.44 The EEFM is used to estimate the employment impact of the Alconbury Enterprise Zone by fixing the level of employment within the nine target sectors at a higher level (i.e. the level of employment in the baseline scenario, plus the additional employment that is expected to be accommodated at Alconbury). While this approach provides a robust means of measuring the total change in employment associated with Huntingdonshire, it does not capture any ‘within sector' or 'within target sector' spill-over and multiplier effects. As a result the ELR may under-estimate the demand for industrial land within Huntingdonshire.

1.45 For example a business operating within the Pharmaceuticals Sector at Alconbury may purchase goods and services from other Pharmaceuticals and Chemicals Manufacturing (i.e. downstream) businesses operating in the district.

1.46 This impact is expected to be relatively small, but it is still important to ensure that this effect is captured by the study.

1.47 Research undertaken by AECOM based on UK Input-Output tables suggests that the 'within sector multipliers' associated with the nine target sectors is in the order of 1.15 nationally. One-third of this effect is expected to accrue to Huntingdonshire in the two alternative Policy-On Scenarios (Model 3 and 4) [4].

Summary of Policy-On Scenarios

1.48 The Employment Land Review estimates the employment land demand associated with three Policy-On Scenarios. Each considers the potential impact of Alconbury Enterprise Zone. They are based on the EEFM and have been provided by Cambridgeshire Insights.

1.49 Models 3 and 4 are the two 'alternative' employment scenarios which adopt differing assumptions concerning (i) the level of displacement of Alconbury employment that occurs within Huntingdonshire, (ii) the proportion of employment within Huntingdonshire that is within the nine target sectors, and (iii) the within target sector multiplier effects that are expected to accrue to Huntingdonshire.

1.50 The purpose of the assumptions is not to pre-guess the likely levels of displacement and target sector employment experienced at Alconbury between 2013 and 2033, but to test the sensitivity of the employment land recommendations to the assumptions adopted.

1.51 Model 5 is the Policy-On Additive scenario and is consistent with the employment and population scenario set out in *Population, Housing and Employment Forecasts (April 2013)* produced by Cambridgeshire County Council. This assumption assumes that the 8,000 additional jobs are Alconbury are within the nine target sectors, that there is zero displacement of employment from elsewhere within Huntingdonshire, and no 'within sector multipliers' are retained within the district.

[4] While limited evidence exists on the supply chain linkages within Cambridgeshire, the county contains clusters of advanced manufacturing industries and there will be opportunities for manufacturing firms based at Alconbury Enterprise Zone to develop local supply chains that draw on these businesses. In addition recent research for Leeds City Region *(Leeds Manufacturing, Adding Value)* suggests that its manufacturing businesses source more than half of their supplies from the immediate area or wider city region. Given this, it is assumed that one-third of the multiplier impacts are retained within the local authority.

Model 3: Policy-On (a) – Alconbury Enterprise Zone
(High Displacement & Low Target Sector Employment)

1.52 This employment forecast provides the most conservative assessment of the employment land requirements in Huntingdonshire with Alconbury.

1.53 The scenario assumes that a challenging business environment means that it is difficult to attract target sector employment to Alconbury, although rates above the current Huntingdonshire level are achieved. Correspondingly displacement is assumed to be higher as (i) it is easier for non-target sector firms wishing to expand to move onto the site, (ii) there is lower demand for new employment space elsewhere in Huntingdonshire, and (iii) the less specialist nature of businesses at Alconbury mean that they are more likely to compete directly with existing Huntingdonshire businesses.

1.54 For the purposes of modelling, the following has been assumed:

- 25% of direct employment at Alconbury is within the nine target sectors (17% of Huntingdonshire employees currently work in the target sectors)
- 40% of target sector employment at Alconbury is displaced from elsewhere within Huntingdonshire
- There is a 5% within-sector multiplier associated with target sector employment located at Alconbury. By assumption, these jobs will be located elsewhere in the district, rather than at Alconbury.

1.55 Within the EEFM, this is equivalent to 1,260 target sector jobs within Huntingdonshire by 2036 above the EEFM Baseline Scenario, 1,200 of which will be located at Alconbury[5].

1.56 Table 6 provides a breakdown of the projected changes by sector. Total employment is forecast to increase by 7,355 between 2013 and 2036, which is 2,030 above the baseline scenario (Model 2).

[5] Limitations in the way data can be input into the EEFM mean that an additional 1,270 target sector jobs were included in Model 3.

Table 6 – Projected Employment Change by Industry Sector, Model 3 (2013-2036)

Industry Sector	Workforce Change Numbers of Employees	Percentage Workforce Change
Agriculture	-456	-34%
Mining & Quarrying	-26	-55%
Manufacturing - Food Manufacturing	-304	-31%
Manufacturing - General Manufacturing	-1,150	-38%
Manufacturing - Chemicals	-610	-36%
Manufacturing - Pharmaceuticals	113	231%
Manufacturing - Metals Manufacturing	-267	-27%
Manufacturing - Transport Equipment	-569	-44%
Manufacturing - Electronics	-605	-34%
Utilities	-339	-30%
Waste & Remediation	78	25%
Construction	1,109	22%
Wholesale	480	8%
Retail	764	12%
Land Transport	159	5%
Water & Air Transport	2	42%
Accommodation & Food Services	419	10%
Publishing & Broadcasting	14	4%
Telecoms	92	41%
Computer Related Activity	110	7%
Finance	25	3%
Real Estate	690	41%
Professional Services	2,934	43%
Research & Development	186	51%
Business Services	991	30%
Employment Activities	569	30%
Public Administration	-244	-5%
Education	10	0%
Health & Care	2,086	16%
Arts & Entertainment	732	36%
Other Services	358	14%
TOTAL	7,355	9%

Source: Oxford Economics / Cambridgeshire Insights (2013)

1.57 The implications for total employment land requirements are set out in Table 7 and 8. The assumptions for estimating the employment land requirements are consistent with the assumptions applied to Model 2.

Table 7 – Model 3: Change in NIA Demanded, by Sector (2013-36)

	Projected Employment Change (2013-36)	Occupying B1, B2 & B8	Primary Land Use Category	Employment Density (sqm per employee)	Change in Net Internal Area Demand (sqm)
Agriculture	-456	5%	Office	12	-274
Mining & Quarrying	-26	0%	Other	n/a	0
Manufacturing - Food Manufacturing	-304	100%	Industrial	47	-14,309
Manufacturing - General Manufacturing	-1,150	100%	Industrial	37 / 47	-42,537 / -54,034
Manufacturing - Chemicals	-610	100%	Industrial	47	-28,664
Manufacturing – Pharmaceuticals	113	100%	Industrial	47	5,317
Manufacturing - Metals Manufacturing	-267	100%	Industrial	47	-12,555
Manufacturing - Transport Equipment	-569	100%	Industrial	47	-26,734
Manufacturing - Electronics	-605	100%	Industrial	47	-28,423
Utilities	-339	0%	Other	n/a	0
Waste & Remediation	78	100%	Industrial	47	3,668
Construction	1,109	26%	Office	12	3,459
Wholesale	480	100%	Warehousing	70	33,625
Retail	764	0%	Other	n/a	0
Land Transport	159	48%	Warehousing	70	5,359
Water & Air Transport	2	48%	Warehousing	70	64
Accommodation & Food Services	419	0%	Other	n/a	0
Publishing & Broadcasting	14	100%	Office	12	167
Telecoms	92	100%	Industrial	47	4,333
Computer Related Activity	110	100%	Office	12	1,319
Finance	25	100%	Office	12	303
Real Estate	690	100%	Office	12	8,285
Professional Services	2,934	100%	Office	12	35,211
Research & Development	186	100%	Office	12	2,229
Business Services	991	100%	Office	12	11,888
Employment Activities	569	100%	Office	12	6,830
Public Administration	-244	22%	Office	12	-643
Education	10	0%	Other	n/a	0
Health & Care	2,086	0%	Other	n/a	0
Arts & Entertainment	732	0%	Other	n/a	0
Other Services	358	22%	Office	12	946
Total change in NIA Demanded*					-31,135 / -42,631

Source: SERPLAN and Employment Densities Guide 2nd Edition, 2010 / AECOM / Cambridgeshire Insights
** The range provided for the Total Change in NIA Demand reflects the range of possible manufacturing employment densities*

Table 8 – Model 3: Overview of Change in Demand for NIA and Employment Land (2013-36)

	Change in Net Internal Area Demanded (sqm)	**Change in Demand for Employment Land (ha)**
Growing Sectors	123,005	31.5
Declining Sectors	-154,140 / -165,636	-39.5 / -42.5
Total Office	69,721	17.9
Total Industrial	-139,905 / -151,401	-35.9 / -38.8
Total Warehousing	39,049	10.0
Total	**-31,135 / -42,631**	**-8.0 / -10.9**

Source: AECOM, 2013
** Where ranges in demand are provided, this reflects the range of possible manufacturing employment densities set out in Table 3.*

1.58 Overall there will be a net reduction in demand for employment land of between 8 and 10.9 ha in Huntingdonshire by 2036. This is due to a decline in demand for Industrial space as the demand for office and warehousing space is expected to increase over the same period.

1.59 However, in 2036 it is assumed that the Alconbury Enterprise Zone will accommodate 8,000 jobs. These will include the 1,200 target sector jobs assumed to be accommodated at Alconbury, plus additional jobs from other sectors. It is assumed that non-target sector employment at Alconbury will be drawn from the following sectors: Food Manufacturing; General Manufacturing; Transport Equipment; Land Transport; Water and Air Transport; Finance; Real Estate; Business Services; Employment Activities. These sectors will require a combination of office, warehousing, and industrial space in out of town locations.

1.60 The profile of employment at Alconbury of these non-Target sectors will be based on their employment profile in 2013. For example, Food Manufacturing accounts for 6% of total employment in 2013 of the non-target sectors listed in the previous paragraph. Consequently it is assumed to account for 6% of total non-target sector employment at Alconbury in 2033.

1.61 The distribution of the expected employment change by sector between Alconbury and the rest of Huntingdonshire is set out in Table 9. The NIA estimate is based on the assumptions set out in Table 3. In some sectors employment is expected to increase in Alconbury but decline elsewhere in Huntingdonshire. This is expected, given the model parameters, because employment is displaced from existing employment sites to Alconbury.

Table 9 – Model 3: Overview of Change in Demand for NIA and Employment Land (2013-36)

	Workforce Change (2013-36)	**Accommodated in:**		**Category**	**NIA Demanded Elsewhere in Huntingdonshire**
		Alconbury	**Elsewhere in Huntingdonshire**		
Agriculture	-456	0	-456	Office	-274
Mining & Quarrying	-26	0	-26	Other	0
Manufacturing - Food Manufacturing	-304	355	-660	Industrial	-30,999
Manufacturing - General Manufacturing	-1,150	1,099	-2,249	Industrial	-83,210 / -105,699
Manufacturing - Chemicals	-610	236	-846	Industrial	-39,760
Manufacturing - Pharmaceuticals	113	199	-86	Industrial	-4,040
Manufacturing - Metals Manufacturing	-267	234	-501	Industrial	-23,535
Manufacturing - Transport Equipment	-569	473	-1,042	Industrial	-48,969
Manufacturing - Electronics	-605	229	-834	Industrial	-39,208
Utilities	-339	0	-339	Other	0
Waste & Remediation	78	192	-114	Industrial	-5,372
Construction	1,109	0	1,109	Office	3,459
Wholesale	480	0	480	Warehousing	33,625
Retail	764	0	764	Other	0
Land Transport	159	1,271	-1,112	Warehousing	-37,346
Water & Air Transport	2	2	0	Warehousing	9
Accommodation & Food Services	419	0	419	Other	0
Publishing & Broadcasting	14	0	14	Office	167
Telecoms	92	117	-24	Industrial	-1,147
Computer Related Activity	110	193	-83	Office	-995
Finance	25	333	-308	Office	-3,697
Real Estate	690	610	80	Office	965
Professional Services	2,934	324	2,610	Office	31,319
Research & Development	186	230	-44	Office	-528
Business Services	991	1,217	-226	Office	-2,710
Employment Activities	569	686	-117	Office	-1,401
Public Administration	-244	0	-244	Office	-643
Education	10	0	10	Other	0
Health & Care	2,086	0	2,086	Other	0
Arts & Entertainment	732	0	732	Other	0
Other Services	358	0	358	Office	946
Total	7,355	8,000	-645		-253,344 / -275,833

Source: AECOM, 2013

** Where ranges in demand are provided, this reflects the range of possible manufacturing employment densities set out in Table 3.*

1.62 Overall the workforce is expected to increase by 7,355 by 2036. Given that 8,000 jobs are expected to be accommodated at Alconbury, this means that there will be 645 fewer jobs located elsewhere in the district. This is associated with a decline in demand for NIA of 235,000 to 276,000 sqm. However, the pattern is uneven by land use and the aggregate results for industrial, office, and warehousing are presented in Table 10.

Table 10 – Model 3: Overview of Change in Demand for NIA and Employment Land (2013-36)

	NIA Demanded Outside of Alconbury (sqm)	Land Requirements Outside of Alconbury (ha)
Total Office	26,609	6.8
Total Industrial	-276,240 / -298,729	-70.8 / -76.6
Total Warehousing	-3,712	-1.0
Total	**-253,344 / -275,833**	**-65.0 / -70.7**

Source: AECOM, 2013
** Where ranges in demand are provided, this reflects the range of possible manufacturing employment densities set out in Table 3.*

1.63 Accounting for employment accommodated at Alconbury and applying the assumptions set out in Table 3 suggests that, by 2036 net demand for employment land for the B1, B2 and B8 land use classes outside of Alconbury would be between 65.0 and 70.7 ha lower than its level in 2013.

1.64 This is due to a declining demand for industrial space of between 71 and 77 ha by 2036.Over the same period, demand for land accommodating office space is expected to increase by 6.8 ha and demand for land accommodating warehousing is expected to increase by 0.9 ha.

1.65 These figures are lower than for the baseline case as they assume that 40% of employment at Alconbury will be displaced from elsewhere in the district – i.e. it is included in the baseline case. This is a high level of displacement and associated with the fact that only limited employment at Alconbury is created within the target sectors. It provides a ‘lower-bound’ on the potential employment land requirements. Less conservative assumptions concerning displacement and target sector employment are provided in the next model.

Model 4: Policy-On Scenario (b) – Alconbury Enterprise Zone
(Low Displacement & High Target Sector Employment)

1.66 This employment forecast provides a less conservative assessment of the employment land requirements in Huntingdonshire with Alconbury.

1.67 The scenario assumes that a higher level of employment is generated in the target sectors at Alconbury and that levels of displacement are correspondingly lower.

1.68 For the purposes of modelling, the following assumptions have been taken:

- 75% of direct employment at Alconbury is within the nine target sectors (17% of Huntingdonshire employees currently work in the target sectors)

- 20% of target sector employment at Alconbury is displaced from elsewhere within Huntingdonshire
- There is a 5% within-sector multiplier associated with the target sector employment located at Alconbury. By assumption, these jobs will not be located elsewhere in the district, rather than at Alconbury.

1.69 Within the EEFM, this is equivalent to 5,040 target sector jobs within Huntingdonshire by 2036 above the EEFM Central Baseline Scenario, 4,800 of which will be located at Alconbury[6].

1.70 Table 11 provides a breakdown of the projected changes by sector. Total employment is forecast to increase by almost 13,400 between 2013 and 2036, which is 8,050 above the baseline scenario (Model 2).

[6] Limitations in the way data can be input into the EEFM mean that an additional 5,045 target sector jobs were included in Model 3.

Table 11 – Projected Employment Change by Industry Sector, Model 4 (2012-2036)

Industry Sector	Workforce Change Numbers of Employees	Percentage Workforce Change
Agriculture	-456	-34%
Mining & Quarrying	-26	-55%
Manufacturing - Food Manufacturing	-304	-31%
Manufacturing - General Manufacturing	-1,150	-38%
Manufacturing - Chemicals	-125	-7%
Manufacturing - Pharmaceuticals	528	1077%
Manufacturing - Metals Manufacturing	167	17%
Manufacturing - Transport Equipment	-569	-44%
Manufacturing - Electronics	-133	-7%
Utilities	-339	-30%
Waste & Remediation	498	161%
Construction	1,512	30%
Wholesale	621	10%
Retail	925	14%
Land Transport	388	11%
Water & Air Transport	2	42%
Accommodation & Food Services	514	13%
Publishing & Broadcasting	14	4%
Telecoms	294	132%
Computer Related Activity	428	26%
Finance	85	9%
Real Estate	842	50%
Professional Services	3,562	52%
Research & Development	589	161%
Business Services	1,274	38%
Employment Activities	729	39%
Public Administration	-148	-3%
Education	99	2%
Health & Care	2,410	19%
Arts & Entertainment	792	39%
Other Services	358	14%
TOTAL	13,381	16%

Source: Oxford Economics / Cambridgeshire Insights (2013)

1.71 The implications for total employment land requirements are set out in Table 7. The assumptions for estimating the employment land requirements are consistent with the assumptions applied to Models 2 and 3

Table 12 – Model 4: Change in NIA Demanded, by Sector (2013-36)

	Projected Employment Change (2013-36)	Occupying B1, B2 & B8	Primary Land Use Category	Employment Density (sqm per employee)	Change in Net Internal Area Demand (sqm)
Agriculture	-456	5%	Office	12	-274
Mining & Quarrying	-26	0%	Other	n/a	0
Manufacturing - Food Manufacturing	-304	100%	Industrial	47	-14,309
Manufacturing - General Manufacturing	-1,150	100%	Industrial	37-47	-42,537 / -54,034
Manufacturing - Chemicals	-125	100%	Industrial	47	-5,867
Manufacturing – Pharmaceuticals	528	100%	Industrial	47	24,793
Manufacturing - Metals Manufacturing	167	100%	Industrial	47	7,861
Manufacturing - Transport Equipment	-569	100%	Industrial	47	-26,734
Manufacturing - Electronics	-133	100%	Industrial	47	-6,274
Utilities	-339	0%	Other	n/a	0
Waste & Remediation	498	100%	Industrial	47	23,388
Construction	1,512	26%	Office	12	4,716
Wholesale	621	100%	Warehousing	70	43,446
Retail	925	0%	Other	n/a	0
Land Transport	388	48%	Warehousing	70	13,033
Water & Air Transport	2	48%	Warehousing	70	64
Accommodation & Food Services	514	0%	Other	n/a	0
Publishing & Broadcasting	14	100%	Office	12	167
Telecoms	294	100%	Industrial	47	13,833
Computer Related Activity	428	100%	Office	12	5,135
Finance	85	100%	Office	12	1,014
Real Estate	842	100%	Office	12	10,107
Professional Services	3,562	100%	Office	12	42,742
Research & Development	589	100%	Office	12	7,067
Business Services	1,274	100%	Office	12	15,292
Employment Activities	729	100%	Office	12	8,747
Public Administration	-148	22%	Office	12	-391
Education	99	0%	Other	n/a	0
Health & Care	2,410	0%	Other	n/a	0
Arts & Entertainment	792	0%	Other	n/a	0
Other Services	358	22%	Office	12	946
Total change in NIA Demanded*	13,381				125,967 / 114,470

*Source: SERPLAN and Employment Densities Guide 2nd Edition, 2010 / AECOM / Cambridgeshire Insight. * The range provided for the Total Change in NIA Demand reflects the range of possible manufacturing employment densities*

Table 13 – Model 4: Overview of Change in Demand for NIA and Employment Land (2013-36)

	Change in Net Internal Area Demanded (sqm)	**Change in Demand for Employment Land (ha)**
Growing Sectors	222,353	57.0
Declining Sectors	-96,386 / -107,883	-24.7 / -27.7
Total Office	95,270	24.4
Total Industrial	-25,846 / -37,342	-6.6 / -9.6
Total Warehousing	56,543	14.5
Total	**125,967 / 114,470**	**32.3 / 29.4**

Source: AECOM, 2013
** Where ranges in demand are provided, this reflects the range of possible manufacturing employment densities set out in Table 3.*

1.72 Overall there will be an increase in demand for employment land of between 29.4 and 32.3 ha in Huntingdonshire by 2036. This is driven by growth of sectors requiring office and warehousing space. Demand for manufacturing space is expected to decline by between 6.6 and 9.6 ha over the same period.

1.73 As with Model 3, in 2036 it is assumed that the Alconbury Enterprise Zone will accommodate 8,000 jobs. These will include the 4,800 target sector jobs assumed to be accommodated at Alconbury, plus additional jobs from other sectors. The assumptions for non-target sector employment accommodated at Alconbury will be consistent with Model 3.

1.74 The distribution of the expected employment change by sector between Alconbury and the rest of Huntingdonshire is set out in Table 14. The NIA estimate is based on the assumptions set out in Table 3.

Table 14 – Model 4: Overview of Change in Demand for NIA and Employment Land (2013-36)

	Workforce Change (2013-36)	Accommodated in: Alconbury	Accommodated in: Elsewhere in Huntingdonshire	Category	NIA Demanded Elsewhere in Huntingdonshire
Agriculture	-456	0	-456	Office	-274
Mining & Quarrying	-26	0	-26	Other	0
Manufacturing - Food Manufacturing	-304	121	-426	Industrial	-20,007
Manufacturing - General Manufacturing	-1,150	375	-1,525	Industrial	-56,422 / -71,671
Manufacturing - Chemicals	-125	751	-876	Industrial	-41,172
Manufacturing - Pharmaceuticals	528	640	-112	Industrial	-5,276
Manufacturing - Metals Manufacturing	167	690	-522	Industrial	-24,554
Manufacturing - Transport Equipment	-569	161	-730	Industrial	-34,324
Manufacturing - Electronics	-133	730	-863	Industrial	-40,579
Utilities	-339	0	-339	Other	0
Waste & Remediation	498	641	-143	Industrial	-6,725
Construction	1,512	0	1,512	Office	4,716
Wholesale	621	0	621	Warehousing	43,446
Retail	925	0	925	Other	0
Land Transport	388	434	-46	Warehousing	-1,546
Water & Air Transport	2	1	1	Warehousing	45
Accommodation & Food Services	514	0	514	Other	0
Publishing & Broadcasting	14	0	14	Office	167
Telecoms	294	327	-33	Industrial	-1,534
Computer Related Activity	428	522	-94	Office	-1,124
Finance	85	114	-29	Office	-351
Real Estate	842	208	634	Office	7,609
Professional Services	3,562	986	2,575	Office	30,906
Research & Development	589	650	-61	Office	-733
Business Services	1,274	415	859	Office	10,308
Employment Activities	729	234	495	Office	5,937
Public Administration	-148	0	-148	Office	-391
Education	99	0	99	Other	0
Health & Care	2,410	0	2,410	Other	0
Arts & Entertainment	792	0	792	Other	0
Other Services	358	0	358	Office	946
Total	13,381	8,000	5,381		-130,931 / -146,180

Source: AECOM, 2013

** Where ranges in demand are provided, this reflects the range of possible manufacturing employment densities set out in Table 3.*

1.75 Overall the workforce is expected to increase by 13,381 by 2036. Given that 8,000 jobs are expected to be accommodated at Alconbury, this means that there will be 5,381 additional jobs located elsewhere in the district. This is associated with a decline in demand for NIA of between 131,000 and 146,000 sqm. The results for industrial, office, and warehousing are presented in Table 5.

Table 5 – Model 4: Overview of Change in Demand for NIA and Employment Land (2013-36)

	NIA Demanded Outside of Alconbury (sqm)	**Land Requirements Outside of Alconbury (ha)**
Total Office	57,717	14.8
Total Industrial	-230,593 / -245,843	-59.1 / -63.0
Total Warehousing	41,945	10.8
Total	-130,931 / -146,180	-33.6 / -37.5

Source: AECOM, 2013
** Where ranges in demand are provided, this reflects the range of possible manufacturing employment densities set out in Table 3.*

1.76 Accounting for employment accommodated Alconbury and applying the assumptions set out in Table 3 suggests that, by 2036 net demand for employment land for the B1, B2 and B8 land use classes outside of Alconbury would be between 37.5 and 33.6 ha lower than its level in 2013.

1.77 This is due to a declining demand for industrial space of between 59.1 and 63 ha by 2036.Over the same period, demand for land accommodating office space is expected to increase by 14.8 ha and demand for land accommodating warehousing is expected to increase by 10.8 ha.

1.78 Model 4 adopts a lower assumption for displacement of Alconbury employment and assumes that a higher proportion of employment is within the Alconbury target sectors. Consequently the requirements for employment land under the assumptions adopted for Model 4 are above the baseline case (Model 1).

Model 5: Policy On Scenario (c) – Alconbury Enterprise Zone
(Zero Displacement & Full Target Sector Employment)

1.79 This employment forecast provides a theoretical upper bound on the employment land requirements in Huntingdonshire with Alconbury.

1.80 The scenario assumes that there is no displacement of employment activity to Alconbury from elsewhere in the district and that all 8,000 jobs located at Alconbury are from the target sectors. This means that all of the jobs at Alconbury will be additional to Huntingdonshire – compared to the baseline case – plus there will be additional supply chain impacts associated with other sectors. This model does not consider the 'within target sector multipliers' included in Models 3 and 4 and is consistent with the original Alconbury Additive-Target Scenario published by Cambridgeshire Insight.

1.81 For the purposes of modelling, the following assumptions have been taken:

- 100% of direct employment at Alconbury is within the nine target sectors (17% of Huntingdonshire employees currently work in the target sectors)
- 0% of target sector employment at Alconbury is displaced from elsewhere within Huntingdonshire

1.82 Within the EEFM, this is equivalent to 8,000 target sector jobs within Huntingdonshire by 2036 above the EEFM Central Baseline Scenario.

1.83 Table 16 provides a breakdown of the projected changes by sector. Total employment is forecast to increase by over 18,000 between 2013 and 2036, which is 12,800 above the baseline scenario (Model 2).

Table 16 – Projected Employment Change by Industry Sector, Model 5 (2012-2036)

Industry Sector	**Workforce Change Numbers of Employees**	**Percentage Workforce Change**
Agriculture	-456	-34%
Mining & Quarrying	-26	-55%
Manufacturing - Food Manufacturing	-304	-31%
Manufacturing - General Manufacturing	-1,150	-38%
Manufacturing - Chemicals	235	14%
Manufacturing - Pharmaceuticals	840	1715%
Manufacturing - Metals Manufacturing	523	52%
Manufacturing - Transport Equipment	-569	-44%
Manufacturing - Electronics	217	12%
Utilities	-339	-30%
Waste & Remediation	797	258%
Construction	1,827	36%
Wholesale	730	12%
Retail	1,052	16%
Land Transport	566	16%
Water & Air Transport	2	42%
Accommodation & Food Services	588	14%
Publishing & Broadcasting	14	4%
Telecoms	471	211%
Computer Related Activity	683	42%
Finance	131	14%
Real Estate	961	57%
Professional Services	4,053	59%
Research & Development	938	257%
Business Services	1,496	45%
Employment Activities	854	45%
Public Administration	-74	-1%
Education	168	4%
Health & Care	2,664	21%
Arts & Entertainment	839	41%
Other Services	358	14%
TOTAL	18,089	22%

Source: Oxford Economics / Cambridgeshire Insights (2013)

1.84 The implications for total employment land requirements are set out in Table 17. The assumptions for estimating the employment land requirements are consistent with the assumptions applied to the other models that incorporate Alconbury.

Table 17 – Model 5: Change in NIA Demanded, by Sector (2013-36)

	Projected Employment Change (2013-36)	Occupying B1, B2 & B8	Primary Land Use Category	Employment Density (sqm per employee)	Change in Net Internal Area Demanded (sqm)
Agriculture	-456	5%	Office	12	-274
Mining & Quarrying	-26	0%	Other	0	0
Manufacturing - Food Manufacturing	-304	100%	Industrial	47	-14,309
Manufacturing - General Manufacturing	-1,150	100%	Industrial	37 / 47	-42,537 / -54,034
Manufacturing - Chemicals	235	100%	Industrial	47	11,023
Manufacturing – Pharmaceuticals	840	100%	Industrial	47	39,465
Manufacturing - Metals Manufacturing	523	100%	Industrial	47	24,589
Manufacturing - Transport Equipment	-569	100%	Industrial	47	-26,734
Manufacturing - Electronics	217	100%	Industrial	47	10,181
Utilities	-339	0%	Other	0	0
Waste & Remediation	797	100%	Industrial	47	37,477
Construction	1,827	26%	Office	12	5,701
Wholesale	730	100%	Warehousing	70	51,123
Retail	1,052	0%	Other	0	0
Land Transport	566	48%	Warehousing	70	19,008
Water & Air Transport	2	48%	Warehousing	70	64
Accommodation & Food Services	588	0%	Other	0	0
Publishing & Broadcasting	14	100%	Office	12	167
Telecoms	471	100%	Industrial	47	22,145
Computer Related Activity	683	100%	Office	12	8,190
Finance	131	100%	Office	12	1,569
Real Estate	961	100%	Office	12	11,533
Professional Services	4,053	100%	Office	12	48,632
Research & Development	938	100%	Office	12	11,254
Business Services	1,496	100%	Office	12	17,957
Employment Activities	854	100%	Office	12	10,247
Public Administration	-74	22%	Office	12	-194
Education	168	0%	Other	0	0
Health & Care	2,664	0%	Other	0	0
Arts & Entertainment	839	0%	Other	0	0
Other Services	358	22%	Office	12	946
Total change in NIA Demanded*	18,089				247,222 / 235,725

*Source: SERPLAN and Employment Densities Guide 2nd Edition, 2010 / AECOM / Cambridgeshire Insights. * The range provided for the Total Change in NIA Demand reflects the range of possible manufacturing employment densities*

Table 18 – Model 5: Overview of Change in Demand for NIA and Employment Land (2013-36)

	Change in Net Internal Area Demanded (sqm)	**Change in Demand for Employment Land (ha)**
Growing Sectors	331,270	84.9
Declining Sectors	-84,048 / -95,545	-21.6 / -24.5
Total Office	115,727	29.7
Total Industrial	61,299 / 49,802	15.7 / 12.8
Total Warehousing	70,196	18.0
Total	**247,222 / 235,725**	**63.4 / 60.4**

Source: AECOM, 2013
** Where ranges in demand are provided, this reflects the range of possible manufacturing employment densities set out in Table 3.*

1.85 Overall there will be an increase in demand for employment land of between 60.4 and 63.4 ha in Huntingdonshire by 2036. In model five, as 100% of employment at Alconbury is additional for Huntingdonshire, this is the only model in which the demand for industrial space is expected to increase across the district by 2026. Demand for industrial land is expected to increase by between 12.8 and 15.7 ha by 2036.

1.86 In Model 5, 8,000 jobs within the nine target sectors are expected to be accommodated at Alconbury. Unlike Models 3 and 4, no additional non-target sector employment is expected to be accommodated at Alconbury.

1.87 The distribution of the expected employment change by sector between Alconbury and the rest of Huntingdonshire is set out in Table 19. The NIA estimate is based on the assumptions set out in Table 3.

Table 19 – Model 4: Overview of Change in Demand for NIA and Employment Land (2013-36)

	Workforce Change (2013-36)	Accommodated in: Alconbury	Accommodated in: Elsewhere in Huntingdonshire	Category	NIA Demanded Elsewhere in Huntingdonshire
Agriculture	-456	0	-456	Office	-274
Mining & Quarrying	-26	0	-26	Other	0
Manufacturing - Food Manufacturing	-304	0	-304	Industrial	-14,309
Manufacturing - General Manufacturing	-1,150	0	-1,150	Industrial	-42,537 / -54,034
Manufacturing - Chemicals	235	998	-763	Industrial	-35,876
Manufacturing - Pharmaceuticals	840	856	-16	Industrial	-765
Manufacturing - Metals Manufacturing	523	942	-419	Industrial	-19,692
Manufacturing - Transport Equipment	-569	0	-569	Industrial	-26,734
Manufacturing - Electronics	217	971	-754	Industrial	-35,433
Utilities	-339	0	-339	Other	0
Waste & Remediation	797	844	-47	Industrial	-2,208
Construction	1,827	0	1,827	Office	5,701
Wholesale	730	0	730	Warehousing	51,123
Retail	1,052	0	1,052	Other	0
Land Transport	566	0	566	Warehousing	19,008
Water & Air Transport	2	0	2	Warehousing	64
Accommodation & Food Services	588	0	588	Other	0
Publishing & Broadcasting	14	0	14	Office	167
Telecoms	471	455	16	Industrial	771
Computer Related Activity	683	698	-15	Office	-185
Finance	131	0	131	Office	1,569
Real Estate	961	0	961	Office	11,533
Professional Services	4,053	1,329	2,723	Office	32,681
Research & Development	938	907	30	Office	365
Business Services	1,496	0	1,496	Office	17,957
Employment Activities	854	0	854	Office	10,247
Public Administration	-74	0	-74	Office	-194
Education	168	0	168	Other	0
Health & Care	2,664	0	2,664	Other	0
Arts & Entertainment	839	0	839	Other	0
Other Services	358	0	358	Office	946
Total	18,089	8,000	10,089		-26,076 / -37,572

Source: AECOM, 2013

** Where ranges in demand are provided, this reflects the range of possible manufacturing employment densities set out in Table 3.*

1.88 Overall the workforce is expected to increase by 18,089 by 2036. Given that 8,000 jobs are expected to be accommodated at Alconbury, this means that there will be 10,089 additional jobs located elsewhere in the district. However, this is still associated with a decline in demand for NIA of between 26,100 and 37,600 sqm. The results for industrial, office, and warehousing are presented in Table 20.

Table 20 – Model 5: Overview of Change in Demand for NIA and Employment Land (2013-36)

	NIA Demanded Outside of Alconbury (sqm)	**Land Requirements Outside of Alconbury (ha)**
Total Office	80,513	20.6
Total Industrial	-176,784 / -188,281	-45.3 / -48.3
Total Warehousing	70,196	18.0
Total	-26,076 / -37,572	-6.7 / -9.6

Source: AECOM, 2013
** Where ranges in demand are provided, this reflects the range of possible manufacturing employment densities set out in Table 3.*

1.89 Accounting for employment accommodated Alconbury and applying the assumptions set out in Table 3 suggests that, by 2036 net demand for employment land for the B1, B2 and B8 land use classes outside of Alconbury would be between 6.7 and 9.6 ha lower than its level in 2013.

1.90 While demand for industrial land is expected to increase by 2036 across Huntingdon, this is lower than the level of industrial employment that is expected to be accommodated at Alconbury. Given this, demand for industrial employment land elsewhere in Huntingdonshire is expected to decline by 45.3 and 48.3 ha. Over the same period, demand for land accommodating office space is expected to increase by 20.6 ha and demand for land accommodating warehousing is expected to increase by 18.0 ha.

1.91 As described above, this Scenario provides a theoretical upper bound on the employment land requirements in a ‘with Alconbury’ scenario. It is highly unlikely that no employment will be displaced within the district, and similarly, even if a company is primarily engaged in target sector activities, it is still likely to require non-target sector employment within its overall operations, particularly if the firm is large.

Summary

1.92 Five alternative forecast options have been considered for the Plan period. The assumptions for each are summarised in Table 21 which presents the total requirement for employment land across Huntingdonshire under each scenario plus an additional 29.7 ha buffer, based on the historic five year land supply requirement.

Table 21 –Huntingdonshire-wide Employment Land Requirements (Including employment accommodated at Alconbury)

Model	Land Need 2012-2036 (ha)	Buffer (five years take-up rate) (ha)	Total Land Need (ha)	Assumptions
Model 1: Historic Land Take-Up Rate	+136.5	+29.7	+166.2	Based on historic (12 years) take-up of 5.94 ha/pa
Model 2: Policy Off	-24.2 / -21.2	+29.7	+5.5 / +8.5	Based on projected growth/reduction of employment in industry sectors
Model 3: Policy On (Alconbury and High Displacement)	-10.9 / -8.0	+29.7	+18.8 / +21.7	Assume 25% jobs at Alconbury in target sectors, 40% local displacement, and 5% within target sector multipliers
Model 4: Policy On (Alconbury and Low Displacement)	+29.4 / +32.3	+29.7	+59.1 / 62.0	Assume 75% jobs at Alconbury in target sectors, 20% local displacement, , and 5% within target sector multipliers
Model 5: Policy On (Alconbury and No Displacement)	+60.4 / +63.4	+29.7	+90.1 / +93.1	Assume 100% jobs at Alconbury in target sectors and 0% local displacement

Source: AECOM 2013
** Where ranges in demand are provided, this reflects the range of possible manufacturing employment densities set out in Table 3.*

1.93 Table 21 indicates that a net positive demand for employment land across the whole of Huntingdonshire is identified in every Model ranging from +5.5 / 8.5 ha in Model 2 to 166.2 ha in Model 1 (based on the estimated change in need for employment land between 2013 and 2026 and the requirement for a five year buffer of employment land supply).

1.94 However, the figures presented in table 21 include the demand for all employment land across Huntingdonshire, including the land that would be provided by Alconbury Enterprise Zone. The Enterprise Zone would accommodate a significant proportion of employment growth forecast in Scenarios 3, 4 and 5. (Scenarios 1 and 2 are both policy off scenarios that do not consider the impact of Alconbury Enterprise Zone).

1.95 Alconbury Enterprise Zone is expected to accommodate 8,000 jobs from a combination of target and non-target sectors (the precise mix depending on the model assumptions). Once the 8,000 jobs likely to be accommodated at Alconbury have been removed from the demand analysis presented in table 21 (as set out in Tables 9, 14 and 19), demand for employment land in the rest of Huntingdonshire will be lower.

1.96 The employment land requirements for the rest of Huntingdonshire are set out in table 22. The results for Models 1 and 2 are not included as they do not consider the impact of Alconbury.

Table 22 – Employment Land Requirements for Huntingdonshire, excluding Alconbury (Excluding employment accommodated at Alconbury)

Model	Land Need 2012-2036 (ha)	Buffer (five years take-up rate) (ha)	Total Land Need (ha)	Assumptions
Model 3: Policy On (Alconbury and High Displacement)	-70.7 / -65.0	+29.7	-41.0 / -35.3	Assume 25% jobs at Alconbury in target sectors and 40% local displacement
Model 4: Policy On (Alconbury and Low Displacement)	-37.5 / -33.6	+29.7	-7.8 / -3.9	Assume 75% jobs at Alconbury in target sectors and 20% local displacement
Model 5: Policy On (Alconbury and No Displacement)	-9.6 / -6.7	+29.7	+20.1 / 23	Assume 100% jobs at Alconbury in target sectors and 0% local displacement

Source: AECOM 2013
** Where ranges in demand are provided, this reflects the range of possible manufacturing employment densities set out in Table 3.*

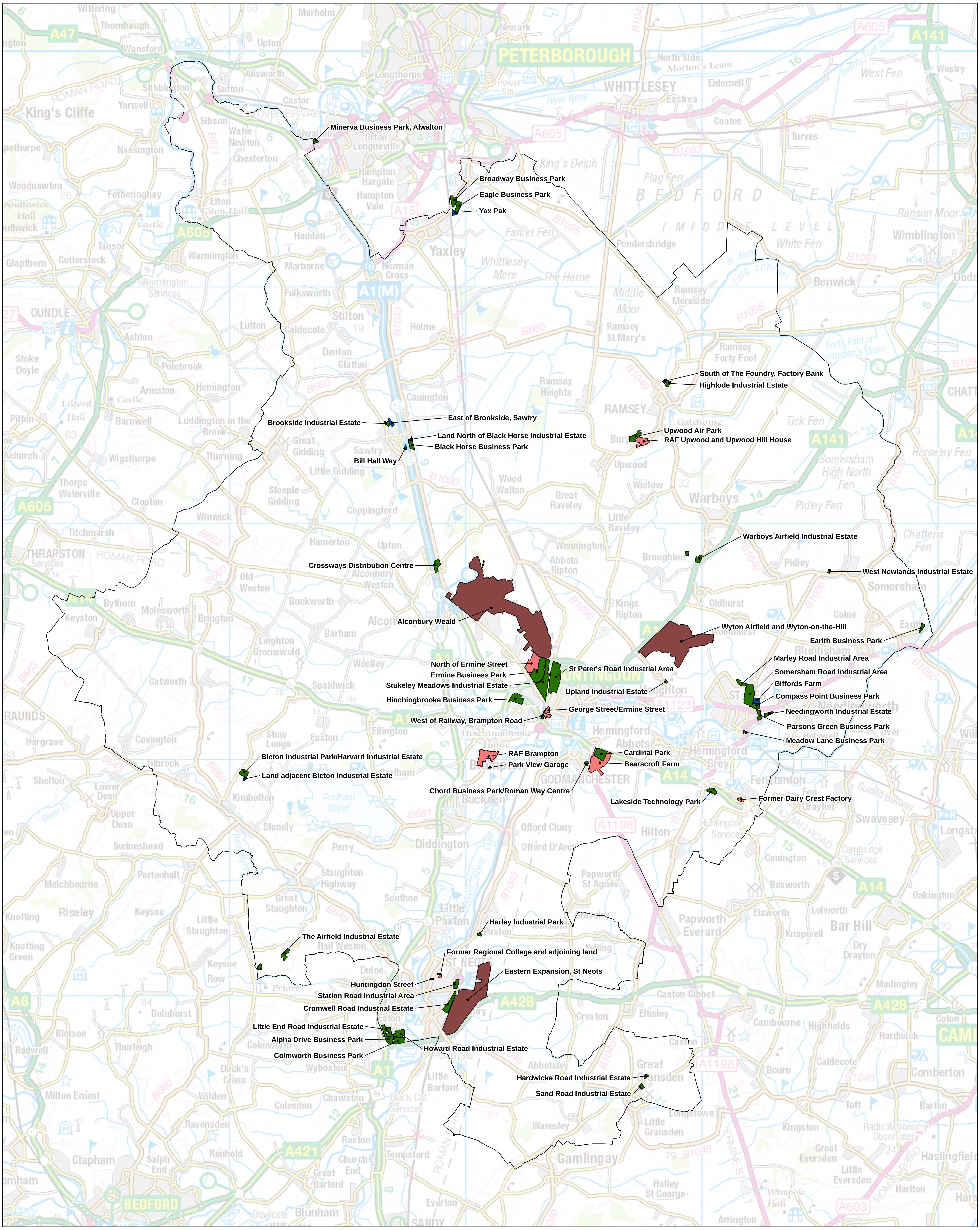
1.97 Once the accommodation at Alconbury is taken into account, the total requirement for employment land falls considerable under each scenario. In Models 3 and 4 there is a net decline in demand for employment land across the rest of Huntingdonshire. In Model 5, the total requirement falls to a net demand of between 20 and 23 ha additional land.

1.98 However, it is important to recognise that the net change in demand for employment land overlooks significant changes within use categories. These are highlighted in table 23 below. As illustrated, while demand for industrial employment space is expected to decline outside of Alconbury, under all scenarios the demand for office and warehousing is expected to increase.

Table 23 – Land Forecast Models – Summary by land use

	Model 2: Policy Off	Model 3: Policy On, High Displacement	Model 4: Policy On, Low Displacement	Model 5: Policy On, No Displacement
Land Uses Demand (excluding demand associated with Alconbury)				
Office	15.6	6.8	14.8	20.6
Industrial	-48.3 / -45.3	-76.6 / -70.8	-63.0 / -59.1	-48.3 / -45.3
Warehousing	8.5	-1.0	10.8	18.0
Additional Land Requirements (exc Alconbury & five yr buffer)	-24.2 / -21.2	-70.7 / -65.0	-37.5 / -33.6	-9.6 / -6.7
Employment Accommodated at Alconbury	0	8,000	8,000	8,000
Employment associated with Non B1 / B2 / B8 Land Uses	3,798	4,208	5,428	6,383

Source: AECOM
** Where ranges in demand are provided, this reflects the range of possible manufacturing employment densities set out in Table 3.*



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Huntingdonshire
DISTRICT COUNCIL

Legend

- Proposed Allocation (Mixed-use)
- Proposed Allocation (Employment)
- Proposed Allocation (Strategic Expansion Location)
- Established Employment Areas
- Huntingdonshire Boundary

NORTH

0 3.5 7 14
Kilometers