

Welwyn Hatfield Local Plan Employment Land Requirements Analysis –

Technical Note Labour Demand Scenarios

Welwyn Hatfield Borough Council

May 2019

1. Introduction

- 1.1 This technical note summarises the findings of the updated assessment of Welwyn Hatfield's future employment land requirements. The updated analysis is based on the latest (at the time of writing) Experian and East of England Forecasting Model (EEFM) employment forecasts. These were published in March 2019 and September 2018 respectively. The findings are compared with those from the Welwyn Hatfield Economy Study Updated Economic Analysis Note, February 2017 (this will be referred to as the "2017 assessment" in this document).
- 1.2 The methodology for translating employment change into employment floorspace and land requirements is consistent with Planning Practice Guidance on assessing economic needs. It is also the same methodology used in the Welwyn Hatfield Economy Study (July 2014), the Welwyn Hatfield Economy Study Update (December 2015) and the Welwyn Hatfield Economy Study Updated Economic Analysis Note (February 2017). In accordance with Planning Practice Guidance, the approach to translating employment forecasts into land requirements is as follows:
- Map the Standard Industrial Classification sectors to use classes;
 - Estimate employment for each B-use class;
 - Apply use class specific employment densities to convert employment to floorspace need; and
 - Apply use class specific plot ratios to convert floorspace to employment land.
- 1.3 The findings of the labour-demand scenarios are presented for the 2013-2032 Local Plan period, but also for the period 2018-2035 so that forecasts cover a full 15 year period following the anticipated adoption date of the Local Plan.
- 1.4 It should be noted that all forecasts of employment change and the resulting employment floorspace and land requirements should be treated as broadly indicative. To reflect this all numbers presented in this note have been rounded and thus may not completely add up.
- 1.5 Furthermore, all the projections of future employment land need presented in this document do not take into consideration any future losses of employment land. Given the significant levels of B-use class floorspace losses in recent years, any further losses would need to be offset by gains. Therefore all projections of additional employment land requirements should be treated as conservative estimates.

2. Updated Experian scenario

- 2.1 In summary, the March 2019 Experian forecasts are slightly lower than the ones published in December 2016, with lower growth rates. The Experian forecasts do remain below the level of the EEFM forecasts, although the two are converging.
- 2.2 According to Experian's latest forecasts, full time equivalent employment (FTE) across all sectors in Welwyn Hatfield is forecast to increase from 58,200 in 2013 to approximately 76,920 in 2032, an increase of approximately 32% (Table 2-1). This compares to the estimated increase from 63,000 to 79,300 in the 2016 assessment.
- 2.3 It should be noted that as well as updating forecasts of future economic activity, from time to time forecasting houses will also revise data for previous years as further data on past performance becomes available. This appears to have taken place in this instance. This is explained in more detail in Experian's technical note (Appendix 1). It should be noted that the key data is the change between different years rather than the absolute figure, and this is what is used to calculate floorspace requirements.
- 2.4 Key growth sectors in terms of absolute number of FTE employment according to the March 2019 forecasts include Retail; Health, Professional services; Accommodation & food services; Construction; Other private services; and Residential care & social work. The greatest decline is projected in Public administration & defence, followed by real estate activities, manufacturing of chemicals, and manufacturing of food, drink & tobacco.

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Table 2-1 Sectors showing the greatest growth and decline in FTE employment (in absolute terms) between 2013 and 2032 according to Experian

Sector	2013	2032	Change 2013-2032	% Change 2013-2032
Retail	9,900	15,800	+5,900	+60%
Health	2,500	4,500	+2,000	+80%
Professional Services	5,400	7,200	+1,800	+33%
Accommodation & Food Services	2,000	3,400	+1,400	+70%
Construction of Buildings	1,500	2,900	+1,400	+93%
Other Private Services	2,000	3,300	+1,300	+65%
Residential Care & Social Work	2,600	3,900	+1,300	+50%
Computing & Information Services	1,400	2,600	+1,200	+86%
Land Transport, Storage & Post	3,000	4,100	+1,100	+37%
Education	5,000	6,000	+1,000	+20%
Chemicals (manufacture of)	200	0	-200	-100%
Food, Drink & Tobacco (manufacture of)	400	200	-200	-50%
Real Estate	800	600	-200	-25%
Public Administration & Defence	2,900	2,300	-600	-21%
All other sectors	19,900	21,800	+1,900	+10%
Total FTE (all sectors)	59,500	78,600	+19,100	+32%
Workforce jobs (not FTE)	80,500	107,200	+26,700	+33%

Source: Experian, March 2019

- 2.5 FTE employment in B-use class sectors is projected to increase from 30,800 in 2013 to 36,300 in 2032 (Table 2-2). This is an increase of 5,500 (+18%). In comparison, the Dec 2016 projections forecast an increase of 7,500 (+23%) over the same period.

Table 2-2 Experian employment forecasts (FTE employment)

Use Class	2013	2018	2023	2028	2032	Change 2013-2032	% Change 2013-2032	2017 assessment
B1a/b	22,500	25,100	26,000	26,500	27,100	+4,600	+20%	+6,200
B1c	1,600	1,900	1,900	1,900	1,800	+200	+13%	+500
B2	1,500	1,400	1,300	1,200	1,200	-300	-20%	-200
B8	5,200	5,700	5,900	6,000	6,200	+1,000	+19%	+1,000
Total B use class	30,800	34,100	35,100	35,600	36,300	+5,500	+18%	+7,500

Source: Experian, AECOM

- 2.6 The updated employment projections are converted into indicative floorspace and land requirements using the same employment density and plot ratio assumptions used in the Welwyn Hatfield Economy Study Update (December 2015) and the Welwyn Hatfield Economy Study Updated Economic Analysis Note (February 2017). These are detailed in Table 2-3 below.

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Table 2-3 Employment density and plot ratio assumptions

Use class	Employment density	Plot ratio
B1a/b	12 square metres per FTE	75% of site area
B1c	47 square metres per FTE	40% of site area
B2	36 square metres per FTE	40% of site area
B8	70 square metres per FTE	50% of site area

- 2.7 Welwyn Hatfield's additional B-use class floorspace requirements for the period 2013-2032 are estimated to be approximately 118,000 square metres (Table 2-4). This is approximately 41,000 square metres lower than the 2017 assessment.

Table 2-4 Experian-based B-use class floorspace need (in square metres)

Use Class	2013	2018	2023	2028	2032	Change 2013-2032	2017 assessment
B1a/b	270,000	301,000	312,000	318,000	325,000	+55,000	+75,000
B1c	77,000	91,000	90,000	88,000	86,000	+9,000	+21,000
B2	55,000	49,000	46,000	45,000	42,000	-13,000	-9,000
B8	365,000	400,000	410,000	423,000	432,000	+67,000	+72,000
Total B use class	767,000	841,000	858,000	874,000	885,000	+118,000	+159,000

Source: Experian, AECOM

- 2.8 The indicative employment land requirements are presented in Table 2-5 below. The total additional land need is estimated to be approximately 20 hectares, which is lower than the 2017 assessment (28 hectares).

Table 2-5 Experian-based B-use class employment land need (in hectares)

Use Class	2013	2018	2023	2028	2032	Change 2013-2032	2017 assessment
B1a/b	36	40	42	42	43	+7	+10
B1c	19	23	22	22	22	+2	+5
B2	14	12	12	11	11	-3	-2
B8	73	80	82	85	86	+13	+15
Total B use class	142	155	157	160	162	+20	+28

Source: Experian, AECOM

3. Updated EEFM scenario

- 3.1 The latest available EEFM forecasts (September 2018) project a 15% increase in employment across all sectors between 2013 and 2032. Total employment is projected to increase from 79,800 in 2013 to approximately 92,000 in 2032. In comparison the August 2016 EEFM forecasts projected a 17% increase over the same period, from 79,900 to 93,300.
- 3.2 Key growth sectors in terms of absolute employment numbers include Retail; Health & care; Construction; Professional services; Public administration; Education; Accommodation & food services; and Wholesale. Several manufacturing sub-sectors are projected to decline in employment, including manufacturing of metals, food, electronics, and transport equipment (Table 3-1).

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Table 3-1 Sectors showing the greatest growth and decline in employment (in absolute terms) between 2013 and 2032 according to EEFM

Sector	2013	2032	Change 2013-2032	% Change 2013-2032
Retail	12,600	16,100	+3,500	+28%
Health & care	6,800	9,000	+2,200	+32%
Construction	6,200	8,100	+1,900	+31%
Professional services	5,800	7,500	+1,700	+29%
Public administration	3,100	4,400	+1,300	+42%
Education	8,200	9,500	+1,300	+16%
Accommodation & food services	3,500	4,600	+1,000	+29%
Wholesale	4,500	5,100	+600	+13%
Manufacturing - general	700	600	-100	-14%
Manufacturing - transport equipment	600	500	-100	-17%
Manufacturing - electronics	400	300	-100	-25%
Manufacturing - food	200	100	-100	-50%
Telecoms	1,400	1,300	-100	-7%
Manufacturing - metals	600	400	-200	-33%
All other sectors	25,200	24,500	-700	-3%
Total employment (all sectors)	79,800	92,000	12,200	15%

Source: EEFM, September 2018

- 3.3 FTE employment in B use class sectors is forecast to increase by 15% between 2013 and 2032, rising from 35,000 to approximately 40,200, an increase of 5,200 (Table 3-2). The August 2016 EEFM forecasts projected higher levels of growth (6,200 increase between 2013 and 2032). Most of the projected employment growth is expected to come from B1a/b sectors (+4,200 employment), followed by B8 employment (+1,000).

Table 3-2 EEFM employment forecasts (employment)

Use Class	2013	2018	2023	2028	2032	Change 2013-2032	% Change 2013-2032	2017 assessment
B1a/b	25,500	26,000	27,300	28,600	29,700	+4,200	+16%	+5,700
B1c	1,900	2,100	2,100	2,000	2,000	+100	+5%	0
B2	2,100	2,200	2,100	2,000	2,000	-100	-5%	-200
B8	5,500	5,900	6,100	6,300	6,500	+1,000	+18%	+700
Total B use class	35,000	36,200	37,600	38,900	40,200	+5,200	+15%	+6,200

Source: EEFM, AECOM

- 3.4 Based on the above employment forecast Welwyn Hatfield's additional floorspace requirements for the period 2013-2032 are estimated to be approximately 115,000 square metres. This is 9,000 square metres higher than the 2017 assessment (Table 3-3).

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Table 3-3 EEFM-based B-use class floorspace need (in square metres)

Use Class	2013	2018	2023	2028	2032	Change 2013-2032	2017 assessment
B1a/b	306,000	312,000	328,000	343,000	356,000	+50,000	+69,000
B1c	91,000	97,000	97,000	96,000	96,000	+5,000	-3,000
B2	75,000	78,000	76,000	73,000	70,000	-5,000	-7,000
B8	387,000	412,000	428,000	442,000	452,000	+65,000	+47,000
Total B use class	859,000	899,000	929,000	954,000	974,000	+115,000	+106,000

Source: EEFM, AECOM

The above floorspace projections translate into indicative additional need for 20 hectares of employment land between 2013 and 2032. This includes additional need for 13 hectares of B8 land and 7 hectares of B1a/b land.

The overall additional employment land need of 20 hectares is higher than the August 2016 estimate of 18 hectares (Table 3-4).

Table 3-4 EEFM-based B-use class employment land need (in hectares)

Use Class	2013	2018	2023	2028	2032	Change 2013-2032	2017 assessment
B1a/b	41	42	44	46	47	+7	+9
B1c	23	24	24	24	24	+1	-1
B2	19	20	19	18	18	-1	-2
B8	77	82	86	88	90	+13	+10
Total B use class	160	168	173	176	179	+20	+16

Source: EEFM, AECOM

4. Hybrid Scenario (average of Experian and EEFM scenarios)

- 4.1 Previously, the Experian and EEFM scenarios projected different levels of additional B-use class need between 2013 and 2032 (28 and 16 hectares respectively), as well as different breakdowns of that need by B-use class. This provided the rationale for producing a hybrid scenario that provided a middle point between the two.
- 4.2 The updated Experian and EEFM scenarios are much more aligned overall and project similar levels of employment growth between 2013 and 2032. The overall employment land need resulting from the two scenarios is the same – 20 hectares. There are differences in the sectoral breakdown between the two sets of forecasts however, and therefore it is still beneficial to consider a hybrid scenario.
- 4.3 The hybrid scenario projects additional employment growth of 5,200 between 2013 and 2032 (Table 4-1). This is projected to come primarily from B1a/b growth (+4,400), although this is lower compared to the 2017 assessment (+5,900). B8 employment growth on the other hand is projected to be slightly higher (+900 compared to +800).

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Table 4-1 Hybrid employment forecasts

Use Class	2013	2018	2023	2028	2032	Change 2013-2032	% Change 2013-2032	2017 assessment
B1a/b	24,000	25,500	26,600	27,600	28,400	+4,400	+18%	+5,900
B1c	1,800	2,000	2,000	2,000	1,900	+100	+6%	+200
B2	1,800	1,800	1,700	1,600	1,600	-200	-11%	-200
B8	5,400	5,800	6,000	6,200	6,300	+900	+17%	+800
Total B use class	33,000	35,100	36,300	37,400	38,200	+5,200	+16%	+6,800

Source: Experian, EEFM, AECOM

- 4.4 Based on the above employment forecasts Welwyn Hatfield's additional floorspace requirements for the period 2013-2032 are estimated to be approximately 116,000 square metres (Table 4-2). This is lower than the 2017 assessment (+132,000 square metres).

Table 4-2 Hybrid B-use class floorspace need (in square metres)

Use Class	2013	2018	2023	2028	2032	Change 2013-2032	2017 assessment
B1a/b	288,000	306,000	320,000	331,000	340,000	+52,000	+71,000
B1c	84,000	94,000	93,000	92,000	91,000	+7,000	+9,000
B2	65,000	64,000	61,000	59,000	56,000	-9,000	-8,000
B8	376,000	406,000	419,000	432,000	442,000	+66,000	+60,000
Total B use class	813,000	870,000	893,000	914,000	929,000	+116,000	+132,000

Source: Experian, EEFM, AECOM

- 4.5 The above floorspace projections translate into indicative additional need for 20 hectares of employment land between 2013 and 3032. This includes additional need for 13 hectares of B8 land and 7 hectares of B1a/b land. This is slightly lower than the 2017 assessment of 23 hectares (Table 4-3).

Table 4-3 Hybrid B-use class employment land need (in hectares)

Use Class	2013	2018	2023	2028	2032	Change 2013-2032	2017 assessment
B1a/b	38	41	43	44	45	+7	+10
B1c	21	23	23	23	23	+2	+2
B2	16	16	15	15	14	-2	-2
B8	75	81	84	86	88	+13	+16
Total B use class	151	161	165	168	171	+20	+23

Source: Experian, EEFM, AECOM

5. Employment land need conclusions

- 5.1 In conclusion, the labour demand scenarios discussed in this note project very similar levels of additional need over the period 2013-2032, approximately 20 hectares. This is slightly lower than the February 2017 assessment. The fact that the Experian and EEFM scenarios produce similar findings is a positive sign that enhances our confidence in these projections.
- 5.2 All the scenarios need to be considered in the context of significant levels of employment floorspace loss across Hertfordshire, and in Welwyn Hatfield in particular. The *Loss of Employment Space in Hertfordshire, February 2019* report prepared by Lambert Smith Hampton for the Hertfordshire LEP states there has been a net loss of over 771,000 sq. m. of commercial floorspace across Hertfordshire over the last decade.
- 5.3 All local authorities in Hertfordshire have seen a net loss in office floorspace stock. The largest net losses have been in Welwyn Hatfield which recorded a net loss of 82,800 square metres between 2008-09 and 2017-18. That is more than a quarter of the borough's office stock being lost over a decade. Furthermore, Welwyn Hatfield lost approximately 23,550 square metres of industrial floorspace to residential uses.
- 5.4 Allowing for further employment floorspace losses over the Local Plan period, the labour-demand based projection of 20 additional hectares of employment land need by 2032 should be considered to be a conservative estimate of the actual amount of employment land that will need to be provided in order to:
- Meet the needs of local businesses and the local economy;
 - Meet the needs of the growing population; and
 - Address the significant losses of employment floorspace over the past decade.

6. Employment land need projections 2018-2035

- 6.1 The analysis presented in sections 2 to 4 covers the Local Plan period 2013-2032. Section 5 presents the employment land need projections for the period 2018-2035.
- 6.2 Experian projects a 2,600 increase in FTE employment between 2018 and 2035 (Table 6-1). This compares to 5,500 between 2013 and 2032. Experian's data suggest that FTE employment grew rapidly between 2013 and 2018 and will continue to grow at a slower rate beyond 2018.

Table 6-1 Experian employment forecasts 2018-2035 (FTE employment)

Use Class	2013	2018	2023	2028	2032	2035	Change 2018-2035	% Change 2018-2035
B1a/b	22,500	25,100	26,000	26,500	27,100	27,600	+2,500	+10%
B1c	1,600	1,900	1,900	1,900	1,800	1,800	-100	-5%
B2	1,500	1,400	1,300	1,200	1,200	1,100	-300	-21%
B8	5,200	5,700	5,900	6,000	6,200	6,200	+500	+9%
Total B use class	30,800	34,100	35,100	35,600	36,300	36,700	+2,600	+8%

- 6.3 Based on the above employment growth projections, Welwyn Hatfield is estimated to need an additional 47,000 square metres of B-use class floorspace and 7 hectares of B-use class land between 2018 and 2035. These figures are considerably lower than the 2013-2032 estimates (118,000 square metres and 20 hectares respectively).

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Table 6-2 Experian-based B-use class floorspace need 2018-2035 (in square metres)

Use Class	2013	2018	2023	2028	2032	2035	Change 2018-2035
B1a/b	270,000	301,000	312,000	318,000	325,000	331,000	+30,000
B1c	77,000	91,000	90,000	88,000	86,000	84,000	-7,000
B2	55,000	49,000	46,000	45,000	42,000	40,000	-9,000
B8	365,000	400,000	410,000	423,000	432,000	433,000	+33,000
Total B use class	767,000	841,000	858,000	874,000	885,000	888,000	+47,000

Source: Experian, AECOM

Table 6-3 Experian-based B-use class employment land need 2018-2035 (in hectares)

Use Class	2013	2018	2023	2028	2032	2035	Change 2018-2035
B1a/b	36	40	42	42	43	44	+4
B1c	19	23	22	22	22	21	-2
B2	14	12	12	11	11	10	-2
B8	73	80	82	85	86	87	+7
Total B use class	142	155	157	160	162	162	+7

Source: Experian, AECOM

- 6.4 The EEFM forecasts also project lower levels of growth in the period 2018-2035 compared to 2013-2032 although the difference is not as substantial as in the Experian data. Employment is projected to grow by 4,900 over the period 2018-2035 compared to 5,200 for 2013-2032.

Table 6-4 EEFM employment forecasts 2018-2035 (employment)

Use Class	2013	2018	2023	2028	2032	2035	Change 2018-2035	% Change 2018-2035
B1a/b	25,500	26,000	27,300	28,600	29,700	30,500	+4,500	+17%
B1c	1,900	2,100	2,100	2,000	2,000	2,100	0	0%
B2	2,100	2,200	2,100	2,000	2,000	1,900	-300	-14%
B8	5,500	5,900	6,100	6,300	6,500	6,600	+700	+12%
Total B use class	35,000	36,200	37,600	38,900	40,200	41,100	+4,900	+14%

Source: EEFM, AECOM

- 6.5 Based on the above employment growth projections, Welwyn Hatfield is estimated to need an additional 90,000 square metres of B-use class floorspace and 14 hectares of B-use class land between 2018 and 2035. These figures are lower than the 2013-2032 estimates (115,000 square metres and 20 hectares respectively).

Table 6-5 EEFM-based B-use class floorspace need 2018-2035 (in square metres)

Use Class	2013	2018	2023	2028	2032	2035	Change 2018-2035
B1a/b	306,000	312,000	328,000	343,000	356,000	366,000	+54,000
B1c	91,000	97,000	97,000	96,000	96,000	96,000	-1,000
B2	75,000	78,000	76,000	73,000	70,000	68,000	-10,000
B8	387,000	412,000	428,000	442,000	452,000	459,000	+47,000
Total B use class	859,000	899,000	929,000	954,000	974,000	989,000	+90,000

Source: EEFM, AECOM

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Table 6-6 EEFM-based B-use class employment land need 2018-2035 (in hectares)

Use Class	2013	2018	2023	2028	2032	2035	Change 2018-2035
B1a/b	41	42	44	46	47	49	+7
B1c	23	24	24	24	24	24	0
B2	19	20	19	18	18	17	-2
B8	77	82	86	88	90	92	+10
Total B use class	160	168	173	176	179	182	+14

Source: EEFM, AECOM

- 6.6 The Experian and EEFM forecasts have more significant differences for the period 2018-2035 than they do for 2013-2032. The Hybrid scenario takes an average of the two and projects B-use class employment growth of approximately 3,700 between 2018 and 2035 (Table 6-7). This translates into indicative additional need for 69,000 square metres of B-use class floorspace (Table 6-8) and 10 hectares of employment land (Table 6-9). These projections are approximately 50% lower than the hybrid projections for the 2013-2032 period.

Table 6-7 Hybrid employment forecasts 2018-2035 (employment)

Use Class	2013	2018	2023	2028	2032	2035	Change 2018-2035	% Change 2018-2035
B1a/b	24,000	25,500	26,600	27,600	28,400	29,000	3,500	+14%
B1c	1,800	2,000	2,000	2,000	1,900	1,900	-100	-5%
B2	1,800	1,800	1,700	1,600	1,600	1,500	-300	-17%
B8	5,400	5,800	6,000	6,200	6,300	6,400	600	+10%
Total B use class	33,000	35,100	36,300	37,400	38,200	38,800	3,700	+11%

Source: Experian, EEFM, AECOM

Table 6-8 Hybrid B-use class floorspace need 2018-2035 (in square metres)

Use Class	2013	2018	2023	2028	2032	2035	Change 2018-2035
B1a/b	288,000	306,000	320,000	331,000	340,000	349,000	+43,000
B1c	84,000	94,000	93,000	92,000	91,000	90,000	-4,000
B2	65,000	64,000	61,000	59,000	56,000	54,000	-10,000
B8	376,000	406,000	419,000	432,000	442,000	446,000	+40,000
Total B use class	813,000	870,000	893,000	914,000	929,000	939,000	+69,000

Source: Experian, EEFM, AECOM

Table 6-9 Hybrid B-use class employment land need 2018-2035 (in hectares)

Use Class	2013	2018	2023	2028	2032	2035	Change 2018-2035
B1a/b	38	41	43	44	45	46	+6
B1c	21	23	23	23	23	23	-1
B2	16	16	15	15	14	14	-2
B8	75	81	84	86	88	89	+8
Total B use class	151	161	165	168	171	172	+10

Source: Experian, EEFM, AECOM

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- 6.7 Overall, the assessment for the 2018-2035 period projects lower levels of employment growth and resulting employment land need than the assessment for the 2013-2032 period. A number of factors are likely to contribute to this outcome. Both the Experian and EEFM employment growth projections for this period are lower than 2013-2032. A likely factor is that the period 2013-2018 captures much of the recovery from the last economic recession. Therefore continuing these levels of economic growth over the long term would likely be unsustainable. Furthermore, the projections from 2018 onwards likely reflect the current levels of economic uncertainty resulting from the United Kingdom's withdrawal from the European Union. Another factor could be an assumption that increased automation could lead to improved productivity which may result in lower levels of labour demand growth in future years.

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