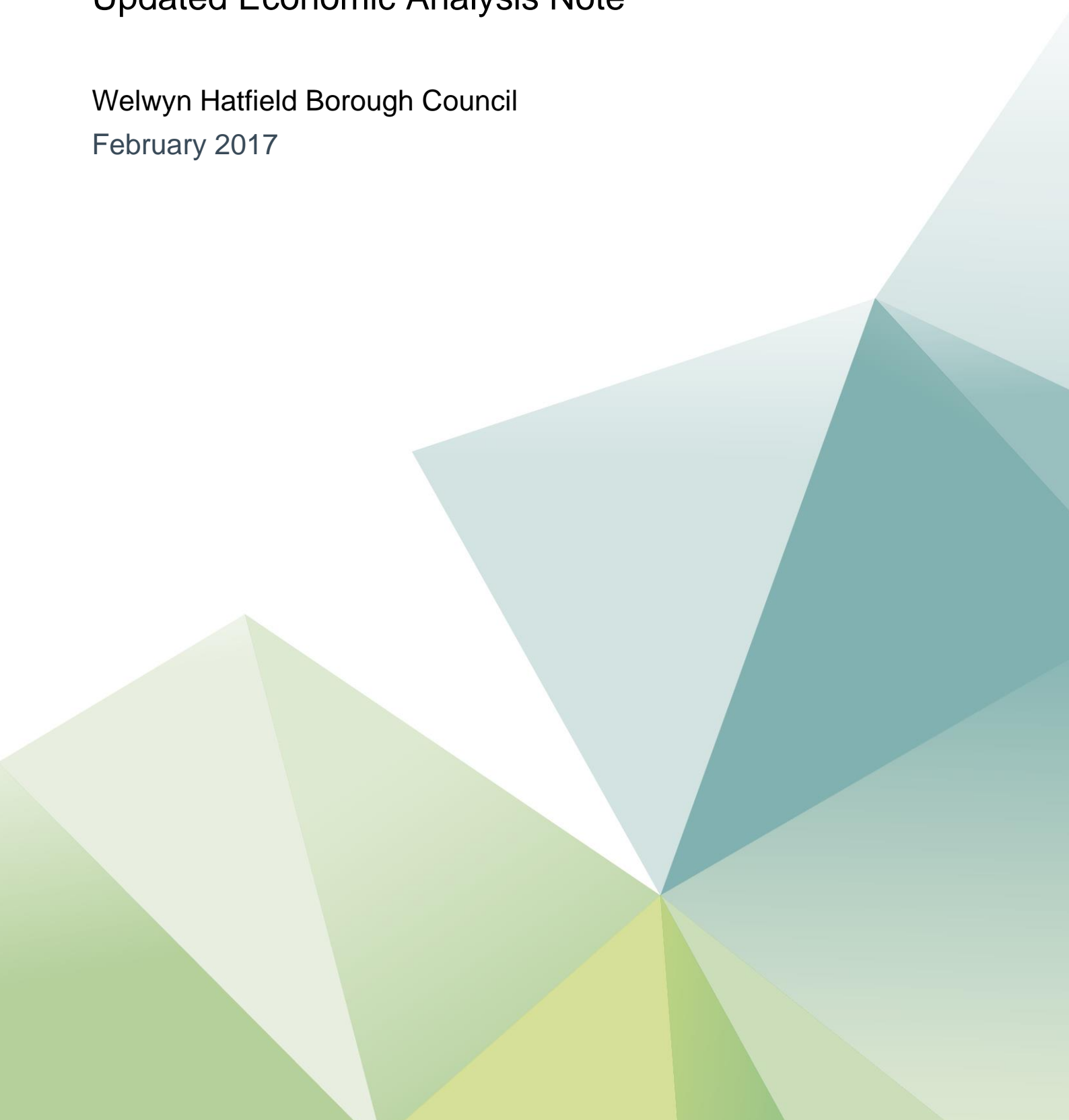


Welwyn Hatfield Economy Study

Updated Economic Analysis Note

Welwyn Hatfield Borough Council

February 2017



1. Introduction

- 1.1. This note summarises the findings of the update of the 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) FTE employment forecasts. These were published in December 2016 and August 2016 respectively.
- 1.2. The current Economy Study is based on the analysis of earlier releases of the Experian and EEFM forecasts (published in June 2015 and January 2015 respectively). Our previous assessment was undertaken for the period 2013 – 2032; to ensure consistency and enable comparison we have undertaken the updated analysis for the same period.
- 1.3. The latest Experian forecasts provide FTE employment figures for 38 sectors for the period 1997–2037 (the June 2015 forecasts covered the period to 2035). The latest Experian forecasts use 2015 as the first forecast year and also provide historical estimates going back to 1997. The June 2015 Experian forecasts used 2014 as the first forecast year.
- 1.4. Comparison of the two Experian datasets shows differences in both the projected levels of growth to 2032, and also the estimates of employment figures going back to 1997. We asked Experian to explain these differences, its responses are provided below:

Historical changes:

- The relationship between local workforce jobs and workplace-based employment, which is used to construct the FTE series, was re-visited for 1997-2014. This change is a major reason for the level shift in the historical FTE employment series.
- Between the two releases Experian refreshed all national, regional and local area data leading to new data points and revisions to history, with some methodological changes in the underlying official sources.

Forecast changes:

- ONS made upward revisions of the regional history over this period, partly causing the step increase from 2014 onwards.
 - Experian's UK outlook is now a lot more pessimistic for FTE employment growth in the Administrative & Supportive Services and Wholesale sectors than in June 2015, whilst Computing & Information Services; Education; Professional Services; and Retail sectors were all revised upwards.
 - Local level industry data is constructed using the annual Business Register Employment Survey (BRES) data released for each local authority. Between June 2015 and December 2016, there was an additional year of BRES data which changed the industry breakdown for each local authority and therefore some sectors appear stronger than previously.
 - There were stronger growth rates at the national level and so these sectors take more of the share of total employment.
- 1.5. Furthermore, Experian now presents FTEs rounded to the nearest 100, rather than the nearest 10 as before.

2. Scenario 1 – Experian employment projections scenario

- 2.1. In summary, the December 2016 Experian forecasts are higher than the ones published in June 2015, with higher growth rates. The Experian forecasts do remain below the level of the EEFM forecasts, though the two forecasts are now closer.
- 2.2. According to Experian's latest forecasts, full time equivalent employment (FTE) across all sectors in Welwyn Hatfield is forecast to increase from 63,000 in 2013 to approximately 79,300 in 2032, an increase of approximately 26% (**Table 2-1**). This compares to the estimated increase from 61,070 to 73,800 in the 2015 assessment.
- 2.3. Key growth sectors in terms of absolute number of jobs for the December 2016 forecasts include Professional services; Retail; Other private services; Construction; and Residential care & social work. The greatest decline is projected in Public administration & defence (-300 FTE employment).

Table 2-1 Dec 2016 Experian employment forecasts (FTE employment) – sectors showing the greatest numerical changes in employment 2013-2032

Sector	2013	2032	Change 2013-2032	% Change 2013-2032
Professional services	5,800	8,600	+2,800	+48%
Retail	10,300	12,200	+1,900	+18%
Other private services	2,000	3,500	+1,500	+75%
Construction of buildings	1,600	3,000	+1,400	+88%
Residential care and social work	2,900	4,300	+1,400	+48%
Computing and information services	1,400	2,700	+1,300	+93%
Education	5,200	6,400	+1,200	+23%
Public Administration & Defence	3,100	2,800	-300	-10%
Total FTE (all sectors)	63,000	79,300	+16,300	+26%
Workforce jobs (not FTE)	85,900	105,300	+19,400	+23%

Source: Experian

- 2.4. **Table 2-2** shows that FTE employment in B-use class sectors is projected to increase from 32,400 in 2013 to 39,900 in 2032. This is an increase of 7,500 (+23%). In comparison, the June 2015 projections forecast an increase of 5,400 (+17%) 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	Previous assessment
B1a/b	23,400	26,300	27,400	28,400	29,600	+6,200	+26%	+4,200
B1c	1,800	2,200	2,200	2,200	2,300	+500	+28%	0
B2	1,400	1,400	1,300	1,300	1,200	-200	-14%	-200
B8	5,800	6,000	6,300	6,600	6,800	+1,000	+17%	+1,400
Total B use class	32,400	35,900	37,200	38,500	39,900	+7,500	+23%	+5,400

Source: Experian, Atkins

2.5. Based on the above employment forecasts Welwyn Hatfield’s additional floorspace requirements for the period 2013-2032 are estimated to be approximately 159,000 sqm (**Table 2-3**). This is 17,000 sqm more than the previous assessment.

2.6. Compared to the previous assessment:

- B1a/b floorspace projections are 25,000 sqm higher
- B1c floorspace projections are 20,000 sqm higher
- B2 floorspace projections are 2,000 sqm lower, and
- B8 floorspace projections are 26,000 sqm lower.

Table 2-3 B use class floorspace need (sqm) – Scenario 1

Use class	2013	2018	2023	2028	2032	Change 2013-2032	% Change 2013-2032	Previous assessment
B1a/b	280,000	316,000	329,000	341,000	355,000	+75,000	+27%	+50,000
B1c	86,000	105,000	105,000	105,000	107,000	+21,000	+24%	+1,000
B2	50,000	49,000	45,000	45,000	41,000	-9,000	-18%	-7,000
B8	403,000	419,000	442,000	460,000	475,000	+72,000	+18%	+98,000
Total B use class	819,000	889,000	921,000	951,000	978,000	+159,000	+19%	+142,000

Source: Experian, Atkins

2.7. The indicative employment land requirements are presented in **Table 2-4**. The total additional land need is estimated to be 28 ha, which is slightly higher than the previous assessment (+25 ha). Overall, the additional land requirements by B use-class sector appear more balanced than in the previous assessment

Table 2-4 B use class land need (ha) – Scenario 1

Use class	2013	2018	2023	2028	2032	Change 2013-2032	Previous assessment
B1a/b	37	42	44	45	47	+10	+7
B1c	22	26	26	26	27	+5	0
B2	13	12	11	11	10	-2	-2
B8	81	84	88	92	95	+15	+20
Total B use class	152	165	170	175	180	+28	+25

Source: Experian, Atkins

3. Scenario 2 – EEFM scenario

- 3.1. The August 2016 EEFM forecasts show a 16% increase in FTE employment across all sectors between 2013 and 2032 (**Table 3-1**). FTE employment is projected to increase from 72,590 in 2013 to 84,400 in 2032. In comparison the January 2015 EEFM forecasts projected a 22% increase over the same period, from 73,500 to 89,900.
- 3.2. Key growth sectors in terms of absolute numbers of FTE employment include Professional Services; Retail; Business Services; Land Transport; and Hotels and restaurants. Telecoms is projected to experience the greatest decline in FTE employment, followed by various manufacturing sectors.

Table 3-1 EEFM employment forecasts (FTEs) – sectors showing the greatest numerical changes in employment 2013-2032

Sector	2013	2032	Change 2013-2032	% Change 2013-2032
Professional services	5,050	7,590	+2,540	+50%
Retail	11,630	14,040	+2,410	+21%
Business services	5,860	7,290	+1,430	+24%
Land transport	2,720	3,840	+1,120	+41%
Hotels and restaurants	2,490	3,530	+1,040	+42%
Other services	4,610	5,540	+930	+20%
Utilities	30	900	+870	+2900%
Telecoms	1,920	1,270	-650	-34%
Total FTE (all sectors)	72,590	84,390	+11,820	+16%
Total employment: jobs (not FTE)	79,890	93,310	+13,420	+17%

Source: Cambridge Econometrics, Atkins

- 3.3. FTE employment in B use class sectors is forecast to increase by 17% between 2013 and 2032, rising from 36,000 to 42,200 (**Table 3-2**). The January 2015 EEFM forecasts projected higher levels of growth. Most of this projected employment growth is expected to come from B1a/b sectors (+5,700 FTE employment), while B8 employment is also projected to grow (+700 FTE employment). B2 FTE employment is forecast to decline by 200 while B1c FTE employment levels are forecast to remain unchanged over the period.

Table 3-2 EEFM employment forecasts (FTE employment)

Use class	2013	2018	2023	2028	2032	Change 2013-2032	% Change 2013-2032	Previous assessment
B1a/b	25,600	28,600	29,700	30,600	31,300	+5,700	+22%	+6,300
B1c	3,100	3,200	3,200	3,100	3,100	0	0%	+200
B2	1,900	2,200	2,000	1,800	1,700	-200	-11%	-400
B8	5,400	6,000	6,100	6,100	6,100	+700	+13%	+900
Total B use class	36,000	40,000	41,000	41,600	42,200	+6,200	+17%	+7,000

Source: Cambridge Econometrics, Atkins

3.4. Based on the above employment forecasts Welwyn Hatfield's additional floorspace requirements for the period 2013-2032 are estimated to be approximately 106,000 sqm (**Table 3-3**). This is 27,000 sqm less than the previous assessment.

3.5. Compared to the previous assessment:

- B1a/b floorspace projections are 7,000 sqm lower;
- B1c floorspace projections are 15,000 sqm lower;
- B2 floorspace projections are 6,000 sqm higher; and
- B8 floorspace projections are 11,000 sqm lower.

Table 3-3 B use class floorspace need (sq.m) – Scenario 2

Use class	2013	2018	2023	2028	2032	Change 2013-2032	% Change 2013-2032	Previous assessment
B1a/b	307,000	343,000	356,000	367,000	376,000	+69,000	+22%	+76,000
B1c	148,000	151,000	150,000	147,000	145,000	-3,000	-2%	+12,000
B2	67,000	79,000	72,000	65,000	60,000	-7,000	-10%	-13,000
B8	380,000	422,000	424,000	425,000	427,000	+47,000	+12%	+58,000
Total B use class	902,000	995,000	1,002,000	1,004,000	1,008,000	+106,000	+12%	+133,000

Source: Cambridge Econometrics, Atkins

3.6. The above floorspace projections translate into indicative additional need for 9 ha of B1a/b land and 10 ha of B8 land. B1c and B2 requirements are forecast to decline by 1 and 2 ha respectively (**Table 3-4**). This results in lower overall additional employment land need than the January 2015 EEFM forecasts.

Table 3-4 B use class need (ha) – Scenario 2

Use class	2013	2018	2023	2028	2032	Change 2013-2032	Previous assessment
B1a/b	41	46	47	49	50	+9	+10
B1c	37	38	37	37	36	-1	+3
B2	17	20	18	16	15	-2	-3
B8	76	84	85	85	85	+10	+12
Total B use class	171	188	188	187	187	+16	+22

Source: Cambridge Econometrics, Atkins

4. Scenario 4 – Hybrid scenario (average of Experian and EEFM employment projections)

- 4.1. The Experian and EEFM scenarios project broadly similar levels of total B use class need by 2032 (180 and 187 ha respectively). However, the change in requirements between 2013 and 2032, and the breakdown of need by use class are quite different.
- 4.2. Starting with FTE employment in B use-class sectors, the Hybrid scenario projects a 6,800 FTE employment increase between 2013 and 2032. This is higher than the previous assessment's 6,200. B1a/b employment is estimated to account for most of the projected growth in B use-class sectors (**Table 4-1**). FTE employment across all sectors is projected to increase by 7,600, compared to the previous assessment's 14,600.

Table 4-1 Hybrid employment forecasts (FTE)

Use class	2013	2018	2023	2028	2032	Change 2013-2032	% Change 2013-2032	Previous assessment
B1a/b	24,500	27,500	28,600	29,500	30,400	+5,900	+24%	+5,200
B1c	2,500	2,700	2,700	2,700	2,700	+200	+8%	+200
B2	1,600	1,800	1,600	1,500	1,400	-200	-13%	-300
B8	5,600	6,000	6,200	6,300	6,400	+800	+14%	+1,100
Total B use class FTE	34,200	38,000	39,100	40,000	41,000	+6,800	+20%	+6,200
All sectors FTE	67,800	74,400	77,200	79,800	82,100	+7,600	+21%	+14,600
Workforce jobs / total employment: jobs (not FTE)	82,900	90,400	93,400	96,700	99,500	+16,600	+20%	+16,900

Source: Experian, Cambridge Econometrics, Atkins

- 4.3. Under the updated Hybrid scenario, Welwyn Hatfield's additional floorspace requirements for the period 2013-2032 are estimated to be approximately 132,000 square metres (**Table 4-2**). This is 6,000 less than the previous assessment. Most of the additional demand for floorspace is projected to come from B1a/b and B8 uses (71,000 and 60,000 sqm respectively).

Table 4-2 B use class floorspace need (sqm) – Scenario 4

Use class	2013	2018	2023	2028	2032	Change 2013-2032	Previous assessment
B1a/b	294,000	330,000	343,000	354,000	365,000	+71,000	+63,000
B1c	117,000	128,000	127,000	126,000	126,000	+9,000	+7,000
B2	59,000	64,000	59,000	55,000	51,000	-8,000	-10,000
B8	391,000	420,000	433,000	443,000	451,000	+60,000	+78,000
Total B use class	861,000	942,000	962,000	978,000	993,000	+132,000	+138,000

Source: Experian, Cambridge Econometrics, Atkins

4.4. The above floorspace figures translate into indicative need for 10 ha of additional B1a/b land by 2032, 2 ha of B1c land, and 12 ha of B8 land. B2 land requirements are projected to decline by 2 ha (**Table 4-3**).

Table 4-3 B use class land need (ha) – Scenario 4

Use class	2013	2018	2023	2028	2032	Change 2013-2032	Previous assessment
B1a/b	39	44	46	47	49	+10	+8
B1c	29	32	32	32	32	+2	+2
B2	15	16	15	14	13	-2	-2
B8	78	84	87	89	90	+12	+16
Total B use class	161	176	179	181	183	+22	+23

Source: Experian, Cambridge Econometrics, Atkins

5. FEMA Analysis (EEFM)

- 5.1. The EEFM forecasts for the FEMA show an increase in total FTE employment of 66,200 over the period 2013 to 2032 (**Table 5-1**). This is higher than the previous assessment which projected a 57,900 increase in FTE employment.
- 5.2. Key growth sectors across the FEMA are projected to include Business services, Health and care; Construction; Hotels and restaurants, Professional services; and Education.

Table 5-1 EEFM employment forecasts for the FEMA (FTEs) – sectors showing the greatest numerical changes in employment 2013-2032¹

Sector	2013	2032	Change 2013-2032	% change 2013-2032
Business services	35,600	50,300	+14,700	+41%
Health and care	44,100	54,600	+10,500	+24%
Construction	27,600	37,700	+10,100	+37%
Hotels and restaurants	18,300	26,500	+8,200	+45%
Professional services	37,000	44,100	+7,100	+19%
Education	33,300	38,300	+5,000	+15%
Retail	39,400	43,800	+4,400	+11%
Other Services	11,800	15,500	+3,700	+31%
Manufacture of transport	8,100	5,500	-2,600	-32%
Finance	7,300	5,800	-1,500	-21%
Total FTE (all sectors)	387,700	453,900	+66,200	+17%
Total employment (not FTE)	424,300	500,000	+75,700	+18%

Source: Cambridge Econometrics, Atkins

- 5.3. **Table 5-2** shows that FTE employment in B use-class sectors is projected to increase by 28,900 between 2013 and 2032. This is lower than the previous assessment (33,700). B1a/b sectors will be responsible for the vast majority of these new jobs, although the growth in B1a/b FTE employment is projected to be lower than the previous assessment.

¹ See Appendix for full list of employment sectors

Table 5-2 EEFM FEMA employment forecasts (FTE employment)

Use class	2013	2018	2023	2028	2032	Change 2013-2032	% change 2013-2032	Previous assessment
B1a/b	148,400	161,300	167,200	173,900	179,400	+31,000	+21%	+35,700
B1c	17,300	17,600	17,300	16,800	16,500	-800	-5%	0
B2	17,000	17,900	16,200	14,700	13,400	-3,600	-21%	-4,100
B8	31,400	33,800	33,600	33,600	33,700	+2,300	+7%	+2,100
Total B use class	214,100	230,600	234,300	239,000	243,000	+28,900	+13%	+33,700

Source: Cambridge Econometrics, Atkins

- 5.4. The FEMA's additional floorspace requirements for the period 2013-2032 are estimated to be approximately 364,000 square metres (**Table 5-3**). This is lower than the previous assessment's 423,000 sqm.

Table 5-3 B use class floorspace need (sqm) - EEFM FEMA forecasts

Use class	2013	2018	2023	2028	2032	Change 2013-2032	Previous assessment
B1a/b	1,781,000	1,935,000	2,007,000	2,087,000	2,153,000	+372,000	+429,000
B1c	812,000	829,000	814,000	792,000	774,000	-38,000	-4,000
B2	612,000	644,000	584,000	528,000	484,000	-128,000	-146,000
B8	2,198,000	2,366,000	2,355,000	2,354,000	2,356,000	+158,000	+144,000
Total B use class	5,403,000	5,774,000	5,760,000	5,761,000	5,767,000	+364,000	+423,000

Source: Cambridge Econometrics, Atkins

- 5.5. The above floorspace requirements translate into indicative need for 50 additional ha of B1a/b land across the FEMA by 2032, as well as 32 ha of B8 land (**Table 5-4**). These levels of growth are lower than the previous assessment. B1c and B2 land requirements are projected to decline by 10 ha and 32 ha respectively.

Table 5-4 B use class land need (ha) - EEFM FEMA forecasts

Use class	2013	2018	2023	2028	2032	Change 2013-2032	Previous assessment
B1a/b	237	258	268	278	287	+50	+57
B1c	203	207	203	198	193	-10	-1
B2	153	161	146	132	121	-32	-37
B8	440	473	471	471	471	+32	+29
Total B use class	1,033	1,099	1,088	1,079	1,072	+39	+49

Source: Cambridge Econometrics, Atkins

6. Updated supply-demand balance

- 6.1. The updated supply table provided by the Council (**Table 6-1**) provides floorspace for each of the B1, B2 and B8 use classes, as well as for planning permissions and sites which are not for a specific B use class.

Table 6-1 B use class employment floorspace – potential supply to 2032

Supply type		Land Area	B1 (sqm)	B2 (sqm)	B8 (sqm)	BMix1 (sqm)	Total (sqm)
Completions 2013/14 – 2015/16		2.1	-17,511	2,469	20,617	-2,784	2,791
Vacant sites with planning permission	Hatfield Business Park plots 4100/5000/5600	7.9	39,150	0	0	0	39,150
	Former Argos Distribution Site, WGC	3.0	0	0	0	6,229	6,229
	The Holdings, Cole Green Lane, WGC	2.2	0	0	0	5,800	5,800
Other vacant sites	Land north of Chequersfield, WGC	4.5	0	0	22,600	0	22,600
Small sites with planning permission		-2.2	-20,574	-32	605	4,102	-15,899
Local Plan sites	SDS3 - Broadwater Road West (North)	0.9	6,400	0	0	0	6,400
	SDS4 - Broadwater Road West (South West)	1.5 ³	11,250	0	0	0	11,250
	SDS5 - North West Hatfield	1.9	13,900	0	0	0	13,900
	SDS7 - Marshmoor, Welham Green	9.4	40,500	0	0	0	40,500
Estimated further loss in HELAA from office-to-residential conversions		-4.1	-30,770	0	0	0	-30,770
Totals		27.1	42,345	2,437	43,822	13,347	101,951

Source: Welwyn Hatfield Borough Council

- 6.2. In order to enable a like-for-like comparison with the previous assessment, we have made the following splits:
- B1 was split into B1a/b and B1c using a 75% - 25% split. This is in line with the projected B1a/b and B1c growth levels.
 - B1mix was split into B1a/b, B1c, B2 and B8 using a 35%, 10%, 10% and 45% split respectively.
- 6.3. As the updated floorspace figures do not include a breakdown in hectares, we have converted them into land by applying the standard plot ratio assumptions used elsewhere in our analysis.
- 6.4. As **Table 6-2** shows, the reduced identified supply of employment floorspace is projected to lead to a shortfall of employment floorspace and land by 2032. This shortfall primarily relates to B1a/b uses (-34,600sqm and -5ha). Even allowing for the re-use of all surplus B1c and B2 land, Welwyn Hatfield is projected to have an indicative shortfall of approximately 30,000sqm / 3ha by 2032. In comparison, the previous assessment projected an overall surplus of 45,000sqm / 7ha.

Table 6-2 Welwyn Hatfield supply/demand balance under the Preferred Hybrid Scenario (up to 2032)

	B1a/b	B1c	B2	B8	Total	Previous assessment total
Floorspace (sqm)	-34,600	2,900	11,800	-10,200	-30,100	45,000
Land (ha)	-5	1	3	-2	-3	7.1

Note: Negative values indicate shortfall, positive values indicate surplus. All numbers are rounded.

Appendix A. Forecasts by sector

Table A-1 Experian employment forecasts (Scenario 1)

FTE employment, categories	2013	2032	Change 2013-2032	% change 2013-2032
Agriculture, Forestry & Fishing	0	0	0	-
Extraction & Mining	0	0	0	-
Food, Drink & Tobacco (manufacture of)	300	300	0	-
Textiles & Clothing (manufacture of)	0	0	0	-
Wood & Paper (manufacture of)	0	0	0	-
Printing and Recorded Media (manufacture of)	400	300	-100	-25%
Fuel Refining	0	0	0	-
Chemicals (manufacture of)	100	100	0	-
Pharmaceuticals (manufacture of)	0	0	0	-
Non-Metallic Products (manufacture of)	500	400	-100	-20%
Metal Products (manufacture of)	500	300	-200	-40%
Computer & Electronic Products (manufacture of)	300	300	0	-
Machinery & Equipment (manufacture of)	400	400	0	-
Transport Equipment (manufacture of)	0	0	0	-
Other Manufacturing	300	200	-100	-33%
Utilities	700	900	+200	29%
Construction of Buildings	1,600	3,000	+1,400	88%
Civil Engineering	200	200	0	-
Specialised Construction Activities	1,400	2,000	+600	43%
Wholesale	6,600	7,300	+700	11%
Retail	10,300	12,200	+1,900	18%
Land Transport, Storage & Post	3,100	4,100	+1,000	32%
Air & Water Transport	0	0	0	-
Accommodation & Food Services	2,100	3,300	+1,200	57%
Recreation	800	900	+100	13%
Media Activities	300	500	+200	67%
Telecoms	2,300	2,800	+500	22%
Computing & Information Services	1,400	2,700	+1,300	93%
Finance	600	700	+100	17%
Insurance & Pensions	0	0	0	-
Real Estate	900	700	-200	-22%
Professional Services	5,800	8,600	+2,800	48%
Administrative & Supportive Services	6,500	7,400	+900	14%
Other Private Services	2,000	3,500	+1,500	75%
Public Administration & Defence	3,100	2,800	-300	-10%
Education	5,200	6,400	+1,200	23%
Health	2,400	2,700	+300	13%
Residential Care & Social Work	2,900	4,300	+1,400	48%
Total	63,000	79,300	+16,300	26%

Table A-2 EEFM employment forecasts (Scenario 2)

Sector	2013	2032	Change 2013-2032	% change 2013-2032
Agriculture	110	100	-10	-9%
Mining and Quarrying	0	0	0	-
Food Manufacturing	280	220	-60	-21%
General Manufacturing	830	750	-80	-10%
Chemicals	720	730	+10	1%
Pharma	20	110	+90	450%
Metals	410	230	-180	-44%
Transport	790	720	-70	-9%
Electronics	280	180	-100	-36%
Utilities	30	900	+870	2,900%
Waste and remediation	100	130	+30	30%
Construction	5,090	5,440	+350	7%
Wholesale	4,840	5,070	+230	5%
Retail	11,630	14,040	+2,410	21%
Land Transport	2,720	3,840	+1,120	41%
Water and air transport	0	0	0	-
Hotels and restaurants	2,490	3,530	+1,040	42%
Publishing and broadcasting	540	450	-90	-17%
Telecoms	1,920	1,270	-650	-34%
Computer related activity	1,760	2,200	+440	25%
Finance	680	610	-70	-10%
Real Estate	980	1,180	+200	20%
Professional services	5,050	7,590	+2,540	50%
R+D	1,030	910	-120	-12%
Business services	5,860	7,290	+1,430	24%
Employment activities	1,480	1,630	+150	10%
Public Administration incl land forces	3,240	3,540	+300	9%
Education	6,600	7,090	+490	7%
Health and care	7,620	7,730	+110	1%
Arts and entertainment	880	1,370	+490	56%
Other services	4,610	5,540	+930	20%
TOTAL	72,590	84,390	+11,800	16%

Table A-3 EEFM employment forecasts - FEMA

Sector	2013	2032	Change 2013-2032	% change 2013-2032
Agriculture	1,100	1,000	-100	-9%
Mining and Quarrying	100	0	-100	-100%
Food Manufacturing	1,800	1,500	-300	-17%
General Manufacturing	7,700	6,300	-1,400	-18%
Chemicals	3,700	3,600	-100	-3%
Pharma	2,200	2,100	-100	-5%
Metals	4,900	3,500	-1,400	-29%
Transport	8,100	5,500	-2,600	-32%
Electronics	3,500	2,300	-1,200	-34%
Utilities	700	1,300	+600	86%
Waste and remediation	1,200	1,000	-200	-17%
Construction	27,600	37,700	+10,100	37%
Wholesale	23,800	25,800	+2,000	8%
Retail	39,400	43,800	+4,400	11%
Land Transport	14,200	14,900	+700	5%
Water and air transport	2,600	3,000	+400	15%
Hotels and restaurants	18,300	26,500	+8,200	45%
Publishing and broadcasting	2,500	2,100	-400	-16%
Telecoms	3,700	2,900	-800	-22%
Computer related activity	11,100	11,800	+700	6%
Finance	7,300	5,800	-1,500	-21%
Real Estate	6,200	7,400	+1,200	19%
Professional services	37,000	44,100	+7,100	19%
R+D	2,800	2,800	0	0%
Business services	35,600	50,300	+14,700	41%
Employment activities	12,100	14,900	+2,800	23%
Public Administration incl land forces	11,500	13,400	+1,900	17%
Education	33,300	38,300	+5,000	15%
Health and care	44,100	54,600	+10,500	24%
Arts and entertainment	7,800	10,200	+2,400	31%
Other services	11,800	15,500	+3,700	31%
Total	387,700	453,900	+66,200	17%

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