

Examination of the Welwyn Hatfield Local Plan

Council's Hearing Statement for Matter 2

Overarching Strategy: Q3 Employment Forecasts

9 October 2017

(For Hearing Session 24-26 October 2017)



Employment Forecasts

Are the employment forecasts and targets appropriate?

Welwyn Hatfield Response

- 3.1 Forecasting long-term economic change is always a difficult task. It is not an exact science, and there is no way to accurately and confidently predict future economic change. There are a multitude of economic, technological, social, and political factors (both domestic and international) that can influence the overall employment numbers in an area, as well as the distribution of employment by sector.
- 3.2 In addition to the above limitations, the United Kingdom is currently facing exceptional levels of economic uncertainty as it starts the process of exiting the European Union. The uncertain economic climate makes economic forecasting even more challenging.
- 3.3 Forecasting employment change at the local (i.e. borough) level, brings its own additional set of challenges, as the economic forecasts of all major UK forecasting houses are based primarily on national and regional forecasting models, that in simple terms allocate a proportion of regional growth to each local authority. This is done in a relatively crude way which may not necessarily fully reflect local characteristics.
- 3.4 To address the above limitations, and in accordance with Planning Practice Guidance, the most recent updates to the Welwyn Hatfield Economy Study (ECO/7 in 2015 and ECO/9 in 2017) considered a range of employment scenarios including:
 - A scenario based on the December 2016 employment forecasts produced by Experian;
 - A scenario based on the August 2016 East of England Forecasting Model (EEFM) employment forecasts produced by Cambridge Econometrics;
 - A hybrid scenario combining the Experian and EEFM scenarios.
- 3.5 Informing the most recent update in ECO/9, Experian's December 2016 employment forecasts project a 26% increase in total full-time equivalent (FTE) employment over the period 2013-2032 (+16,300 FTEs). The total number of workforce jobs (not FTEs) is projected to increase by 23% over the same period (+19,400 jobs). EEFM's August 2016 employment forecasts project lower levels of employment growth, with FTE employment projected to increase by 16% over the period 2013-2032 (+11,800 FTEs) and total employment (not FTEs) projected to increase by 17% (+13,400) over the same period.
- 3.6 The Experian and EEFM forecasts present significantly different projections of employment growth over the assessment period. As Experian and Cambridge Econometrics are both reputable forecasting houses, it is difficult to judge which set of forecasts is likely to be more accurate over the period to 2032. For this reason, the hybrid scenario combines the two to provide an alternative economic growth projection that sits between the two sets of forecasts. According to the hybrid scenario in the most recent Economy Study Update (ECO/9 in 2017), full-time equivalent (FTE) employment over the period 2013-2032 is projected to increase by 21% (+14,300 FTEs). This translates to an increase in the total number of jobs (not FTEs) of 20% over the same period (+16,600 jobs). This is similar to the 16,900 job figure in ECO/7, which was the most up-to-date evidence at the time of the Regulation 19 consultation on the Local Plan and which resulted in the plan's reference to that number (para 5.4).

- 3.7 Representations at the Regulation 19 stage indicated various levels of agreement with the established economic needs for the borough – some indicated that they were too high (for example unduly influenced by historic circumstances – see below), and some considered that they were too low (for example underestimating likely future growth in certain sectors. None of these respondents advanced a specific alternative approach to establishing need nor explained how it would be more sound than the hybrid approach taken by the Council, and as such did not result in any changes to the strategy. One representation also indicated a view that employment need was overstated as there are already sufficient sites allocated in the sub-region – because of a lack of evidence of this, and that in any case such an approach would exacerbate unsustainable travel patterns, reducing provision would not be a sound amendment.
- 3.8 The Welwyn Hatfield Economy Study concluded that the hybrid scenario offered the most balanced projection of employment growth over the period 2013-2032. Academic research has demonstrated that combining forecasts improves accuracy relative to individual forecasts. This is particularly the case when it is difficult to choose a best scenario. As such the Economy Study has followed a sound approach of testing a range of employment growth scenarios and identified the one that provided the most balanced and realistic projections, based on local insight, understanding of the local economy, and professional judgment.
- 3.9 Planning Practice Guidance states that the assessment of need should be proportionate and does not require planning authorities to consider purely hypothetical future scenarios, only future scenarios that could be reasonably expected to occur. Considering the range of scenarios tested, the hybrid scenario appears to be the most realistic, reasonably expected to occur, and best reflecting local circumstances.

Are they unduly influenced by one-off historic circumstances?

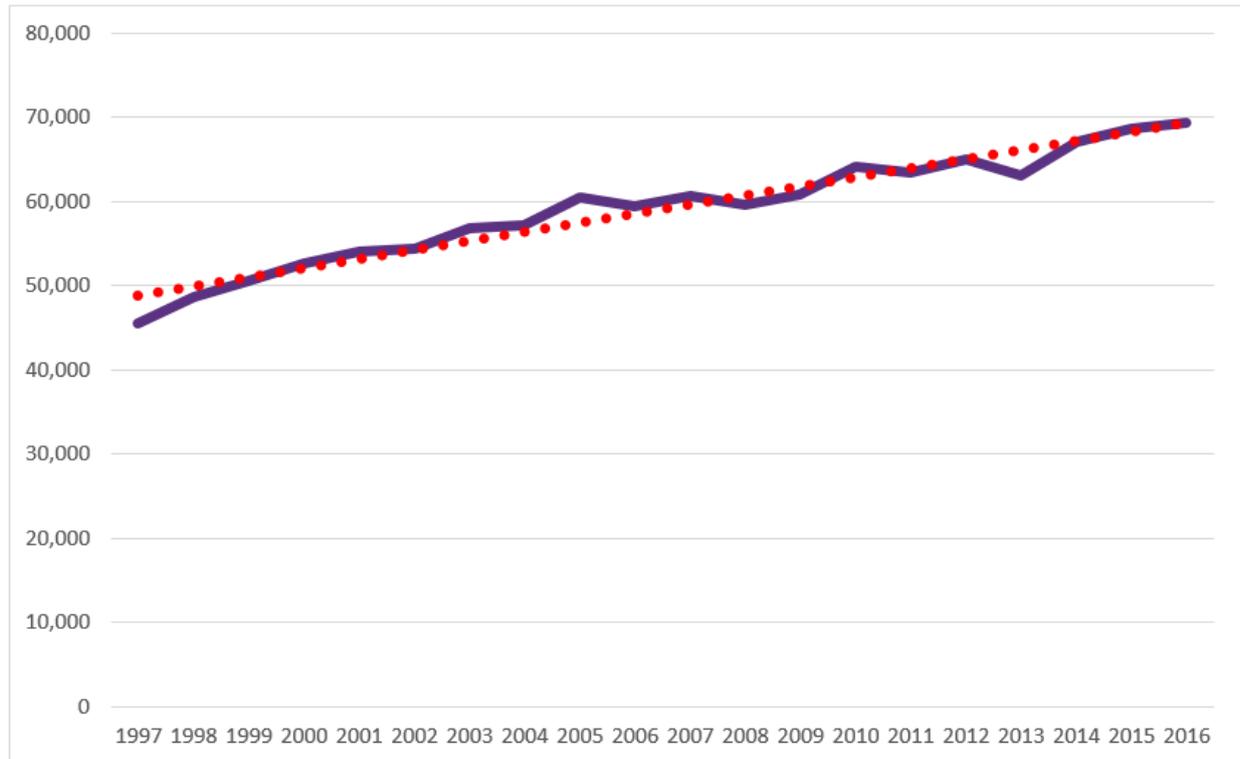
Welwyn Hatfield Response

- 3.10 The only objective benchmark for retrospectively evaluating the realism and appropriateness of future employment forecasts is the analysis of historical employment growth levels. Experian provides a full set of historical employment data going back to 1997.
- 3.11 The analysis of Welwyn Hatfield’s historical employment figures in the table below shows that FTE employment increased by 52% (+23,800 FTEs) between 1997 and 2016. This shows that the observed levels of employment growth over that period have been much higher than levels of employment growth projected by any of the Experian, EEFM or hybrid scenarios. The twenty-year period from 1997 to 2016 is an appropriate evidence base for reality-testing the future employment growth scenarios. This is because it includes a full economic cycle: the years before, during and after the great economic recession of the late 2000s and early 2010s.

Comparison of employment forecasts with historic growth data	FTE employment change	
Experian 20-year projection 2013-2032	+16,300	+26%
EEFM 20-year projection 2013-2032	+11,800	+16%
Hybrid 20-year projection 2013-2032	+14,300	+21%
20-year historical data 1997-2016	+23,800	+52%

3.12 A closer analysis of Welwyn Hatfield’s employment data over the past 20 years (Figure 1 below) shows a remarkably smooth growth trend. There have been limited fluctuations from the trend, and no major outliers (a statistical observation that is markedly different in value from the others in a sample). Figure 1 demonstrates that Welwyn Hatfield’s economy is remarkably resilient, experiencing a relatively small decline in employment as a result of the great recession but recovering swiftly afterwards.

Figure 1 – Historical total FTE employment in Welwyn Hatfield, 1997-2016



3.13 The average (arithmetic mean) annual growth rate between 1997 and 2016 was 2.27%. The more accurate way to calculate the level of employment growth over the period 1997-2016 however is the compound annual growth rate (CAGR)¹. The CAGR over that period was 2.24%.

3.14 The fact that the arithmetic mean and the CAGR are almost identical confirms that there was very little volatility in the rate of employment growth in Welwyn Hatfield between 1997 and 2016, with FTE employment growing by approximately 2.24% year-on-year. Applying the historic CAGR of 2.24% forward over the period 2013-2032 would result in a 52% increase in FTE employment over the assessment period. In comparison, the hybrid scenario suggests more conservative growth of 21% between 2013 and 2032.

3.15 As such it is clear that historical growth has not unduly influenced projected future growth. Maintaining a more conservative economic outlook is considered appropriate given the current economic circumstances – uncertainty over the outcome of the Brexit

¹ CAGR is the annual growth rate over a period of years, calculated on the basis that each year's growth is compounded. This means that the amount of growth in each year is included in the following's year's number, thus providing a more accurate figure than the arithmetic mean.

negotiations and forecasts of slower UK economic growth over the coming years² make it difficult to argue that Welwyn Hatfield's employment will continue to grow at a rate of 2.24% per year. As discussed earlier, both Experian and EEFM forecasting models take into account national economic trajectories, which is why they are preferable to a purely trend-based approach.

- 3.16 Given the above, the hybrid scenario's projection of average annual employment growth of 1% (which combines the forecasts of two of the UK's most reputable forecasting houses) is considered to be pragmatic and appropriate at this point in time. As with any long-term economic forecasting, the assessment of economic need should be updated on a regular basis to ensure it reflects the latest economic, political and technological developments.

² The International Monetary Fund's (IMF) World Economic Outlook suggests that annual UK economic growth will be lower than 2% over the coming years.