Stevenage Employment Technical Paper Update

Stevenage Borough Council

December 2016

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BOROUGH COUNCIL

Contents

1.0   # Introduction

1.1   An Employment Technical Paper was prepared by Stevenage Borough Council (SBC) in December 2015 to provide additional information to help explain how policies in the draft local plan at the time had been developed.[1] This work follows on from the Employment & Economy Baseline Study (EEBS) prepared by NLP on behalf of SBC in 2013 to inform preparation of the new Local Plan up to 2031.[2]

1.2   The purpose of this Update Paper is to review the estimated requirements for employment floorspace drawing on the latest evidence and consider this against the identified future land supply within the Borough. It represents a partial update to the 2015 Employment Technical Paper, and accordingly, the two documents should be read alongside each other.

What is a Technical Paper?

1.3   A technical paper is intended to provide additional contextual information and analysis to help explain how policies drafted within a Local Plan have been developed.

1.4   SBC's Local Plan evidence base contains a number of studies although it is not always appropriate or possible to simply translate their recommendations directly into policy. This is due to a number of (overlapping) reasons including:

- Evidence needs to be considered 'in the round'. Evidence base studies normally focus on particular issues or specialist areas; Once they are completed, the Council should consider how they interact with the findings of other work that has been carried out;

- Government policy is set out in the National Planning Policy Framework (NPPF) and associated Planning Practice Guidance (PPG). These are clear that many of the analyses that the Council is required to carry out to support its plan should be objective and 'unfettered' by other considerations;

- This means that the Council need to look across all of the evidence it has gathered, including public consultation responses, and come to a view on:

    a The most appropriate balance of land uses for the plan;

    b The most appropriate targets for these land uses (where relevant);

    c The most appropriate sites where these requirements can be met.

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[1] Employment Technical Paper, Stevenage Borough Council, December 2015
http://www.stevenage.gov.uk/content/15953/26379/43876/Employment-Technical-Paper-2015.pdf
[2] Stevenage Employment and Economy Baseline Study, Nathaniel Lichfield & Partners, March 2013
http://www.stevenage.gov.uk/content/committees/87812/88269/88273/executive-28-may-2013-item-6-bd15.pdf

- Some potential sites will have been promoted for more than one use. A landowner might be willing, for example, to let their land be used for either housing or employment. The Council should decide which, if any, of these uses is most appropriate;

- Some potential sites identified in the evidence base will be in less preferable areas for development. The Council needs to work out whether it is necessary or appropriate to use any of these sites;

- Objections may be received to the findings of evidence base studies, which may use alternate sources of information that might suggest slightly different answers could be available;

- New data may have been released since the relevant study was completed; and

- The Council must consider how its evidence and emerging proposals compare with those of other nearby authorities.

1.5   Technical papers help to explain how the Council has taken these matters into account and got 'from A to B', or from initial study findings to the policies in the plan.

What does this technical paper cover?

1.6   This paper covers employment, in terms of both demand and supply. In planning, employment land usually refers to 'B-class' uses[3] and includes:

- B1(a) – offices

- B1(b) – research and development

- B1(c) – light industry

- B2 – general industry; and

- B8 – storage and distribution.

1.7   This technical paper primarily focuses upon these use classes and the implications of future growth (or decline) in these sectors for the Local Plan. However, the role of other, non-B-class sectors in providing jobs is acknowledged. This includes jobs in sectors such as health, retail, leisure and education.

What are the key evidence studies?

1.8   The following studies should be read alongside this technical paper:

- Stevenage Employment and Economy Baseline (Nathaniel Lichfield & Partners [NLP], 2013)

- Functional Economic Market Area Study: Stevenage, North Hertfordshire and Central Bedfordshire Councils (NLP, 2015)

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[3] Different land uses are categorised into classes by Government. These are defined by the Town and Country Planning (Use Classes) Order (1987) as amended.

- Land Availability Assessment – Employment (Stevenage Borough Council (SBC), 2015)
- Stevenage and North Hertfordshire Strategic Housing Market Assessment Update (Opinion Research Services (ORS), 2015)
- Stevenage Central Town Centre Framework (David Lock Associates (DLA), 2015)
- Whole Plan Viability Study including Community Infrastructure Levy (HDH Planning & Development (HDH), 2015)
- Green Belt Technical Paper (SBC, 2015)

Which other authorities' plans, proposals and evidence are most relevant?

1.9   The plans, proposals and evidence of Central Bedfordshire, North Hertfordshire and Welwyn Hatfield councils are of most relevance when considering employment issues for Stevenage.

What are the key issues for this paper?

1.10   This paper provides further explanations of:

- How Stevenage's future employment land needs have been identified and why the method used and targets in the local plan are appropriate;
- How the sites that will contribute towards these needs within the Borough have been identified; and
- What the implications are from this review with regards to Stevenage's ability to accommodate its employment land needs within the Borough boundary.

2.0   **Demand for New Employment Land**

2.1   The first stage of the analysis is to review demand-side factors to determine how much employment land should be planned for. This is carried out below, having regard to studies that form part of the evidence base and other relevant strategies and monitoring data.

Employment baseline study

2.2   An Employment & Economy Baseline Study was carried out by NLP in March 2013 and provided an objective assessment of future requirements for employment land within Stevenage Borough.

2.3   In evaluating future requirements, five different scenarios were developed, as follows:

1   Baseline job growth based on 2012 East of England Forecasting Model

2   Higher enterprise job growth

3   Past take-up (baseline)

4   Past take-up (high)

5   Labour supply (based on an assumed 300 dwellings per annum)

2.4   These scenarios generated a range of future job, floorspace and land requirements for B class uses. When compared with an existing supply allowance of 3ha, the scenarios generate a range of residual requirements ranging from a surplus of 6ha of employment land over the plan period (i.e. too much land) to a shortfall of 47ha (i.e. a need for additional land).

2.5   NLP considered the two outliers to be less appropriate as bases for future planning, leaving three scenarios which projected **a net requirement for between 20ha and 30ha of employment land over the period 2011-2031**. This took an existing supply allowance of 3ha into account[4]. These scenarios were reflected in the first consultation on the Local Plan held in 2013, and are summarised in the table below.

Table 2.1   Summary of scenarios in NLP baseline study (net land requirements)

Scenario	Net Land Requirement		
	Industrial	Office	Total
Baseline *	4ha	16ha	20ha
Higher Enterprise	4ha	18ha	22ha
Labour Supply	19ha	11ha	30ha

Source: NLP 2013   * Note: based on 2012 EEFM

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[4] This 3ha represented the alternative supply position at the time which excluded two sites within the GSK campus which had planning consent for the specialist Bioscience Catalyst and the former Kodak site from the available supply position

2.6   The Baseline and Higher Enterprise scenarios were underpinned by the autumn 2012 run of the East of England Forecasting Model (EEFM)[5]. The Labour Supply scenario projected a higher requirement for industrial floorspace in the future, in contrast to the other options.

2.7   NLP advised that these scenarios should be considered as a minimum with the potential to seek a more aspirational approach. The NLP study forms the Council's starting point for the consideration of employment land issues and should be referred to for more detail.

Further analysis of the EEFM baseline

2.8   Since publication of the NLP study, three further runs of the EEFM have been released. The spring 2013 baseline was released in August 2013, the autumn 2014 baseline released in January 2015 and the 2016 baseline was released in August 2016. Prior to the completion of the NLP study, EEFM model runs had been released in 2009 and 2010.[6]

2.9   The NLP study contains a detailed explanation of the assumptions and ratios used to translate the 2012 EEFM forecasts into the requirements identified in Table 2.1. These assumptions have been applied on a broadly consistent basis by SBC to the other, more recent EEFM forecasts to give an indicative comparison of how the projected land requirements for the Borough have changed over time.

2.10   Using the same approach as the 2015 Employment Technical Paper to calculate estimates of land and jobs requirements arising from this data, the latest 2016 EEFM forecasts produce the lowest land requirement for the Borough of all sets of forecasts reviewed since 2009 (Table 2.2).

Table 2.2   Estimates of B-class job and land requirements in Stevenage from EEFM results

EEFM Model Run	Total jobs 2011-2031	B-class jobs 2011-2031	Approx. gross B-class land requirement 2011-2031		
			Industrial	Office	Total
2016	3,800	-3,000	7ha	8ha	**15ha**
2014	4,400	1,400	7ha	16ha	**23ha**
2013	5,000	4,500	18ha	22ha	**40ha**
2012	3,400	1,000	6ha	17ha	**23ha**
2010	11,500	5,750	14ha	27ha	**41ha**
2009	11,400	4,220	30ha	20ha	**47ha**
Annual Average (2009-2016)			**14ha**	**18ha**	**32ha**

Source: Employment & Economic Baseline Study (NLP, 2013) / EEFM / SBC analysis. Job numbers rounded to nearest 100. Land requirements independently rounded to nearest hectare.

2.11   The 2012 EEFM results used within the NLP study, along with the 2014 forecasts, translate into a requirement for 23ha of employment land over the 20 year plan period. However, it is notable that other runs of the model result in

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[5] http://www.cambridgeshireinsight.org.uk/EEFM

[6] Earlier runs of the EEFM (and its predecessors) also exist though have not been considered for the purposes of this analysis.

significantly higher land requirements. For example, the 2010 and 2013 EEFM data releases suggest a requirement for approximately 40ha of employment land over the period 2011-2031, while the 2009 results suggest 47ha. As such, it was considered appropriate at the time the 2015 Employment Technical Paper was prepared to plan for at least 30ha of employment floorspace, the higher end of the NLP study recommendation (of 20-30ha), to ensure that the Council would not be underproviding employment land.

2.12   There have also been significant variations in the proportion of future jobs predicted to occur in B-class uses in Stevenage. Table 2.2 shows that the 2013 EEFM run was a significant outlier in this respect. It forecast that 90% of future jobs would be in B-class uses. The remaining forecasts project B-class uses will account for between 29% and 50% of total future job growth.

2.13   The key exception to this is the latest 2016 release of the EEFM model which implies a significant decline in B-class jobs in the Borough over the 20 year period 2011-2031 (equivalent to around 3,000 jobs), despite overall employment growing by just under 4,000 (Table 2.2). The 2016 release represents the only year in the series where the EEFM model predicts that B-class employment will decline in Stevenage over the study period in question.

2.14   As shown in Table 2.3 below, the forecast decline in B class jobs in Stevenage over the period to 2031 implied by the latest 2016 EEFM model run also deviates from the past trajectory of B class job growth recorded within the Borough over recent years. Where historic B class job growth has been recorded by previous EEFM model runs (i.e. in 2012, 2013 and 2014), to varying degrees this growth is also projected to continue in future up to 2031 (Table 2.3).

Table 2.3   Implied historic and forecast annual B Class job growth from EEFM results

EEFM Model Run	Average Annual B Class Job Change		
	1991-2011 Historic Trend	2001-2011 Historic Trend	2011-2031 Forecast
2016	n/a*	20	**-160**
2014	140	155	**65**
2013	120	110	**235**
2012	135	150	**45**

Source: EEFM 2012, 2013, 2014, 2016 / NLP analysis
* Note: 2016 EEFM model run only provides historic employment data back to 2001

2.15   Part of this decline implied by the 2016 EEFM model may also be explained by a potential data anomaly associated with the Business Services sector right at the start of the study period, which implies an unusually sharp decline in this employment sector in Stevenage between 2011 and 2012 (although other B-class sectors apart from business services are also forecast to decline in employment terms).

2.16   The resulting 15ha gross land requirement derived from the 2016 EEFM is driven exclusively by an allowance for a safety margin and replacement of ongoing employment floorspace losses.

2.17   The 2016 figure of 15ha is significantly lower than previous estimates and the 30ha figure recommended by the 2015 Employment Technical Paper. The 2015 Technical Paper acknowledged the fluctuation in EEFM data each year and that the data sources can be subject to errors and/or anomalies that skew the results. The NLP study took this into account when making its recommendation. A change in the EEFM model provider between the latest 2016 release (prepared by Cambridge Econometrics) and previous releases (prepared by Oxford Economics) may also explain some of the variation between the more recent employment growth estimates, as some of the underlying assumptions and data sources have changed.[7] Given the apparent anomalous 2016 figure, it would be unwise to rely on it alone.

2.18   Looking across all six years of EEFM estimates (as presented in Table 2.2), the average gross floorspace requirement equates to just under 32ha over the 20 year period 2011-2031, and the rolling average over the last 3 years equates to 26ha. **For this reason, maintaining a 20 year employment land target of around 30ha appears to represent the most appropriate way forward,** particularly given the scope for significant fluctuation in growth assumptions between different EEFM data releases. This also aligns with the LEP's strategy for over 30ha of employment land to be delivered in this area.

2.19   Reducing the target would not only risk not meeting the needs of the Borough, but would also not align with Stevenage's ambitions for large-scale regeneration of the town centre, which it is hoped will significantly increase investment in the Borough.

The balance between dwelling and employment provision – EEFM

2.20   The housing evidence base for the Local Plan identifies an objectively assessed need (OAN) of 7,300 homes over the plan period 2011-2031[8]. The Submission Local Plan translates this into a marginally higher housing target of 7,600 homes. This latter figure broadly aligns with the Government's (CLG's) 2012-based household projections[9]. These are, in turn, informed by ONS' 2012-based population projections.

2.21   It should be noted that since the Council's objective assessment of housing need was prepared in June 2015, the Government have released an updated set of sub-national population projections (2014-based), published in May 2016.

2.22   The NPPF, and associated guidance, emphasise the need to achieve a broad balance between housing and employment growth.

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[7] A technical methodology note setting out assumptions and data sources for the latest 2016 EEFM data release has not yet been released by Cambridgeshire County Council.

[8] Stevenage and North Hertfordshire Strategic Housing Market Assessment Update (SHMA) (ORS, 2015)

[9] The CLG forecasts suggest an increase of 7,700 households between 2011 and 2031. It is acknowledged that household numbers do not translate directly into dwellings.

2.23   The EEFM baseline forecasts include a 'demand for dwellings' measure. The demand for dwellings in Stevenage across the six most recent model runs is shown in Table 2.4 below.

Table 2.4   Demand for dwellings forecast by EEFM (2011-2031)

EEFM model run	Demand for dwellings
2016	7,150
2014	6,500
2013	4,400
2012	6,200
2010	6,500
2009	6,300

Source: EEFM

2.24   The demand for dwellings measure arising from the EEFM has remained fairly consistent across the majority of recent model runs, indicating a requirement for around 6,500 new homes over the plan period (with the exception of the years 2013 and 2016).

2.25   This supports observations set out within the 2015 Employment Technical Paper that it is commuting movements that 'take up the slack' in the job projections with higher in-commuting forecast in the pre-2012 EEFM results and more out-commuting forecast in more recent results, particularly the 2014 EEFM. The methodology of the EEFM is such that low employment growth will effectively 'trigger' increased commuting to better performing areas (and vice versa):

"each available job…is allocated to a resident of one of the authorities with which the area has commuting links, in proportion to the strength of that link. This method assumes that commuting patterns do not change [proportionally] over time."[10]

2.26   The 2016 EEFM demand for dwellings figure stands at 7,150 (covering the 20 year plan period 2011-2031) which represents the highest figure across the six year time series.

2.27   All of these demand for dwellings measures (as summarised in Table 2.4) fall below the identified OAN / housing target of 7,600 with the latest 2016 EEFM figure (at 7,150) being closest to this target figure.

Conclusions

2.28   From the analyses above, a number of conclusions can be drawn. With regards to the EEFM, it can be seen that:

a   The EEFM results for Stevenage can vary significantly from one model run to another;

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[10] East of England Forecasting Model Technical Report: Model Description and Data Sources (Oxford Economics, 2015)

b   The model runs in 2009 and 2010 projected significantly higher overall jobs growth for Stevenage than the model runs after this time, with the latest 2016 EEFM data projecting lower levels of job growth in Stevenage when compared with the previous release (2014), reinforcing this overall trend of decline;

c   The number of forecast B-class jobs also varies, both in terms of absolute numbers and the proportion of total jobs;

d   The EEFM results have been translated into B-class land requirements, broadly using the assumptions from the 2013 NLP study. These range from 15 to 47ha over the plan period, with the latest EEFM release (2016) generating the lowest land requirement of all releases in the time series. This is partly explained by a potential anomaly relating to employment recorded within the business services sector, although all B class sectors of the economy are projected by the EEFM 2016 to decline to 2031.

2.29   To determine land requirements for the purposes of the Local Plan, it is necessary to make a balanced and pragmatic planning judgement based on these factors. In light of the variations between forecasts and issues identified, **a trend-based B-class land requirement of 30ha over the period 2011-2031 is still assumed to be appropriate**.

3.0 # Supply of Employment Land

3.1 Having established a position in relation to demand, it is necessary to turn to supply. This will help to determine the extent to which the requirements identified in the preceding section can be accommodated in Stevenage.

Pipeline Supply

3.2 Within the Stevenage Borough Local Plan 2011-2031 Publication Draft (January 2016), Policy EC1 allocates seven sites for employment development over the plan period. SBC estimates that together, these sites have the potential to accommodate over $140,000m^2$ of employment floorspace to 2031.

3.3 Beyond these sites, the Council's latest Annual Monitoring Report (2015/16 Partial Update (Housing and Employment)) identifies a number of sites within the Borough that benefit from planning permission for B use class development that is either under construction or not started. Some of these permissions imply a net loss of B class floorspace if implemented in full.

3.4 The 2015 Employment Technical Paper also identified a number of sites within Gunnels Wood where it is considered that more intensive use could be accommodated through redevelopment and/or intensification. This is particularly true in that part of Gunnels Wood closest to the town centre, identified as an 'Edge of Centre Zone' in the draft plan. The 2015 Paper quantified these opportunities to amount to approximately 2ha of land and this figure has been carried forward into this update paper.

Aligning Demand with Supply

3.5 Having conducted this analysis, it is necessary to synthesise the supply-side and demand-side analysis to determine the extent to which the updated requirements identified in Section 2.0 of this paper might be met.

3.6 A view needs to be taken on whether individual sites or schemes contribute to the trend-based requirements. As explained in Section 2, forecasts of future employment requirements are generally 'policy off' and influenced by past trends and / or performance. Schemes which deviate from the general parameters which have informed these forecasts are viewed as 'policy on' responses. For Stevenage, this is particularly pertinent for development in the R&D sector and in locations in and immediately around the town centre.

3.7 Table 3.2 on the following page sets out this synthesis. This has been undertaken on a consistent basis to the 2015 Employment Technical Paper.

Table 3.1   Aligning supply-side and demand-side analysis

Site / category	Supply side 2011-2031		Demand side 2011-2031			Commentary
	Site area (ha)	Floorspace (m^2)	Contributes to trend-based demand requirement?	Contribution to trend-based demand (land)	Contribution to trend-based demand (floorspace)	
Completions						
Completions to 31/03/2016	-2.8	-25,000	Yes	0	0	Estimate based on SBC monitoring data 2011-16. Net loss of land broadly equal to loss replacement allowance made within gross land requirement for this 5 year period, so discounted to avoid 'double counting'
Extant Planning Permissions						
Planning Permissions Under Construction	-1.5	-20,000	Yes	-1.5	-20,000	Comprises a number of individual sites and permissions, all of which considered to represent trend-based 'business as usual' development. Includes a number of losses/COU of high density office premises resulting in a net loss of floorspace but net gain in land
Unimplemented Planning Permissions	2.5		Yes	2.5		
Future Sites: Draft Local Plan Employment Allocations						
GSK / Stevenage Bioscience Catalyst	12.0	50,000	Part	1.0	4,000	EEFM (2016 and previous releases) imply low levels of job growth in R&D sector – approx. 1ha over the plan period. Remainder of allowances at GSK considered a 'policy on' response
South of Bessemer Drive, Gunnels Wood	2.2	12,000	Yes	2.2	12,000	Assumed to be available to contribute to general market needs
West of Gunnels Wood Road	1.0	4,000	Yes	1.0	4,000	Assumed to be available to contribute to general market needs
Land west of North Road	5.0	20,000	Yes	5.0	20,000	Assumed to be available to contribute to general market needs
Stevenage Central	1.8	35,000	Part	0.3	6,000	Predominantly a 'policy on' response as no equivalent town centre market in the past to influence trends. Small allowance made to represent partial replacement of existing town centre stock
West of Stevenage	2.0	10,000	Yes	2.0	10,000	Assumed to be available to contribute to general market needs
Land west of Junction 8	4.0	12,500	Yes	4.0	12,500	Assumed to be available to contribute to general market needs
Broad Areas / Windfall Opportunities						
Gunnels Wood Edge of Centre Policy Area	2.0	15,000	Yes	2.0	15,000	75% plot ratio. Assumes that a number of sites can be redeveloped/intensified for B use classes
Total	**28.2**	**113,500**		**18.5**	**63,500 (min)**	
			Requirement	**30.0**		
			Balance	**-11.5**		

3.8   As shown in Table 3.2, a total of 28.2ha of land has been identified on the supply side. It is estimated that this will deliver approximately 113,500m^2 of floorspace.

3.9   'Policy on' schemes (at GSK and in Stevenage town centre) have been discounted from being able to meet the identified trend-based requirement. Following this process, it is determined that the sites and schemes will contribute just under 19ha towards the demand-led projections.

3.10   As established in Section 2.0 of this paper, a trend-based requirement for at least 30ha is established. The opportunities identified will therefore deliver approximately 62% of the required quantum of employment land, resulting in a shortfall of approximately 11.5ha (see Table 3.2).

Conclusions

3.11   The pipeline supply of employment space in Stevenage has been estimated based on drawing together a number of sites that have been allocated for employment development within the Publication Draft Local Plan alongside other sites that have extant planning permission for B class development (either under construction or not started) and sites within the Gunnels Wood 'Edge of Centre Zone' that have potential to be intensified to accommodate a greater quantum of employment floorspace over the plan period.

3.12   Together, these sites or areas are considered to be able to make a positive contribution to future employment land requirements in the Borough.

3.13   Some schemes (including proposed developments at GSK and in Stevenage town centre) are considered to only make a partial contribution to the EEFM trend-based requirements as they represent policy on responses which are not necessarily captured in the baseline economic forecasts.

3.14   Overall, it is considered that Stevenage can meet just under two thirds of future forecast demand for employment land based on currently identified pipeline supply.

4.0 # Overall Conclusions and Implications

4.1   This technical paper update has considered the various studies that comprise the Council's employment evidence base. It has considered the results of these 'in the round' alongside subsequently released data to inform the employment strategy of the Local Plan.

4.2   A review of EEFM employment data releases over the last few years demonstrates that implied growth forecasts for Stevenage have fluctuated significantly over time. Based on synthesising the latest EEFM results, a pragmatic requirement for at least 30ha of employment land is identified.

4.3   Beyond this 'baseline' position, there may be a need to plan for additional employment land requirements, particularly for those sectors or schemes which have been identified as priorities but which are not captured in forecasts based upon past performance, including Research and Development and high-intensity, high quality office provision.

4.4   A synthesis of the supply-side and demand-side data suggests that there is insufficient land available to meet the trend-based requirement for employment land in Stevenage over the 20 year plan period 2011-31. Under this scenario, around two thirds (62%) of the trend-based requirement of c.30ha would be met, resulting in a shortfall of approximately 11.5 ha of employment land.

4.5   The need for some employment provision to be made outside of the Borough boundary appears inevitable and the Council will need to pursue other opportunities to accommodate its need through the Duty to Co-operate.