

Employment Provision Technical Note – TN3.2/CS/2010
Joint Technical Unit, July 2010

This note summarises a methodology to calculate an implied reduction in the required provision of employment land. This reduction arises from both the decision to progress the Core strategy for the Growth Area on a 15 year and not 20 year planning horizon, and the from the scaling down of housing provision to meet locally generated needs.

This will imply a reduced jobs growth target to balance with a reduced housing provision. Land provision may therefore be reduced accordingly.

County Model Household Forecast – indigenous growth

The revised housing provision is based on the Population Model developed originally by Bedfordshire County Council and managed now by the Research Liaison Group (run jointly by Bedford Borough, Central Bedfordshire and Luton. The net nil migration forecast over a 15 year planning period establishes a need to plan for 23,000 homes (2011 to 2026). This represents the natural growth of the indigenous population (i.e. discounting migration).

The Milton Keynes South Midlands Sub-regional Strategy (MKSM SRS) aspiration target for balancing housing and employment was adjusted upward by the Regional Spatial Strategy (RSS) and subsequently the emerging Core Strategy Preferred Options to cover the 30 year planning period 2001 to 2031. This target required 23,000 jobs to 2021 and a further 12,000 jobs to 2031 i.e. 35,000 jobs in total.

Coupled with the housing target to 2031 of 43,200 dwellings the aspiration was therefore to deliver housing and jobs balance which can be expressed as a ratio of 0.8.

However, if the target is adjusted 'pro rata' to 15 years as shown in Appendix 1, this implies a jobs to homes ratio of 0.7. This is due to the relative phasing of housing growth within the plan period, with completion levels increasing in the latter stages of the plan period.

The reduced housing target of 23,000 dwellings over 15 years, indicated by the County model needs forecast, would potentially bring the ratio back into alignment with the jobs/housing balance aspiration ratio of 0.8 (rounded).

Nathaniel Lichfield & Partners study

However, an alternative method to calculate future 15 year employment requirements is set out below. The current Core strategy evidence base includes the joint Luton Bedfordshire Employment Land Review (ELR) 2008, which has been further tested and refined by the consultants Nathaniel Lichfield & Partners (NLP). The NLP study compares the joint Luton and South Bedfordshire ELR 2008 findings on available land supply and economic scenarios with a housing trajectory model. The purpose of the study is to test the ability of employment land supply to accommodate Core Strategy employment aspirations i.e. NLP use demographic multipliers and employment multipliers to test against the employment aspiration.

The reduced local need housing requirement of 23,000 dwellings 2011 to 2026 can therefore, be calculated on the same basis and consistently with the NLP methodology, as set out in the attached Appendix 2. This more robust method indicates a reduced job and land requirement of the following scale:-

Reduced (i.e. 15 year) employment requirements (rounded):-

Period	2011-21	2021-26	2011-26	2006-2031 Core Strategy Ha target of 160ha	15 year jobs/dwellings Ratio
All Jobs	19,000	9,300	28,300		1.2
Revised (B class) Jobs	9,100	4,400	13,400	NA	
Revised Land Ha	+90Ha	+44Ha	+134ha	-26ha	

Note: makes no allowance for future commuting levels

This calculation indicates a need for 28,300 jobs in the economy across all sectors to sustain 23,000 dwellings. This generates a jobs homes balance ratio of 1.2 which arguably, is more logical than a ratio of 0.8 as an aspiration, because it recognises that more households in future may depend on two incomes - in line with current socio-economic trends, although increased tendency to form single households in future may erode this balance.

No allowance has been made for a reduced provision taking into account future commuting patterns. NLP posit a notional 20% and trend 28% factor but any such discounting may just reinforce existing unsustainable trends and so while commuting will continue in future, as an aspiration, arguably the 1.2 ratio should be adhered to.

The NLP methodology also allows the share of 'B class' jobs to be calculated and consequently the demand for net additional employment land. The method builds in demographic and employment factors (Appendix 3) which relate dwellings to household size, working age and economic activity. Floor space/worker ratios and plot size ratios can then be applied to the number of household workers to calculate demand for floor space and then converted in to Ha of land.

The NLP equivalent method therefore calculates B jobs to be equivalent to +134ha and is 26 ha less than the Core Strategy proposed provision of 160ha between 2001 and 2031.

The NLP Study also reviewed the employment land demand and supply identified with the ELR 2008 including the emerging Core Strategy strategic land provision to meet the original growth aspiration of 23,000 jobs to 2021 and 12,000 jobs to 2031. The NLP study clarified this provision follows:-

- 110 ha of existing employment land supply (available commitments and allocations etc) was considered suitable to meet some of the future employment demand.

Therefore, to meet the growth aspiration and allowing for a vacancy assumption, a net requirement of:-

- 114ha to 119 ha is required 2001 to 2021 (the former depending on airport growth with runway improvement or the latter without).
- And 44ha required 2021 to 2031

Provision was identified to deliver this employment with a mix of employment uses on the following sites:-

- land in and around Butterfield
- land at provision at London Luton Airport (Century Park extension) as part of an urban extension to the East of Luton in North Hertfordshire district;
- land within and adjoining the preferred sustainable urban extensions around proposed junction 11A (15ha east + 15 ha west of M1 J11a and 40ha north of HR);
- land at Sundon Quarry
- a scale of employment in and around Leighton Buzzard and Linslade (20ha)

The NLP study concluded that the strategic sites provision proposed in the preferred options would not in themselves generate sufficient employment to meet the jobs aspiration, according to a market view of demand and capacity i.e. only 12,500 -13,300 jobs - although with a greater B1 office component allied to

structural aims of the growth area, this could increase the yield to 14,400 to 15,200 jobs.

Furthermore, when a cautious allowance is made for some of the existing level of available commitments to make a contribution, a further 9,600 jobs may arise to boost supply :-

- 211,000 m2 of office floor space with planning permission in Luton alone at 2008. This includes
- land on established business parks, such as Butterfield 59,000 m2
- large existing development sites such as Century Park (16,700 m2)
- and Napier Park (45,000 m2).
- For industrial sites, there is in the order of 192,000 m2 of space with ,permission, including Century Park (89,000 m2).

A further finding of the NLP housing trajectory model was the distribution, and necessary emphasis, on employment delivery falling initially on Luton and Leighton Buzzard, then Houghton Regis.

Halcrow Employment Land Review 2008

This study predates the NLP work and approaches the issue of employment land provision from a different starting point. Using a set of derived economic forecasts predicting growth in various sectors of the economy, the study calculates that for the period 2001-21 there will be an increase in demand for B-class space of around 42ha. Added to existing demand (606ha) and making an allowance for vacant sites (65ha), this produced a total demand of 713ha across the Luton and South Bedfordshire area.

The study then went on to examine the supply of “fit for purpose” employment sites and concluded that there was 599ha suitable for employment use. This produced a figure of 114ha of new employment land to be identified through the emerging LDF. To this was added a further 44ha required for the period 2021-31.

The change to the end of the plan period means a reduction in employment requirement. This can be done by simply deducting half of the 44ha figure for 2021-31. The change in start date for the plan period is more complicated to account for. The report refers to slight decreases in demand for employment land 2001-6 with growth beginning after that period. However, the current economic slowdown will probably have slowed any such growth. On this basis it would appear reasonable to assume that the demand that existed in 2001 remains in place and still needs to be planned for.

This would produce a demand of 735ha (606ha existing demand + 65ha vacancy allowance + 42ha growth 2011-21 + 22ha growth 2021-26) against a supply of 599ha leaving a shortfall of 136ha for the period 2011-26.

Conclusions

There is a clear case for a downward adjustment of the proposed Core strategy B class employment land supply of 160 Ha 2006 to 2031. Using the NLP methodology would suggest a reduction to 134ha, whereas the Halcrow ELR methodology would suggest a reduction to 136ha.

Furthermore, such a reduction might be suited to a review of existing commitments or even existing stock if a view is taken that strategic sites are critical in their contribution to the economic diversification aspiration and to make most of the advantages with transport locations and an accessible workforce in Sustainable Urban Extensions.

Alternatively, the mix of existing supply in the planning pipeline may provide a healthy pool for immediate and interim requirements, including meeting urban regeneration objectives. The NLP and ELR 2008 calculations were based on 2006 and assumptions then on employment generation would have been more optimistic. Unemployment in Luton has increased significantly since 2008:-

	Sep-08	Sep-09	Change	%change
LBC	3,711	6,243	2,532	68.2
GA	5,002	8,896	3,894	77.8

LBC/E&R Unemployment Bulletin

Although there has been a small reduction in the figures for 2010, it is likely in the current economic and public spending outlook, that unemployment may resume and upward trend in the foreseeable future.

A more pragmatic position might be to safeguard commitments and strategic provision but subject any Strategic employment provision contingency to phasing.

This would mean assuming strategic allocations together, make a contribution towards employment with the 15 year plan period with the equivalent 26 Ha reduction being apportioned and safeguarded to make 'headroom' beyond 2026.

Monitoring delivery of the growth area could then review elements of safeguarded land coming forward beyond the 15 year plan, when specific triggers are reached.

Appendix 1: 15 Year pro rata equivalent MKSM targets

A 15 year Plan might imply:-

Dwellings Target	2011-2021	2021-26	2011-26	15 year Jobs/dwellings ratio
MKSM (Luton/D/HR/LL)	16,300	7,700	24,000	
Residual rural area	500	250	750	
Total	17,300	7,950	24,750	
Ratio				0.7
Jobs Target				
GA (Luton+S.Beds)	11,500*	6,000**	17,500	

- *23,000 jobs 2001 to 2021 divided by 20year x10years=11,500 jobs 2011 to 2021
- **12,000 jobs 2021 to 2031 divided 10yr x5yr=6,000 jobs

Appendix 2: Housing & Jobs equivalent

Previous "Preferred Options" option

	Dwellings		Jobs		Total Dwellings		Total Jobs		Total	
	2011-16	2011-16	2016-21	2016-21	2011-21	2011-21	2021-26	2021-26	2011-26	2011-26
Requirement	10,125		5,375		15,500		7,500		23,000	
Urban capacity - Luton	4,500	5,227	1,200	1,394	5,700	6,621	2,100	2,439	7,800	9,060
Urban capacity - South Beds	3,200	4,051	500	633	3,700	4,684	1,000	1,266	4,700	5,950
Total urban capacity	7,700	9,278	1,700	2,027	9,400	11,305	3,100	3,705	12,500	15,010
Rural allocations	250	316	250	316	500	633	250	316	750	949
North Houghton Regis SUE	1,150	1,456	2,000	2,532	3,150	3,987	2,000	2,532	5,150	6,519
North Luton SUE	175	222	175	222	350	443	1,750	2,215	2,100	2,658
East Leighton Linslade SUE	850	1,076	1,250	1,582	2,100	2,658	400	506	2,500	3,165
Total provision	10,125	12,348	5,375	6,679	15,500	19,026	7,500	9,275	23,000	28,301
Net diff	0		0		0		0		0	

B class jobs

	Jobs	B jobs	Jobs	B jobs	Jobs	B jobs	Jobs	B jobs	Total Jobs	Total B jobs
	2011-16	2011-16	2016-21	2016-21	2011-21	2011-21	2021-26	2021-26	2011-26	2011-26
							2021-2 jobs over the 15 year period and consequently a land budget to generate this figure of 6			
Requirement										
Urban capacity - Luton	5,227	2,655	1,394	708	6,621	3,363	2,439	1,239	9,060	4,603
Urban capacity - South Beds	4,051	1,859	633	291	4,684	2,150	1,266	581	5,950	2,731
Total urban capacity	9,278	4,515	2,027	999	11,305	5,513	3,705	1,820	15,010	7,334

Rural allocations	316	145	316	145	633	291	316	145	949	436
North Houghton Regis SUE	1,456	668	2,532	1,162	3,987	1,830	2,532	1,162	6,519	2,992
North Luton SUE	222	102	222	102	443	203	2,215	1,017	2,658	1,220
East Leighton Linslade SUE	1,076	494	1,582	726	2,658	1,220	506	232	3,165	1,453
Total provision	12,348	5,924	6,679	3,134	19,026	9,058	9,275	4,377	28,301	13,434
Net diff										

	B class jobs		FL/W		FL/W		FL/W		Total	
	B jobs	Ha	B jobs	Ha	B jobs	Ha	B jobs	Ha	B jobs	FL/W
	2011-16	2011-16	2016-21	2016-21	2011-21	2011-21	2021-26	2021-26	2011-26	2011-26
Requirement										
Urban capacity - Luton	2,655	13	708	4	3,363	17	1,239	6	4,603	23
Urban capacity - South Beds	1,859	9	291	1	2,150	11	581	3	2,731	14
Total urban capacity	4,515	23	999	5	5,513	28	1,820	9	7,334	37
Rural allocations	145	1	145	1	291	1	145	1	436	2
North Houghton Regis SUE	668	3	1,162	6	1,830	9	1,162	6	2,992	15
North Luton SUE	102	1	102	1	203	1	1,017	5	1,220	6
East Leighton Linslade SUE	494	2	726	4	1,220	6	232	1	1,453	7
Total provision	5,924	30	3,134	16	9,058	45	4,377	22	13,434	67
Net diff										

To convert the FL/W net Ha requirement into a gross Ha footprint apply the plot ratio in appendix 3 which is x 0.5 (i.e. a building of 1000 square meters floor space will require another 1000 square meters of operational/parking curtilage combining to a gross footprint of 0.2 Ha.

Appendix 3: Demographic & Employment Multipliers

	Luton	S Beds	
Average Household Size:	2.45	2.3	Census 2001
Proportion Working Age:	63.3%	62.9%	Mid-year Population Estimates 2008
Proportion Economically Active:	74.9%	87.5%	Annual Population Survey 2008

	Luton	S Beds	
Proportion of Jobs in B-Class Uses:	50.8%	45.9%	ABI 2007/NLP Analysis
Average Floorspace Ratio:	0.005	0.005	ha
Plot Ratio:	0.5	0.5	