South West Milton Keynes

Employment Assessment

Jones Lang LaSalle

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Contents

1 Introduction

1.1 This assessment appraises the employment implications of the proposed development. Specifically, it addresses:-

- the policy requirements for B class employment land;
- the market for B class employment land uses at this location and in the context of the proposed development land; and
- the employment likely to be generated by the proposed development.

1.2 This report gives also an assessment on the quantity and quality of employment land to serve the proposed development and informs its land use budget and master plan. A development framework plan is provided in Appendix 1. In brief, the proposed development is a residential led scheme of up to 1,855 homes. Other elements include a neighbourhood centre, a primary school, a secondary school and a significant level of green open space.

1.3 The employment element comprises of 2.07 hectares. This will be developed for B1 purposes, most probably offices. The offices will be developed at the gateway to the scheme, fronting the A421, and next door to the neighbourhood centre.

1.4 A similar assessment (referred to as an Employment Land Assessment) was produced by King Sturge LLP in March 2010 to support the previous proposals for Salden Chase of 5,000 plus houses and 7.5 ha of B class employment land. Subsequently, King Sturge LLP merged with JLL in June 2011.

1.5 To produce this assessment, we have reviewed the following contextual policy documents and associated evidence:-

- The Vale of Aylesbury Plan Strategy, Proposed Submission May 2013, but now withdrawn.
- Aylesbury Vale Employment Land Review Update, September 2012.
- Milton Keynes Core Strategy, adopted July 2013.
- The Milton Keynes Core Strategy Employment Technical Paper, March 2011, that refers to a number of evidential documents that informed the Core Strategy, and the recently published Plan: MK Employment Topic Paper.

1.6 The now withdrawn Core Strategy and associated employment evidence base for Aylesbury Vale are considered in Section 2. Section 3 considers the Core Strategy for Milton Keynes and its evidence base.

1.7 Thereafter, in Section 4, we have reviewed the market for offices, industry and distribution for Milton Keynes, in the context of the site. We consider also the implications of the level of employment land to be provided, in terms of both its quantum and type, and its proposed location.

1.8 Section 5 considers the issue of job generation. This involves both B class land uses and other land uses that are employment generating. Thereafter, Section 6 draws conclusions and provides a summary.

2 Vale of Aylesbury Plan Strategy and Evidence Base

2.1 The Vale of Aylesbury Plan Strategy (2011-2031) was submitted to the Secretary of State for examination in May 2013.

2.2 The proposed spatial strategy for growth concentrated on the Aylesbury area (comprising Aylesbury Town and adjacent parts of surrounding parishes) and the Buckingham area. No strategic provision was made in relation to the potential extension of Milton Keynes into Aylesbury Vale.

2.3 The policy on employment proposed growth at a number of strategic employment sites. Reference was made to existing sites at Silverstone, Westcott, and College Road North (Aylesbury). In addition, reference was made to new strategic employment sites at sustainable locations within and around Aylesbury and Buckingham. However, like housing, no reference was made to the potential growth of Milton Keynes.

2.4 Consideration was had to developing homes and jobs together, seeking to ensure that there was a broad balance and synergy between new homes and jobs. At major development areas, where significant levels of housing growth were proposed, proportionate employment development would be sought. However, no prescriptive guidance was given on what "proportionate" meant.

2.5 On 7 January 2014, Aylesbury Vale District Council received a letter from the Inspector, following initial hearing sessions on the Duty to Co-operate and the overall provision for housing and jobs. This letter recommended strongly that the Vale of Aylesbury Plan should be withdrawn.

2.6 In his letter, the Inspector concluded that the Council had not engaged with neighbouring councils sufficiently and that this had undermined the effectiveness of plan preparation in dealing with key strategic issues, particularly housing need and employment growth. Specific reference was made to objections made by Milton Keynes Council, its concerns about the balance between houses and jobs, and the need to respond to possible growth of the Milton Keynes urban area into Aylesbury Vale which had not been properly addressed. The Inspector agreed, concluding in paragraph 27 of his letter that

> *"…. there are significant issues in terms of potential unmet needs from other authorities and how they will be accommodated. There are particular issues concerning the relationship of Aylesbury Vale to Milton Keynes and its future growth. These issues have been left unresolved".*

2.7 Following receipt of this letter from the Inspector, on 3 February 2014, a report was made to the Cabinet of Aylesbury Vale District Council, recommending the formal withdrawal of the Vale of Aylesbury Plan.

2.8 The principal employment evidence base to the submitted Strategy was an Employment Land Review Update by G L Hearn. This update was produced in 2012 and considered principally the supply and demand for employment land and premises. The Employment Land Review drew also on the 2008 Employment Land Review undertaken by Roger Tym & Partners.

2.9 The key findings of the Employment Land Review Update by G L Hearn can be summarised as follows:-

- Compared to the national average, the employment rate in Aylesbury Vale is high, the skills' profile is strong, and there are high levels of self-employment and business enterprise. The business base is focused principally towards small firms.
- Over the last decade, there has been very little growth in office floor space in the District, a decline in industrial floor space, and a growth in warehouse floor space.
- It is recommended that an additional 30 hectares (over and above existing commitments) of employment land is identified to meet economic needs up to 2031.
- Priority should be given to addressing the limited supply of good quality office floor space in Aylesbury town.

- The delivery of a healthcare innovation centre at Stoke Mandeville Hospital should be encouraged.
- Further land for employment should be allocated at Buckingham and Westcott Venture Park.
- The strong and vibrant rural economy should be supported.

2.10 The Employment Land Review Update made no reference to Milton Keynes and the potential for employment allocations at SWMK as part of wider strategic growth.

Summary

2.11 The draft Vale of Aylesbury Plan Strategy and associated employment evidence base did not address the relationship between Milton Keynes and related land in Aylesbury Vale. This is one of the principal reasons why the Inspector appointed to examine the plan recommended its withdrawal. As such, it provides no guidance on the level or type of employment land for this proposed development.

3 Milton Keynes Core Strategy and Evidence Base

3.1 Whilst the application site is within Aylesbury Vale District, it adjoins the administrative boundary of Milton Keynes. Indeed, the principal access points to the A421 fall within Milton Keynes. As such, planning and economic policy for Milton Keynes is relevant.

Milton Keynes Core Strategy

3.2 The Milton Keynes Core Strategy was adopted by Milton Keynes Council on 10 July 2013. This followed eight years of preparation. The plan looks forward and provides guidance to 2026.

3.3 The employment land supply for Milton Keynes is considered in paragraph 5.27 to 5.33 and by Policy CS3. The latter refers to Table 5.4 that lists the employment land allocations in Milton Keynes. These total 216.3 hectares. For ease of reference, a copy of Policy CS3, incorporating Table 5.4, is provided in Appendix 2.

3.4 In paragraph 5.27, it is noted that Milton Keynes has a key role as an employment centre within the South East Midlands Local Enterprise Partnership. However, it notes, as with housing supply, that

> *"……there is a* ***substantial existing supply of employment land*** *in the Borough, however there are* ***some qualitative deficiencies*** *in this portfolio of employment land which may need to be remedied in the medium to long term to achieve all of the objectives of the Council's Economic Development Strategy…" (*Our emphasis*)*

3.5 The Core Strategy recognises that jobs are not just created in firms occupying B Class employment land. Instead, there is recognition that other jobs will be created in retail, education, health and other services. The potential job creation from these sources is identified in Table 5.3 – that is entitled "Jobs potential of existing employment locations in Milton Keynes Borough". Again, for ease of reference, this table is provided in Appendix 3. Further reference is drawn to this table in Section 5 of this report, where job generation for the development is considered.

3.6 Paragraph 5.29 refers to the proposed review of the Core Strategy (referred to as Plan: MK), that Policy CSAD1 indicates will be prepared so that it is adopted by 2015. This proposed review will reassess the adequacy, both quantitatively and qualitatively, of the existing portfolio of employment land. In addition, it will take forward the need, if evidenced, for new strategic employment allocations to meet the economic and housing growth potential of Milton Keynes, including the development needs of business, by providing locations to support clusters of knowledge driven and high technology industries.

3.7 In paragraph 5.30, reference is made to the Employment Land Study for Milton Keynes, which was produced in May 2007. This study recommended that Milton Keynes needed jobs in the knowledge economy and those that matched the changing skills profile. To do this, a number of actions are referred to. These are as follows:-

- *"Provide more office and high technology floor space*
- *Reduce the reliance on distribution and logistics activity (B8 uses)*
- *Increase the job density on employment sites*
- *Strengthen the role of Central Milton Keynes and other centres*
- *Improve connections between Oxford and Cambridge*
- *Increase trading opportunities at college and place of work."*

3.8 Paragraph 5.31 provides further explanation. It reads;

> *"There is a* ***surplus of land allocated for industrial, and warehousing and distribution*** *(B1C/B2 and B8) uses. Where land currently allocated for non-office uses is uncommitted, we have the opportunity to*

> *reallocate suitable sites for office development and high technology floor space (B1a/B1b uses). This would help to re-shape the local economy over time. It will be progressed through the Plan: MK. The need for serviced accommodation is to assist small businesses which are significant in the Milton Keynes employment market. Further research will be undertaken in the Plan: MK to inform policies in this area." (*Our emphasis*)*

3.9 In paragraph 5.32, this point is reinforced. Essentially, if land that is identified in Table 5.3 as existing employment land, is reallocated for office and technology uses, then it is considered that more jobs can be produced from the available stock of employment land. Further, it is considered this would create the opportunity to consider different uses for any employment land that is no longer required for its current purpose.

3.10 Finally, paragraph 5.33 notes that Central Milton Keynes is the principal focus for B1a/B1b uses. However, reference is made to the Employment Land Study of May 2007, which identifies a number of other areas considered suitable for this use. It reads:

> *"…the ELS report also identified Linford Wood, Kents Hill, Knowlhill and Walton as suitable locations for these uses in the period up to 2017. As these sites are developed in the future, the ELS identifies more opportunities in the Western Expansion Area, Shenley Wood and Snelshall."* (Our emphasis)

3.11 We have emphasised Snelshall as this site is located directly to the north of the application site, the other side of the A421. This is considered further in Section 4.

3.12 Policy CS3 covers two pages and is provided in full in Appendix 2. It provides a number of criteria against which planning applications will be judged. These criteria include:-

- the physical and locational attributes of particular sites;
- the need for a variety of sites to meet differing requirements; and
- the inclusion of serviced accommodation.

3.13 Policy CS3 also states that central Milton Keynes will be the primary focus for offices and R&D activities (i.e. Classes B1(a) and B1(b)). However as reported below, it is accepted by the plan's evidence base (with reference to the Employment Land Study) that out-of-centre locations will also be needed to accommodate anticipated economic growth.

3.14 Policy CS3 requires planning applications that propose more than 1,000 sq m of B1(a) and B1(b) floorspace on sites outside Central Milton Keynes to provide evidence that demonstrates why the development cannot occur in Central Milton Keynes. This evidence is market related and is provided in Section 4.

Evidence Base to Core Strategy

3.15 The production of the Core Strategy was informed by an Employment Technical Paper, which was produced by Milton Keynes Council in March 2011. This technical paper referred to a number of elements that form the evidence base for employment land. Specifically, it referred to the Milton Keynes Employment Land Study, which was produced by consultants GVA in May 2007.

3.16 Much of the key findings of this study have been referred to above. However, it does provide an interesting snapshot of the office development market leading up to 2011. This is represented in Table 3.3 to the Employment Technical Paper, which provides data on office development completions within and outside Central Milton Keynes from 2006 to 2010. Table 3.3 is reproduced below.

Table 3.3 Office completions within and outside Central Milton Keynes 2006-2010 in square metres

Year	B1(a) Office Completions within CMK (sq.m)	B1(a) Office Completions outside CMK (sq.m)	Total Completions (sq.m)
2006/07	5,010	19,332	24,342
2007/08	0	19,402	19,402
2008/09	465	11,094	11,559
2009/10	20,190	11,106	31,296
Total **Annual Average**	**25,665 (29.6%)** **6,416 sq.m**	**60,934 (70.4%)** **15,234 sq.m**	**86,599 (100%)**

Source: Milton Keynes Intelligence figures

3.17 In the four years from 2006 to 2010, nearly 86,600 sq m of office floor space was constructed in the Borough. 30% of this was constructed within Central Milton Keynes and 70% outside. Whilst there is a drive for substantially increased levels of development of offices in Central Milton Keynes, this does show the importance of the office market outside Central Milton Keynes.

3.18 This is accepted by the Employment Land Study, which acknowledges that out of centre locations will be required to accommodate economic growth, but that Central Milton Keynes should be the favoured location and priority for development. In paragraph 5.14 of the Employment Technical Paper, reference is made to targets set by the Employment Land Study for office development, both within Central Milton Keynes and outside Central Milton Keynes. The Employment Land Study sets an overall target for B1(a) office development of 584,000 sq m of floor space by 2021. Of this total figure, 216,000 sq m should be directed to Central Milton Keynes. This works out at 12,000 sq m per annum. The balance – over 350,000 sq m - is to be located in established employment areas outside Central Milton Keynes.

3.19 Reference is also made to Table 8.2 of the Employment Land Study, which identifies targets for the development of sites in the shorter to medium term (2007 to 2016). This identified 197,000 sq m of B1a/b floor space outside Central Milton Keynes. The following locations were referred to:

> *"Linford Wood, Willen, Kents Hill, Borton and Knowlhill as first priority. Other areas include WEA, Shenley Wood, Towergate/Wavendon Gate and Snelshall will need to be considered. Focus on computer services, technology on science parks and other uses that cannot be accommodated in centres." (Our emphasis)*

Plan: MK Employment Topic Paper

3.20 This topic paper was reported to the Cabinet of MKC on 23 July 2014, along with a number of others, to support an early review of the adopted Core Strategy. The topic paper is draft and is currently being consulted upon.

3.21 The topic paper provides no solid conclusions and is awaiting the production of an Economic Growth and Employment Land Study to inform it. This study is being commissioned by MKC in partnership with Milton Keynes Development Partnership. Nevertheless, it does provide some useful background information on the balance between jobs and homes and recent market trends.

3.22 With regards to the former, it notes that growth in Milton Keynes is employment led, rather than housing led. This is demonstrated by the number of jobs from all sources generally exceeding the number of new dwellings. This

demonstrates that Milton Keynes is not a dormitory town where people live but work elsewhere. Instead, it experiences net in-commuting, particularly from Bedfordshire, Northamptonshire and Aylesbury Vale.

3.23 With regards to the latter, the high proportion of offices take-up of new premises is noted, particularly within CMK. There is now a reported lack of new office accommodation in the market. Conversely, there is a significant amount of existing older commercial floorspace that is vacant and on the market. The figures reported refer to 109,870 sq m (1.18 million sq ft) of vacant offices and 215,740 sq m (2.32 million sq ft) of vacant industrial stock.

Summary

3.24 Given the relationship of the site to Milton Keynes, the planning and economic policy of Milton Keynes is relevant. The Milton Keynes Core Strategy notes that there is a substantial existing supply of employment land in the adjoining Borough of Milton Keynes. However, it notes also that there are some qualitative deficiencies too.

3.25 Specifically, the evidence base to the Milton Keynes Core Strategy identifies a surplus of land allocated for industrial, warehouse and distribution. It identifies also a need to promote land that can attract the knowledge economy. For this reason, a progressive approach is taken in reallocating employment land for office use. A number of locations are considered suitable for reallocation for office use. These include the Snelshall employment area situated opposite the site, the other side of the A421.

3.26 Policy CS3 considers CMK to be the primary focus for office development. However, explanatory text to this policy and the associated evidence base recognises that a significant proportion of office development will continue to occur outside CMK.

4 Market Commentary

4.1 Any market commentary tends to reflect the current economic times. This is natural given that most decision makers and advisors are considering markets in an immediate or short term timescale. In this case, the timescale for development is much longer. As such, we have not sought to place emphasis on the downturn suffered by the commercial property market from 2008 to 2013. Instead, we have sought to concentrate on longer term trends in the marketplace.

4.2 Nevertheless, the downturn has affected the confidence of both investors and developers. This has placed a premium on primary sites and locations. As a consequence, we anticipate a much more cautious approach will be taken with secondary locations.

Offices

4.3 Nationally, we have noticed a move, in terms of demand, back towards city and town centres. This shift has become more apparent over the last couple of years.

4.4 There are a number of reasons for this shift. These include:-

- Companies taking less car parking, because less people are using the car to get to work.
- Accessibility to local amenities has become increasingly important. This includes a place to go to lunch, informal meeting places such as cafes and parks, shopping, gyms and other leisure uses, such as restaurants, and schooling.
- Proximity to competitors for ease of staffing.

4.5 The shift back to town centres has been a gradual movement. However, we consider there is more to come, as there will be latent demand from companies holding space in out of town business parks, but who have been unable to lease their floor space, to move back to the town and city centres, until their lease expires. Milton Keynes has benefited from this shift. A good example is the redevelopment of the National Hockey Stadium to build The Quadrant – a 400,000 sq ft purpose-built office complex for Network Rail.

4.6 Last year, Milton Keynes saw a series of significant transactions in Quarter 4 2013, with office take-up reaching 110,383 sq ft; the highest quarterly take-up since 2009. Total take-up for 2013 surpassed both 2011 and 2012, amounting to 207,822 sq ft.

4.7 Key lettings are summarised below in Table 1.

Table 1 – Key lettings in Milton Keynes in 2013

Property	Location	Size (sq ft)	Landlord	Tenant
Pavilions, Linford Wood	Out of centre	18,026	Ignis Asset Management	Radiotherapy Clinic
The Pinnacle	Central Milton Keynes	17,500	Aberdeen Asset Management	I2
The Pinnacle	Central Milton Keynes	37,000	Aberdeen Asset Management	Catapult Transport Systems
Noble House	Out of centre	7,000	Threadneedle	Celaton

4.8 In addition, we understand that an occupier (thought to be Grant Thornton) is in discussion with Milton Keynes Development Partnership for a new building on a site near The Pinnacle.

4.9 As of Quarter 1 2013, Grade A office space accounted for just 8% of Central Milton Keynes supply. In addition, the volume of refurbished stock is dwindling. Letting activity and sales of obsolete office space for residential conversion are reducing the overall supply of second-hand buildings, further compounding the outlook for occupiers seeking alternative space. In 2013, Grade A space in Milton Keynes reduced by 27%.

4.10 For landlords and occupiers alike, the shortage of Grade A space is becoming acute and is likely to drive significant investment in second-hand office stock in the short term and in new sites in the medium term.

4.11 The shift back to town and city centres does not necessarily mean that out of town locations will not succeed. However, out of town locations will have to work harder to attract office occupiers and pitch themselves appropriately.

4.12 The obvious potential competitor advantage that out of town sites could offer is accessibility to the national motorway and trunk road network. SWMK does not offer this comparative advantage to competing established business parks or other development land. Considered in isolation, the site is not an obvious pitch for large scale offices. It is not located in Central Milton Keynes and access to the M1 motorway is convoluted, albeit access to the A421 and A5 Trunk Roads is more direct.

4.13 For these reasons, we do not consider this site to be suitable to accommodate or attract large floor plate office buildings. However, we do consider it holds an attraction in serving the local market, particularly the needs of the proposed SWMK development.

4.14 Typically, the local population will require small offices, or even suites, with their own front door. Businesses looking for this type of space will tend to be small SMEs with workforces less than 10 staff with financial services, technology, IT, administration, real estate and other business services likely to predominate.

4.15 A good example of the type of development we see working in similar locations is Frank Whittle Park on Davy Avenue in Knowlhill. Marketing details of this scheme are provided in Appendix 4.

4.16 Frank Whittle Park is made up of 10 two storey office units in four buildings, totalling 37,131 sq ft (GIA), 28,712 sq ft (NIA). Units range from 2,000 to 10,000 sq ft.

4.17 The scheme was built out in two phases. The first phase was developed in 2008, with the second following in 2010. Seven of the units are occupied, with these having been offered to the market on both a freehold and leasehold basis.

4.18 The market has improved since Frank Whittle Park was built. In addition, the level of Grade A space in Milton Keynes has diminished. On this basis, we see potential capacity for up to 100,000 sq ft (9,300 sq m) (GEA) of new offices over the lifetime of the proposed development. The offices should be built out in phases no greater than 25,000 sq ft (GEA), should be designed to provide flexible accommodation (including serviced accommodation), and should be offered both leasehold and freehold.

4.19 For the reasons referred to already, the new office development should be located either within or close to the neighbourhood centre. In addition, prominence to the A421 would be an advantage.

Other B Class Employment Uses

4.20 The 2010 Employment Land Assessment produced by King Sturge supported a development of 7.5 hectares, of which 5.5 hectares was for trade, industry and distribution. The latter had the potential to provide 22,000 m² of built floorspace. However, this level of floorspace was based on the assumption that the overall development would be much more significant, providing in excess of 5,000 houses.

4.21 The 2010 report concluded that Salden Chase (as the larger site was then referred to) was a peripheral location, relative to other areas, to serve Milton Keynes. For this reason, it considered it was unlikely that it would attract any development in the offices, industrial and distribution markets that went beyond local needs..

Trade

4.22 The trade sector has become its own market sector, catering for quasi retail/employment uses such as tiling, plumbing and other associated operations.

4.23 This part of Milton Keynes is well covered in terms of provision. Bletchley Trade Park was completed over seven years ago and accommodates 13 tenants in 4,500 sq m of floor space. In the last five years, Gould Close, situated to the south of Denbigh Road in North Bletchley has been developed for a number of smaller trade counter uses.

4.24 These developments have soaked up most of the demand for this part of Milton Keynes. It would suggest there is not much scope for further trade related development in either the short to medium term.

Industry

4.25 Milton Keynes now has a very large stock of industrial property. It is a well-established market. This is made up of a combination of owner occupier units and multi-let estates.

4.26 As Milton Keynes only started in 1967, it is unlike most normal industrial markets in terms of age profile. Generally, the condition of buildings is relatively good. This ensures a good supply of second-hand buildings.

4.27 The market for new large floor plate B2 buildings has largely receded. Partly, this is for economic reasons, with a continued shift to large scale manufacturing to overseas. Partly, it is also because the advantages that attracted operators to Milton Keynes say 30 years ago no longer exist (e.g. the cheapness of land and tax breaks).

4.28 Whilst the industrial market has generally picked up over the last year, there is still a significant level of good second-hand buildings that lie vacant. These buildings, which are of generally modern design, are being offered for rent between £3.50 and £4.00 per sq ft.

4.29 The availability of this quality and quantity of space at this affordable rent militates against new development of new industrial floor space, particularly on a speculative basis, as it cannot compete in terms of rent. As the market returns, and the level of vacant floor space reduces, this may change. However, we see such development only occurring in prime locations.

4.30 As referred to above, the site is not a prime pitch. This is because of its location away from the M1 motorway and its peripheral situation on the edge of Milton Keynes. On this basis, and due to the much reduced level of housing proposed, we cannot project with any confidence that the development of industrial property will attract sufficient interest from occupiers, developers and investors to be feasible.

Distribution

4.31 Milton Keynes has been a strong location for high bay warehousing and distribution. This is because Milton Keynes has been able to provide the three elements considered essential by logistics and distribution operators. These are:-

- Location.
- Flat land.
- Labour.

4.32 The accessibility of Milton Keynes, or certain parts of it, to the M1 motorway have been key. This has resulted in significant levels of take-up in the last 10 years.

4.33 Magna Park, the development scheme of Gazeley at Junction 13 of the M1 motorway has attracted significant interest. John Lewis, Barr Soft Drinks and River Island already occupy purpose-built large bay warehouses. In addition, Waitrose has pre-let a further 1,000,000 sq ft.

4.34 Compared to such locations, the site compares unfavourably in terms of accessibility to Junctions 13 and 14 of the M1 motorway. This is due to the distance in travelling time to the M1 motorway. Operators will instead prefer to be in Northampton and pay less.

4.35 For this reason, we do not consider that the site represents an obviously attractive pitch for large B8 buildings. This has been evident by the slow development of Snelshall, the other side of the A421.

4.36 The Snelshall development currently comprises four buildings. These are occupied by DHL (for Mondelez), Suzuki, Delico and Kuehne & Nagel (for Waitrose).

4.37 Suzuki GB Plc relocated into a new 170,000 sq ft distribution, training and office complex in October 2005. We understand that this building was taken on a freehold basis from the developer, Rosemount.

4.38 DHL agreed a pre-let of 350,000 sq ft of distribution floor space in late 2004. DHL moved into the new development in May 2006.

4.39 The building currently occupied by Kuehne & Nagel (for Waitrose) has been occupied by two other occupiers previously. The building, measuring 325,000 sq ft, was first occupied by Celestia. Celestia vacated the building in 2007. Frontier, the owners of the building, struggled to lease the unit for in excess of a year. However, in the Summer of 2008, Jenks, a food distributor and marketing company, leased the building. Jenks, who had a poor covenant, only took the unit as they could not get funding for a pre-let at Magna Park. Following the commercial failure of Jenks' UK operation in Spring 2009, the unit became vacant.

4.40 The space was filled by Kuehne & Nagel on behalf of Waitrose less than three years ago. However, we do not consider that this deal demonstrates that this is a particularly strong location for big box logistics. The deal was only done as an existing building was there, there was a shortage of other options that fulfilled this requirement, and that a good deal could be struck given the overall market sentiment. Waitrose would not have committed to the development of a new building here given the availability of much better locations (such as Magna Park).

4.41 It is for this reason that the remaining nine hectares of development land have stood idle for so long. In our view, the remaining land at Snelshall is likely to be sufficient to accommodate any pressures for large or medium scale distribution in the foreseeable future for this part of Milton Keynes.

Summary

4.42 The site is a peripheral location, relative to other areas, to serve Milton Keynes. For this reason, and due to the level of proposed housing, it is unlikely to attract any development in the trade, industrial and distribution markets. Instead, operators in these markets will be attracted to other better located sites within Milton Keynes which will make better or optimum use of demand in these sectors.

4.43 However, we do see it serving local needs for offices, including some serviced office accommodation. Moreover, this type of development will sit well with the other principal proposed uses, particularly housing and the neighbourhood centre. This approach confirms fully with the criteria set by Policy CS3 of the Milton Keynes Core Strategy.

4.41 We consider that there is market capacity for 100,000 sq ft (9,300 sq m) of two storey offices, in a business park format and built out in phases. At a 0.45 plot ratio, this would require a site of just over 2 hectares.

4.44 The type of accommodation will be typically small with no larger than 10,000 sq ft and as small as 2,000 ft². It will not compete with the much larger floorplate and HQ type buildings currently being developed successfully in CMK and will serve purely a local market, particularly the needs of the proposed SWMK development. As such, it complies with Policy CS3 that requires evidence to demonstrate why the development cannot occur in CMK.

5 Job Generation

5.1 The master plan proposes 2.07 hectares of employment land. At a plot ratio of 0.45 – a plot ratio similar to Frank Whittle Park – this would generate 9,315 sq m of floor space (gross external area (GEA)). 80% of this would represent usable floor space (i.e. net internal area (NIA)) of 7,452 sq m.

5.2 The Milton Keynes Core Strategy refers to a job density of 12 sq m net per job. The source for this figure is the HCA Employment Densities Guide, Second Edition 2010. A copy of this guide is provided in Appendix 5.

5.3 The table of employment densities is provided on page 6 of this guide. The 12 sq m per employee density is based on "general offices". This refers to HQ, admin and client facing offices. However, we see offices at the site being typically "business park" or "serviced offices". The HCA Guide gives a job density of 10 sq m net per employee for these types of offices.

5.4 At this density, the proposed offices of 7,452 sq m (NIA) would generate 745 jobs.

5.5 The Employment Density Guide does refer also to the increasing phenomena of hot-desking. This enables occupiers to use space more effectively and efficiently and reduce the floor space per worker. As such, in time, the proposed offices could accommodate and generate a greater number of employees than 745.

5.6 The Milton Keynes Core Strategy does recognise that jobs will not just be created by B class employment uses. It accepts also that jobs will be generated in other sectors from residents of new houses. Table 5.3 of the Core Strategy makes explicit assumptions. It assumes 0.31 jobs per dwelling will be generated from retailing, health, etc and 0.37 jobs per dwelling in education, real estate, etc.

5.7 For 1,855 homes, this would generate indirectly 575 and 686 jobs respectively, totalling a further 1,261 jobs from the development. These jobs, added to the 745 office jobs generated directly, will provide a total of 2006 jobs.

5.8 Moreover, the development will generate directly employment through the neighbourhood centre, the primary school and the secondary school. From research we have undertaken, these three elements could generate the following number of full time jobs.

- Neighbourhood centre – 50
- 3 FE Primary School – 50
- 4 FE Secondary School – 100

TOTAL 200

5.9 These would take the number of jobs generated to c. 2,200. It could be argued that these jobs are already accounted for by the Core Strategy's assumptions concerning these sectors. However, it is our understanding that the assumptions for these sectors referred to job generation in the round and are not necessarily directly related to any specific proposals as they are here.

6 Conclusions

6.1 The draft Vale of Aylesbury Plan Strategy and associated employment evidence base did not address the relationship between Milton Keynes and related land in Aylesbury Vale. This is one of the principal reasons why the Inspector appointed to examine the plan recommended its withdrawal. As such, it provides no guidance on the level or type of employment land for this proposed development.

6.2 Given the relationship of the site to Milton Keynes, the planning and economic policy of Milton Keynes is relevant. The Milton Keynes Core Strategy notes that there is a substantial existing supply of employment land in the adjoining Borough of Milton Keynes. However, it notes also that there are some qualitative deficiencies too.

6.3 Specifically, the evidence base to the Milton Keynes Core Strategy identifies a surplus of land allocated for industrial, warehouse and distribution. It identifies also a need to promote land that can attract the knowledge economy. For this reason, a progressive approach is taken in reallocating employment land for office use. A number of locations are considered suitable for reallocation for office use. These include the Snelshall employment area situated opposite the site, the other side of the A421.

6.4 Policy CS3 considers CMK to be the primary focus for office development. However, explanatory text to this policy and the associated evidence base recognises that a significant proportion of office development will continue to occur outside CMK. The site is a peripheral location, relative to other areas, to serve Milton Keynes. For this reason, and due to the level of proposed housing, it is unlikely to attract any development in the trade, industrial and distribution markets. Instead, operators in these markets will be attracted to other better located sites within Milton Keynes which will make better for optimum use of demand in these sectors.

6.5 However, we do see it serving local needs for offices including some serviced accommodation. Moreover, this type of development will sit well with the other principal proposed uses, particularly housing and the neighbourhood centre.

6.6 We consider that there is a market capacity for 100,000 sq ft (9,300 sq m) of two storey offices, in a business park format and built out in phases. At a 0.45 plot ratio, this would require a site of just over 2 hectares.

6.7 The type of accommodation will be typically small units, no larger than 10,000 sq ft, and as small as 2,000 ft². It will not compete with the much larger floorplate and HQ type buildings currently being developed successfully in CMK and will serve purely a local market, particularly the needs of the proposed SWMK development. As such, it complies with Policy CS3 that requires evidence to demonstrate why the development cannot occur in CMK.

6.8 The offices proposed to be developed on site will generate 745 jobs directly. A further 1,261 jobs will be generated indirectly by other non-B class sectors from residents of new houses. Finally, the neighbourhood centre, the primary school and secondary school would generate directly a further 200 jobs. Total job generation will be in the order of 2,200.

Appendix 1 – Development Framework Plan

NOTE
This drawing is for information purposes only and not for use in construction.
Do NOT scale from this drawing.
All dimensions are to be checked on site and any discrepancies should be immediately reported to the originator of the drawing.

Title

South West Milton Keynes Development Framework Plan

Date	Scale
16-09-14	1:2500 @ A1

Drawn	Designed	Approved	Drawing Number	
CP	SH	SH	SWMK03\073	H

David Lock Associates
Town Planning and Urban Design

DAVID LOCK ASSOCIATES LIMITED
50 NORTH THIRTEENTH STREET, CENTRAL MILTON KEYNES, MK9 3BP
TEL: 01908 666276 FAX: 01908 605747 EMAIL: mail@davidlock.com
www.davidlock.com

- Planning Application Boundary
- Primary route - 15m Corridor
- Secondary route
- Improvements to existing highway
- Residential
- Mixed Use/Local Centre
- Primary Education
- Secondary Education
- Oil Pipeline Exclusion Zone (10m wide)
- Amenity Greenspace
- Allotments
- Outdoor Sports Facilities
- Indicative green space within residential parcels
- Employment
- Proposed Surface water attenuation feature
- Existing footpath (MK Boundary Walk)
- Existing bridleway & Sustrans Route 51 (Weasel Lane)
- Existing Hedgerows to be Retained
- Existing Woodlands to be Retained
- Indicative Location of Local Equipped Area for Play - LEAP (400m²)
- Indicative Location of Neighbourhood Equipped Area for Play - NEAP (1000m²)
- Indicative Location of Changing Pavillion

LANDUSE	(Ha)
Allotments	1.22
Employment	2.07
Green Open Space	55.75
Grid Road Reserve	7.24
Infastructure	4.84
Local Centre	0.67
Primary School	3.00
Secondary School	5.20
Water Attenuation	5.05
Residential	54.16
SUB-TOTAL	***139.21***
Highway Improvements	5.56
TOTAL	***144.77***

Appendix 2 – Policy CS3 to Milton Keynes Core Strategy

Policy CS3

Employment Land Supply

Planning permission will be granted for employment uses in the areas listed in Table 5.4 'Employment Land Allocations in Milton Keynes', and shown on the Local Plan Proposals Map, subject to the following criteria

1. The guidance on uses in Table 5.4 'Employment Land Allocations in Milton Keynes'
2. The physical and locational attributes of particular sites
3. The need for a variety of sites to meet the differing requirements of a wide range of employment uses
4. The inclusion of serviced accommodation (for meetings / short term lets)
5. Should the employment needs of the Borough change dramatically and undermine the assumptions behind the Core Strategy, then a partial review could be considered.

Central Milton Keynes is the primary focus for the development of additional office (B1a) and high technology/research and development (B1b) floorspace within the Borough. Planning applications for more than 1,000 sq.m. of B1a/B1b uses on sites outside CMK will need to provide evidence that demonstrates why the development cannot occur in CMK. Developments should not be deliberately sub-divided or phased in an attempt to avoid the 1,000 sq.m. threshold.

Office and high technology/research and development (B1b) proposals of more than 1,000 sq.m. of floorspace, which clearly demonstrates with evidence why it cannot be accommodated within Central Milton Keynes will be permitted at strategic locations (over 10 hectares) with good transport links. These include Shenley Wood, the Western Expansion Area, Kents Hill/Walton and Knowlhill and in other locations to be identified in the Plan:MK.

Account will be taken of any need to make further employment allocations to widen the quantitative supply of sites, where there is evidence. These strategic employment allocations will support the delivery of the key priorities of the Economic Development Strategy (EDS) and will be addressed in Plan:MK.

Table 5.4 Employment Land Allocations in Milton Keynes

Grid Square/Area	Vacant Land (in hectares)	Use Classes
Bletchley (Brickfields)	5.9	B1/B2/B8
Broughton /Atterbury	4.8	B1/B2/B8/C2
Caldecotte	2.5	B1/B8/C2
Crownhill	1.2	B1/B2/B8
Eastern Expansion Area (Magna Park)	65.9	B2/B8
Fox Milne	1.0	B1/B2/B8
Kents Hill	5.2	B1/B2/B8
Knowlhill	7.4	B1/B2/B8
Linford Wood	5.1	B1

Grid Square/Area	Vacant Land (in hectares)	Use Classes
Mount Farm	1.9	B1/B2/B8
Northern Expansion Area	3.1	B1/B2/B8
Old Wolverton	1.0	B2/B8
Redmoor	1.7	B2/B8
Rooksley	1.3	B1/B2/B8
Shenley Wood	17.8	B1/B2/B8/C2/D1
Snelshall East	4.7	B1/B2/B8
Snelshall West	5.1	B1/B2/B8/C1
Strategic Land Allocation (Eagle Farm North)	28	B1(c)/B2/B8
Tower Gate	7.1	B1/C2/D1
Walton	9.5	B1/B2/B8
West Ashland	4.7	B1/B2/B8
Western Expansion Area	17.0	B1/B2/B8
Willen Lake	1.1	B1
Wolverton	2.6	B1/B2/B8
Wolverton Mill	8.2	B1/B2/B8
Woburn Sands	1.3	B1
Wymbush	1.2	B1/B2/B8
Total	**216.3**	

Notes and Sources

1	Area of vacant land: HCA/MK Intelligence information. Figures in table exclude areas where amount of vacant land is less than 1 hectare e.g. Fenny Stratford 0.6 ha, Fishermead 0.4 ha, Granby 0.5 ha, Kiln Farm 0.2 ha, Olney 0.9,Stonebridge 0.4 ha, Tongwell 0.5 ha, Winterhill 0.8 ha and land for mixed use development in Central Milton Keynes.
2	Use Classes: Source Table E1, Adopted Milton Keynes Local Plan (December 2005) p.152 as supplemented by MK Intelligence information.
3	Base date April 2013.
4	Employment allocations in SLA to be determined through Development Framework
5	C2 residential institutional and D1 non-residential institutions are ancillary uses to the main use of a site for employment (B1,B2 and B8 uses) purposes. This is to avoid the impression that institutional uses that are not related to the main use of a site for employment is acceptable on an employment site.

Appendix 3 – Table 5.3 to Milton Keynes Core Strategy

Table 5.3 Jobs potential of existing employment locations in Milton Keynes Borough

	Vacant Land	Number of Jobs
1. Existing employment locations (including SLA)	216.3 ha	11,790 - 39,620
2. Number of jobs in CMK delivery of 12,000 sq metres of B1(a) Office space per annum (2013-2026)		10,400
3. Jobs from retailing, health etc 0.31 jobs per dwelling 28,000 dws in MK		8,680
4. Jobs from education, real estate etc 0.37 jobs per dwelling 28,000 dws in MK		10,360
5.Total number of potential jobs (rounded figures) (Row 5= sum of rows 1-4)		**41,230 - 69,060 jobs**
6. Potential jobs per dwelling ratio (No of jobs in row 5/ 28,000 dws)	**28,000 dws**	**1.5 - 2.5 jobs per dwelling**
7. Number of jobs in Milton Keynes in 2010 (rounded figures)		**143,200**

Notes and Sources

1	Area of vacant land: HCA/MK Intelligence information in hectares (ha) or in square metres (sq.m) for B1 (a) floorspace in CMK. Base date for vacant land figures is April 2013.
2	CMK office floorspace gross total over remainder of plan period (2013 to 2026) equates to 156,000 sq. m. This is then reduced by 20% to convert to net internal area of 124,800 sq.m to calculate job numbers
3	Employment densities: Offices (B1a) 12 sq metres per person, Light Industry (B1c) 47 sq metres per person, General Industrial (B2) 36 sq. metres per person, Warehouse and Distribution (B8) 75 sq metres per person. This figure splits the difference between general warehousing 70 sq.m per person and 80 sq.m per person for large scale and high bay warehousing (Source: HCA Employment Densities Guide 2nd Edition 2010).
4	Job creation from the occupation of empty premises not included
5	Figures on number of jobs in the Borough are from the ONS Business Register and Employment Survey (BRES). Job figures in this table are rounded.
6	Gain in B1 (a) floorspace in CMK from 2010 to 2013 is 38,590 sq.m gross, a net gain of 29,366 sq.m

Appendix 4 – Marketing Details of Frank Whittle Park

A new high quality office development - For Sale / To Let

2,000 - 10,000 sq ft (185 - 930m²)

frank whittle park

KNOWLHILL MILTON KEYNES

SITE PLAN

LOCATION

Frank Whittle Park is situated within the employment area of Knowlhill. The site is walking distance from Milton Keynes Central railway station, 2 minutes from the A5 dual carriageway, and less than 10 minutes drive from Junction 14 of the M1 Motorway.

The development is situated prominently on the main estate road, Davy Avenue, that runs through Knowlhill. To the rear of the development are the attractive Teardrop Lakes linear park system which staff can enjoy for recreation. Knowlhill is one of Milton Keynes premier business parks with occupiers including NHBC, Morgana and the Open University. Frank Whittle Park sits opposite the Parcelforce UK Headquarters and adjacent to the newly constructed EMW Law Headquarters.

SPECIFICATION

The buildings are constructed to a high specification over two floors including the following:

- Self contained entrance
- Raised floors
- Suspended ceilings
- LG3 lighting
- WC's and shower
- Gas fired central heating
- BREEAM rating of "Very Good" relating to energy efficiency

Each building has been designed to be able to easily accommodate additional items such as comfort cooling, kitchens and data & telecoms cabling.

TERMS

The buildings are available for sale on a freehold basis or for rent on a leasehold basis.

Individual buildings from 2,000 sq ft (185m²) upwards in size.

Each building benefits from allocated private car parking spaces, with additional shared disabled parking.

The scheme is extensively landscaped to create a high quality experience for both staff and clients, and reflects the extensive areas of parkland nearby.

frank whittle park

KNOWLHILL MILTON KEYNES

frank whittle park

KNOWLHILL MILTON KEYNES

VIEWING

For viewing and further information, please contact the sole agents:

A DEVELOPMENT BY:
RYSTWOOD DEVELOPMENTS LTD

David Clarke

Lambert Smith Hampton

01908 604630

206 SILBURY BOULEVARD MILTON KEYNES MK9 1LU

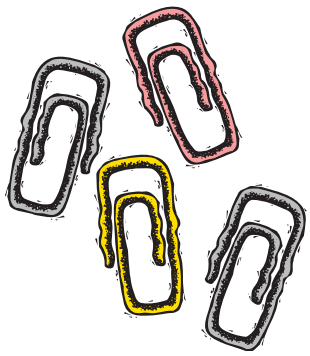
dprclarke@lsh.co.uk

Designed and Produced by Tom Wells Associates 01604 880400

Appendix 5 – HCA Employment Densities Guide, 2nd Edition, 2010

Employment Densities Guide

2nd Edition | 2010



Drivers Jonas Deloitte.

Contents

Abbreviations

Abbreviation	Definition
ASHE	Annual Survey of Hours and Earnings
BREEAM	Building Research Establishment Environmental Assessment Method
DEFRA	Department for Food and Rural Affairs
FT	Full time
FTE	Full Time Equivalent (employee)
GEA	Gross External Area
GIA	Gross Internal Area
HCA	Homes & Communities Agency
IPD	Investment Property Databank Ltd
LFS	Labour Force Survey
NIA	Net Internal Area
OECD	Organisation for Economic Co-operation and Development
ONS	Office of National Statistics
PT	Part time
R&D	Research & Development
RDA	Regional Development Agency
RICS	Royal Institution of Chartered Surveyors
UK SIC(92)	UK Standard Industrial Classification of Economic Activities
WAG	Welsh Assembly Government

1 Introduction

1.1 This Employment Densities Guide 2nd Edition (the Guide) updates English Partnerships' 2001 Employment Densities Guide (the 1st Edition). The Guide has been authored by Drivers Jonas Deloitte with input from Locum Consulting, IPD and Colin Buchanan. Data and analysis from the 1st Edition has been retained where it is still relevant.

1.2 The purpose of the Guide is to assist appraisers in the estimation of employment generated by property development based on 'employment density' ratios. Ratios are generally expressed as the number of square metres per employee. Lower numbers imply a higher density of employment. The Guide's primary audience is practitioners in the Homes and Communities Agency (HCA), the Regional Development Agencies (RDAs), Urban Development Corporations (UDCs), successor bodies to these organisations, the Welsh Assembly Government (WAG) and Local Authorities.

1.3 The Guide is intended to be used in planning, appraising and evaluating economic development and regeneration programmes and projects. The indicative employment density figures in the Guide incorporate broad assumptions. Users should read the supporting narrative to understand how to apply the ratios. When development-specific information is available it should be used in preference to the indicative figures in this Guide.

1.4 The main information sources used for updating this guidance are:

- employment densities data available within the public domain;
- in-house data and expertise from Locum Consulting, IPD, Colin Buchanan and Drivers Jonas Deloitte; and
- discussions with occupiers and operators on typical employment densities and variance factors. (The information gathered from these discussions has only been used to 'sense check' the guidance figures as the limited sample base was not statistically significant.)

1.5 Further information on data sources can be found in Appendix 1.

1.6 Section 2 of the Guide explains how employment densities are calculated, together with the principal variables. Section 3 sets out the Table of Employment Densities by Use Class and Type and basis of the floor area calculation. Section 4 comprises guidance notes on using the data in relation to each Use Class and Type.

Use of employment density calculations

1.7 The average floorspace requirement per Full-Time Equivalent (FTE) employee of a particular use class can be used in a number of situations, including:

- forecasting the number of jobs that will be generated by a development;
- developing a masterplan for a regeneration or economic development project to inform the selection of the best option for developing the site; and
- assessing the value for money of the project, i.e. the cost per job (the sum of the public investment divided by the forecast number of jobs to be created).

2 Calculating Employment Densities

2.1 This section provides details on the method and issues that must be considered when calculating densities.

Employment densities

2.2 Employment density refers to the average floorspace (in m^2) per Full-Time Equivalent (FTE) member of staff. It is used as a measure of intensity of building use and an indicator of how much space each person occupies within the workplace. Details on how to measure floorspace and employment are provided below.

Average employment density figures

2.3 Average employment densities are derived from surveys of a large number of buildings. However, since the 1st Edition, limited new survey work has entered the public domain. No primary research has been undertaken for this Guide. As such, the figures in this guide are the best available average for each defined land use from sources available to the authors (see Appendix 1).

Measuring floorspace

2.4 The Royal Institution of Chartered Surveyors (RICS) recognises three principal measurements of floorspace: gross external, gross internal and net internal. These are calculated following the RICS Code of Measuring Practice (the 6th edition being current). In summary these are:

(i) **Gross External Area (GEA)** – this measurement includes walls, plant rooms and outbuildings, but excludes external space such as balconies and terraces. It has a narrow field of use mostly limited to calculating building costs for large industrial and warehouse buildings, planning applications and approvals, council tax banding, and rating in Scotland for industrial buildings.

(ii) **Gross Internal Area (GIA)** – this refers to the entire area inside the external walls of a building and includes corridors, lifts, plant rooms, service accommodation (e.g. toilets). It is a widely used metric used in calculating building costs, marketing, valuation, property management and rating (in England and Wales) of industrial buildings (including ancillary offices), warehouses and leisure units and also the valuation of new residential developments.

(iii) **Net Internal Area (NIA)** – this is commonly referred to as the net lettable or 'usable' area of offices and retail units. It includes entrance halls, kitchens and cleaners' cupboards, but excludes corridors, internal walls, stairwells, lifts, WCs and other communal areas. It is a widely used metric and is the recognised method for marketing, valuation, property management and rating for offices, shops and supermarkets.

2.5 Appendix 2 sets out further detail on what is included and excluded within each of the above measuring bases.

Floorspace metrics

2.6 In Section 3, the Table of Employment Densities gives the measurement basis for each Use Class. It is recommended that the relevant floorspace metrics are used consistently throughout a project's development, appraisal and evaluation.

2.7 It is important to understand the basis of floorspace measurement and to use it consistently. If necessary, a given figure on one basis can be converted to the appropriate basis for the employment density type.

Converting gross internal to net internal area

2.8 Gross internal to net internal ratios can vary significantly according to use:

- for office space the gross figure is typically 15-20% higher than net internal space;
- for all multi-tenanted buildings the range may be higher than 15-20% given the space allocated for shared or common areas; and
- for larger warehouses, the net area can be as much as 95% of the gross area.

Use 15-20% as a general benchmark for converting gross to net areas in office and retail properties.

Worked Example 1 – Converting GIA to NIA

Example Development:	**1,000m² GIA development of B1 General Office space**
Appraisal:	**NIA is derived by applying benchmark:** **1,000m² x (100-15)% = 850m² NIA** **OR** **1,000m² x (100-20)% = 800m² NIA** **The figure used will be dependent on the level of space efficiency anticipated at the building. For more efficient buildings, use a lower conversion percentage of 15%.**

Vacant space

2.9 When evaluating actual densities, only the occupied floorspace should be used in the evaluation. Include a note on the amount of unoccupied space so that the basis of the calculations are clear. This mitigates the risk of the vacant area distorting the employment density figure.

Worked Example 2 – Calculating vacant space

Example Development:	**1,000m² NIA development of B1 General Office space**	
Appraisal:	**Apply benchmark of 12m² per FTE:**	**1,000m² ÷ 12m² per FTE = 83 FTE**
Evaluation:	**Just 750m² of the building is occupied:**	**750m² ÷ 12m² per FTE = 63 FTE in occupation**
	NOTE: the building has remaining vacant space of:	**1,000m² - 750m² = 250m²**
	equating to a potential additional capacity of:	**250m² ÷ 12m² per FTE = 20 FTE**

2.10 Note: the FTE and employment density figures in Section 3 are based on 100% occupation of a building.

2.11 Vacancy rates in buildings can vary significantly. There is no 'rule of thumb' to allocate a vacancy rate for any specific reason such as Use Type, scale, timing or location. It is recommended that in carrying out a project appraisal, sensitivity analysis is used to generate a number of vacancy rate scenarios (e.g. 50%, 70%, 90%) for, say, twelve months after first occupation of the building to assess the impact on the forecast gross jobs figure.

Measuring employment

2.12 Employment can be measured in several ways:

- **Actual** – the number of employees who are full-time, part-time, or on contract.
- **Full-Time Equivalent (FTE)** – the number of total hours worked as a proportion of the average annual hours worked in a like-for-like full-time job.
  - 1 FTE means the person works full-time,
  - 0.5 FTE means the person works half-time. Thus two part-time staff who work half-time each will equal 1 FTE.

2.13 In evaluating completed projects it is recommended that FTE numbers are used to measure employment achieved. These figures should be compared with the employment forecast made as part of the project appraisal. Where there is a significant variance (i.e. +/- 10%) between ex ante appraisal and ex post evaluation, an explanation for the difference should be provided in the evaluation.

Trends in Full and Part -Time Working

2.14 The ONS Annual Survey of Hours and Earnings (ASHE)[1] provides data on the proportion of employees working full or part-time in different occupations:

- Service industries: part-time employment ranges between a low of 40% (found in the financial services sector) and a high of 63% (found in the leisure and recreation sector – reflecting shift patterns in bars, pubs and restaurants and seasonal working).

[1] ONS Annual Survey of Hours and Earnings 2009: http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15313

- Manufacturing: less than 10% are part-time.

2.15 With regard to the proportion of hours worked by part-time staff to FTE, the majority of part-time staff work between 45% - 55% of full-time hours, with an overall average of 50% for all services and industry.

A ratio of 2:1 part-time staff to FTE should therefore be applied.

Calculating employment densities for redevelopment projects

2.16 Predicting employment density figures during the project appraisal stage is most accurate for new build (or recently constructed) properties and less accurate for older properties. This is because new buildings are usually designed with regular shaped floors and capable of servicing the employment densities set out in Section 3. See also Section 4 for guidance on density variances in older buildings.

2.17 When an occupied building is to be redeveloped, care needs to be taken in the application of employment density metrics when calculating the additional new jobs created by the project (i.e. the gross number of jobs accommodated in the redeveloped building less the previous number of jobs in the original building). If firm data are not available on employment in the original building and employment density ratios are used to determine employment levels, appraisers should adjust for the type and age of the building(s) concerned and the businesses within them, following the guidance provided in section 4.

3 Table of Employment Densities

3.1 Employment densities can be used in the appraisal of potential employment in property regeneration and economic development projects. Most of the broad categories of use contain wide ranges of density. The figures in the table below are indicative only of the levels of employment that could be generated.

3.2 Where appraisers use significantly different figures (i.e. +/-10%) from those set out below, they should specify the reasons for the variation and justify them in the specific context of the project. Potential reasons for departing from the figures in the table are discussed in Section 4.

3.3 A more detailed description of the Use Class classifications is in Appendix 5. Further description of the Use Type for offices is provided in Appendix 4.

	Use Class	Use Type	Area per FTE (m²)	Floor Area Basis	Comment on potential variation
	Industrial				
1	B2	General	36	GIA	Range of 18 - 60 m²
2	B1(c)	Light Industry (Business Park)	47	NIA	
	Warehouse & Distribution				
3	B8	General	70	GEA	Range of 25 - 115 m² The higher the capital intensity of the business, the lower the employment density
4	B8	Large Scale and High Bay Warehousing	80	GEA	Wide variations exist arising from scale and storage duration
	Office				
5	B1(a)	General Office	12	NIA	Includes HQ, Admin and 'Client Facing' office types
6	B1(a)	Call Centres	8	NIA	
7	B1(a)	IT/ Data Centres	47	NIA	
8	B1(a)	Business Park	10	NIA	A blended rate of the above B1(a) uses where they are found in out of town business park locations
9	B1(a)	Serviced Office	10	NIA	Densities within separately let units are c.7 m² per workstation but 30% of a facility's total NIA for shared services reduces the overall density
	Retail				
10	A1	High Street	19	NIA	Town/ City Centre
11	A1	Food Superstores	17	NIA	
12	A1	Other Superstores/ Retail Warehouses	90	NIA	
13	A2	Financial & Professional Services	16	NIA	Includes the back office function area as well as the customer facing areas
14	A3	Restaurants & Cafes	18	NIA	Range of 10 - 30 m²
	Leisure & Visitor Attractions				
15	C1	Budget Hotels	1 employee per 3 bedrooms plus casual staff		
16	C1	General Hotels (3 star)	1 employee per 2 bedrooms		
17	C1	4/ 5 Star Hotels	1 employee per 1.25 bedrooms		
18	D1	Cultural Attractions	36	GIA	Very wide range exists, so use with caution. Excludes external areas
19	D2	Cinemas	90	GIA	Range of 90 - 120 m²
20	D2*	Amusement & Entertainment Centres	70	GIA	Range of 40 - 100 m² - excludes external areas
21	D2	Sports centres and Private Clubs	65	GIA	Range of 30 - 100 m²

*some 'Sui Generis' Use Classes are applicable for this Use Type. See Appendix 5 for a list of Sui Generis uses.

4 Guidance Notes

4.1 These notes are to be read in conjunction with the table in Section 3. They explain a wide range of factors affecting density.

Average densities

4.2 The average density quoted is the mean figure, where it is possible to do so from a number of sources of data. Where new data sources are scarce, the median has been used as this reflects better statistical practice.

Density variances

4.3 Factors that may affect employment density variances from the mean or median within the different Use Classes and Types include the following:

a) type of activity within Use Type

b) working practices

c) size of premises

d) location

e) region

f) economic cycle

g) building age

h) energy efficiency

i) reliance on technology

j) length of occupation and type of tenure

a) Density variances within Use Types

4.4 Some Use Types, particularly in the industrial sector, have wide-ranging employment densities. This section highlights issues which give rise to the range.

Industrial and warehousing

4.5 B8 warehousing range is from 25m² to 115m² per FTE – the wide variation results from small amounts of very low density warehousing. For example, long term and large scale storage facilities for perishable (fresh or frozen) food warehousing has significantly higher employment densities than for non-perishable foods.

4.6 Technological developments and restructuring in most industrial sectors is setting a trend for an increase in floorspace per head so that average density is likely to become lower over time.

Office

4.7 Definitions of the office types are set out in Appendix 4.

4.8 Occupational densities for all office types have increased significantly since the publication of the 1st Edition of this Guide in 2001 (see Appendix 6 for a comparison). This is supported by anecdotal evidence that shows there is now much greater awareness amongst occupiers of the relationship between space efficiency and cost of occupation. Higher densities are achieved through more efficient space planning, new ways of working and improved communications technology.

Serviced offices

4.9 Whilst the occupational density of individual units within serviced offices is comparatively high at 7m^2 per workstation, the actual employment density of serviced office property is around 10m^2 per FTE. The provision of shared facilities such as reception, breakout space, meeting rooms etc., account for 30% of the total NIA within a serviced office centre. This reduces the overall employment density, even when taking into account the operator's own staff.

4.10 This Use Type is characterised by changes in density as the nature of the product is innately flexible and occupation by licensees is short term. The two main causes of temporary fluctuations in employment density are:

- The extent to which desk sharing within licensed units and the use of communal 'touch-down' 'virtual office' by subscribers will produce greater employment density than the number of workstations the operator actually provides.
- The higher level of churn of occupiers (compared with conventional offices) can lead to frequent peaks and troughs of vacant space within a centre. Average workstation vacancy rates range between 10% for 'economical' centres and 30% for premium centres, with an overall average of 25% of workstations remaining vacant.

Retail

4.11 Discussions with national retailers have emphasised that employment densities within the retail use class are dependent more on turnover than on floor area. This means a retail unit in a good location with high visibility and a high foot fall is likely to have a higher employment density than a retail unit of the same size in a poor location and/or with a low turnover.

General restaurants

4.12 The range of employment density for most types of casual dining-type restaurants is 10-30m^2 per person. Variations within this range are caused by the following factors:

- number of transactions – e.g. turnover rate of covers / customers;
- opening times – e.g. lunchtime only or all day opening;
- seasonal variation – e.g. summer trade greater than remainder of year; and
- brand and business model – e.g. upmarket operation will have higher ratio of staff to covers / customers.

Leisure and visitor attractions

Hotels

4.13 The types of hotel specified in the table in Section 3 have been retained as the benchmarking approach for consistency with the 1st Edition of this Guide. However, an alternative classification of hotel type, which aligns with that used in the hotels industry is shown below.

Alternative hotel classification and ratios

Type	Employment density
Limited service	1 employee per 5 bedrooms
Budget	1 employee per 2.5 bedroom
Mid market	1 employee per 1.67 bedroom
Upper class	1 employee per 1.25 bedroom
Luxury	1 employee per 1 to 0.8 bedrooms

4.14 Employment density in hotels is affected by the following factors:

- size of public areas;
- occupation rates and turnover of rooms; and
- ancillary operations i.e. conferencing &catering operations, health club, etc.

Cultural attractions

4.15 The diverse and heterogeneous nature of the cultural sector makes it impossible to identify a credible 'rule of thumb' for employment density. This use type could cover a huge range of different types of facilities. A sense check with a small number of local museums, galleries, theatres and heritage attractions suggests a very wide range of employment density from about 30m^2 to over 300m^2 GIA per FTE.

4.16 Variations within this range caused by the following factors:

- Facility use/purpose – what are its core and ancillary functions? Examples include the cultural programme, learning/education programmes, research and conservation, catering, retail and/or corporate hire businesses. The employment density for the Restaurants and Cafés Use Type should be applied where relevant.
- Building structure – e.g. whether it is an historic or new modern building, the proportion of the total floor space occupied, and amount of public/circulation space.
- Governance and management – who is the responsible body? E.g. local authority, independent trust or private company. The employment density may need to be adjusted where employees are responsible for more than one site.
- Volunteers can reduce the (paid) employment density by up to 50-80%[2]. However, use of volunteers can be used to demonstrate other benefits of the development in support of sustainable communities.

4.17 This Use Type may well include external areas but this factor has been excluded as it does not form part of the GIA calculation. In the absence of any new data sources, the benchmark from the 1st Edition of this Guide is assumed to remain valid.

Cinemas

4.18 A typical cinema of 3,400m^2 GIA and 10 screens would employ 60 people, with only about a quarter being full-time, giving a density of 90m^2 per FTE. A sense check with a national operator suggests an employment density of 90-120m^2 GIA per FTE, with variations within this range caused by the following factors:

[2] The social benefits of volunteering should not be ignored. Well-run volunteer programmes can help people gain and retain skills that are essential for subsequent paid employment, or provide employment that is rewarding or socially useful in itself.

- amount of space;
- turnover/throughput of customers; and
- building age/design e.g. layout, number of floors etc.

Amusement & entertainment centres

4.19 This is an extremely diverse Use Type, including amusement arcades, zoos & aquaria, science centres and a range of other one-off visitor attractions, which makes it very difficult to identify a benchmark for employment density. Examples include:

- An amusement arcade of 250-300m^2 GIA might have six staff and a density of 40-50m^2 GIA per FTE.
- A small aquarium or zoo of 3,000-4,000m^2 GIA and 50 staff would have a density of 60-80m^2 GIA per FTE.

4.20 Again, this Use Type may well include external areas but this factor has been excluded as it does not form part of the GIA calculation.

Sports centres/private sports clubs

4.21 This Use Type has a range of 30-100m^2 GIA per FTE where private sports clubs are at the denser end of the spectrum in comparison to a dry fitness club/gym being at the other end.

4.22 Employment density in sports centres and private sports clubs are affected by the following factors:

- whether the sports facility is wet or dry (swimming pools have minimum staff requirements by law);
- location, e.g. whether city centre or out of town; and
- business model e.g. a fitness centre with a clientele which pays for a high level of personal interaction from personal trainers and physiotherapists will have a higher density.

b) Changing working practices in offices

4.23 Changing working practices are manifest in all sectors, but particularly in the office sector. The change in density between the 1st edition and this 2nd edition of the Guide indicates these practices are delivering higher densities.

Home-working

4.24 Data from the 2001 Census shows that approximately 9% of the UK workforce work mainly at home. This varies by occupation and is not broken down into those 'teleworking' or other categories.

4.25 The proportion working from home has been increasing steadily over the last 10-15 years for the following reasons:

- increasing share of the workforce who are self-employed;
- general increase in flexible working patterns in the workplace; and
- improvements in telecommunications technology (i.e. high speed broadband) enabling working from home or non-workplace locations.

4.26 There is only a minor variation in the prevalence of working from home between rural and urban areas. Based on the DEFRA classifications, approximately 10% of the workforce in rural areas are home-workers compared to 8% in mainly urban districts.

4.27 A 2005 labour market trends study estimated that home workers had increased to 11% of the workforce, representing annual average increase of 4% since 1997. If we compare this to the long-term average increase in the workforce of 1% per annum and apply these growth rates to 2011, then it can be reasonably assumed that approximately 13% of the workforce will work from home.

4.28 Even though some of this employment is generated purely from home working, for the purposes of this Guide, however, only jobs directly linked to employment space (as opposed to residential space) should be estimated, so that double counting is avoided.

Hot-desking

4.29 Hot-desking has become increasingly prevalent within the office sector. This is particularly the case in city centre locations where rents are higher. For the purposes of this Guide, the Office density measurements assume a 'workstation:FTE' ratio of 1:1.

4.30 In practice, however, organisations look to accommodate staff at varying workstation:FTE ratios. These can vary from a 1:1 ratio down to a ratio of 7:10. It is likely that as pressures on space efficiencies increase (for instance, to reduce both costs and carbon emissions) a tighter hot-desking policy is likely to be introduced and implemented. In effect, the lower the workstation:FTE ratio, the higher the employment density.

Worked Example 3 – Calculating employment density for hot-desking offices

Example Development:	**1,000m² NIA development of B1 General Office space**	
Appraisal:	**Apply benchmark of 12m² per FTE at the workstation to FTE ratio of 1:1**	**1,000m² ÷ 12m² per FTE = 83 FTE** **83 FTE ÷ 1 workstation each = 83 FTE**
	But: **applying workstation to FTE ratio of 8:10** **This gives a revised employment density of 9.6m² per FTE**	**83 FTE ÷ 0.8 workstation each = 104 FTE**

Residents and local jobs

4.31 Research by GLA Economics for Greater London investigated the relationship between population density and employment in areas of low accessibility (i.e. avoiding central London and other key centres). It is clear that where there is more housing there will be greater demand for local goods and services, e.g. leisure facilities, schools, cinemas, cafes, bakeries etc., and in turn this will generate employment. The research was intended to identify interactions between residents and jobs that are essentially local and to inform the use of 'job:residents' ratios in planning housing developments in areas of high and low accessibility.

4.32 The paper concludes by noting that land used for housing will have associated employment growth in the locality. Taking the coefficient of employment density regressed alone on population density in areas of low accessibility, it can be deduced that an increase to the resident population of, say, 1,000 will on average have the potential to give rise to a further 230 jobs in the locality.

4.33 This study was undertaken for London where higher earnings in the central area support lower wage services in outer London. Based on earning differentials between London and the rest of the UK we suggest that a figure of **150 jobs per 1,000 increase in population** is more applicable outside London.

This employment density assumption should only be used for purely residential developments.

4.34 Where the development is mixed use, employment densities should be calculated from the commercial aspect of the development and not the residential. This will avoid double counting employment figures.

c) Density variance through size of premises

4.35 A common thread apparent in the research for this guidance has found that smaller buildings generally have higher densities than larger buildings for all Use Types.

d) Density variance through location

4.36 One of the factors affecting density is the location of a development in terms of its accessibility and proximity to a town or city.

4.37 The main information on location variances is from the office sector (see table below). Suburban and out of town business park locations tend have the higher densities than city and town centre locations, which is surprising given town centre occupancy costs. This may be explained by the greater presence of meeting spaces and boardrooms in a city location and the propensity for call centre and high density administration functions to be located out of town.

Location	Area per FTE (general office)
In Town	11.9 m²
Out of Town	11.4 m²

e) Density variances amongst English regions

4.38 There is a lack of regional data by Use Type with which to provide any benchmark figures. However, it is recognised that there will be differences across the country, e.g. between the North and South and between London and the South East and other regions. There are unlikely to be significant differences between North East and North West regions, or parts of the South East and Eastern regions.

f) Density variances over economic cycles

4.39 Employment densities fluctuate over time for any given building. During times of economic buoyancy when businesses are expanding, and taking on more staff, densities increase. Conversely, during periods of economic instability or recession, companies may reduce the number of employees or rationalise accommodation, which may have the effect of reducing employment density.

4.40 It is difficult to identify the correlation between economic activity and changes in employment density due to the time lag between property acquisitions and disposals and economic activity. Regional variations in the economic cycle also complicate the assessment of employment densities.

4.41 When considering employment density it is important to take account of:

- the prevailing economic context, e.g. is it an economically buoyant or depressed period;
- property prices; and
- how profitable is the sector in question, i.e. the impact of a downturn will be cushioned in a highly profitable sector.

g) Density variance through building age

4.42 In general, lower densities occur in older buildings, often reflecting the less efficient use of space in such buildings, when compared to purpose-designed modern accommodation. As older buildings are refurbished and modernised, densities will, on average, increase and therefore density can be considered to be increasing over time as older building stock is refurbished.

4.43 The table below shows the variance in employment densities within general office buildings and how these might vary according to the age of the building. The reduction in employment density in the '2001 to present' bracket could be due to increased energy awareness as well as the increased provision of breakout and collaborative working spaces.

Age of construction	Area per FTE (general office)
Pre 1945	15.6 m²
1945 to 1984	12.5 m²
1985 to 2000	10.3 m²
2001 to present	11.5 m²

h) Density variance through energy efficiency

4.44 Sustainable design attempts to reduce energy consumption (amongst other things). The two energy efficiency measures that may affect employment density are:

- Using natural ventilation[3] rather than energy intensive air-conditioning – as natural ventilation works within the physical constraints of the building, there will be a limit to the

[3] internal and external air currents and the thermal properties of certain building materials are used to provide cool fresh air to occupants

number of occupants that naturally ventilated space can support. This may mean that low energy buildings require lower employment densities to keep heat gain from occupants and their associated equipment within operable limits.

- The provision of as much natural daylight as possible to minimise lighting loads – this may affect the amount of glazing, the layout of workstations and the depth of floor plates.

4.45 It is worth noting, therefore, that increased use of natural ventilation and daylight may limit the overall floorspace achievable on a development site.

i) Changing technologies in industrial, warehouse and distribution sectors

4.46 The increased automation of functions in these uses is another factor affecting employment density. Where there is a high degree of automation the employment densities are likely to be less than the benchmark figure.

j) Length of occupation and type of tenure

4.47 The length of occupation can have an impact on the employment density of a building. Occupiers who hold their workspace on a freehold or long leasehold basis have less impetus to relocate than those holding under a short leasehold basis. A recently purchased freehold property is likely to have a lower employment density as owners may have taken more space initially, to allow for future expansion. Conversely, an occupier who has been in a property for a number of years may have higher employment densities due to expansion. It is likely that the more flexible the structure of occupation, i.e. short-term occupation with a leasehold tenure, the closer the employment density will be to the benchmark figures and to an occupier's own target employment density.

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Consultations
A range of in-house Locum Consulting/Colliers International information and expert opinion.
Consultations with a small number of operators of hotels, leisure, visitor attractions and cultural venues.
Consultations with a small number of operators within the retail and industrial sectors.

Appendix 2 – Floorspace Definitions

The Royal Institution of Chartered Surveyors (RICS) defines floorspace in its 6th Edition 'Code of Measuring Practice: A Guide for Surveyors and Valuers'. These definitions are set out within the following tables:

Gross External Area – GEA

Gross External Area is the area of a building measured externally at each floor level

Including	Excluding
Perimeter wall thickness and external projections	External open-sided balconies, covered ways and fire escapes
Areas occupied by internal walls and partitions	Canopies
Columns, piers, chimney breasts, stairwells, lift-wells, and the like	Open vehicle parking areas, roof terraces, and the like
Atria and entrance halls, with clear height above, measured at base level only	Voids over or under structural, raked or stepped floors
Internal balconies	Greenhouses, garden stores, fuel stores, and the like in residential property
Structural, raked or stepped floors are to be treated as a level floor measured horizontally	
Horizontal floors, whether accessible or not, below structural, raked or stepped floors	
Mezzanine areas intended for use with permanent access	
Lift rooms, plant rooms, fuel stores, tank rooms which are housed in a covered structure of a permanent nature	
Outbuildings which share at least one wall with the main building	
Loading bays	
Areas with a headroom of less than 1.5m	
Pavement vaults	
Garages	
Conservatories	

Gross Internal Area – GIA

Gross Internal Area is the area of a building measured to the internal face of the perimeter walls at each floor level

Including	Excluding
Areas occupied by internal walls and partitions	Perimeter wall thicknesses and external projections
Columns, piers, chimney breasts, stairwells, lift-wells, other internal projections, vertical ducts, and the like	External open-sided balconies, covered ways and fire escapes
Atria and entrance halls, with clear height above, measured at base level only	Canopies
Internal open-sided balconies, walkways, and the like	Voids over or under structural, raked or stepped floors
Structural, raked or stepped floors are property to be treated as a level floor measured horizontally	Greenhouses, garden stores, fuel stores, and the like in residential
Horizontal floors, with permanent access, below structural, raked or stepped floors	
Corridors of a permanent essential nature (e.g. fire corridors, smoke lobbies)	
Mezzanine floor areas with permanent access	
Lift rooms, plant rooms, fuel stores, tank rooms which are housed in a covered structure of a permanent nature, whether or not above the main roof level	
Service accommodation such as toilets, toilet lobbies, bathrooms, showers, changing rooms, cleaners' rooms, and the like	
Projection rooms	
Voids over stairwells and lift shafts on upper floors	
Loading bays	
Areas with a headroom of less than 1.5m	
Pavement vaults	
Garages	
Conservatories	

Net Internal Area – NIA

Net Internal Area is the *usable* area within a building measured to the internal face of the perimeter walls at each floor level.

Including	Excluding
Atria with clear height above, measured at base level only	Those parts of entrance halls, atria, landings and balconies used in common
Entrance halls	Toilets, toilet lobbies, bathrooms, cleaners' rooms, and the like
Notional lift lobbies and notional fire corridors	Lift rooms, plant rooms, tank rooms (other than those of a trade process nature), fuel stores, and the like
Kitchens	Stairwells, lift-wells and permanent lift lobbies
Built-in units, cupboards, and the like occupying usable areas	Corridors and other circulation areas where used in common with other occupiers
Ramps, sloping areas and steps within usable areas	Permanent circulation areas, corridors and thresholds/recesses associated with access, but not those parts that are usable areas
Areas occupied by ventilation/ heating grilles	Areas under the control of service or other external authorities including meter cupboards and statutory service supply points
Areas occupied by skirting and perimeter trunking	Internal structural walls, walls enclosing excluded areas, columns, piers, chimney breasts, other projections, vertical ducts, walls separating tenancies and the like
Areas occupied by non-structural walls subdividing accommodation in sole occupancy	The space occupied by permanent and continuous air-conditioning, heating or cooling apparatus, and ducting in so far as the space it occupies is rendered substantially unusable
Pavement vaults	The space occupied by permanent, intermittent air-conditioning, heating or cooling apparatus protruding 0.25m or more into the usable area
	Areas with a headroom of less than 1.5m
	Areas rendered substantially unusable by virtue of having a dimension between opposite faces of less than 0.25m
	Vehicle parking areas (the number and type of spaces noted)

Appendix 3 – Shift working

The extent to which shift working takes place will alter the employment density. For example, a retail job may be filled by a combination of full-time and part-time employees over the course of a working day.

The 2008 Labour Force Survey (LFS) indicates that on average, 13% of those in employment work shifts (in addition to 3% working shifts 'occasionally'). The most common type of shift work by far is the two-shift system, with its share remaining fairly constant since 1998. There has also been little change in the type of shifts worked over the past ten years.

There is a no recent data on the proportion of shift working by industry sector. A study by the Office of National Statistics (ONS) assessing the change in working patterns between 1993 and 2003 found that shift working in both office and retail employment had increased over the ten year period:

- Transport and communication industry had the most common use of shift work with circa 25%+.
- Retail (UK SIC(92) industrial group 5) shift working rose from circa 10 - 15%.
- Office jobs (UK SIC(92) industrial group 7) rose from 2.5% in 1993 to circa 5% in 2003.

Shift patterns can be seen to vary significantly across all use types and will be dependent on local working practices. Suggested shift patterns that could be used as a rule of thumb are:

Use Class	Number of shifts in a working day
A1 (Retail)	1.5
B1 (General Offices)	1
B1 (Call Centre)	1.5
B1 (R&D/Hi-Tech)	2
B2	2
B8	1

N.B. All figures within Section 3 of this Guide are assumed to be based on a single shift.

Appendix 4 – Definitions of Office Types

	Definition
General office	This category is inclusive of all mixed use or undefined use including HQ offices, client-facing offices and other administrative offices. Other varieties of office which are separately identified below (i.e. Call Centres, IT/Data Centres, Business Park and Serviced Offices are threfore excluded from this category. Definitions of the types of office included within theis class of office are as follows: **HQ Office** A Headquarters office is a building where the predominant use is as an organisation, or brand/division headquarters. Headquarters offices typically fall into two distinct types: those which offer a relatively small amount of accommodation, predominantly for the senior management team and their support, and those larger buildings which centralise much more of the central management and policy-making. For public sector organisations the organisational or departmental headquarters should be included in this definition. **Client-facing Office** A client-facing office (or "front office") is a building predominantly dedicated to client or customer-facing activities. This will typically be the key driver for the building's location (i.e. readily accessible by clients or near to the customer base served) and will also influence the style (higher proportions of "front of house" and meeting spaces) and standard of accommodation (higher standard front of house services). **Administrative Office** An administrative office (or "back office") is a building predominantly dedicated to non-client or customer facing activities in support of the operation of the business. Included are "middle office" functions - departments of a financial services company that manage position-keeping (i.e. control representation of transactions within transaction-registering system of a company). A back office is where tasks dedicated to running the company itself take place. Examples of back-office tasks include IT departments that keep the phones and computers running (operations architecture), accounting, and human resources.
Call centre	A call centre is a building where the predominant use is as a call centre or contact centre. These buildings may be either converted standard office space (typically open-plan), converted, or purpose-built warehouse-type space. A call centre or call centre is a centralised office used for the purpose of receiving and transmitting a large volume of requests by telephone. A call centre is operated by a company to administer incoming product support or information inquiries from consumers/customers. Outgoing calls for telemarketing, clientele, and debt collection are also made. In addition to a call centre, collective handling of letters, faxes, and e-mails at one location is known as a contact centre. Call-centres use a wide variety of different technologies to allow them to manage large volumes of work. These technologies facilitate queuing and processing of calls, maintaining consistent work flow for agents and creating other business cost savings.

Office Type	Definition
IT/ data centre	A data centre or computer centre is a building predominantly allocated to house computer systems. Exclude offices which have significant data centre functions within them (e.g. trading floors or call-centres). A data centre is a facility used to house computer systems and associated components, such as telecommunications and storage systems. It generally includes redundant or backup power supplies, redundant data communications connections, environmental controls (e.g. air-conditioning, fire suppression), and special security devices.
Business Park	This category is different to all other office types as it is based solely on the nature of location as opposed to nature of occupier. The reason for the inclusion of this category as a separate office type is to capture the average density for all B1 office types defined within this table (save for serviced offices) usually found in this out of town building type, particularly as business parks often feature in the developments and regeneration schemes this Guide is designed to cater for.
Serviced office	A serviced office is an office or office building that is fully equipped and managed by a facility management company, which then rents individual (and often furnished) offices or floors to other companies. Serviced offices, which are also referred to as managed offices, business centres, incubator centres or executive suites, often allow tenants to share reception services, business machines and other resources, providing reduced costs and access to equipment, services (e.g. IT & comms networking and connectivity) and amenities which may otherwise be unaffordable or uneconomic to purchase. Occupiers of serviced office facilities usually fall into the following categories: ▪ New Market / Locational - Businesses which are typically headquartered abroad or in another region of the country which require a business presence in the area of operation of the business centre. ▪ Startup Companies / Entrepreneurial - Small to medium businesses or enterprises which don't want to make a financial commitment to a longer term lease. This class of client likely also benefits from not having to add administrative and support personnel to payroll, with all the pursuant HR costs (benefits, insurance, recruitment). ▪ Overflow - Typically a large company experiencing growth, with traditional leased space in the area which it has outgrown. These can be short-term requirements (3–6 months) for large number of users (as many as 40-50). ▪ Interim - Clients that are in the process of moving from one space to another, and may be facing delays in the completion of the new space. ▪ Project-based - Clients that have a specific need for office space, based on a specific contract or project.

Appendix 5 – Use Classes Order

The Use Classes as defined by the Town and Country Planning (Use Classes) Order 1987 (as amended) are shown below:

Use Class	Use
A1 (Shops)	Sale of goods and cold food, retail warehouses, hairdressers, travel and ticket agencies, post offices, domestic hire shops, funeral directors, dry cleaners, internet cafés
A2 (Financial and Professional Services)	Professional (excluding health and medical services) and financial services (banks and building societies); other services appropriate in a shopping area where the services are provided principally to visiting members of the public
A3 (Restaurants and cafes)	Sale of food and drink for consumption on premises, e.g. in restaurants, cafes
A4 (Drinking establishments)	Public house, wine bar or other drinking establishment
A5 (Hot food take aways)	Sale of hot food for consumption off the premises
B1 (Business)	(a) Offices other than financial and professional services providing for the visiting members of the public (b) Research and development (c) Other industrial processes appropriate in a residential area
B2 (General industrial)	General industry, not within B1
B8 (Storage or Distribution)	Storage or distribution centres
C1 (Hotels)	Hotels, boarding and guest houses, provided that care is not provided
C2 (Residential Institutions)	Residential accommodation for provision of care (e.g. old age homes); residential schools and colleges and training centres; hospitals and nursing homes
C2A (Secure residential accommodation)	Prison; young offenders institutions; detention centres; secure training centres; custody centres; short-term holding centres; secure hospitals; secure local authority accommodation; military barracks
C3 (Dwellinghouses)	Dwelling houses for individuals, families and up to six individuals living as a single household
C4 (Houses in multiple occupation)	Use of a dwelling house by not more than six residents as a house in multiple occupation
D1 (Non-residential institutions)	Clinics, health centres, crèches, day nurseries, day centres, consulting rooms (not attached to doctor's house); museums, libraries, art galleries, public and exhibition halls; non-residential schools, colleges and other educational centres; public worship or religious instruction; law courts
D2 (Assembly and leisure)	Cinemas, dance and concert halls; swimming pools, skating rinks, gymnasiums; other indoor and outdoor sports and leisure uses, bingo halls
Sui Generis	Launderettes, taxi businesses, car hire businesses, filling stations, scrap yards, shops selling or displaying motor vehicles for sale, retail warehouse clubs, hostels, theatres, amusement arcades and centres, fun fairs, nightclubs, casinos

Appendix 6 – Differences between the 1st and 2nd Editions

The table below compares the employment densities stated within the 1st Edition of the Guide in comparison to densities stated in the current 2nd Edition.

N.B. To bring this Guide in line with current practice, the 2nd Edition uses different bases of floor area measurement, principally in the use of NIA as opposed to GIA.

	Use Class	Use Type	Area per workspace (m²) 2001		Area per FTE (m²) 2010	
	Industrial					
1	B2	General	34	GIA	36	GIA
2	B1(c)	Light Industry (Business Park)	32	GIA	47	NIA
	Warehouse & Distribution					
3	B8	General	50	GEA	70	GEA
4	B8	Large Scale and High Bay Warehousing	80	GEA	80	GEA
	Office					
5	B1(a)	General Office	19	GIA	12	NIA
6	B1(a)	Call Centres	13	GIA	8	NIA
7	B1(a)	IT/ Data Centres	-	-	47	NIA
8	B1(a)	Business Park	16	GIA	10	NIA
9	B1(a)	Serviced Office	20	GIA	10	NIA
	Retail					
10	A1	High Street	20	NIA	19	NIA
11	A1	Food Superstores	19	NIA	17	NIA
12	A1	Other Superstores/ Retail Warehouses	90	GIA	90	NIA
13	A2	Financial & Professional Services	-	-	16	NIA
14	A3	Restaurants & Cafes	13	GIA	18	NIA
	Leisure & Visitor Attractions					
15	C1	Budget Hotels	1 employee per 3 bedrooms		1 employee per 3 bedrooms	
16	C1	General Hotels (3 star)	1 employee per 2 bedrooms		1 employee per 2 bedrooms	
17	C1	4/ 5 Star Hotels	1 employee per 1.25 bedrooms		1 employee per 1.25 bedrooms	
18	D1	Cultural Attractions	36	GIA	36	GIA
19	D2	Cinemas	90	GIA	90	GIA
20	D2*	Amusement & Entertainment Centres	40	GIA	70	GIA
21	D2	Sports centres and Private Clubs	90/ 55	GIA	65	GIA

*some 'Sui Generis' Use Classes are applicable for this Use Type. See Appendix 5 for a list of Sui Generis uses.

If you have any questions on this Guide please contact:

simon.dancer@hca.gsx.gov.uk

Jones Lang LaSalle

Real value in a changing world

Peter Leaver
Director
Jones Lang LaSalle
45 Church Street
Birmingham
B3 2RT
+ 44 (0)121 214 9970
peter.leaver@eu.jll.com

Edmund Miller
Graduate Surveyor
Jones Lang LaSalle
30 Warwick Street
London
W1B 5NH
+ 44 (0)207 318 7877
edmund.miller@eu.jll.com