Chesterfield Borough Employment Land Requirements (2011-2036)

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1.0 Introduction

- 1.1 The provision of a high quality sites and premises infrastructure plays a key role in building a competitive economy that can create and sustain a range of employment opportunities to meet the needs of local people. Future employment land requirements will be linked to a range of factors including:
 - Maintaining and reinforcing Chesterfield's role as a sub-regional employment centre. As well as providing the majority of jobs for local people, more than 21,000 people travel into the Borough for work each day, with the largest in-flow of people coming from North East Derbyshire (8,400), Bolsover (3,300) and Sheffield (3,200). The level of local employment has been relatively static in recent years with job's growth in public and private sector services off-set by declines in the area's traditional industrial base. If local employment growth had grown in line with the national average over the last 15 years there would now be almost 56,000 employee jobs in Chesterfield, compared to the current level of 48,000.
 - Supporting the effective functioning of the local business base. In 2015 there were 3,190 businesses operating in Chesterfield. Since 2010 there has been a 12% increase (335 businesses) in the number of businesses based in Chesterfield, but this is below the increase seen nationally of 17%. Chesterfield has lower levels of entrepreneurial activity with only 6.3 start-ups per 1,000 of working age population compared to 8.7 start-ups / 1,000 nationally. In order to grow the local employment base, it is vital that new starts, business expansions and inward investors can continue to be accommodated / attracted to the Borough.
 - Diversifying the economic base and promoting the growth of new business sectors. Local employment growth has failed to keep pace with growth seen nationally reflecting the scale of difficulties that the area has faced as it seeks to adjust to the

decline of traditional manufacturing employment and secure the growth of new economic activities. This task is currently made more challenging given the area's particular dependence on the public sector for employment and the under-representation of the Financial, Business and Professional Services sector which has been, and will continue to be a key driver of growth in the national economy. However, the outlook for employment is cautiously optimistic, building on the core attributes of Chesterfield as a place to do business and a number of major development opportunities currently being developed / in the pipeline that will support growth across a number of business sectors.

- Responding to future population growth. ONS projections suggest that Chesterfield's population will increase to 108,635 by 2036 (from a 2011 baseline of 102,671), creating an additional demand for employment. The scale of demand will be dependent on the relative size of the working age population, with the pension age potentially rising to 68 by 2036, and the level of economic activity at the time.
- Tackling worklessness. The decline of the traditional industrial base has resulted in concentrated disadvantage in particular communities (for example on the fringes of Chesterfield town centre and in the east of the Borough) alongside a relatively high level of worklessness across the Borough as a whole. Whilst the claimant count unemployment rate in Chesterfield has actually fallen below the national average for the first time since the current records began (currently 1.7% compared to 1.9%), the broader measure of worklessness (the number of working age people claiming key out of work benefits) is significantly higher with 7,770 people (or 11.8%) claiming these benefits (compared to 9.2% nationally). There is a need to ensure the provision of a sufficient number and range of employment opportunities to meet the needs of the local population.
- Supporting more sustainable patterns of development.
 Prioritising the re-use of brownfield sites and promoting sites which reduce the need to travel and are accessible by public transport.
- 1.2 In order to meet both current and future employment / business requirements, Chesterfield needs to be able to offer an appropriate range of employment sites, in terms of quantity, size and location. The quality of site provision is key the aim should be the identification of a portfolio of employment sites that are attractive to the market (recognising that attracting / retaining business investment is a competitive process) and that have a realistic prospect of implementation within the designated plan period. Ideally, the portfolio should differentiate between different employment requirements eg

office and industrial/logistics and be able to offer diversity of choice within these categories. There is a need to ensure that the best employment sites are safeguarded for employment use and not lost to other uses such as housing. This is not to preclude the development of mixed uses on former industrial sites so long as appropriate provision is made to meet employment land requirements.

2.0 Calculating Employment Land Requirements

- 2.1 In seeking to determine Chesterfield's employment land requirements, a range of factors have been taken into account including: the impact of population growth on the future demand for employment; Chesterfield's functional relationship with surrounding districts; past trends in employment and business creation; and the local growth prospects for different market sectors taking account of national forecasts and specific local developments.
- 2.2 It should be noted that determining employment need and translating this into an employment land requirement is based on a number of assumptions about variables such as the size of the working age population and the future make-up of the local economy. Changes in any of these assumptions will clearly impact on the final employment land figure, and the approach set out below needs to be viewed in that context.

Future Employment Requirement

- 2.3 In 2036, Chesterfield's population is estimated as 108,635, based on 2012 sub national projections.
- 2.4 Chesterfield's working age population (16-64) currently stands at 62.9% of total population (approx. 65,500 people) compared to 63.5% nationally. In recent years the size of Chesterfield's working age population has consistently been in the 63-64% range. Looking forward the number of 16-64 year olds is predicted to decline as the population shifts towards an increasingly ageing profile. Set against this, the Government has already put in place measures to increase the retirement age to 67, with plans to increase this to 68 by 2036. Taking a balance of these two factors it is assumed that the working age population (16-68 year olds) will account for 62% of the population in 2036.
 - In 2036 the working age population will be $108,635 \times 0.62 = 67,354$
- 2.5 The national economic activity rate (including those in employment and the unemployed) currently stands at 77.7% and has been increasing slowly over the last ten years (2005 76.4%). Economic activity rates are predicted to increase in future, particularly for women across all age ranges (apart from 16-24 year olds) and for men in the older age

ranges. For this forecast, it is assumed that the future economic activity rate for Chesterfield will be 79% by 2036.

Economically active population: $67,354 \times 0.79 = 53,210$

- 2.6 As a sub-regional employment centre, Chesterfield not only provides jobs for local residents but also for residents in surrounding areas (Chesterfield's Travel To Work Area covers a large part of North East Derbyshire and Bolsover, and the Town also attracts a number of commuters from Sheffield and Derbyshire Dales). Therefore, any employment land forecast will need to reflect this sub-regional role by taking account of population growth (and employment demand) in surrounding districts. Equally, a number of Chesterfield residents will continue to work in locations outside of the Borough and this also needs to be reflected in any forecast.
- 2.7 At the time of the Census 2011, there were 48,190 Chesterfield residents in employment of which 30,660 were based in Chesterfield and 17,530 worked elsewhere.
 - 30,660 / 48,190 = 0.64 (ie 64% of local employment need is met within the boundaries of the Borough).
- 2.8 On the basis that Chesterfield's role as an employment centre is maintained and its relationship with surrounding districts remains broadly unchanged to 2036 (although to note that the proportion of Chesterfield residents actually working in the Borough has declined from 68% at the time of the Census 2001to 64% in 2011):

$$53.210 \times 0.64 = 34.054$$

A total of 34,054 Chesterfield residents will be working in the Borough in 2036.

- 2.9 At the time of the Census 2011, there were 52,110 jobs in the Borough (including homeworkers) of which 30,660 (or 59%) were taken by Chesterfield residents.
- 2.10 Again, assuming established employment roles and commuting patterns remain the same and additionally, that population growth in surrounding commuting districts broadly reflects the population growth predicted for Chesterfield:

$$34,054 / 0.59 = 57,720$$

Therefore in 2036 there will be 57,720 people working in Chesterfield compared to 52,110 people working in the Borough in 2011.

$$57,720 - 52,110 = 5,610$$

- 2.11 This will require an additional 5,610 jobs to be accommodated in the Borough. However at the time of the Census 2011, 7% of people working in Chesterfield were home workers. Assuming a similar rate of home workers in 2036 this would reduce the number of jobs to be accommodated by approximately 390.
- 2.12 Therefore there will be a requirement to accommodate an additional **5,200** (rounded) jobs in Chesterfield by 2036.

3.0 Future Employment by Key Business Sector

- 3.1 The starting point in translating the employment forecast into an employment land requirement is to make an educated guess about the sectoral composition of the local economy in 2036. The table below sets out current employment by key sector relative to the regional and national averages and an employment projection for Chesterfield in 2036. To note that the base position for Chesterfield relates to the latest figures available (2014) as the figures for 2011 appear to overstate employment in the public sector, particularly in relation to education (compared to trend). Total employment in 2014 stood at 48,100 compared to 48,800 in 2011.
- 3.2 This projection takes account of past trends and forecasts for growth at the national scale, alongside key developments that are likely to impact on employment at the local level, for example Markham Vale, Chesterfield Waterside, Peak Resort etc.

Employment by Key Business Sector								
	Chesterfield		East	Great	Ch	Chesterfield		Employment
	(2014)		Midlands	Britain	(20	(2036)		Change Net
			(2014)	(2014)		, ,		(2014-2036)
Energy/Water	100	0.3%	1.3%	1.1%	100)	0.2%	0 (0%)
Manufacturing	4,500	9.3%	12.9%	8.5%	3,7	00	6.9%	-800 (-18%)
Construction	1,900	4.0%	4.4%	4.5%	2,2	:00	4.1%	300 (16%)
Wholesale / Retail	9,700	20.2%	17.1%	15.9%	10,	400	19.5%	700 (7%)
Transport and	2,300	4.7%	5.1%	4.5%	4,1	00	7.7%	1,800 (78%)
Storage								
Accommodation /	2,200	4.5%	5.8%	7.1%	2,8	00	5.3%	600 (27%)
Food Services								
ICT	1,500	3.1%	2.4%	4.1%	1,8	00	3.4%	300 (20%)
Financial and	7,400	15.3%	19.7%	22.2%	10,	200	19.1%	2,800 (38%)
Business Services								
Public Admin,	17,200	35.8%	26.8%	27.4%	16,	200	30.4%	-1,000 (-6%)
Education, Health								
Other Services	1,300	2.7%	4.2%	4.4%	1,8	00	3.4%	500 (38%)
Total	48,100				53,	53,300		5,200
						-		

Summary:

- 3.3 Manufacturing: further decline in the sector anticipated but at a significantly reduced rate compared to historic trend (for example the sector declined by 35% over the last ten years). There will be some new job creation related to new business starts, expansions, relocations, but this is likely to be offset by employment losses elsewhere in lower value added activities and as a result of continuing productivity gains across the sector as a whole. Markham Vale has been the key location for accommodating indigenous business expansions (eg Inspirepac, Gould Alloys, MSE Hiller) as well as attracting new manufacturing investment to the area (eg Ready Egg Products).
- 3.4 Construction: an increase in employment of 300 jobs to reflect growth in the overall population base (increased housing and domestic market demand) and the delivery of a number of regeneration schemes in Chesterfield in the next ten years.
- 3.5 Wholesale / Retail: Chesterfield to maintain its role as a sub-regional retail centre with the share of employment remaining at around 20%. An increased population will increase overall demand for retail goods, however the continuing rise of on-line retail will put pressure on traditional bricks and mortar locations (although it will support demand for distribution related activities). Future investment will seek to enhance Chesterfield's town centre experience, blending retail with leisure to increase footfall and dwell times. It is anticipated that the redevelopment of the former Co-op building to include a number of family orientated restaurants will have a positive impact on the wider town centre in future, alongside other public realm improvements as set out in the Town Centre Masterplan.
- 3.6 Transport and Storage: significant increase in employment (1,800 jobs) largely reflecting the development of Markham Vale as a logistics hub. A large unit (44,000 sqm) for Great Bear is due for completion in spring 2016, creating 400 jobs. The opening up of Markham Vale North will see the potential for approximately 90,000 sqm of floorspace within the Borough. Longer term there is scope for further distribution uses in the Staveley Corridor alongside the development of a maintenance depot for HS2 (also falling within this sector). The sector also includes a significant Post Office / Royal Mail presence in Chesterfield. There has been some consolidation in post related activities in recent years, and on balance it is not anticipated that the sector will generate an additional employment requirement in future (equally if there is an employment increase, it is assumed that this will be capable of being accommodated within their existing property portfolio).
- 3.7 Accommodation & Food Services: although the range and quality of Chesterfield's hotel and food offer has improved in recent years, the share of employment remains below the national average (4.5% compared to 7.1%), highlighting opportunities for further growth in this sector. Premier Inn has recently confirmed they will be an anchor

- tenant for the Elder Way development in the town centre, with a number of café-bar / restaurants sitting alongside the hotel in the former Co-op building. The development of Peak Resort will be a major boost for the area's tourism offer and will see a significant number and mix of bed-spaces provided as part of a Phase One development.
- 3.8 ICT: it is anticipated that there will be further growth in the sector, in part linked to the role of the Council's two innovation centres in acting as a seed-bed for the growth of new ICT related companies.
- 3.9 Financial and Business Services: this sector has been a long-term driver of employment growth in the national economy and forecasts highlight that this will continue to be the case in future. It is projected that this sector will deliver the biggest absolute increase in employment at the local scale, particularly on the back of schemes such as Chesterfield Waterside which will further develop Chesterfield as a location for office based employment.
- 3.10 Public Admin/Health/Education: previously an important source of local jobs growth, the sector is now expected to see falling employment on the back of on-going cuts to public expenditure. The scale of job losses will be balanced to a degree by new developments such as the Derby University St Helenas campus opening in September 2016, and longer term by the growing demand for health and care related services as a result of an ageing population.
- 3.11 Other Services: general growth in this sector linked to demand generated on the back of an increasing population and also the growth of creative industries.

4.0 Assigning Business Sectors to B1, B2, B8 Use Classes

4.1 Having identified the level of employment change by key business sector, the sectors have then been assigned to the relevant B1, B2 and B8 employment use classes. In broad terms B1 is taken as being office based services, B2 covers manufacturing industries, and B8 covers transport and logistics related activities.

B1 Office Space

Sector	Number of Jobs
ICT	300
Financial and Business Services	2,800
Other Services	375
Public Administration	-300
Net Employment Requirement	3175

Note: no distinction has been made between the B1 and A2 use classes with regard to employment in the Financial and Business Services Sector. A proportion (30%) of the decline in Public Admin, Education and Health employment to reflect the fact that some public sector floorspace has the potential to be recycled for other employment uses.

B2 General Industrial

4.2 This includes all of the manufacturing and construction sectors. It is projected that a further 800 jobs will be lost from the manufacturing sector, balanced against a growth of 300 jobs in construction.

Net employment requirement: - 500 jobs

B8 Distribution

- 4.3 This includes the following:
 - A proportion (30%) of the Wholesale and Retail sector to cover employment growth in the wholesale distribution and motor related repairs sub-sectors.
 - All of the Transport and Storage sector (although this sector also covers post office related activities, it is anticipated that all employment growth will be in the transport and logistics related elements of the sector).

Net employment requirement: $210 (700 \times 0.3) + 1,800 = 2,010 \text{ jobs}$

Balance of Employment

4.4 The balance of employment growth (1,160 jobs) falls within the Retail, Accommodation and Food Services sectors, and will be covered by appropriate planning policies / allocations mainly in relation to the A1-5 and C1 planning use classes.

5.0 Net Employment Change and Demand for Business Floorspace

5.1 Whilst changes in the overall level of employment will be a significant factor in determining future employment land requirements, an approach based only on net employment change wouldn't properly reflect the on-going demand for new business floorspace. This is particularly the case where net employment change in a sector is negative as this could be interpreted as meaning there is no demand for new employment land. However, the net change figure represents a balance between jobs created and jobs lost, so even where net change is negative that doesn't mean that new jobs aren't being created, only that more jobs are being lost. As highlighted above, manufacturing has seen a significant decline in employment over the last 10 years, however, during that period a number of manufacturing businesses

have successfully expanded at Markham Vale (eg Inspirepac and Ready Egg Products) reflecting an on-going demand for employment land.

- As part of the normal functioning of the local business base, there will always be some level of demand for new business floorspace, regardless of whether new employment is being created. For example, businesses can move premises for a number of reasons to accommodate a new manufacturing process, the need for more storage space, or displacement by higher value activities such as retail and residential development without generating additional employment. This point is illustrated by an analysis of property enquiries dealt with by the Council's Economic Development Unit (EDU) which shows that for every job created as part of successful property relocation at least three jobs are safeguarded. Put another way, the majority of company moves are linked to maintaining existing jobs, rather than creating new employment.
- 5.3 Whilst some of these moves can be accommodated within the existing premises infrastructure (as a result of vacancies elsewhere), loss of employment land / buildings for other uses (particularly residential), and general redundancy / deterioration in the quality of the building stock over time, will continue to generate a requirement for new business floorspace.
- 5.4 In order to properly reflect the dynamics of the local commercial property market, it is proposed that any estimate of future demand for employment land takes account of both the change in the level of employment and the on-going requirement to support the effective functioning of the local business base. However, calculating the level of floorspace required to support the normal functioning of the business base is not straightforward, therefore it is simply proposed that an allowance is made based on the current level of employment in the business sector and informed by any sector specific factors. As a reference point a turnover rate of 10% per 10 year period has been assumed, equating to 25% over the period 2011-36.

6.0 Employment Land Projections 2011 to 2036

B1 Offices

- 6.1 Net employment land requirement for 3,175 jobs
- 6.2 The most recent HCA Employment Density Guide (2015) applies a job to floorspace ratio of 1 job/12 sqm for a typical office based user, based on net internal floorspace. An allowance of 20% is typically applied to convert gross office floorspace into net floorspace (to cover shared spaces such as corridors, stairwells etc), therefore, based on 3,175 jobs, this results in a total floorspace requirement of:

 $3,175 \times 1 \text{ job}/12 \text{ sgm} = 38,100 \text{ sgm} /0.8 = 47,600 \text{ sgm}$

6.3 A plot ratio is then applied in order to determine the total site area required. A typical plot ratio is 40%, ie the building footprint occupies 40% of the total site area, with the remainder of the site given over to site access, carparking, turning circle, landscaping etc. For B1 offices a plot ratio of 1.2 (or 120%) has been applied. This assumes that the typical office development is three storeys in height.

47,600 sqm / 1.2 = 39,700 sqm or 4.0 ha

6.4 In addition, an allowance of 25% of the current B1 employment base (approximately 10,000 jobs) has been made to account for demand generated as a result of normal turnover within the sector.

 $10,000 \times 25\% \times 1 \text{ job/}12 \text{ sqm} / 0.8 / 1.2 \text{ plot ratio} = 31,2500 \text{ sqm or } 3.1 \text{ ha}$

4.0 + 3.1 = 7.1 ha

6.5 It is also important to ensure an additional margin in the supply of employment land so that businesses have a degree of flexibility in their locational choices, increasing the likelihood of a successful local outcome. It is also necessary to allow an additional margin because some of the sites identified may not come forward for development within the plan period (particularly where these have been carried over from previous plan periods). The previous Northern Land Report applied a 20% margin to allow for flexibility of choice.

 $7.1 \times 1.2 = 8.5 \text{ ha}$

B2 Industrial

- 6.6 The net employment change for the manufacturing and construction sectors was calculated as -500 jobs. However, as set out above, the net employment figure conceals an element of gross new job creation as a result of new firm formation, business expansion and new investment into the area. This is particularly the case with the construction sector, which viewed in isolation, has a forecast increase of 300 jobs.
- 6.7 Statistics on business start-ups at the national level highlight the ongoing demand for floorspace in the manufacturing sector. For example in 2014, there were 17,000 new start businesses in the manufacturing sector, representing over 10% of the existing manufacturing base. Similarly, enquiries received by EDU point to a consistent level of demand for industrial units (for manufacturing and warehousing), with an average of 280 enquiries, requiring a total of 140,000 sqm of floorspace, received over the last three years. On this basis, and reflecting the positive employment position in the

construction sector, an additional allowance of 10% has been added to the baseline turnover of 25%, giving a total of 35%.

$$6,400 \times 0.35 = 2,240 \text{ jobs}$$

6.8 A standard manufacturing floorspace ratio of 1 job / 36 sqm (GIA) was applied to the above figure to produce a total floorspace requirement.

$$2,240 \times 1$$
 job per $36 \text{ sqm} = 80,640 \text{ sqm}$

6.9 A standard plot ratio of 0.4 is then applied to give a total site area:

$$80,640 \text{ sqm} / 0.4 = 201,600 \text{ sqm or } 20.2 \text{ ha}$$

6.10 Applying a 20% margin to allow for a degree of choice:

$$20.2 \times 1.2 = 24.2 \text{ ha}$$

B8 Distribution

6.11 Net employment land requirement for 2,010 jobs, comprising 1,800 jobs in storage and transport, and 210 jobs in wholesale distribution. The current floorspace ratio for regional distribution centres is 1 job per 77 sqm (GEA). This figure has been adjusted to 1 job per 50 sqm to reflect a higher density of use for smaller scale wholesale activities:

$$1,800 \times 1 \text{ job/77 sqm} = 138,600 \text{ sqm}$$

 $210 \times 1 \text{ job } / 50 \text{ sqm} = 10,500 \text{ sqm}$

$$Total = 149,100 \text{ sgm}$$

6.12 A higher standard plot ratio of 0.5 is then applied to give a total site area:

$$149,100 / 0.5 = 298,200 \text{ sgm or } 29.8 \text{ ha}$$

6.13 In addition, a reduced allowance of 10% has been applied to account for demand generated as a result of normal turnover by smaller scale operators within the B8 sector.

$$5,200 \times 10\% \times 1$$
 job / 64 sgm / 0.5 plot ratio = 66,560 sgm or 6.7 ha

$$29.8 \text{ ha} + 6.7 \text{ ha} = 36.5 \text{ ha}$$

6.14 Applying a 20% margin to allow for a degree of choice:

$$36.5 \text{ ha x } 1.2 = 43.8 \text{ ha}$$

6.15 The total employment land requirement for the period 2011 to 2036 is therefore estimated as:

- B1 8.5 ha
- B2 24.2 ha
- B8 43.8 ha

Total - 77 ha

7.0 Aspirational Scenario(s)

- 7.1 Chesterfield BC is a member of the Derby, Derbyshire, Nottingham and Nottinghamshire Local Enterprise Partnership (D2N2). The D2N2 Strategic Economic Plan seeks to narrow the gap between the D2N2 region and other parts of the country and create 55,000 additional private sector employee jobs in the D2N2 area between 2013 and 2023.
- 7.2 Chesterfield BC is also a member of Sheffield City Region (SCR)
 Combined Authority and Local Enterprise Partnership. Underpinning its
 Strategic Economic Plan (SEP), the City Region has set an ambitious
 target of securing an additional 70,000 jobs (net) in the area by 2024.
- 7.3 Work undertaken by consultants Ekosgen (in consultation with local authorities) for SCR has set out how the 70,000 jobs might be distributed on a sectoral and local authority basis. Chesterfield's share of employment would be 4,900 new jobs by 2024. Whilst this level of employment growth is capable of being accommodated under the projection set out above (which is based on 5,200 jobs), it would represent a significant acceleration in both job creation and land take-up. For example, the main projection is based on an average increase of 210 jobs a year (5,200 / 25 = 208), whereas achievement of the SCR target would require an increase of 380 jobs a year (4,900 / 13 = 377), 80% higher than the projection.
- 7.4 The land requirements of two additional growth scenarios are considered: firstly, an accelerated growth scenario (Growth Scenario 1) which sees growth following a higher trajectory than the main projection; and secondly, a high growth scenario (Growth Scenario 2) that is based on achieving the SCR target by 2024, and with continuing employment growth up to 2036.
- 7.5 Growth Scenario 1 (GS1) assumes job creation of 6,200 by 2036, 20% above the main projection. Growth Scenario 2 (GS2) assumes job creation of 7,400 by 2036, 40% above the baseline. The employment land requirement of each scenario is calculated on the same basis as the main projection methodology.

Growth Scenario 1

7.6 This scenario considers a higher level of employment growth to 2036 on the back of an improving economic outlook for the city region

economy, based on significant investment in infrastructure, skills and business support.

GS1	Chesterfield (2014)		Chesterfield (2036)		Employment Change Net (2014-2036)
Energy/Water	100	0.3%	100	0.2%	0 (0%)
Manufacturing	4,500	9.3%	3,700	6.8%	-800 (-18%)
Construction	1,900	4.0%	2,300	4.2%	400 (21%)
Wholesale / Retail	9,700	20.2%	10,600	19.5%	900 (9%)
Transport and Storage	2,300	4.7%	4,400	8.1%	2,100 (91%)
Accommodation / Food	2,200	4.5%	2,900	5.3%	700 (32%)
Services					
ICT	1,500	3.1%	1,800	3.4%	300 (20%)
Financial and Business	7,400	15.3%	10,500	19.3%	3,100 (42%)
Services					
Public Admin, Education,	17,200	35.8%	16,200	29.8%	-1,000 (-6%)
Health					
Other Services	1,300	2.7%	1,800	3.4%	500 (38%)
Total	48,100		54,300		6,200

7.7 Assigning Business Sectors to B1, B2 and B8 Use Classes

B1 Office Space

- ICT 300 jobs
- Financial and Business Services 3,100 jobs
- Other Services 375 jobs
- Public Administration 300 jobs lost

Net employment requirement: 3,475 jobs

B2 Industrial

Net employment requirement: - 400 jobs lost

B8 Distribution

- Wholesale and Retail Sector (30%) 270 jobs
- Transport and Storage 2,100 jobs

Net employment requirement: 2,370 jobs

7.8 Employment Land Projections 2011-36

B1 Offices

Net employment requirement 3,475 jobs

 $3,475 \times 1 \text{ job/}12 \text{ sqm} = 41,700 \text{ sqm } /0.8 = 52,125 \text{ sqm}$

52,125 sqm /1.2 = 43,438 sqm (4.3 ha)

Allowance for normal turnover 3.1 ha

Total 4.3ha + 3.1ha = 7.4ha

Allowance for choice (20%) = 8.9 ha

B2 Industrial

As main projection: 24.2 ha

B8 Distribution

Net employment land requirement for 2,370 jobs, comprising 2,100 jobs in storage and transport, and 270 jobs in wholesale distribution.

$$2,100 \times 1 \text{ job/77 sqm} = 161,700 \text{ sqm}$$

 $270 \times 1 \text{ job } / 50 \text{ sqm} = 13,500 \text{ sqm}$

Total = 175,200 sqm

175,200 / 0.5 = 350,400 sgm or 35.0 ha

Allowance for normal turnover 6.7 ha

35.0 ha + 6.7 ha = 41.7 ha

Allow for choice (20%) = 50.0 ha

- 7.9 The total employment land requirement under GS1 is therefore estimated as:
 - B1 8.9 ha
 - B2 24.2 ha
 - B8 50.0 ha

Total - 83 ha

Growth Scenario 2

7.10 This scenario assumes achievement of the SCR growth target (4,900 jobs) by 2024 and then annual growth of 210 jobs (as per main projection) until 2036, resulting in an employment total of 7,400 jobs.

GS2 Chesterfield (2014)	Chesterfield (2036) Employment Chang Net (2014-2036)	е
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Energy/Water	100	0.3%	100	0.2%	0 (0%)
Manufacturing	4,500	9.3%	3,900	7.0%	-600 (-13%)
Construction	1,900	4.0%	2,400	4.3%	500 (26%)
Wholesale / Retail	9,700	20.2%	10,600	19.1%	900 (9%)
Transport and Storage	2,300	4.7%	4,700	8.5%	2,400 (104%)
Accommodation / Food	2,200	4.5%	3,000	5.4%	800 (36%)
Services					
ICT	1,500	3.1%	1,900	3.4%	400 (27%)
Financial and Business	7,400	15.3%	10,800	19.5%	3,400 (46%)
Services					
Public Admin, Education,	17,200	35.8%	16,200	29.2%	-1,000 (-6%)
Health					
Other Services	1,300	2.7%	1,900	3.4%	600 (46%)
Total	48,100		55,500		7,400
Total	48,100		55,500		7,400

7.11 Assigning Business Sectors to B1, B2 and B8 Use Classes

B1 Office Space

- ICT 400 jobs
- Financial and Business Services 3,400 jobs
- Other Services 450 jobs
- Public Administration 300 jobs lost

Net employment requirement: 3,950 jobs

B2 Industrial

Net employment requirement: 100 jobs lost

B8 Distribution

- Wholesale and Retail Sector (30%) 270 jobs
- Transport and Storage 2,400 jobs

Net employment requirement: 2,670 jobs

7.12 Employment Land Projections 2011-36

B1 Offices

Net employment requirement 3,950 jobs

 $3,950 \times 1 \text{ job/}12 \text{ sqm} = 47,400 \text{ sqm } /0.8 = 59,250 \text{ sqm}$

59,250 sqm /1.2 = 49,375 sqm (4.9 ha)

Allowance for normal turnover 3.1 ha

Total 4.9ha + 3.1ha = 8.0ha

Allowance for choice (20%) = 9.6 ha

B2 Industrial

As main projection: 24.2 ha

B8 Distribution

Net employment land requirement for 2,670 jobs, comprising 2,400 jobs in storage and transport, and 270 jobs in wholesale distribution.

$$2,400 \times 1 \text{ job/77 sqm} = 184,800 \text{ sqm}$$

 $270 \times 1 \text{ job } / 50 \text{ sqm} = 13,500 \text{ sqm}$

Total = 198,300 sqm

198,300 / 0.5 = 396,600 sqm or 39.7 ha

Allowance for normal turnover 6.7 ha

$$39.7 \text{ ha} + 6.7 \text{ ha} = 46.4 \text{ ha}$$

Allow for choice (20%) = 55.7 ha

- 7.13 The total employment land requirement under GS2 is therefore estimated as:
 - B1 9.6 ha
 - B2 24.2 ha
 - B8 55.7 ha

Total - 90 ha