Nottinghamshire County Council, Nottingham City Council, Ashfield District Council, Broxtowe Borough Council, Erewash Borough Council, Gedling Borough Council and Rushcliffe Borough Council on behalf of the Greater Nottingham Partnership

NOTTINGHAM CITY REGION EMPLOYMENT LAND STUDY





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Volume 1 Main Report

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1 INTRODUCTION

- 1.1 This study was commissioned by Nottingham City Council, Nottinghamshire County Council and District Councils, on behalf of the Greater Nottingham Partnership (GNP), in June 2006, as an assessment of the quantity and quality of employment land in Nottingham City Region. The study brief¹ defines the City Region, or study area, as the Nottingham Core Housing Market Area comprising the local authority areas of Nottingham City, Broxtowe, Erewash, Gedling and Rushcliffe plus the Hucknall wards in Ashfield district, which lie outside the HMA but are part of the Nottingham Travel-to-Work Area and the Greater Nottingham Partnership. Key tasks for the study, as set out in the brief, are:
 - To assess whether the employment land identified in the study area meets current and future employment requirements up to 2026;
 - To assess if additional land is required;
 - If appropriate, to identify potential new employment sites and existing sites which could be transferred to other uses.
- 1.2 As the brief also indicates, the study is to contribute to the development of spatial planning policies both at local and strategic level. Its findings will be part of the evidence base for the new Local Development Frameworks (LDFs) and sub-regional proposals relating to the review of the Regional Spatial Strategy (RSS). It should also support the development of Nottingham as a Science City, linking with the Innovation Property Demand Study, and generally help inform public agencies and the private sector.
- 1.3 Following this Introduction, Chapters 2-4 take stock of the current situation in the City Region, setting out the context of current policy and profiling the economy and property market. In Chapters 5 and 6 we turn to the future, considering demand, supply and market balance, in terms of both quantity and quality. Chapter 6 provides conclusions and recommendations².

¹ Nottingham City Council, *Nottingham City Region Employment Land Study Brief*, April 2006

² With reference to the stages shown in the study brief, which in turn reflects Government guidance on employment land studies, Chapters 2-4 correspond to Stage 1 (take stock), Chapter 5 to Stage 2 (consider future demand and supply quantitatively) and Chapters 5-6 to Stage 3 (consider the quality of sites and make recommendations for a balanced employment land portfolio).

2 POLICY CONTEXT

2.1 In this chapter, we set out the background of current policy, showing the national and regional strategies that the City Region's authorities need to conform to, and the sub-regional policies it needs to reconsider, in framing its employment land policies.

National Policy

- 2.2 Until recently, the main document providing central Government guidance on employment land was Planning Policy Guidance Note (PPG)4, Industrial and Commercial Development and Small Firms. Key statements in PPG4 include:
 - 'One of the Government's key aims is to encourage continued economic development in a way which is compatible with its stated environmental objectives.'
 - Policies should provide for choice, flexibility and competition. In allocating land for industry and commerce, planning authorities should be realistic in their assessment of the needs of business. They should aim to ensure that there is sufficient land available which is readily capable of development and well served by infrastructure. They should also ensure that there is a variety of sites available to meet differing needs. A choice of suitable sites will facilitate competition between developers; this will benefit end-users and stimulate economic activity.'
 - 'The locational demands of businesses are... a key input to the preparation of development plans. Development plan policies must take account of these needs and at the same time seek to achieve wider objectives in the public interest.'
- 2.3 Employment land is also mentioned in Government guidance on housing. Planning Policy Guidance (PPG)3 was amended in January 2005 to add a new paragraph 42(a), which stated that:
 - 'Local planning authorities should consider favourably planning applications for housing or mixed use developments which concern land allocated for industrial or commercial use.'
 - But employment sites should still be safeguarded for employment 'if it can be demonstrated, preferably through an up-to-date review of employment land, ([see] Employment Land Reviews: Guidance Note' ODPM 2004)
 - that there is a realistic prospect of the allocation being taken up for [employment] use in the plan period; or
 - that its development for housing would undermine regional and local strategies for economic development and regeneration.'
- 2.4 This guidance was recently cancelled following the publication of Planning Policy Statement (PPS)3, Housing, on 29 November 2006. The new PPS makes two mentions of the transfer of employment land to housing. The first mention (in paragraph 38) is brief:

'Options for accommodating new housing growth... may include, for example, re-use of vacant and derelict sites or industrial and commercial sites for providing housing as part of mixed-use town centre development.'

2.5 The second mention of employment land in the new PPS3 is in the section on Effective Use of Land. This section states that, as a key policy objective, Local Planning Authorities 'should continue to make effective use of land by re-using land that has been previously developed'. It goes on to say (in paragraphs 43-44) that Local Development documents should include strategies, targets and trajectories for bringing previously developed land into housing use, and lists ways of implementing these, which include:

- Considering whether sites that are currently allocated for industrial or commercial use could be more appropriately re-allocated for housing development'.
- 2.6 The new PPS3 offers far less specific guidance on the release of employment sites to housing than did PPG3. There is nothing in PPS3 to replace the clear-cut criteria in the now cancelled paragraph 42(a). In effect, PPS3 has reverted to the position set out in paragraph 42 of PPG3, before the insertion of paragraph 42(a), which simply encouraged local planning authorities when reviewing their development plans to review their non-housing allocations and consider whether some of this land might better be used for housing or mixed use developments.
- 2.7 Although a footnote to paragraphs 43-44 of PPS3 makes reference to the ODPM Guidance Note on Employment Land Reviews (2004), this additional guidance does not fill the gap. The Note provides detailed lists of suggested criteria and scoring methods to help assess employment sites, but no simple statement of what question the assessment should aim to answer.
- 2.8 In summary, the new PPS3 will likely make it easier to protect employment land, because it removes both the presumption that authorities should consider favourably proposed transfers to housing and the tests that sites have to pass in order to be safeguarded for employment. But the new PPS also introduces greater uncertainty, in that it provides no clear-cut criteria for retaining or releasing sites.

Structure Plans

2.9 Most of the Nottingham City Region falls in Nottinghamshire and hence is covered by the Nottinghamshire Structure Plan. Erewash, however, falls outside of the County and is covered by the Derbyshire Structure Plan.

The Nottinghamshire Structure Plan

- 2.10 Nottinghamshire County Council and Nottingham City Council adopted a Joint Structure Plan (JSP) in February 2006. This replaced the earlier Nottinghamshire Structure Plan, adopted in November 1996.
- 2.11 The Structure Plan will shortly cease to have any statutory function; being replaced by the emerging Regional Spatial Strategy. But because it was only adopted recently its evidence base and objectives are still relevant.
- 2.12 As background to its employment land policies, the Written Statement notes that:
 - Gross domestic product (GDP) per head of population is below the average for the United Kingdom and the East Midlands region.
 - Nottingham is the key wealth creator, with considerably higher GDP per head than the rest of the Plan area.
 - The unemployment rate in April 2003 stood at 2.7%, which is higher than the East Midlands and equal to the UK average. But local pockets of very high unemployment persist.
 - Economic activity rates are lower than the UK average and the East Midlands average.
 - Most recent job growth has taken place in services, while manufacturing has declined.
 - Job growth has not been even across the County, but has concentrated on Nottingham City.

- 2.13 Most of these statements still hold true, as we shall see in the next chapter. Perhaps most relevant to the present study is the understanding that job growth is being fuelled by the service sector, while manufacturing is declining. Many older land-use plans in Nottinghamshire do not refer to this trend, which has a decisive impact on employment land requirements, as we shall see. It is a key objective of the Structure Plan is to assist in the strengthening and diversification of the economy, especially facilitating the growth of the service sectors while managing the decline of manufacturing.
- 2.14 In pursuit of this objective, the Plan allocates quantities of employment land to each of the local authorities in its area for the period 2001-21. Under the previous planning system, these quantities would have been translated into site-specific site allocations in Local Plans. But, further to the new planning legislation, it is likely that they will never be taken forward.

The Derbyshire Structure Plan

- 2.15 The Derbyshire Structure Plan, whose area includes Erewash district, was adopted in 2001, five years earlier than the Nottinghamshire Structure Plan, and so its evidence base is less relevant to this study. Its proposed land allocations covered the period 1991 2011.
- 2.16 Like the Nottinghamshire Structure Plan, the Derbyshire Plan sought to support the growth of the local economy. But it placed less importance on diversification into the service sector, although it did encourage local authorities to provide major new office sites. The Derbyshire Plan also protected existing employment sites against their loss to other uses and sought to balance jobs and housing.

Structure Plan Provision of Employment Land

2.17 The table below shows employment land requirements as set out in the Nottingham and Nottinghamshire Structure Plan and the Derbyshire Structure Plan.

	-	
Hectares	20-year period	Per Annum
Ashfield (Hucknall)	55	2.8
Broxtowe	75	3.8
Erewash	100	5.0
Gedling	65	3.3
Nottingham City	108	5.4
Rushcliffe	120	6.0
Total	523	26.2

Table 2.1 Structure Plan Land Requirements

Source: Nottingham and Nottinghamshire Structure Plan (2006), Derbyshire Structure Plan (2001)

2.18 The methods used to establish these Structure Plan targets are not compatible with those used by EMRA in assessing employment land requirements for the Regional Spatial Strategy. Neither of the Structure Plans place much weight on economic modelling. Instead, they relied largely on past take-up as an indication of future requirements, although in Nottinghamshire's the forecasts produced for the Regional Assembly's 2002 QUELS study were also taken into account.

Regional Policy

The Emerging Regional Spatial Strategy

2.19 The current Regional Plan for the East Midlands (RSS8) was adopted in March 2005 and is currently under review. Under the 2004 Planning and Compulsory Purchase Act, the new Regional Plan produced by this review will replace the Structure Plan,

providing strategic guidance to which local planning authorities will be required to conform.

- 2.20 The Regional Assembly is currently consulting on a draft Plan published in September 2006, which will undergo an Examination in Public in 2007 and should be finalised in 2008. Part 1 of the Plan provides the regional strategy and part 2 sub-regional strategies for four Sub-Areas, including the Three Cities Sub-Area of which Nottingham City Region is part.
- 2.21 In Part 1 of the draft Regional Plan, Policy 2, Selecting Land for Development, sets out the sequential principle that land should be selected for development in priority order, beginning with urban areas, followed by sites adjoining urban areas as part of planned and sustainable urban extensions, followed by rural sites within or adjoining existing settlements. Policy 2 also provides sustainability criteria to be used in choosing sites for development. The first criterion is that that priority should be given to making best use of previously developed land and vacant and under-used buildings. Other sustainability criteria include 'the likelihood that the site could be viably developed, taking into account the availability of resources both public and private'.
- 2.22 Policy 4, Concentrating Development in Urban Areas, sets out a spatial hierarchy comprising first the Principal Urban Areas (PUAs), which are the built-up areas centred on Derby, Leicester, Lincoln, Northampton and Nottingham, second the North Northamptonshire Growth Towns and third the Sub-Regional Centres 'Significant levels of new development' should be located in the PUAs and Growth Towns and 'appropriate development of a lesser scale' in the Sub-Regional Centres.
- 2.23 In the Nottingham City Region, the Nottingham PUA comprises the City of Nottingham including Clifton, Arnold, Beeston, Carlton, Long Eaton, Sandiacre, Stapleford and West Bridgford. Sub-Regional Centres, comprise Hucknall and Ilkeston
- 2.24 Policy 13 of the draft Regional Plan sets out spatial priorities for the Three Cities Subarea, of which Nottingham City region is part, stating that provisions should be made for employment land to meet the needs of indigenous manufacturing and distribution uses and to encourage new inward investment, and for offices in city centres as part of a mix of uses supporting the vitality and viability of such centres. The policy adds that development associated with the Nottingham East Midlands Airport should be focused where possible in surrounding urban areas:

'In the past there has been pressure for development in the vicinity of the airport. However, urbanisation of the area around NEMA would not lead to a sustainable pattern of development, and would in the long term undermine its operational viability. Instead, related development should be focussed where possible in surrounding urban areas, in particular the three Principal Urban Areas and the Sub-Regional Centre of Loughborough.'

2.25 Policy 14, together with Three Cities SRS Policy 4 in Part 2 of the draft Plan, provides housing targets across the East Midlands for the period 2001-26 as summarised in the table below.

Local Authority Area	Housing	2001-26	
	Total	Of which in Notting incl sustainable urban	•
Erewash	290		55
Nottingham	945		945
Broxtowe	270		170
Gedling	310		225
Rushcliffe	555		445
Ashfield - Hucknall	120		-
Nottingham City-Region	2,490		1,840

Table 2.2 Proposed Regional Housing Provision, 2001-26

Source: Draft Regional Plan, September 2006

- 2.26 Over the planning period 2001-26, the Nottingham City Region is to provide land for some 2,500 housing units per year, of which almost three quarters are to be in the Nottingham PUA. The policy states that housing will be partly in sustainable urban extensions, for which the most suitable location is the south of Nottingham. A location to the south of Clifton is proposed, which is well related to existing and planned infrastructure and to the airport, and there may be smaller urban extensions elsewhere.
- 2.27 Policy 19, Regional Priorities for Regeneration, reinforces the Plan's focus on the main urban areas, stating that regeneration activity should be concentrated in the areas of greatest need, which include the PUAs.
- The Regional Plan's main guidance on employment land is at Policy 20 and Three 2.28 Cities SRS Policy 5.

Policy 20

Regional Priorities for Employment Land

Local Authorities, emda and Sub-Regional Strategic Partnerships should work together in Housing Market Area groupings to undertake and keep up to date Employment Land Reviews in order to:

- ensure that there is an adequate supply of good quality land for office and industrial uses available for development (B1, B2 and B8 land) in sustainable locations allocated in Local Development Frameworks:
- bring forward good-quality allocated employment sites to meet the specific requirements of potential [inward] investors; and
- review current employment land allocations to ensure that they are relevant to current and likely future requirements and that surplus employment land is considered for beneficial alternative use.

In addition, Local Authorities should:

- ensure that any additional strategic distribution centres over 25,000 square meters maximize potential for rail freight and generate at least 10% of their energy requirements from on-site renewable sources; and
- monitor gains and losses in the overall supply of good quality office and industrial sites and assess the floorspace capacity of allocated sites.'

Three Cities SRS Policy 5 Employment Land

'In reviewing employment land allocations in the Sub-area, Local Planning Authorities should have regard to Regional Plan Policy 20 and to the following factors:

- the housing distribution set out in Policy Three Cities SRS 3, in particular the sustainable urban extensions;
- supporting the regeneration of the city centres, including large scale office developments, leisure and retail;
- the need to provide for the regeneration of deprived communities;
- the needs of high technology sectors, and to support Science City proposals;
- the need to serve the airport related development requirements of Nottingham East Midlands Airport;
- the need to promote local employment opportunities that will reduce out commuting; and
- opportunities to address the green infrastructure deficit in the Sub-area.'
- 2.29 As part of the evidence base for the Regional Plan, the Regional Assembly commissioned the Employment Land Provision Study (ELPS) to forecast employment land requirements by Housing Market Area across the East Midlands, based on economic and employment forecasts produced by Experian for emda. We have used the same forecasts in the present study, to ensure that the two studies are mutually consistent and complementary.

The Regional Economic Strategy

2.30 The current RES for the East Midlands, A Flourishing Region4, was published by emda in July 2006. In its analysis of the regional economy, this latest RES, like its predecessors published in 1999 and 2003, stresses the combination of high employment and low value added which has long been typical of the East Midlands:

The Productivity Gap

'The labour market in the East Midlands is characterised by the persistence of a 'low-pay, lowskill equilibrium', where high employment rates are to an extent maintained by a concentration of low pay, low skill jobs. The East Midlands is the only region of the five Northern and Midlands regions with an above average employment rate ...[and its] unemployment rate is relatively low. Despite this, average earnings are relatively low and there are a large number of people with no qualifications. In particular, the East Midlands significantly lags behind the national average in higher level qualifications, and has one of the lowest proportions of its workforce educated to degree level in the UK. This gap.. is reflected in earnings levels, with individuals working in the East Midlands earning 6.6% less than the national average... This is a consequence of the region's industrial and business structure, which results in a comparatively weak demand for skills due to a large number of businesses competing principally on the basis of cost.'

'The East Midlands continues to demonstrate a productivity gap. In 2003, Gross Value Added (GVA) per hour worked in the East Midlands was 96.9% of the UK average.'

Source: A Flourishing Region

⁴ emda, A Flourishing Region, Regional Economic Strategy for East Midlands 2006-2020

- 2.31 Put simply, the East Midlands has plenty of jobs, but these jobs on average are relatively less productive, and hence relatively less well-paid, than the national norm.
- 2.32 Among other distinctive features of the regional economy, the RES points to the ageing of the population, which is a national trend but particularly affects the East Midlands which of all the English regions is forecast to experience the most growth in population of pensionable age. It notes also that the region's most deprived communities are concentrated in its major urban centres. Of the local authority areas in the East Midlands, Nottingham is the most deprived and South Northamptonshire the least.
- 2.33 The RES holds out a vision for a 'flourishing region' by 2020, in which the East Midlands will enjoy levels of sustainable economic well-being and a quality of life higher than the European average and comparable with the best in the world'. This economic well-being in turn is a function of two overarching indicators:
 - Productivity, measured as GVA per hour worked
 - Access to jobs, measured by the employment rate, which is the proportion of the population of working age which is in work.
- 2.34 With regard to the first indicator, the aim is to correct the East Midlands' productivity deficit by upgrading the mix of economic activity, so that the region's people are wealthier. As regards access to jobs, there is no deficit; on average, as we have seen, the region's workers are already advantaged. But it is an objective of the RES to combat economic exclusion, 'ensuring that everyone has the opportunity to contribute to and benefit from the region's sustainable economic growth'.
- 2.35 The RES translates this broad vision into 10 'strategic priorities', or broad areas for intervention, and many 'priority actions', or specific proposal for public intervention. Priority 10, Land and Development, has as its aim:
- 2.36 'to ensure that the quality and supply of development land is the balance between competing land uses, contributes towards sustainable growth of the regional economy'.
- 2.37 More specific objectives of emda intervention in land and development are:
 - Support innovative businesses, inward investment and new enterprise;
 - Support the RES priority sectors which under emda's new sector policy comprise transport equipment manufacture, food and drink manufacture, construction and health care - and industrial clusters⁵;
 - Encourage links between business and academic institutions;
 - Complement the work of Innovation East Midlands and blueprint;
 - Encourage sustainable building design.
- 2.38 Priority actions in support of these objectives are set out at Section 7b of the RES, under three headings:
 - Secure the quality and supply of employment sites
 Support upgrading of existing employment sites, help bring forward new sites, where necessary for regeneration promote the redevelopment of commercially unattractive sites, undertake masterplanning and Environmental Impact Analyses, support the relocation of firms affected by redevelopment proposals, target public resources on priority sites;

⁵ The new sector policy replaces emda's previous focus on industrial clusters The RES states that emda will continue to support clustering where this would contribute to the development of priority sectors; at present, only aerospace and motor sports, both part of the transport equipment sector, warrant such support.

- Infrastructure for Employment-Related Schemes
 Assess infrastructure deficiencies and needs, use development briefs and planning
 decisions to ensure appropriate provision, invest public money to provide
 infrastructure where there is market failure, assess impacts of development
 through EIAs and capacity studies;
- Previously Developed Land and Buildings
 Increase the re-use of previously developed land and vacant buildings through site remediation, reclamation and redevelopment; key actions include Brownfield Action Plans and continuing remediation of former colliery sites.

Other Policies and Initiatives

The East Midlands Airport

- 2.39 The East Midlands Airport, the region's only international airport, is located south of Nottingham City Region, in North West Leicestershire. It carries over 4m passengers a year and handles nearly 300,000 tonnes of cargo. It is the second largest international freight hub in the UK, after Heathrow, and the largest for cargo carried on dedicated freighter aircraft (as distinct from cargo carried in the belly space of passenger craft). It serves as a national express freight hub. It is Royal Mail's largest UK hub for flown mail and a base of four of the world's largest freight integrator companies - DHL, UPS, TNT and FedEx - which together account for nearly 90% of the general express delivery market.
- 2.40 The White Paper on the Future of Air Transport (2003), reflecting the outcome of earlier studies and consultations, proposes substantial increases in the airport's traffic. In response, the airport, with emda, commissioned an Economic Development Strategy Study by York Aviation, to assess the impacts of the proposed expansion and set out a programme of initiatives for maximising the regional benefits of the airport's expansion. More recently, a draft masterplan, published in February 2006, set out land-use proposals for accommodating this expansion.
- 2.41 The York Aviation study estimates that the airport in 2001 supported around 9,100 full-time equivalent (fte) jobs in the East Midlands, of which one quarter were in Nottinghamshire. It forecasts that by 2030 this regional total would rise by 26,800 fte jobs, of which one quarter 6,900 jobs would be in Nottinghamshire. The document gives no indication of how these figures were calculated, which affects their credibility. Furthermore, emda in November 2006⁶ advised that, based on experience elsewhere, it seems that initial job estimates on the employment effects of airport development tend to be rather large. Thus, at Stansted, even a new runway is expected to generate around 10,000 direct jobs, against initial forecasts of at least 40,000, and this is a much larger development than the proposals at East Midlands. Furthermore, since the York Aviation study oil prices have risen dramatically and environmental concerns over aviation have heightened, which increases uncertainly surrounding the development. For all these reasons, emda's advice is that no adjustment should be made to the Experian employment forecast to account for the impact of airport growth.
- 2.42 With regard to the location of airport-related growth, the York Aviation study sets out, as a basic principle, that development of airport-related activities should take place offsite, to widen the labour catchment area and reduce pressure on the road network around the airport. It indicates that such development should take place within, or close to, a 20-minute drivetime of the airport. It identifies three areas that have potential for airport-related development, of which one, Clifton/South Nottingham, is in the Nottingham City Region. It notes that the proposed next line of Nottingham Express Transit (NEM) would link Clifton with the city centre and that expansion of Clifton for

⁶ Emails from emda to Roger Tym & Partners

airport-related employment uses would be well placed for the airport, especially if it helped bring about the expansion of NET to the airport, although this would be dependent on upgrading of the A453.

2.43 All this suggests that all or most of the City Region's share of direct airport-related jobs, and probably of indirect jobs, is likely to locate in Clifton. But Nottingham's induced jobs are likely to be spread widely across the study area, depending on where the workers that serve the airport live, shop and otherwise spend money. Attracted jobs may be anywhere in the City Region. The presence of an airport is likely to make the area more attractive to businesses which operate internationally. But this advantage is by no means unique to Nottingham; all the major competing office locations have access either to the East Midlands Airport (Derby/Leicester) or to other international airports.

Science City

- 2.44 The Science Cities initiative was first introduced in the 2004 Budget speech, which announced that, as part of their £100 million technology investment programme, the Northern Regional Development Agencies would promote 'Science Cities', starting with Manchester, Newcastle and York. Nottingham, along with Bristol and Birmingham, was designated a Science City in the 2005 Budget. The initiative is being coordinated by Nottingham Development Enterprise (NDE) and led by a Board that as well as NDE included the City's two universities, emda, the City Council and Greater Nottingham Partnership. The Board has set out its vision, that by 2020 Nottingham will be recognised as:
 - 'An international centre for research and teaching excellence
 - An exemplar of the application of such excellence to create competitive and sustainable businesses [in the] city region;
 - An exemplar of how the local community can be excited and engaged in science and connected to the opportunities generated'.
- 2.45 The second of these objectives related directly to employment land. The Science City prospectus published in 2006 estimates that there are currently 20,000 jobs in Greater Nottingham in science and technology sectors and aims to double this number by 2020, though recognizing that this is an aspirational target, not yet supported by evidence. Research, including surveys of potential occupiers, is currently under way and should fill this gap in the near future. Although this evidence base is not yet complete, initial consultations with NDE have highlighted two key themes which need to be taken into account when planning for employment land in NCR.
- 2.46 First is the need to identify additional business space close to the universities, which, along with the hospital, are expected to be the main drivers of Science City growth, and spin-out companies will be vital if Science City is to achieve its job target. NDE have identified a shortage of suitable space for small and medium 'grow-on' businesses, which are mature enough to leave subsidised incubator-style space and are starting to seek property on the commercial market. This shortage is probably not unique to science and technology companies; the 2004 study of Demand for Small Business Units within Nottingham City, found generally strong demand for move-on space, particularly for freehold property. But any general shortage will bear particularly heavily on those science and technology companies that need to be close to the main research institutions, because their choice of location is narrower. Current market research should provide firmer evidence on the amount of space required and its profile - whether offices, workshops or wet labs for example. But, ahead of these results, the planners should start searching for suitable land to accommodate Science City development around the universities.

2.47 The second key theme is that planning policy should safeguard and support assets that Nottingham already possesses and that could contribute to Science City objectives. Some flagship schemes are already underway, including the latest phases of Nottingham Science and Technology Park and Bio City. There are also emerging proposals for major sites that include Boots, Siemens and Rolls Royce and could meet a range of requirements, from large headquarters-style units to incubator and grow-on spaces. Yet again, the market research currently in progress should help establish the volume and mix of space that might be taken up for Science-City-related development.

3 THE ECONOMY

Overview

- 3.1 In this chapter, we profile the economy of the Nottingham City Region. As mentioned above, a similar analysis was carried out for the recent Nottinghamshire Structure Plan but the geography of that document is different to that used in this study. For this study we are concerned only with part of Nottinghamshire together with Erewash in Derbyshire. We discuss the City Region economy and its constituent districts, under three main headings:
 - We first discuss the *workplace economy*, comprising the businesses and jobs located in Nottingham City Region, considering its competitiveness, its growth record and what the sub-region has to offer as a business location.
 - Secondly, we look at *resident population and workforce*, to assess their economic well-being in terms of earnings and access to jobs.
 - Finally, we analyse *travel to work*, which links residents to workplaces. This is
 particularly important to the City Region because workers are largely blind to local
 authority boundaries when making choices about where to work.
- 3.2 The final section of the chapter draws implications for employment land policy, considering what its objectives might be and what kinds of business it might focus on.
- 3.3 Throughout the analysis, we benchmark the local economy against larger areas, comprising the region and Great Britain or England.
- 3.4 Most of this chapter considers all aspects of the economy. From the next chapter onwards, we will narrow the focus to activities which use employment (business) space defined here as industrial space, warehouses and offices.
- 3.5 Throughout this study, we have used employment figures from the Government's Annual Business Inquiry (ABI). These figures can include errors and inaccuracies but we have made no attempt to correct them.

The Workplace Economy

Industrial Structure

Broad Sectors

3.6 In 2004, the latest data for which figures are available, there are approximately 330,000 employee jobs in Nottingham City Region. Over half of these are in the City of Nottingham.

Area	Jobs	% of NCR Jobs
Hucknall	6661	2%
Broxtowe	33371	10%
Gedling	27616	8%
Nottingham City	181637	55%
Ruschliffe	41486	13%
Erewash	37473	11%
NCR	328244	100%

Table 3.1 Total Employment, 2004

Source: Annual Business Inquiry, 2004. Figures exclude the self-employed

3.7 Figure 3.1 below shows the broad industrial structure of these jobs, compared to regional and national benchmarks. Both in the East Midlands region and nationally, the

principal employment sectors are Distribution, Hotels and Restaurants (providing a quarter of all jobs), Public Administration, Education and Health (also a quarter of all jobs) and Finance, Banking, Insurance (one fifth). In the East Midlands and the Nottingham City Region the manufacturing sectors provide slightly more jobs than nationally. Nationally manufacturing still accounts for around 12% of all jobs but in both the City Region and East Midlands manufacturing accounts of 17% of all jobs.



Figure 3.1 Employment by Broad Sector, 2004

Source: Annual Business Inquiry, 2004

- 3.8 Hucknall and Erewash are heavily dependent on the manufacturing sector, with 23% and 26% of total jobs in 2004 being classed as manufacturing.
- 3.9 Nottingham City is a strong Finance and Business service centre (FBS). 22% of City jobs are classed as FBS which compared favourably with the national proportion of 19% and the Regional proportion of only 15%.
- 3.10 Nottingham City is also a strong public administrative centre, along with Rushcliffe and to a lesser degree Gedling. 37% of all Rushcliffe's jobs are in public services.

Knowledge Based Sectors

3.11 Employment in knowledge-based sectors is currently recognised as a key measure of economic competitiveness, which in turn is a determinant of current and future prosperity. The thinking behind this view is best summarised in a quote from the Government White Paper *Our Competitive Future: Building the Knowledge-Based Economy:*

'In a knowledge-driven economy...the generation and exploitation of knowledge has come to play the predominant part in the creation of wealth. Companies in countries with higher labour costs, such as the UK, therefore have to innovate and adapt continuously to retain their competitive edge.'

- 3.12 Knowledge based jobs are also a component of the 'Science City' designation although not all knowledge based jobs are necessarily Science City related - especially those in finance and business services.
- 3.13 The graph below shows employment in knowledge-based sectors, as defined by the Organisation for Economic Co-operation and Development (OECD)⁷.

Figure 3.2 Employment in Knowledge-Based Industries, 2004



Source: Annual Business Inquiry, 2004

- 3.14 The graph groups the knowledge-based sectors into five categories as follows:
 - High-tech Manufacturing
 - Financial and Business Services (FBS)

⁷ This definition comprises: Publishing and Sound Recordings; Reproduction of Recorded Media; Manufacture of Pharmaceuticals etc; Manufacture of Office Machinery/Computers; Manufacture of Electric Motors/Generators etc; Manufacture of Electricity Distribution etc; Manufacture of Accumulators etc; Manufacture of Electrical Equipment; Manufacture of Electronic Valves; Manufacture of TV/Radio Transmitters etc; Manufacture of Medical/Surgical Equipment etc; Manufacture of Instruments for Measuring; Manufacture of Optical Instruments etc; Manufacture of Watches and Clocks; Manufacture of Aircraft and Spacecraft; Telecommunications; Accounting/Bookkeeping Activities etc; Architectural/Engineering Activities etc; Technical Testing and Analysis; Advertising; Labour Recruitment etc; Insurance and Pension Funding etc; Act Auxiliary Financial Intermediation; Computing and Related Activities; and Research and Development.

- Communications
- Computing and Research and Development (R&D)
- Media.
- 3.15 Nottingham City has the highest representation of knowledge-based sectors. These sectors account for 19% of all jobs in the City against 16% of all jobs in Great Britain. This over-representation is entirely due to Financial and Business Services. Other knowledge-based sectors are not particularly well-represented in Nottingham. The City has proportionally slightly more jobs in Computing and Communications than the national economy but fewer jobs in high-tech manufacturing and a similar proportion of jobs in the media.
- 3.16 In Hucknall, 16% of all jobs are in knowledge-based sectors, virtually the same as the national average. Three quarters of these knowledge-based jobs are in high-tech manufacturing, probably accounted for by Rolls Royce. There does not appear to be any spin-off from Hucknall into surrounding districts.
- 3.17 In the other local authority areas in Nottingham City Region, shares of knowledgebased industries in total employment are far below the national benchmark, varying between 6% in Gedling and 10% in Broxtowe and Rushcliffe.
- 3.18 The ongoing research into Science City may shed more light on the knowledge-based sectors in the City Region, based on a finer-grained analysis than the figures above.

Business Space Sectors

- 3.19 In this study, we are particularly interested in 'B-space employment' the jobs that occupy industrial space, warehousing and offices, comprising Classes B1-B8 of the Use Classes Order and certain sui generis uses.
- 3.20 To identify these jobs, we use a mapping of sectors into land uses, based on the Standard Industrial Classification (SIC (2003)) which is set out at Appendix 1. In summary, we assume that Industrial space is occupied by Manufacturing, plus certain parts of the Construction, Motor Repairs/Maintenance and Sewage and Refuse Disposal. Warehousing is occupied by a variety of transport and distribution activities which are widely spread across the Standard Industrial Classification. Office sectors are as defined by the ODPM in 2004 as part of research on town centres⁸, plus selected parts of Public Administration and Defence and an adjustment for Labour Recruitment and Provision of Personnel⁹.
- 3.21 The correspondence between sectors and types of space is not perfect, and hence our definitions of office and industrial/warehousing jobs are no more than approximations. But they are the best possible approximations in our opinion, which we have developed through a series of employment space studies, most recently other studies in Hertfordshire and the East Midlands.
- 3.22 The table below shows the number of jobs in NCR and the proportion of these that we class as occupying B space sectors. The table shows data for both 1998 and 2004 because the ratio of B space jobs to other sectors is changing over time a subject we will return to when discussing the future.

⁸ ODPM, *Producing Boundaries and Statistics for Town Centres England and Wales 2000,* Interim Report, April 2004

⁹ This industry (SIC 74.5) covers people employed in temporary jobs via agencies. It is excluded from the ODPM definition of town centre offices. In our definitions, we distribute the industry's jobs across all types of space in proportion to the shares of each type of space in the economy as a whole (excluding SIC 74.5 itself). Thus, we assume that some of the industry's jobs are based in offices, factories and warehouses while others are in non-B space including shops, hospitals and so forth.

- 3.23 Between 1998 and 2004 the total number of jobs in England increased by 6%. In the East Midlands growth was slower at 3% but in NCR (ex Hucknall) the total number of jobs remained stable. Within NCR Gedling, Erewash and Nottingham City all lost jobs but this was offset within NCR by increases in the other districts.
- 3.24 Although the number of jobs in NCR has remained stable over the period 1998-2004, the proportion of jobs occupying B space has fallen. In 1998, 45% of jobs were in B space but by 2004 this had dropped to only 41%¹⁰. The East Midlands experienced a similar decline in the share of B-space jobs, from 46% to 42% over the period.

	Total Jobs, 1998	% B Space Jobs, 1998	Total Jobs, 2004	% B space Jobs, 2004	Total Jobs % Change 98-04
England	21,155,003	45%	22,532,831	42%	7%
East Midlands	1,752,392	48%	1,804,824	44%	3%
Ashfield	41,542	54%	41,419	48%	0%
Broxtowe	30,086	49%	33,371	44%	11%
Gedling	33,149	37%	27,616	36%	-17%
Nottingham City	185,530	45%	181,637	38%	-2%
Rushcliffe	32,827	38%	41,486	49%	26%
Erewash	39,977	54%	37,473	51%	-6%
NCR (Excl Hucknall)	321,569	45%	321,583	41%	0%

Source Annual Business Inquiry 1998 and 2004

- 3.25 In 1998, 38% of the City Region's B space jobs were in office sectors. By 2004, this proportion had risen to 46%. Conversely the proportion of B space jobs in the industrial sectors fell from 47% to 36%. The share of warehousing jobs remained virtually unchanged over the period.
- 3.26 Within NCR some districts are more dependent of different types of B space than others. Nottingham City is particularly reliant on the office sector, Gedling on the factory (industrial) sectors.

	1998 Office	2004 Office	1998 Industrial	2004 1 Industrial	1998 Warehousing	2004 Warehousing
England	42%	49%	41%	34%	17%	18%
East Midlands	27%	34%	55%	46%	18%	20%
Ashfield	13%	18%	77%	65%	10%	18%
Broxtowe	19%	26%	56%	53%	26%	21%
Gedling	14%	22%	70%	58%	16%	20%
Nottingham City	28%	30%	62%	54%	10%	17%
Rushcliffe	46%	57%	38%	26%	15%	17%
Erewash	53%	54%	33%	35%	13%	12%
NCR	38%	46%	46%	37%	16%	17%

Table 3.3 B-Space Employment by Type of Space, 1998-2004

Source: Annual Business Inquiry 1998 and 2004

¹⁰As noted earlier, the ABI, on which our figures are based, is not always accurate. Nottingham City Council, working with the Office of National Statistics, has identified a number of errors in the data used in this table. The corrected figures show a modest increase in total employment over the period 1998-2004. However, we understand that the differences between the ABI figures and the corrected version are not statistically significant.

Entrepreneurship

3.27 The graph below shows VAT-registered companies per 10,000 population, which is a recognised indicator of entrepreneurship, for the period 1994-2004. The comparative position of different areas changed little over the period.





- 3.28 In 2004, the East Midlands had fewer VAT-registered firms in proportion to population than GB¹¹. These relative positions have been the same since 1994.
- 3.29 In the Nottingham City Region, only Rushcliffe has more VAT-registered firms in proportion to population than either Great Britain or the region. Entrepreneurship is very low throughout the rest of the NCR, including Nottingham City.
- 3.30 This low level of entrepreneurship has implications of the type of space required in the NCR, because there are fewer small business than the national average.

Workplace Earnings

- 3.31 In the table below we look at how much jobs in the NCR local authorities pay, compared to regional and national averages. We know that the industrial structure of the NCR is different to the national and regional averages and this influences the wages paid.
- 3.32 The districts where we identified a high proportion of service sector jobs produce comparatively high earnings. Jobs in Nottingham City and Rushcliffe pay the most but

Source: NOMIS, Mid-Year Population Estimates

¹¹ The GB average is likely to include fewer VAT-registered companies because in other, lower-cost, areas of the country, fewer companies will reach the VAT threshold.

so do jobs in Broxtowe. All of these are in excess of the regional average but still below the national average.

3.33 Wages in Gedling and Erewash are both below the East Midlands average. We have no accurate data for Hucknall because it is only part of the larger Ashfield district. Wages in Ashfield are similar to Gedling and Erewash.



Figure 3.4 Gross Weekly Workplace Earnings, 2005

Source: Annual Survey of Hours and Earnings, 2005

The Residents

3.34 The economic analysis so far has been about the workplace economy, considering the workers who work in the Nottingham City Region, regardless of where they live. In this section, we consider the workers who live in the City Region, regardless of where they work.

Qualifications

3.35 In the figure below, the positive bars measure the proportion of the resident workingage population which has the highest gualifications - NVQ4 and 5, which are equivalent to degree and higher level qualifications. The negative bars show the share of the least well-qualified, with either no qualifications or NVQ1 entry-level qualifications.



Figure 3.5 Residents' Qualifications, 2001

■ No Quals & NVQ Level 1 ■ NVQ Level 4 & 5

Source: Census 2001

- 3.36 On average, residents' qualifications in the East Midlands region are slightly below the national average. In the NCR, Rushcliffe is the only district whose residents are better qualified than the national average. Nottingham City, Broxtowe and Gedling have qualifications slightly above the East Midlands average while the rest of the NCR districts are below the regional average.
- 3.37 The residents of the Hucknall wards are especially poorly qualified. Less than one in 10 of Hucknall residents have a degree-level gualification, compared to more than one in four Rushcliffe residents.

Deprivation

The Index of Deprivation 2004 places Super Output Areas in a hierarchy of 3.38 deprivation.¹² The map below shows the Index of Multiple Deprivation for the NCR

Figure 3.6 Index of Deprivation, 2004



Source: Index of Deprivation, 2004

3.39 Most of the super output areas in the NCR are in the least deprived 50% of super output areas. But large parts of Nottingham are in the most deprived 5%. Small parts of some of the other districts are also in the most deprived 15% of super output areas.

¹² The ranking, technically known as 'rank of average score', is based on the average of indicators that measure different types of deprivation, such as income and employment.

Population Change

3.40 Between 1995 and 2005, NCR's the working-age population grew by 18,900 people, or 4% - fractionally slower than the regional and national totals (Table 3.4).

	1995	2005	Change	% Change
Ashfield	80,900	85,000	4,100	5%
Broxtowe	83,200	83,100	-100	0%
Gedling	83,400	83,100	-300	0%
Nottingham City	202,900	214,600	11,700	6%
Ruschliffe	75,900	80,100	4,200	6%
Erewash	78,300	81,700	3,400	4%
NCR (ex Hucknall)	523,700	542,600	18,900	4%
Notts	553,500	569,000	15,500	3%
East Midlands	3,021,800	3,207,700	185,900	6%
GB	41,506,300	43,538,300	2,032,000	5%

Table 3.4 Working Age Population, 1995-2005

Source: ONS Mid-Year Population Estimates

The working-age population is defined here as residents aged 15-74.

3.41 There is a marked contrast between Broxtowe and Gedling, where there was no change, and the remaining districts, which grew at similar rates between 4-6%.

Earnings

Residents' Earnings

3.42 Earlier we examined average workplace earnings - the earnings of people who work in the NCR. In the graph below, we look at the average earnings of people who live in the NCR and compare them to workplace wages. Workplace earnings are not the same as residents' earnings because people do not necessarily work in the same district in which they live.



Figure 3.7 Gross Weekly Earnings, 2005

Source: Annual Survey of Hours and Earnings, 2005

- 3.43 Nationally, average weekly earnings (2005) are just over £400 per week. Residents of the East Midlands earn less than the national average.
- 3.44 In the individual NCR districts, there are marked differences between residents' and workplace earnings. A key underlying factor is commuting into Nottingham City, where more than half of the NCR's jobs are located. The City's workplace earnings at £390 per week are among the highest in the NCR. Its resident's earnings are £361, well below workplace earnings and the second lowest in the study area after Ashfield's. Conversely, in Broxtowe, Gedling and especially in Rushcliffe, residents' earnings are higher than workplace earnings; and Rushcliffe residents' earnings are far above the national and regional benchmark The likely explanation is that residents of these districts commute to high-paid jobs in the City.
- 3.45 We will consider commuting later in this chapter.

Unemployment

- 3.46 Unemployment is relevant to our study in two ways. It is of course a health indicator, which, together with other indicators such as earnings and travel to work, measures the economic well-being of the area's residents. It is also a measure of the area's capacity to support additional jobs, consistent with the housing provision that is currently planned.
- 3.47 The national claimant unemployment rate (January 2006) is 2.6%, slightly above the East Midlands average of 2.3%. Most of the NCR's districts cluster slightly below the East Midlands average and therefore below the national average.
- 3.48 Rushcliffe has the lowest unemployment rate, which has been below 2% since 1998. Nottingham City has a very high unemployment rate, which is above both the national and East Midlands rate. It is also higher then every CR district. But the gap between Nottingham, the East Midlands and the NCR districts has been narrowing since 1996.
- 3.49 This decline in the claimant count unemployment rate may have helped fuel job growth (and employment land take-up) throughout the 1990's and early part of the new millennium. But as the NCR unemployment rate drops towards what may be considered a 'natural rate' of unemployment this pool of additional labour may be exhausted. We estimate that the total number of claimants within the NCR area is between 5,000 and 8,000 people.
- 3.50 There are measures to increase the available workforce by for example helping the long term sick (those claiming disability and other benefits) back into work. But measures like this may only generate comparative small numbers of additional workers. What may be more relevant for the future supply of labour is the scale of inward migration, especially from EU Accession Countries.
- 3.51 Recent research conducted by Nottingham City Council shows that over the past two years inward migration has increased the City's population by 1%. Most of these inmigrants are of working age and contributing to the workforce.



Figure 3.8 Claimant Count Unemployment, 1995-2006

Source: Claimant Count, ONS, 1996-2006

3.52 In summary, the study area's labour market has been getting tighter, in line with national trends. Unemployment in the NCR districts is currently low. The remaining supply of unemployed workers is mainly concentrated in the City. But skills in the City are only average. If the City's growth is to be orientated towards higher-end services and 'Science City' activities, this growth may not benefit the only remaining pool of unemployed people in the NCR.

Travel to Work

Local Authority Areas

3.53 The travel-to-work data analysed in this section are from the 2001 Census; unfortunately no more recent information is available. We first consider where NCR residents work (Table 3.5).

	Working Residents	Workplace Jobs	Residents minus Jobs
Hucknall	13,961	8,815	5,146
Broxtowe	51,510	35,820	15,690
Gedling	54,554	33,390	21,164
Nottingham City	101,776	172,771	-70,995
Rushcliffe	52,639	36,359	16,280
Erewash	52,820	39,980	12,840
NCR	327,260	327,135	125

Table 3.5 Working Residents and Jobs, 2001

Source: Census 2001

- 3.54 In 2001 there were nearly 330,000 working residents in the NCR and almost exactly the same number of jobs. But individual districts are not similarly self-contained. Nottingham City has 70,000 more jobs than working residents. Conversely, in all the other districts there are more workers than there are jobs.
- 3.55 The map below shows where people who work in NCR live:
 - Within NCR, the size of circles represents the numbers of people working in each district (workplace jobs). Within each circle, the colour-coded segments show the place of residence of these workers (grey represents those who live outside NCR).
 - Outside the NCR, the size of circles represents the number of residents of each area who work in the NCR. The colour-coded segments splits these residents according to where in NCR they work.
- 3.56 For example, the size of the Nottingham City circle represents the 170,000 jobs in the City. The pink segment of the circle shows that nearly half of these jobs are taken by residents of the City. The other coloured segments show that most or the remaining jobs in the City are taken by residents of other NCR districts; only about one sixth are taken by people who live outside the NCR.



Figure 3.9 Where Workers Come from

Source: 2001 Census

3.57 The next map below works in a similar way but instead shows where the residents work. In this example the size of Nottingham City is represents the total working residents in Nottingham City (101,000). The colour segments show where these residents work. Outside the NCR, the circles represent those NCR residents who commute out of the NCR.



Figure 3.10 Where Residents Work

Source: 2001 Census

- 3.58 The map shows a marked contrast between Nottingham City and other local authority areas. Nearly three quarters of Nottingham City residents work in the City. In all other districts, half of the residents or less work in their district of residence, and for those that travel to work beyond borough boundaries the main destination is Nottingham City, with the exception of Erewash.
- 3.59 There is some small scale commuting into the NCR and some commuting out of the NCR, but this is usually less than one sixth of working residents in any one district. The main exception to this is Erewash, where one quarter of residents work outside of NCR, mostly in neighbouring Derby.
- 3.60 In our earlier analysis of earnings, we found that in Nottingham City residents' earnings are far below workplace earnings, and suggested the explanation that high-paid jobs in the City are filled by in-commuters. The analysis of travel to work confirms this suggestion and shows that most of these in-commuters come from other parts of the City Region.
- 3.61 This analysis suggests that, if Nottingham City is successful in attracting higher-skilled, higher-paid jobs, the resulting benefits will largely accrue to in-commuters from the surrounding districts, whose residents are more highly skilled. To provide jobs for the

City's residents and reduce its still-high unemployment, numbers of lower-skilled jobs would have to rise as well.

Sustainability

3.62 To assess how far current travel-to-work patterns are sustainable, we have to consider the length of trips and their mode of transport. As regards length, we have found that the NCR is a relatively self-contained labour market, in which most people work in their home district or in Nottingham City. Thus journeys to work are relatively short.





Source: Census 2001

3.63 In terms of travel mode, however, NCR residents' journeys to work are not particularly sustainable. Across the study area, 61% of resident workers drive a car or van to work, a proportion virtually equal to the East Midlands average. There is little variation between the NCR districts, with the important exception of Nottingham City, where just 43% of residents drive to work.

4 LAND AND PROPERTY MARKETS

Overview

- 4.1 Situated centrally within England, the Nottingham City Region benefits from good transport links by road rail and air. It provides a range of employment land opportunities in the form of industrial, distribution and office accommodation meeting a wide range of occupier requirements.
- 4.2 The Nottingham City Region is dominated in terms of commercial activity by the City of Nottingham itself, with a population of approximately 285,000. The city is home to major occupiers including Boots (albeit part of their Beeston HQ is in Broxtowe), Capital One, Inland Revenue and Experian.
- 4.3 An important factor in the success and growth of the local economy is the presence of Nottingham East Midlands Airport. In terms of the distribution/freight industry the benefits of the airport are relatively limited as air freight concerns mostly parcels rather than bulky freight, which is transported predominantly by road. Therefore, whilst the airport itself has witnessed major investment from the likes of UPS, DHL and Royal Mail, few immediate benefits have spread into the Nottingham City Region as a result of the airports' growth. This market perception correlates with the airport's own economic strategy, as discussed above.
- 4.4 However, the airport has become of increased benefit to business and leisure passengers in the area, who now have greater accessibility to European cities. At the same time, the opening of routes by budget airlines, Easyjet, Ryanair and BMIBaby, have made air travel cheaper than ever before. But, while the airport is a benefit to the Nottingham property market, it is not a benefit unique to Nottingham. Within the region, the East Midlands airport is equally accessible to both Derby and Leicester. Outside the East Midlands, most major cities now have access to an international airport.

The Office Market

The Floorspace Stock

- 4.5 NCR has an office floorspace stock of nearly 1.3m square metres¹³. Compared with the region's other major conurbations, this is more than double the office floorspace in the Derby Housing Market Area (HMA) but slightly below that in Leicester HMA.
- 4.6 Of the City Region's constituent parts, Hucknall has the smallest stock of only 10,000 square metres followed by Gedling, Erewash, Broxtowe and Rushcliffe. The City has by far the largest stock of offices, providing 871,000 sq m, nearly 70% of the City Region total. By comparison, Derby City has 442,000 sq m of offices and Leicester 614,000 sq m.
- 4.7 In Chapter 3 we saw how the Nottingham City Region economy has become increasingly focussed on the office market. The growth in office jobs has driven a demand for additional office space. From 1998-2004, the City Region's office stock grew by 23%. The City added the most office stock, gaining 175,000sq m. But in percentage terms some of the other NCR districts grew faster. The Nottingham City stock grew by 20%, while Rushcliffe grew by 35% and Erewash by 31%.

¹³ Our floorspace data are taken from the 2004 DCLG statistics. 2005 data is available but is not compatible with older data, because of a revaluation in 2005.

¹⁵. The Regional Assembly commissioned Anglia Ruskin University to translate the preferred housing option into population by age, using the Chelmer Population and Housing Model.

000 sq m
75
70
69
871
155
10
1,250
1,331
568

Table 4.1 The Office Floorspace Stock, 2004

Source: DCLG Commercial & Industrial Floorspace Statistics

4.8 The map below shows the location of office floorspace across the NCR. The red areas have the most office space and the white areas the least. Unsurprisingly, the greatest concentration is Nottingham City Centre. Over 40% of the City's office floorspace is located in Bridge Ward.





Source: DCLG Floorspace Statistics. © Collins Bartholomew Ltd, 2006.

Demand

4.9 Unsurprisingly, the study area's office market is dominated by Nottingham, which is the prime office location in the East Midlands and home to many large office occupiers. With the decline of manufacturing and growth of service sector, Nottingham is now seen as the capital of the East Midlands and as such is the focus of demand for the majority of corporate occupiers seeking a presence in the region. The city centre is the focus for the majority of office occupier demand, although there are a number of

important office/business parks away from the core area which are also the focus of occupier demand.

- 4.10 These business parks outside the city centre are why some of the outer districts of NCR have witnessed faster office growth than the City. Traditionally the districts outside the City have not been the focus of office demand; before these business parks they had very little office stock.
- 4.11 The main out of town office market in the Nottingham area focuses on the junctions of the M1. Pegasus Business Park at J24, Interchange 25 at J25 and Phoenix Office Park and Nottingham Business Park both at J26 are the main out of town office parks in the study area.
- 4.12 Between the city centre and the M1, ng² has proved a successful and fast-growing business park. It has let well to businesses both large and small, representing a mix of professional and financial services, attracted by its ready access to both the centre and the M1 and generous parking. The site is that of the former Royal Ordnance factory on Queens Drive, which is one of the main routes into Nottingham city centre from the south and around half a mile from the centre. It will be linked to the second line of the Nottingham Express Transit tram system, on which work could begin by the end of next year.
- 4.13 Elsewhere there are concentrations of office space in centres such Long Eaton, Beeston and Eastwood and in the various other district centres throughout the study area. In the main, office space away from Nottingham City core and the M1 office parks is of lower grade and occupied by small operations, many of which are owner occupiers. Turnover of stock in these peripheral office markets is low and the range of options for potential occupiers is limited.
- 4.14 In line with the main concentration of office space, the majority of transactions are concentrated in City Centre and the office parks found in close proximity to the M1 motorway (Table 4.2). Indeed in an average year more than 400,000 sq ft (37,000 sq m) of office space is transacted in City Centre and the main out of town business parks.

Sq m	2001	2002	2003	2004	2005	2006 to date
Hucknall	-	-	-	-	356	-
Broxtowe	-	1,115	760	338	390	2,012
Erewash	2,172	3,373	259	1,411	1,791	216
Gedling	630	-	246	963	306	137
Nottingham	19,426	51,848	47,334	31,208	49,718	20,395
Rushcliffe	101	-	1,867	802	401	1,409
NCR	22,328	56,336	50,467	34,772	52,963	24,168

Table 4.2 Annual	Gross Take-up	of Office	Floorspace	2001 - 2006

Source: LSH

Supply and Market Balance

Availability and Rents

- 4.15 The table below shows current availability in local authorities covered in this study. (Data for individual centres is in the Appendix.) In the City Region as a whole, there are some 66,000 sq m of available office space. The vacancy rate is some 6.3%, suggesting a fairly balanced floorspace market with perhaps slight undersupply. For Nottingham City, the vacancy rate is a little lower at 5.3%, yet again suggesting a slightly undersupplied market.
- 4.16 Unsurprisingly, the majority of available space is found within City Centre with an estimated 450,000 sq ft (40,000 sq m) currently available in the city core area although as previously stated the availability of high quality space is limited.

4.17 In the wider Nottingham area there is around 590,000 sq ft (53,000 sq m) of space available. In Beeston, a range of sub 5,000 sq ft (450 sq m) units are available at Eldon Business Park and Chetwynd Business Park.

Local Authority	Sq m
Ashfield	36
Broxtowe	7,938
Erewash	1,688
Gedling	415
Nottingham	55,107
Rushcliffe	831
NCR	66,015
0 1011	

Table 4.3 Office Space Availability by Local Authority, 2006

Source: LSH

- 4.18 Rental levels for prime property in City Centre currently stand at £17.00 per sq ft. Rents for prime property on the out of town office parks are at the same level. Small suites at ng² have achieved rents as high as £18.50 per sq ft. Rental levels have increased from £14.00 per sq ft in 2000 an increase of more than 20%. Nottingham's rents are higher than in Leicester (£15-16) and Derby (£14.50), and they are high enough to support speculative development. However, margins are narrow, resulting in a fragile market, in which a short-term upturn in supply or lengthening of void periods can easily deter development. Market confidence is not sufficient to support largescale speculative schemes.
- 4.19 Given the lack of supply of prime space in both the city centre and on Nottingham's out of town office parks it is likely that prime rental levels will increase further over the next 12 months.
- 4.20 Away from Nottingham's prime office locations, rents are much lower. £7.50 to £10.50 per sq ft is currently achievable for 'town centre' with the subdued nature of these rental levels very much reflecting the low quality of much of the space currently available. At quality office park space such as that found on Beeston's Chetwynd and Eldon Business Parks, office space currently achieves in excess of £15.00 per sq ft, which is a good indication of the strong levels of demand for smaller units of high quality space away from the core City Centre and out of town markets.

The City Centre Market

- 4.21 As mentioned earlier, central Nottingham's office market is relatively fragile, with developers erring on the side of caution. One or two large developments, can be followed by some months without new development as the market absorbs the new space, as developers will rarely build out new space where a significant quantity of space already lies vacant. As a result, occupiers are frequently faced with the frustration of being able to consider only one or two new buildings readily available. Whilst at the same time, land with planning consent, and capable of offering suitable alternatives, remains a stage back in the development pipeline. Occasionally, the market does not respond quickly enough to mini-booms and a shortage of supply ensues.
- 4.22 As part of this cyclical process, the city centre is currently going through a phase of relatively tight supply. During 2005 no new space was brought to the market and during 2006 only Waterfront Plaza (76,000 sq ft) and The Axis (45,000 sq ft) were completed. Furthermore, the range of options for those willing to occupy good quality second hand space is also extremely limited. This short-term position results from sortterm market fluctuations, rather than a shortage of land.
4.23 Considering the longer term, land is generally available to meet occupiers' expectations providing developers respond fast enough to movements in the market. However, like many core areas, the City Centre suffers from qualitative restrictions on supply. Large sites are difficult to assemble, and the centre cannot readily provide the high quality large floor plates in demand from many occupiers. However, there are sites in the pipeline which could result in a drastic improvement in the supply of high quality office space in the centre of Nottingham. The proposed mixed-use regeneration of Eastside is a major project which could result in the creation of 1.4m sq ft of office space as part of a larger 3m sq ft mixed-use scheme. This project will be crucial if Nottingham is to entice a major occupier to the city centre. But at present there appear to be doubts about the commercial viability of the site's office component.

The Out-of-Town Market

- 4.24 The M1 out of town market office is similarly fragile, and has a similar situation of shortterm undersupply. Very little new space has been completed at the out of town office schemes found along the M1 in recent months meaning that the range of options at these parks is also limited. Yet again, this relatively tight market reflects short-term fluctuations in the floorspace market rather than a shortage development sites. Of the identified land supply for further business park development, much is affected by development constraints. The proposed extension to Nottingham Science and Technology Park is a notable example.
- 4.25 Away from the city centre and M1 corridor, supply is limited in the main to small, average quality units, many of which are available on a freehold basis. The supply of premises in these locations largely reflects demand as occupiers tend to be looking for competitively priced small units where the kudos of location is of less significance. That said, an improved offer of smaller modern office premises perhaps available on a freehold basis would certainly prove attractive in comparison to much of the rather tired offer.
- 4.26 The busiest sub-sector within the office market currently comprises that for self-contained, freehold, out-of-town units offering good accessibility to the region's road network. The market is presently offering a range of schemes at the most popular locations to the west of the City (such as Nottingham Business Park, ng² (The Triangle), Chetwynd Business Park, Eldon Road Industrial Estate and Eastwood Link, but schemes to the east have also been successful. Developments such as Colwick Quays (Colwick Industrial Estate) and, some time earlier, Chase Park (Daleside Road) demonstrated an appetite for units to the east of the city, which currently provides no allocated sites for office development. However, given a favourable planning regime small-scale office developments can readily be accommodated on windfall sites, including on the more modern industrial estates.

Conclusion

4.27 In summary, a healthy level of new build opportunities exist and are capable of satisfying the vast majority of standard office enquiries in the market. In terms of land supply for future office schemes, there is concern that whilst the quantity of land appears adequate, the deliverability of those sites is questionable. This is primarily due to so many of the potential sites requiring investment in infrastructure, the cost for which may currently preclude affordable office development.

The Industrial and Warehousing Market

The Floorspace Stock

4.28 Industrial stock includes light industrial floorspace, which is class B1c in the Town and Country Planning (Use Classes) (Amendment) (England) Order 2005, general industrial, which is class B2, and storage and distribution, which is class B8.

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4.29 For parts of this analysis, particularly that dealing with the quantity of employment land we look at factories (B2) and warehouses (B8) separately because they have different employment densities. But from a market perspective we look at them together because in practice there is little material difference in the type of buildings these two industrial sectors operate from.

Factories

- 4.30 The factory market in NCR is slightly larger than the office market, with a total stock of 3.3 million sq m (2004). Table 4.4 compares the size of the market in NCR with both Derby HMA and Leicester HMA.
- 4.31 Nottingham City Region has only 60% of the factory stock found in Leicester HMA. Nottingham City has around half of the floorspace found in Leicester City.
- 4.32 Unlike offices the stock of factory floorspace has been declining, as reflected in declining factory based employment. Between 1998 and 2004 NCR lost around 8% of its total factory floorspace stock. The fastest decline was from the City where the stock declined by 36%. Erewash was the only NCR district to show positive growth in factory floorspace. Erewash gained 93,000 sq m of factory floorspace between 1998 and 2004.

	000 sq m
Broxtowe	727
Erewash	764
Gedling	272
Nottingham	1,165
Rushcliffe	288
Hucknall	124
NCR	3,340
Leicester HMA	5,705
Derby HMA	833

Table 4.4 The Factory Floorspace Stock, 2004

Source: Commercial & Floorspace Statistics

4.33 The map below shows the location of factory floorspace across the NCR. Like the office map, the map is shaded white thorough green to red, with the most floorspace located in red super output areas. Whereas as shown earlier the office stock is highly concentrated, the factory stock is more evenly spread throughout the NCR.



Figure 4.2 The Factory Floorspace Stock, 2005

Source: Commercial & Floorspace Statistics. © Collins Bartholomew Ltd. 2006.

Warehouses

- 4.34 The B8 component of the industrial sectors has been growing. Between 1998 and 2001 the stock of warehousing floor space grew by 10%. Within NCR the stock in Gelding grew 32%.
- 4.35 The amount of floorspace in the NCR is less than half of that in the Leicester HMA but over double that in the Derby HMA.

Table 4.5 The Warehouse Floorspace Stock,2004

Broxtowe	150
Erewash	391
Gedling	199
Nottingham	1,030
Rushcliffe	146
Hucknall	23
NCR	1,939
Leicester HMA	4,149
Derby HMA	916

Source: Commercial & Floorspace Statistics

4.36 Within the NCR, over half of the warehousing stock is located in the City. The remaining stock is fairly evenly spread throughout the other districts.



Figure 4.3 The Warehouse Floorspace Stock, 2005

Source: Commercial & Floorspace Statistics. © Collins Bartholomew Ltd, 2006.

Demand

- 4.37 The area in and around Nottingham has a strong historic association with industry, which was once the dominant employment type in the study area. Whilst nationally employment has shifted towards the service sector in recent times, in the study area industrial and related employment remains an important economic driver.
- 4.38 The presence of the M1 motorway running through the study area is key to its continuing success as an industrial location. The motorway provides rapid access to markets across the UK and as such the area has become increasingly popular with distribution occupiers.
- 4.39 Rushcliffe and Gedling, which have the largest rural components of all of the study area's districts, and do not border the M1 motorway, have the lowest concentrations of industrial space in the NCR. Nottingham has the highest concentration, resulting from its long association with traditional industries which led to the growth of the city.
- 4.40 In terms of market activity (Table 4.5) most of the of demand in recent times, especially for distribution facilities, has been along the Nottingham and Derby Junctions of the M1 corridor

	•				-	
Sq m	2001	2002	2003	2004	2005	2006 to date
Hucknall	700	216	465	6,082	2,681	11,474
Broxtowe	-	17,522	3,723	1,761	17,838	1,035
Erewash	-	218	5,397	20,129	6,790	15,392
Gedling	-	2,973	255	458	12,498	729
Nottingham	36,286	16,858	26,969	18,560	92,433	51,888
Rushcliffe	1,439	674	-	-	-	607
NCR	38,425	38,461	36,808	46,990	132,240	81,125

Table 4.5 Gross Take-up of Industrial and Warehouse Floorspace 2001 - 2006

Source: LSH

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- 4.41 An important influence on the distribution market is the increasing demand for large regional and national distribution centres, driven mainly by retailers seeking to rationalise their operations in one large centre and by third party logistics operators who serve these retailers.
- 4.42 Increasingly, distribution operations (who occupy warehouses) have looked at new locations away from the traditional East Midlands 'Golden Triangle' due to lack of space and spiralling rents. Nottinghamshire and Derbyshire have historically been considered a little too far north to attract such large requirements, but this is now changing. Rising land prices and tight labour markets in the South East, South Midlands and the 'Golden Triangle' are encouraging occupiers to consider other locations, where land values are lower but accessibility to markets and the transport network are good. The location of the study area in close proximity to the M1 and in the centre of the country makes for a very attractive option for distribution and industrial occupiers seeking access to markets across the country at a discount to other East Midlands locations.
- 4.43 Warehousing is very much focused on the west side of Nottingham due to quality of infrastructure. Distribution occupiers' preferred location factors are accessibility and travel times. Nottingham's central position in England and proximity to the Motorway network is looked upon favourably. Following the introduction of the working time directive, HGV drivers have limitations on journey duration and the ability to cover a high percentage of the country within regulations is an advantage.
- 4.44 Distribution companies will prefer to lease premises as the majority of their work is contract led and often premises are required at short notice. Dependent upon the delivery of such contracts second hand premises will be considered.
- 4.45 While demand is generally good for distribution, however, the majority of requirements are 'Midlands-wide', and therefore Nottingham is in competition with neighbouring cities from Northampton to Sheffield. Developers are reacting with speculative development such as Langley 255 at Langley Mill, Blenheim Park at Bulwell and Willow Farm, Castle Donington. Large warehouse units (up to 250,000 sq ft) are in good demand as retailers and third party logistics operators seek premises. Nottingham has reacted relatively well by providing speculative units and building continues between the junctions of 24 18 of the M1. Other arterial routes such as A50 and A38 are providing additional opportunities as the pipeline of sites along the M1 diminishes.
- 4.46 The industrial and warehousing market has been active in recent years. A number of new developments have been brought to the market, including speculative space, which has largely been well received. Demand has predominantly been for freehold space, although a number of leasehold deals have also been concluded. Whilst demand for high quality space is apparent from both distribution and industrial occupiers, it is the distribution sector which has dominated take-up in recent times. Recent deals include the lettings/sales of nine of the ten units developed at Langham Park, ranging in size from 4,000 to 10,000 sq ft. On Willow Farm a 22,000 sq ft pre-let has been taken by freight forwarder Expeditors UK. At Junction 24 of the M1, Daher has agreed a design and build contract on a 79,000 sq ft unit at Hilton Business Park. At Junction 26 a number of deals have been concluded on the Blenheim Industrial Estate including an 81,000 sq ft pre-let to Healthstore Ltd.
- 4.47 At Junction 27, just outside the study area, Sherwood Park has seen a number of deals including the letting of a 159,000 sq ft distribution facility to L'Oreal. Further north, at Junction 28, Clearway Distribution has taken the 175,000 sq ft Point 28 development and Homecraft Ltd is taking a 85,000 sq ft unit on Nunn Brook Road.
- 4.48 Away from the M1 motorway junctions, the market is more subdued. Demand for distribution space is effectively absent and thus the market is reliant on demand and

the churn of space from local industrial occupiers. Furthermore, the majority of units transacted are of less than 10,000 sq ft, usually second hand and of relatively low quality. Demand is currently highest for smaller freehold units in accessible locations. Over the past 18 months, .Nottingham has maintained a high level of enquiries for units providing up to 3,000 sq ft.

Supply and Market Balance

4.49 Across the City Region, there are just 62,000 sq m of industrial/warehousing floorspace on the market. The vacancy rate is just over 1%, pointing to an undersupplied market.

Local Authority	sq m
Ashfield	11,972
Broxtowe	916
Erewash	13,231
Gedling	775
Nottingham	34,803
Rushcliffe	777
NCR	62,473
Source: LSH	

 Table 4.6 Industrial Floorspace Availability by Local Authority, 2006

Source: LSH

- 4.50 Prime rental levels for the southernmost motorway junctions now stand at £5.75 per sq ft although these decrease to around £4.95 per sq ft for the more northern motorway junctions. Rentals for property in Nottingham itself are in the order of £5.65 per sq ft for prime space where available. Demand for freehold property remains strong with values in the range £65.00 to £70.00 per sq ft. These are high rents and values, above those in Derby and Leicester, and provide profitable opportunities for new development.
- 4.51 At the most favoured locations close to motorway junctions, high quality space that has come available has been quickly acquired by occupiers. The limited supply of sites reaching the market has allowed those with banked land to succeed with speculative development. Looking ahead, the supply of large units is promising. At Junction 24 Wilson Bowden are developing the East Midlands Distribution Centre which will provide 2.6m sq ft of distribution space. Near to Junction 26, Miller Birch is speculatively developing a 250,000 sq ft building at @ccess 26 where design and build options are also available whilst at Blenheim Park buildings of up to 230,000 sq ft are available on a design and build basis.
- 4.52 For smaller units and away from the motorway junctions, whilst the preponderance of demand is for second-hand units, for those seeking higher quality space the range of options available is limited. The success of the Langham Park development suggests that there is demand for small high quality units, but there is currently little to satiate this demand. Existing opportunities for high-quality new units under 10,000 sq ft are limited to Blenheim Court which is approaching completion on the new extension of the Blenheim Industrial Estate, Langham Park on Lows Lane, Stanton and the Chetwynd Industrial Estate in Chilwell. Unsurprisingly these schemes are in locations predominantly on the west side of Nottingham, where road infrastructure is superior due to motorway and city centre connections along major arterial routes (A610, A6005 and A52). It is our view that smaller occupiers are prepared to be more flexible in location. Therefore, there is scope for more development, especially of small freehold units, in less accessible locations to the east of Nottingham.

4.53 Smaller units (up to 10,000 sq.ft.) are also being built at Blenheim Park, Bulwell and Langham Park, Stanton, to provide accommodation for smaller distribution companies as again demand remains relatively good. These and estates such as Lenton Lane, Queens Drive and Glaisdale Drive tend to be favoured locations for such occupiers.

Conclusion

4.54 In summary, the industrial and warehouse markets are relatively fortunate in that over the past two to three years sites have been delivered and speculative development has secured numerous enquiries. The future supply is dictated by the deliverability of sites and the underlying issue is, are these forthcoming? Demand from occupiers remains strong and developers are keen to offer opportunities, but need suitable sites to do so. Infrastructure and accessibility remain the key attributes of potential sites and ideally occupiers will not wish to compromise on either. Quantity does not appear to be the problem. The deliverability of quality sites will dictate the success of these property sectors.

The Regeneration Zones

Profile

- 4.55 Nottingham is undergoing a major regeneration effort which is releasing development land in and around the city centre. More than £3.5 billion is being invested in Nottingham, a combination of public and private sector funds, covering transport, infrastructure and the built environment.
- 4.56 Regeneration plans are focused around three Regeneration Zones; Eastside, Waterside and Southside. All three Zones are at an early stage. The current Local Plan allocates them for mixed-use development, but provides no figures on the amount of employment land they might provide. However, in Eastside a planning application is outstanding for a mixed use scheme known as Eastside City, earmarked for a potential Civil Service relocation further to the Lyons report. Although this office proposal does not have planning permission, we have included it in our supply figures as a commitment, providing a gain of 130,000 sq m of offices and loss of a 13,000 sq m of warehousing which currently occupies the site. No other sites in the Regeneration Zones are included as development sites in our analysis.
- 4.57 Eastside covers 56 ha of former industrial land around the Lace Market and close to the Cities retail core. 37 ha of the area are to be redevelopment for mixed use development including the bus depot, a new canal basin and an extended Island Business Quarter. Eastside is already home to the successful BioCity and the East Midlands Development Agency (EMDA), NHS Direct, Premier Travel Lodge and the BBC.
- 4.58 Waterside comprises around 100 ha of land and buildings along the river Trent and Nottingham Canal. This site is further away from the city centre than Eastside but is still only 15 minutes' walk away.
- 4.59 Southside is the smallest of the three Regeneration Zones. It extends along the already redeveloped Canalside towards the Meadows area of Nottingham. The Zone includes the railway station and the Broadmarsh shopping centre, which is due to be redeveloped.

The Relocation of Existing Occupiers

4.60 Although the Regeneration Zones promise new, high quality employment land and open the possibility of the city accommodating major inward investments (for example Lyons civil service relations) much of the land is in some form of economically benefit use. These businesses will have to be relocated other parts of Nottingham but potential land and property suitable for them businesses may be in short supply,

especially considering the low rents on the Regeneration Zones and accessibility of their location. It is likely than any relocations will be a compromise for existing businesses.

- 4.61 The Regeneration Zones, by definition, are situated in what are presently considered to be the weaker commercial parts of Nottingham. This fact is largely based around infrastructure, as the City's outer ring road does not have an eastern side and the motorway is to the west. Nevertheless, many of these occupiers have been based and retained a presence in this area due to the proximity of labour pools and the city centre. The buildings are generally older and occupational costs cheaper.
- 4.62 Key commercial areas in the Regeneration Zones include Trent Basin, Sneinton Market, Cattlemarket, Nottingham City Transport Bus Depot, Eastcroft Depot, Midland Mainline Rail Station and Eastside City (Island Site). Already investment has taken place in and around these zones on a relatively sporadic basis with the introduction of Waterfront Plaza and the growing Bio-City.
- 4.63 Major planning issues around the Regeneration Zones relate to the relocation the Zones' existing commercial occupiers. In planning for employment land, planning authorities in the City Region will need to consider who will have to move out of the Zones and where they can go.
- 4.64 LSH have received numerous enquiries over the past two years from occupiers in these areas who are faced with future relocation and are seeking premises elsewhere in the City. Many premises have been purchased by emda and English Partnerships in alliance with Nottingham Regeneration Limited to take early ownership within the zones.
- 4.65 The majority of occupiers are seeking to relocate to premises close to the city, to retain staff and customers whilst paying a similar occupational cost. Premises close to the motorway will exceed their budgets, as the rent differential could be 130% of their existing rate per sq ft. As previously mentioned these areas are cheaper and, whilst second hand premises may be available, affordability will be the most important factor.
- 4.66 They will seek to relocate within the outer ring road to estates such as Colwick Ind Est, Bloomsgrove Ind Est, Robin Hood Industrial Estate, Glaisdale Drive Industrial Estate and Queens Drive Industrial Estate. Second hand accommodation is available at these estates; however, rents will be slightly higher.
- 4.67 There are many small businesses to relocate from the Regeneration Zones with a high percentage dealing in engineering, car maintenance and fabrication operations. Often not the best neighbours but certainly Trent Basin has established itself as an area where such operators are welcomed and attracted. The anticipated profile of the area is unlikely to target such operators and a change in this trend will be inevitable if as and when regeneration progresses.
- 4.68 It is not just independent traders that will need to relocate, numerous occupiers with specialist or unusual requirements are located in the Zones and they too are forced to consider alternative locations. Thus, the City Council's Eastcroft Depot is a large site within Waterside that will need to relocate in an area where it can still service the city itself. The bus depots on Lower Parliament Street are a key occupier again whose presence close to the city one would assume is of paramount importance. John A Stephens Limited occupy a large builder merchants in Southside and a low density built site will be difficult to obtain in a location close to the city centre where their customer exposure can be matched. In the same area Thyssen Lift Contractors have a large presence from which relocation will be difficult unless similar alternatives can be provided in such an advantageous location.
- 4.69 The Cattlemarket is another unique operation for which alternative sites will be difficult to make available as it will also be for its immediate neighbour Notts County FC (not an

Roger Tym & Partners Lambert Smith Hampton January 2007 employment use as such), however, they maintain a strong reliance on proximity to the train station.

4.70 Occupiers seeking to relocate are likely to encounter serious problems, as like for like alternatives in the City are limited, especially large scale occupiers and those with unusual or specialist requirements. Demand is expected to outweigh available supply.

5 THE QUANTITY OF EMPLOYMENT LAND

Introduction

- 5.1 In this chapter, we forecast the *future market requirement* for industrial/warehousing and office space, based on employment forecasts, and compare it with *planned supply* - comprising the land currently identified by the planning system for the changing space requirements of industrial, warehousing and office occupiers. The analysis runs to 2016 and at this stage is purely quantitative; Chapter 6 below will consider qualitative issues.
- 5.2 The analysis is in three stages. First, we forecast the demand for employment land, based on employment forecasts. Second, we calculate planned supply, and finally we assess market balance the relationship between forecast demand and planned supply.
- 5.3 It is important to note that our employment forecasts, and hence our calculations on future demand, relate to net change. Net change in employment (the stock of jobs) is the difference between jobs lost and jobs gained. The net change in the floorspace stock that these jobs occupy is the difference between floorspace gained, mostly from new development, and floorspace lost, for example where industrial sites are cleared and redeveloped for housing and other uses. Unfortunately, the available data on planned land supply show only gross gains, which makes the analysis more difficult and more uncertain, as we shall see.

Demand

Employment Forecasts

Method

- 5.4 As our starting point, we use economic/employment forecasts produced by Experian Business Strategies for emda, as part of the evidence base for the Regional Economic Strategy. These forecasts also form the basis of demand forecasting in the regional Employment Land Provision Study (ELPS) commissioned by the Regional Assembly to inform the Regional Spatial Strategy (the East Midlands Plan). The use of this common set of forecasts ensures alignment first between the regional economic and spatial strategies and second between the study area and the region. It also ensures that Nottingham City Region provides enough new jobs for the new residents associated with the housing growth proposed in the draft RSS.
- 5.5 The emda/Experian forecasts provide employment by local authority area to 2016. They are generated by Experian's integrated suite of economic models and represent an independent economic view of local and regional economic prospects. For the most part, the forecasts are based on Experian's standard assumptions, covering factors such as the macroeconomic environment, the industrial structure and past performance of each area and local supply-side features including workforce skills.
- 5.6 But one key input into the model, the future resident population, is customised in the emda/Experian forecasts to simulate the impact on employment of alternative assumptions about housing. Of three alternative scenarios produced by Experian, in this study, as in the regional ELP study, we use the 'preferred option scenario' which is based on the housing land provision proposed in the draft Regional Plan (September 2006¹⁵). Population change is an important driver of employment change, because resident population influences workplace employment through its consumption of goods and services (people create jobs close to where they live through their shopping, use of local public services and so forth) and the resident labour force (employers tend to locate in places where they can labour is available and cheap). Our

forecasts assume that the housing targets in the draft Regional Plan for Nottingham City Region and neighbouring parts of the East Midlands are successfully implemented.

- 5.7 To forecast demand for floorspace, we need to break down workplace employment into activity sectors (industries and services). The Experian preferred housing scenario does not provide this breakdown, but shows total employment only. To translate this scenario into the 30 sectors, therefore, we used shares of each sector in total employment as shown in an earlier version of the emda/Experian forecast, known as the policy-on scenario¹⁶.
- 5.8 With regard to the first step, we need to bear in mind that this study relates solely to industrial, warehousing and office space, comprising the B classes of the Use Classes order and physically similar sui generis uses.
- 5.9 From this 30-sector employment change scenario, our next step is to identify those jobs which are likely to occupy employment space, comprising offices, factories/workshops and warehouses, and physically similar sui generis uses (we refer to these jobs as B-space jobs). We will then multiply these forecasts of B-space employment by standard floorspace/worker ratios to arrive at estimates of the change in occupied space.
- 5.10 To identify B-space jobs, we use a mapping of sectors into land uses, based on the Standard Industrial Classification (SIC (1992)), which is set out in the Appendix. Broadly, we assume that industrial space is occupied by Manufacturing, plus certain parts of the Construction, Motor Repairs/Maintenance and Sewage/Refuse Disposal. Warehousing is occupied by a variety of transport and distribution activities which are widely spread across the Standard Industrial Classification. Office sectors are as defined by the ODPM in 2004 as part of research on town centres¹⁷, plus selected parts of Public Administration and Defence and part of Labour Recruitment which covers people employed through agencies. The appendix explains how the 30-sector Experian forecast is translated into this finer-grained sector breakdown which we need to map sectors into land uses.

Results

- 5.11 The forecast of B-Class employment to 2016 is in Table 5.1 below¹⁸. Because it follows the regional Employment Land Provision Study, we call this the ELPS scenario. Office employment in the City Region is forecast to grow by 13,300 jobs (21%). In absolute terms, the bulk of this growth, comprising around 10,000 jobs, is in Nottingham City, reflecting the concentration of existing office jobs in the City.
- 5.12 Industrial/warehousing employment falls by 13,400 jobs (15%). In absolute terms, Nottingham City accounts for around half of this loss, yet again reflecting its high share of existing jobs. But in percentage terms the City loses many fewer industrial/warehousing jobs than the rest of the study area - just 2%, against 10-20% for the other local authority areas.

¹⁶ The Experian forecast counts full-time equivalent (fte) jobs. Since employment density ratios relate to total jobs, (counting each job as one whether full- or part-time), we have translated these into estimated total jobs. The Experian preferred option scenario does not show Hucknall separately, but their earlier policy-off (baseline) scenario shows Hucknall's employment as 21% of the total for Ashfield district. Our forecast similarly assumes that Hucknall's employment is 21% of Ashfield's throughout.

¹⁷ ODPM, *Producing Boundaries and Statistics for Town Centres England and Wales 2000,* Interim Report, April 2004

¹⁸ The Experian forecast covers the period. 2001-21. We have left out the first two years of the series, to move the base year to 2003. This is the last year in which the series shows actual employment; the forecast proper begins in 2004.

Net Employment Change 2003-16	Jobs	%	% per year
Office Jobs			
Broxtowe	1,739	38%	2.5%
Erewash	518	14%	1.0%
Gedling	548	15%	1.1%
Hucknall	112	14%	1%
Nottingham	10,335	25%	1.7%
Ruschliffe	58	1%	0.0%
Nottingham City Region	13,310	21%	1.5%
Industrial & Warehousing Jobs			
Broxtowe	-2,336	-17%	-1.5%
Erewash	-1,790	-10%	-0.8%
Gedling	-1,363	-15%	-1.2%
Hucknall	-658	-18%	-1.5%
Nottingham	-7,116	-2%	-0.2%
Ruschliffe	-162	-15%	-1.2%
Nottingham City Region	-13,424	-15%	-1.2%
B Space Jobs			
Broxtowe	-597	-3%	-0.3%
Erewash	-1,272	-6%	-0.5%
Gedling	-815	-6%	-0.5%
Hucknall	-545	-12%	-1.0%
Nottingham	3,219	4%	0.3%
Ruschliffe	-105	-1%	0.0%
Nottingham City Region	-114	0%	0.0%

Table 5.1 B-Space Employment Forecasts, ELPS Scenario, 2003-16

Source: Experian, RTP

5.13 In total, B-space employment in the study area is virtually unchanged, as the fall in industrial/warehousing sectors offsets the growth in offices. Nottingham shows an increase in B-space jobs, but the increase is insignificant at 3,200 jobs (4%). In the other local authority areas, B-space employment falls fractionally.

The Demand for Employment Space

The ELP Scenario

- 5.14 To translate jobs into floorspace, we assume employment densities as follows:
 - Offices: 18 square metres per worker
 - Industrial and warehousing: 31 square metres per worker.
- 5.15 For offices and industrial space, these densities are taken from a 1997 study by Roger Tym & Partners for SERPLAN¹⁹. The government's recent Guidance Note on Employment Land Reviews commends these figures²⁰, noting that the RTP study 'remains one of the most comprehensive data sources for London and the South East'. There are no such studies for other regions.
- 5.16 For warehousing, densities are difficult to analyse and forecast, because all the evidence suggests that large, strategic warehouses on average use around 80-90 sq

¹⁹ Roger Tym & Partners for SERPLAN, The Use of Business Space: Employment Densities and Working Practices in South East England, 1997

²⁰ Office of the Deputy prime Minister, Employment Land Reviews: Guidance Note, ODPM Publications, December 2004

m per worker, a much higher ratio than industrial buildings and smaller warehouses. We do not use this higher ratio for NCR, because it is likely that most warehousing in the study area does not belong in this large-scale strategic category.

- 5.17 To translate floorspace into land, we use plot ratios of 40% (4,000 sq m per hectare) for all land uses. This is only a broad approximation, especially for offices. Multi-storey offices in town and city centres can potentially achieve much higher plot ratios.
- 5.18 The forecast demand for space is shown at Table 5.2 below. It is important to note that the demand figures relate to net change in employment space ('net take-up'), which is the difference between new space gained mostly from new development and existing space lost to employment uses for example where vacant industrial sites are redeveloped for other uses. The aim of the forecast is to predict market demand the space which businesses will wish to occupy and landowners and developers will wish to provide, at mutually agreeable property values and rents.

Net Floorspace Change sq m	2003-16	2003-16 per Annum	Past Change 1998-04 per Annum
Offices	239,577	18,429	43,333
Indutrial and Warehousing	-416,151	-32,012	-34,167
Total B Space	-176,574	-13,583	9,167
Net Change in Land Area hectares	2003-16	2003-16 per Annum	Past Change 1998-04 per Annum
Offices	60	4.6	10.8
Indutrial and Warehousing	-104	-8.0	-8.5
Total B Space	-44	-3.4	2.3

Table 5.2 Forecast Demand for Land and Floorspace, Nottingham City Region, ELPS Scenario, 2003-16

Source: RTP, ODPM

- 5.19 For offices, the demand forecast shows net take-up of some 18,000 sq m per year, producing some 240,000 sq m of additional floorspace over the planning period 2003-16. For industrial and warehousing space, net take-up is negative, showing a reduction in floorspace of 32,000 sq m per year, or 416,000 sq m over the plan period.
- 5.20 The net outcome for total employment space is a reduction in B-Class floorspace (negative take-up) of 13,000 sq m per year, which over the plan period amounts to 176,000 sq m and would release 44 hectares of employment land. In proportional terms, this is a tiny reduction in the study area's overall stock of employment land, which is in the region of 1,500 hectares.
- 5.21 The reason behind this reduction is that, within a virtually unchanged total of B-space jobs, there is a shift from industrial jobs, which use 31 sq m per worker, to office jobs, which use 18 sq m per worker. The land release could be higher than forecast if new offices are developed at plot ratios above the 40% we have assumed.
- 5.22 We have compared the forecast demand for space with past change in floorspace, using ODPM Floorspace Statistics for 1998-2004, unfortunately the longest period for which robust data are available. For offices, the annual growth forecast for 2003-16 is slightly less than half the past rate of growth. For industrial and warehousing space, forecast and past rates of decline are very similar.

The ELPS Plus Scenario

5.23 At the request of the client team we have developed an alternative demand scenario, which shows higher employment growth, based on the aspirations of current economic development policies and initiatives. We call this the ELPS Plus Scenario.

- 5.24 In the ELPS Plus Scenario, we add to the ELPS forecast for the period 2003 2016:
 - 4,000 additional jobs from the growth of NEMA, based on the emda/York Aviation Economic Development Strategy discussed in Chapter 2 above (though we note that these estimates are no longer supported by emda);
 - 13,000 Science City jobs, split equally between offices and industrial/warehouse space, reflecting the aspiration set out in the 2006 prospectus to create 20,000 new knowledge-based jobs in 20 years, i.e. 1,000 jobs a year;
 - 6,000 jobs in Civil Service (Lyons) relocations; all in offices (we understand that up to 100,000 sq m of space may be made available in the Nottingham Regeneration Zones for a single large relocation).
- 5.25 As discussed earlier, we cannot tell if any of these additional jobs are already covered in the ELPS forecast. ELPS Plus tests the employment land implications of a scenario in which:
 - Airport growth, Science City and Lyons relocation generate jobs as set out above;
 - and all the resulting jobs are additional to the growth that would occur otherwise.
- 5.26 This is an extreme scenario, bearing in mind that the objectives of two of the initiatives - Science City and Civil Service relocation - may be more about quality or quantity of jobs. Science City, for example could create 1,000 jobs per year by increasing the *share* of knowledge-based jobs in the City Region's economy, without adding anything to the *total number* of these jobs. Against the policy objective of upgrading the mix of economic activity, this would count as a major success.
- 5.27 The table below shows the ELPS Plus forecast and compares it with the original ELPS scenario and with past change.

	ELPS Scena	rio	ELPS Plus S	Past Change	
Net Floorspace Change sq m	2003-16	Per Annum	2003-16	2006-13 Per Annum	1998-2004 per Annum
Offices	239,577	18,429	487,577	37,506	43,333
Industrial and Warehousing	-416,151	-32,012	-132,151	-10,165	-34,167
Total B Space	-176,574	-13,583	355,426	27,340	9,167
Net Change in Land Area hectares	2003-16	Per Annum	2003-16	2006-13 Per Annum	1998-2004 per Annum
Offices	60	4.6	122	9.4	10.8
Indutrial and Warehousing	-104	-8.0	-33	-2.5	-8.5
Total B Space	-44	-3.4	89	6.8	2.3

Table 5.3 Forecast Demand for Land and Floorspace, Nottingham City Region, Alternative Scenarios, 2003-16

Source: RTP, ODPM

- 5.28 In the ELPS Plus scenario, demand is for some 38,000 sq m of net new floorspace per year, i.e. 488,000 sq m (122 ha) over the 13-year planning period over twice as much as in the ELPS scenario. Industrial/warehousing space falls by an insignificant 10,000 sq m per year net, releasing an equally insignificant 33 hectares over the planning period.
- 5.29 If actual employment growth in the future follows the ELPS Plus scenario, then total employment in the study area will be above the levels implied in the draft Regional Plan. Therefore either the area will need either to provide more housing than proposed in the Plan or its net in-commuting will increase. If the regional totals of employment and housing are to conform to the draft Plan, other areas in the East Midlands would

have fewer jobs than planned. If planning authorities envisage adopting ELPS Plus as a target, they should consider these implications.

The Frictional Margin

- 5.30 In the next section, we will compare the above demand forecasts with the land supply identified with the planning system. But first we need to consider the frictional margin additional land which the planning system should provide over and above the forecast demand if the market is to operate smoothly.
- 5.31 The frictional margin is land in the planning and development pipeline. It comprises the land which at any one time is allocated or permitted for B-Class development, but cannot yet provide floorspace, for example because it is under construction or awaiting infrastructure or detailed planning permission. Logically, the land in the pipeline equals the amount developed per year (gross take-up) times the average time that land spends in the pipeline. Thus, if the average time between a site being allocated or permitted for development and building completion on the site is one year, then at any one time the land in the pipeline, then at any one time two years take-up will be in the pipeline, and so forth.
- 5.32 When, at the beginning of a plan period, planning authorities consider how much employment land they should supply during that plan period, they need to add together two elements:
 - The expected net take-up, or forecast demand, over the period;
 - The frictional margin, or land which at any time during the period will be in the planning and development pipeline.
- 5.33 The net take-up (demand) will be used up gradually over the plan period. Therefore, there is no need for all this land to be available at the beginning of the period; it can be released gradually, in line with the expected annual take-up, until at the end of the last year of the period the whole requirement is taken up.
- 5.34 By contrast, the frictional margin, or land in the pipeline, has to be provided in its entirety from the first day and throughout the period. It is not used up over the planning period: at the end of the last year of the period there will still be a pipeline of land committed but not yet developed, to be carried forward into the next planning period.
- 5.35 It is important to note that the frictional margin is a function of gross take-up (new development, floorspace gained) rather than net take-up (floorspace gained minus floorspace lost). As such, the margin is always positive, even when demand is for a reduction in the floorspace stock, as is the case for industry in the study area and elsewhere. Even in markets where the floorspace stock is falling or stagnant, there is generally positive gross development, or 'churn', whereby old stock is replaced by new. The margin provides space for churn. This is essential, because if buildings were not renewed the quality of the stock would deteriorate. This would deter business occupiers, especially the high-value businesses which the City Region especially wishes to encourage.
- 5.36 We cannot be firm about the size of the frictional margin, because there are no statistics on the time sites spend in the pipeline. As a broad indication, the frictional margin may be estimated conservatively at two years gross take-up or generously at five years gross take-up or more. An especially generous estimate of five years or more seems appropriate in two circumstances: firstly where development is complex, for example in urban regeneration areas or new settlements, and secondly in growth areas, where policy aims to stimulate development and jobs by offering the market a degree of oversupply.

- 5.37 For the study area, we do not have data on gross take-up (our historical data and forecasts relate to net take-up, which is something quite different). In our calculations below, therefore, we calculate the margin as a proportion of the floorspace stock. Based on our experience elsewhere, we estimate that the a conservative margin, representing two years supply, is likely to be in the region of 5% of the floorspace stock for industry and warehousing and 10% of the floorspace stock for offices ²¹. These figures are used in our analysis below. Individual planning authorities should be able to make more accurate estimates, using local knowledge, and in some cases they may wish to increase the margin to reflect their particular circumstances.
- 5.38 In assessing the balance of the market below, we will add the frictional margin to the forecast demand to estimate the total *requirement* for employment space over the plan period:

Requirement = forecast demand + frictional margin

Planned Supply and Market Balance

Method

Calculating Supply

- 5.39 In Table 5.4 and Table 5.5 below, we compare this forecast requirement with planned supply, which is the land identified by the planning system for change in employment land uses.
- 5.40 In the ELPS scenario, the tables show demand and requirement by district, based on the emda/Experian forecasts. But the figures for individual districts should not be taken too literally, for two reasons. First, forecasts at this level are less robust, with wider margins of error. Second, much of the demand for employment space is likely to be footloose within the City Region, across local authority boundaries. The districts should work together to agree a distribution of employment land provision between them that takes account of land availability and policy objectives as well as the 'raw' demand forecast. We will return to these issues in our conclusions.
- 5.41 The ELPS plus scenario is only shown for the study area as a whole. We do not make assumptions about the geography of the additional jobs associated with the airport, Science City and possible Lyons relocation.
- 5.42 The planned land supply at our based date, 2003, ideally should be calculated as the sum of three elements:
 - Change in employment space between 2003 and the present (2006)
 - Surplus vacant floorspace at 2003.
 - Outstanding planning commitments (allocations and permissions) at 2006 that involve gain or loss of employment space.
- 5.43 Because we have no data on the first two components, our supply figures only show outstanding planning commitments. This does not invalidate the analysis, because outstanding commitments are certain to be by far the largest components of supply. Individual authorities, using local data, may be able to add the other two components.
- 5.44 It is important to note that all our demand-supply calculations relate to net change. Net change in employment (the stock of jobs) is the difference between jobs lost and jobs gained. The corresponding net change in the floorspace stock is the difference between floorspace gained, mostly from new development, and floorspace lost, for

²¹ The higher percentage for offices id due to gross take-up (new development) being generally higher for offices than industrial space. This is turn is because office floorspace is growing while industrial floorspace is falling.

example where industrial sites are cleared and redeveloped for housing and other uses.

- 5.45 Our supply totals are taken from the site-by-site audit carried out by Lambert Smith Hampton (LSH). The audit is discussed further in Chapter 6 below and full site-by-site details are in Appendix 2. LSH assessed the quality of both development sites committed for employment and existing, occupied employment areas. In relation to development sites, it also assessed availability for development, considering infrastructure and other constraints. In the many cases where planning allocations or permissions for general employment use (B1/B2/B8), with no indication of specific land use, LSH used professional judgment to assign sites to offices or industry/warehousing.
- 5.46 Nottingham City Council has asked us to consider the City's mixed use redevelopment sites ('MU sites') which are referred to in Chapter 4 of the Nottingham Local Plan and include sites in the larger Regeneration Zones. Where MU sites currently house B-Class uses, we have included them in our assessment of existing employment sites, but there are only 10 ha of land in this position. Most land on the MU sites is currently in sui generis uses or vacant.
- 5.47 We have also considered the potential of the MU sites as part of the land supply offered for future development. Some 100 hectares in the MU sites are allocated for development, but it is likely that little of this land area will come forward for employment use, because the Local Plan allows redevelopment for a mix of uses, including housing, community uses and open space. The largest site, at Stanton Tip in the Greenwood Forest, is one of the few areas in the City capable of making a significant contribution to new tree planting. Accordingly, our calculations at this stage assume that development of the MU sites will have no net impact on employment floorspace (the one exception is the Eastside City proposal, which is include in our supply analysis as explained at paragraph 4.56 above.)
- 5.48 In addition to the planning commitments we have analysed, the City Region has three large sites which are expected to come forward for comprehensive redevelopment, which would result in major intensification of employment uses. These sites comprise Boots, Siemens and Rolls Royce. We have not included their comprehensive redevelopment in our analysis of committed supply, because it is not yet embodied in planning allocations and permissions; proposals are still at an early stage and may not be implemented within the plan period to 2016. (However, our supply schedule does include a 13-hectare development site at Watnall Road, Hucknall, which is part of the Rolls Royce complex and was expected to provide expansion land for Rolls Royce.)
- 5.49 However, in considering the long term beyond the LDF period, authorities should bear the long-term potential of the Boots, Siemens and Rolls-Royce sites.

Alternative Supply Scenarios

- 5.50 So far, in discussing the planned supply of employment land we have assumed that all the development sites identified for employment uses come forward during the planning period, and that none of the existing land currently occupied by employment uses is lost. In practice, both assumptions are likely to be incorrect. Firstly, some of the identified sites may not come forward, either because they are not sufficiently attractive to the market or because they are affected by supply-side constraints. Secondly, some of the existing occupied stock is likely to be lost to other uses, for example where industrial sites fall vacant and are redeveloped for housing. If there are such losses, then if demand is to be met in full we need to add to our net requirement the land needed to replace the space lost.
- 5.51 We cannot tell in advance either how much of the planned supply of development land will come forward in practice or how much of the existing occupied stock will be lost. To

Roger Tym & Partners Lambert Smith Hampton January 2007 set the boundaries of this uncertainly, we have built two alternative supply scenarios as follows:

- The 'best-case scenario' assumes that during the plan period all development sites currently committed for employment uses come forward for development, and no existing, currently occupied employment sites are lost to other uses. In this scenario, the planned supply of land equals total planning commitments as explained earlier.
- Conversely, the 'worst-case' scenario assumes that only those development sites which we have assessed as good-quality and immediately available come forward. To estimate this scenario, we use the qualitative assessments discussed in Chapter 6 below; in which 'good quality' development sites are those which are attractive enough to come forward for development under any reasonable market conditions. Furthermore, the worst-case scenario assumes that all those existing, occupied sites which our qualitative analysis recommends should be released to other uses or considered for release are in fact released.

Floorspace and Site Areas

- 5.52 While our demand forecasts are measured in square metres of floorspace, the committed land supply is measured in hectares of land. To convert land into floorspace, we assume a plot ratio of 40%, so that every hectare of land accommodates 4,000 sq m of floorspace. This is an approximation, especially for offices, which may be developed at far higher densities, particularly in City Centre. Furthermore, in mixed use developments land areas plot ratios are of no use. In local employment land studies, individual authorities insofar as possible should measure supply in square meters of floorspace, estimating the floorspace capacity of individual development sites and perhaps using the standard 40% plot ratio as a default assumption.
- 5.53 For convenience, in the analysis that follows we use floorspace and land areas as interchangeable yardsticks, assuming a 40% plot ratio. But the reader should bear in mind the caveats above.

Table 5.4 Supply and Market Balance, Offices, 2003-16

Offices	Net Floorspace Change, sq m	Broxtowe	Erewash	Gedling	Hucknall	Nottingham	Rushcliffe	Total NCR ELPS	Total NCF ELPS +
Demand									
	ELPS Forcast	31,303	9,326	9,857	2,023	186,031	1,037	239,577	487,577
Margin @	10% of stock	7,500	7,000	6,900	1,113	87,100	15,500	125,113	125,113
Requireme	ent = demand + margin								
	ELPS Forecast	38,803	16,326	16,757	3,136	273,131	16,537	364,690	612,690
Committee	d supply								
	Outstanding commitments 2006	28,000	0	0	11,600	296,800	0	336,400	348,800
	Of which good quality	28,000	0	0	11,600	296,800	0	336,400	336,400
	Of which good quality & available short-term	12,000	0	0	9,200	255,600	0	276,800	276,800
Potential l	losses of existing sites								
	Release	0	0	0	0	0	0	0	0
	Consider for release	0	0	0	0	-242,800	0	-242,800	-242,800
Market balance 'best case'		-10,803	-16,326	-16,757	8,464	23,669	-16,537	-28,290	-263,890
Market ba	lance 'worst case'	-26,803	-16,326	-16,757	6,064	-260,331	-16,537	-330,690	-578,690
Offices	Net Change in Land Area, hectares	Broxtowe	Erewash	Gedling	Hucknall	Nottingham	Rushcliffe	Total NCR ELPS	Total NCF ELPS +
Demand									
	ELPS Forcast	7.8	2.3	2.5	0.5	46.5	0.3	59.9	121.9
Margin @	10% of stock	1.9	1.8	1.7	0.3	21.8	3.9	31.3	31.3
Requireme	ent = demand + margin								
	ELPS Forecast	9.7	4.1	4.2	0.8	68.3	4.1	91.2	153.2
Committee	d supply								
	Outstanding commitments 2006	7.0	0.0	0.0	2.9	74.2	0.0	84.1	84.1
	Of which good quality	7.0	0.0	0.0	2.9	74.2	0.0	84.1	84.1
	Of which good quality & available short-term	3.0	0.0	0.0	2.3	63.9	0.0	69.2	69.2
Potential I	losses of existing sites								
	Release	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Consider for release	0.0	0.0	0.0	0.0	-60.7	0.0	-60.7	-60.7
Market ba	lance - best case	-2.7	-4.1	-4.2	2.1	5.9	-4.1	-7.1	-69.1

Source: County and District Councils, LSH, RTP

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Offices 2003-16

- 5.54 We estimate that outstanding planning commitments comprise approximately 84 ha of land suitable for offices, which at our standard plot ratio would provide some 336,400 sq m of new floorspace (Table 5.4). This best-case supply falls short of the ELPS forecast requirement of 365,000 sq m to 2016, but only by an insignificant 30,000 sq m (7.5 ha). In the best-case supply scenario, in which all these development sites come forward in the plan period and none of the existing stock is lost, supply is enough to cover the frictional margin and forecast demand (take-up) to 2014, about two yeas before the end of the forecast period. In effect, supply and requirement are in balance.
- 5.55 In the ELPS Plus scenario, however, the best-case supply falls short of total requirement. Current planning commitments are enough to cover the frictional margin and meet forecast demand (take-up) only to 2009.
- 5.56 To construct the worst-case supply scenario, as explained earlier we need to subtract from total planning commitments those development sites which are of less than good quality or not immediately available and those existing occupied sites that in our view should be released or considered for release.
- 5.57 LSH considers that all of the committed office supply is of good quality, which means that under normal market conditions it is likely to be taken up. Of the total supply,15 ha, equivalent to 60,000 sq m, is subject to constraints, so that only 276,800 sq m (69.2 ha) is immediately available for development. Furthermore, while no existing sites are of such bad quality that they should definitely be released, Chapter 6 advises that an estimated 243,000 sq m (61 ha) should be considered for release, most of it in Nottingham City.
- 5.58 Accordingly, in the worst-case scenario the planned land supply falls to an insignificant 34,000 sq m (8.5 ha). Over the plan period to 2016, this represents an undersupply of 330,690 sq m (82.7 ha) in the ELPS demand scenario and 578,690 sq m (144.7 ha) in the ELPS Plus demand scenario. These figures are estimates of the new land which would need to be identified for offices in the plan period if the worst-case supply scenario is correct and the forecast market requirement is to be met. *When* in the plan period this land is needed would depends on the time profile on which existing sites are released for other uses.
- 5.59 Insofar as additional office sites *are* required, either in the Plan period or beyond, we have already identified potential redevelopment opportunities at Boots, Siemens and Rolls Royce. There may also be scope for new office floorspace in the Regeneration Zones and on industrial sites which become surplus to requirements.

Industrial and Warehousing Space 2003-16

- 5.60 In the industrial/warehousing sector, the forecast ELPS requirement to 2016 is negative at -153,000 sq m (38 ha), pointing to a net loss of space across the City Region. ELPS Plus shows a positive requirement of 130,000 sq m (33 ha). In proportion to the size of the stock, these are only small changes. The committed supply is positive and much larger, providing development sites to accommodate an estimated 1,240,000 sq m (on 310 hectares). Against the ELPS requirement, the resulting best-case excess of supply over demand is 1,394,000 sq m (348 hectares) 26% of the area's floorspace stock. Against the ELPS Plus requirement, oversupply is still vast at 1,110,000 sq m. Regardless of the scenario chosen, all local authority areas are greatly oversupplied.
- 5.61 However, in the case of industry and warehousing the best-case scenario is definitely unrealistic, because there will be continuing pressures to redevelop redundant industrial sites for other uses. Of the existing stock. LSH's quality assessment concludes that only 65,000 sq m (16 ha) should be released for other uses, but as much as 575,000 sq m (144 ha) should be considered for release. Furthermore, only

two thirds of the total supply is good quality, and only half is both good quality and available in practice.

- 5.62 In the worst-case supply scenario, therefore, if the ELPS demand forecast is correct the excess of planned land supply over forecast market requirement falls to 96,000 sq m (24 ha) just 2% of the City Region's total existing stock. But in this worst-case scenario there are market geographical differences. Three of the area's six districts in this worst-case scenario are still oversupplied. The greatest undersupply by far is in Erewash. Supply in Erewash is 219,000 sq m (55 ha) short of demand, due to the district's lack of good quality and available development sites (it offers just 7 hectares of such sites) and its large amount of existing sites that should be considered for release. Nottingham City in the worst-case scenario is also undersupplied, though only by 78,000 sq m (20 ha) and Broxtowe is in balance.
- 5.63 With ELPS Plus demand, the worst-case supply scenario provides a barely significant undersupply of 189,000 sq m (47 ha).
- 5.64 We conclude that in strictly qualitative terms Nottingham City Region could release considerable amounts of industrial/warehousing land to other uses over the plan period, while still meeting market requirements. But there is a trade-off between the release of existing sites and investment in new sites. If large amounts of existing land are released, then to meet demand it will be necessary to relieve constraints so that more of the sites already committed become available for development. There is also a geographical imbalance, with a relative deficit of land to the west of the City, which as discussed in the market profile at Chapter 4 is most popular with occupiers.
- 5.65 Before drawing policy implications from this analysis, we need to look more closely at the quality of sites. This is the task of the next chapter.

Industrial and Warehousing	Net Floorspace Change, sq m	Broxtowe	Erewash	Gedling	Hucknall	Nottingham	Rushcliffe T	otal NCR ELPS T	otal NCR ELPS
Demand									
	ELPS Forecast	-72,408	-55,494	-42,242	-20,391	-220,586	-5,030	-416,151	-132,151
Margin @ 5% of stock		43,850	57,750	23,550	7,350	109,750	21,700	263,950	263,950
Requirement = demand + margin									
	ELPS Forecast	-28,558	2,256	-18,692	-13,041	-110,836	16,670	-152,201	131,799
Committed supply									
	Outstanding commitments 2006	136,000	151,800	140,000	138,400	180,600	493,600	1,240,400	1,240,400
	Of which good quality	18,400	28,160	116,000	69,600	130,600	452,200	814,960	814,960
	Of which good quality & available short-term	8,800	28,160	116,000	66,400	51,000	312,400	582,760	582,760
Potential losses of existing sites									
	Release	-4,000	-25,240	0	-22,960	-8,000	-4,800	-65,000	-65,000
	Consider for release	-35,600	-219,560	-46,000	-1,920	-232,400	-39,600	-575,080	-575,080
Market balance 'best case'		164,558	149,544	158,692	151,441	291,436	476,930	1,392,601	1,108,601
Market balance 'worst case'		-2,242	-218,896	88,692	54,561	-78,564	251,330	94,881	-189,119
Industrial and Warehousing	Net Change in Land Area, hectares	Broxtowe	Erewash	Gedling	Hucknall	Nottingham	Rushcliffe Total NCR ELPS Total N		otal NCR ELPS
Demand									
	ELPS Forecast	-18.1	-13.9	-10.6	-5.1	-55.1	-1.3	-104.0	-33.0
Margin @ 5% of stock		11.0	14.4	5.9	1.8	27.4	5.4	66.0	66.0
Requirement = demand + margin									
	ELPS Forecast	-7.1	0.6	-4.7	-3.3	-27.7	4.2	-38.1	32.9
Committed supply									
	Outstanding commitments 2006	34.0	38.0	35.0	34.6	45.2	123.4	310.1	310.1
	Of which good quality	4.6	7.0	29.0	17.4	32.7	113.1	203.7	203.7
	Of which good quality & available short-term	2.2	7.0	29.0	16.6	12.8	78.1	145.7	145.7
Potential losses of existing sites									
	Release	-1.0	-6.3	0.0	-5.7	-2.0	-1.2	-16.3	-16.3
	Consider for release	-8.9	-54.9	-11.5	-0.5	-58.1	-9.9	-143.8	-143.8
Market balance - best case		41.1	37.4	39.7	37.9	72.9	119.2	348.2	277.2
Market balance - worst case		-0.6	-54.7	22.2	13.6	-19.6	62.8	23.7	-47.3

Table 5.5 Supply and Market Balance, Industrial & Warehousing, 2003-16

Source: County and District Councils, LSH, RTP

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The Regional Strategic Distribution Study

Warehousing

- 5.66 In July 2006 MDS Transmodal Ltd, in association with Roger Tym & Partners and Savills, were commissioned by the East Midlands Development Agency (emda) to conduct the East Midlands Strategic Distribution Study (SDS). This was a region-wide study and did not include recommendations for individual HMAs. The ELPS study took the findings of the SDS and looked at the implications of the study for individual HMAs.
- 5.67 Because emda/Experian forecast that total employment in warehousing will decline in NCR, local authorities do not need to provide new land to accommodate new residents or workers who may require warehousing jobs. But NCR authorities still need to consider the needs of existing business and specifically their market driven demand for ever larger units which cannot be accommodated on existing sites.
- 5.68 Using MDS Transmodal's research, the ELPs study estimated that NCR should provide 1.5 ha of new land each year to meet this need. This site (or sites) would need to be capable of accommodating units larger than 25,000 sq m and provide good road access to the M1. They would be occupied at lower densities than we have assumed for industrial/warehouse floorspace, providing some 88 sq m per worker.
- 5.69 If NCR does not provide land to accommodate these units the implication of the MDS Transmodal study is that some existing occupiers will re-locate to those areas outside of NCR which are providing these sites. In that case, there would be less employment growth in the City Region than shown in the ELPS forecast. But this impact will be vanishingly small. Because employment densities are low in strategic warehouses, the 1.5 ha a year will accommodate only 70 jobs. Also Nottingham Outer HMA is already providing more land than their forecast requirement, so it is likely that businesses can be accommodated in this neighbouring HMA.

Rail Freight

- 5.70 The Strategic Distribution Study identifies a major shortage of new rail connected land to accommodate the land implications of the Regional Freight Strategy. This strategy proposed 30 additional daily freight trains servicing the East Midlands by 2015 but MDS Transmodal found that there is only enough land in the planning pipeline to accommodate a quarter of these trains. There is a region-wide need to identify around 300 ha of new rail connected strategic warehousing land.
- 5.71 In their analysis MDS Transmodal highlight Nottingham Core as one HMA which is potentially capable of accommodating a new rail connected site. They reached this conclusion because in their opinion the rail lines serving Nottingham Core have an acceptable rail gauge and spare capacity to accommodate some of these new trains. But this was a narrow assessment and did not look at the implication this type and scale of development would have on other policies and plans.
- 5.72 A 22 ha site at Toton has been proposed for a rail connected distribution facility, though at this stage it is not a formal allocation. The Strategic Distribution Study considers that this site is not suitable, because its road access is constrained and it is smaller than the 50 ha which MDST consider the minimum viable size. But this advice conflicts with research for the County Council and its partners, which suggests this smaller site is suitable.
- 5.73 If Toton is developed, it could meet any potential need for additional strategic warehousing in the NCR for the next 15 years.

6 THE QUALITY OF SITES

The Assessment

- 6.1 As an important part of this study, Lambert Smith Hampton have made a qualitative assessment of employment sites in the City Region, covering both development sites identified for employment uses and existing, occupied employment areas.
- 6.2 For both categories of site, the assessment focuses of the *market appeal* of the site its attractiveness to occupiers and developers, which we also call 'quality'. The main question it aims to answer is:

If the site is offered for employment use, free of supply-side constraints and assuming that the wider market is reasonably in balance, how likely is it to be brought into employment use within the planning period?

- 6.2 For development sites, this means assessing whether the site is likely to be developed and occupied. For existing employment sites, the question is whether, in the even of the site falling vacant, it would be likely to come back into employment use, either through re-occupation of existing buildings or redevelopment of these buildings to create new space.
- 6.3 The sections below provide brief summaries of these two assessments in turn. The assessments themselves, in full site-specific detail, are at Appendix 2.

Development Sites

- 6.4 Our quality assessment covered 434 ha of committed employment sites in NCR, comprising outstanding local plan allocations and planning permissions where development had not yet commenced at summer 2006. Lists of sites to be assessed were provided by the client team and each site was assessed in two stages. First, using professional judgment and experience, LSH determined the use to which site is best suited whether offices or industry/warehousing. Secondly, it scored sites according to their market appeal for that use.
- 6.5 At the first step, we differentiate between land that is exclusively or primarily suited to office use and land that is best suited to industrial/distribution use. We also try to differentiate between sites which are suitable for warehousing and those suitable for more general industrial uses but in reality there will be some blurring between the two especially as planning permissions and allocations frequently allow either B2 or B8 development. Around 80% of the development land we have assessed is considered suitable for general industrial or warehousing development and 20% for office development²².
- 6.6 To assess market appeal, we take account of the following criteria:

a) Accessibility by road

A site assessed as good for this criterion will have easy access to the principal road network and in addition, the secondary roads that provide linkage from the site to the primary network will be in good condition. Connectivity by road is an important (but not sole) consideration when assessing a site's accessibility to labour markets and the ease with which goods can be distributed to and from manufacturing and distribution facilities. In office markets, sites which are readily accessible to labour will have greater appeal than more isolated opportunities.

 $^{^{\}rm 22}$ In most cases this is a judgement made by LSH and not the client team.

b) Accessibility by public transport

A site assessed as good for this criterion will have a train station or bus stop in easy walking distance, with frequent services throughout the day. The range and frequency of services are important factors particularly in relation to activities that employ a high level of labour.

c) External environment

A site assessed as good for this criterion will have activities similar to the potential use of the site as neighbours. Generally, the quality of the external environment has a more significant bearing in office than industrial markets. Attractive outlooks and freedom from noise and other disturbances are pre-requisites of a good quality office scheme. Proximity to facilities - shopping, restaurants, banks etc - is also important, as is connectivity to broadband.

d) Internal environment

A site assessed as good under this criterion will be flat and regular-shaped and it will not be at risk of flooding or ground contamination/movement. Larger sites, and those destined for higher-value uses, will be visually prominent.

e) Local market conditions

This criterion relates to market conditions in the local area, or micro-location, of each site. A site assessed as good under this criterion will be located in a buoyant local market, where demand is high relative to supply, as evidenced for example by relatively low vacancy, high rents and a high level of market activity.

- 6.7 We have scored each site on a scale of 1-5, as follows:
 - 1 Very good
 - 2 Good
 - 3 Average
 - 4 Poor
 - 5 Very poor.
- 6.8 The scoring is based on regional standards, so that sites scored 1 are equal to the best in the East Midlands.
- 6.9 For each development site, the assessment matrix at Appendix 2 shows quality scores both in relation to individual criteria (a-e above). More important, it shows an overall market appeal score. On this overall score, in LSH's judgment:
 - Sites rated good or very good, if offered to the market for employment uses, under any reasonably likely market conditions are likely to be taken up during the plan period.
 - Average quality sites may or may not be taken up, depending on market conditions and the availability of competing sites.
 - Poor and very poor sites are generally unsuitable for employment use, and if offered to the market would be unlikely to be taken up.
- 6.10 As well as overall market appeal, the matrix shows the unweighted average of the scores relating to individual criteria. The overall market appeal score is not necessarily equal to this average. This is because the relationship between individual scores and LSH's overall judgment is not straightforward; the different criteria carry different weights according to individual circumstances, and they interact with each other in various ways. Due to these complications, there is no system of weights or other mechanical procedure that can translate individual criteria scores into a robust overall

assessment of market appeal. The overall judgment is informed by the individual features.

- 6.11 As well as quality (market appeal), we have assessed the availability, rating each site as either available or constrained. Constraints may be physical, such as contamination or lack of infrastructure, or non-physical, such as multiple ownerships. The availability assessment is indicative only. Within the resources available for this study we were not able to provide a definitive or detailed account of development constraints.
- 6.12 The Government's 2004 Employment Land Reviews Guidance Note summarises in Box 6.2 (and lists in detail at Annex E), a list of appraisal criteria for assessing sites. Our method outlined above covers the first seven of these criteria; comprising base information, quality of existing portfolio and internal environment, quality of the wider environment, strategic access, market conditions/perception and demand, site development constraints [undeveloped sites only] and accessibility. The last three criteria set out in the Guidance Note - the sequential test and brownfield/greenfield; social and regeneration policy; and other policy considerations - relate to policy merit rather than market appeal. These policy-related criteria are not formally scored in our assessment, which focuses on market demand. However, where we are aware of policy-related considerations relating to particular sites, we note them in the Comments at Appendix 2.
- 6.13 In aggregate, the results of our assessment have already been shown in Chapter 5 above. For offices, all but one of the development sites in the City Region are scored as good quality. The one exception is the remaining land at the ng² business park, which is the only site assessed as very good. In the industrial/warehousing sector, there are no 'very good' development sites, but two thirds of the total land supply is assessed as good.

Existing Employment Areas

- 6.14 Our assessment of existing, occupied employment areas covers some over 1,400 hectares, most of which is identified for employment or mixed uses in current local plans. The assessment is not comprehensive. Rather, it covers a selection of the City Region's employment areas, chosen by the client group.
- 6.15 As noted earlier, the key question in assessing the quality (market appeal) of existing employment areas is whether, in the event of the site falling vacant, it would be likely to be re-occupied for employment, either through re-occupation of existing buildings or redevelopment to provide new buildings. The answer depends on two factors: firstly the inherent quality of the site (irrespective of any existing buildings) and secondly the fitness for purpose of any existing buildings.
- 6.16 The matrix below shows how these two elements are combined to provide the market assessment. The underlying rationale is that a vacant site which is inherently good (e.g. highly accessible) is likely to come back into use even if the buildings are not fit for re-occupation, because values will be high enough to support redevelopment to provide better buildings. Conversely, on a poor site with poor buildings, redevelopment will not be financially viable. But a poor site with good buildings will be more likely to be viable, because it can be brought into use simply by re-letting the buildings, without the expense of redevelopment.

Table 6.1 Assessment Method

	Inherent qual		
Suitability of buildings for purpose	(Very) good	Average	(Very) poor
(Very) good	(Very) good	(Very) good	(Very) poor
Average	(Very) good	Average	(Very) poor
(Very) poor	(Very) good	Average	(Very) poor

6.17 In judging the market appeal of sites, LHS takes account of the same criteria as in the assessment of development sites above (paragraph 6.6). Its judgment on buildings takes account both of their inherent characteristics, such as design and layout, and of their current condition.

District	Total	%	Very Good Quality (1)	%	Good Quality (2)	%	Average Quality (3)	%	Poor or Very Poor Quality (4 or 5)	%
Broxtowe	138	100%	0	0%	115	83%	22	16%	2	1%
Erewash	240	100%	0	0%	2	1%	230	96%	9	4%
Gedling	177	100%	0	0%	42	23%	132	75%	4	2%
Notttingham	623	100%	4	1%	457	73%	122	20%	41	7%
Rushcliffe	216	100%	0	0%	150	70%	65	30%	1	1%
Hucknall	15	100%	0	0%	8	57%	0.5	3%	6	39%
NCR	1,404		4	0%	788	56%	556	40%	62	4%

Table 6.2 Quantity of Existing Employment Sites - Hectares

Source: LSH

- 6.18 Across the City Region as a whole, only one site, the business park ng², is rated as very good quality. Of the total land area assessed, just over half is rated as good quality and just under half as average quality. Poor and very poor sites account for just 4% of the total.
- 6.19 As well as quality (market appeal), Appendix 2 provides a policy recommendation, splitting sites into three groups:
 - Those that should be retained in employment use;
 - Those that may be considered for release to other uses, depending on the overall supply-demand balance and on individual circumstances;
 - Those which, should they come forward for redevelopment, *should be released* to other uses, because in LSH's opinion they have very little or no relevance to market requirements. Such sites at present may be occupied because of a lack of supply, but would likely become redundant if better sites were provided.
- 1.1 These recommendations, which have already been analysed in Chapter 5 above, are largely based on the each sites' market appeal for employment uses. But they may also take account of other factors, such as the likely deliverability of sites, depending for example on their likely value for alternative uses.

7 CONCLUSIONS

7.1 In this concluding chapter, we translate our findings into policy recommendations. In the next section, we comment on policy priorities that bear on employment land policies in forthcoming Local Development Frameworks. The two sections that follow summarise our analysis and draw the policy implications, dealing with offices and industrial/warehouse space in turn. We go on to comment more generally on the relevance of this sub-regional study to local planning.

Policy Priorities

- 7.2 Our analysis of the economic and policy background points to two major themes, the first relating to numbers of jobs and the second to the quality of jobs.
- 7.3 With regard to numbers of jobs, a key strategic policy objective is to align employment change with housing land provision and the resulting population change. We have seen that the Nottingham City Region at present is well aligned, with almost exactly as many jobs as workers. The emerging RSS aims to maintain this alignment in future, and this objective is built into the employment change figures which underlie our forecasts of land demand. Any proposals to depart from these figures should be assessed with regard to their implications for the balance of workers and jobs. If the City Region makes room for too few jobs, it risks rising unemployment and/or outcommuting. Perhaps less obviously, aiming for too many jobs may result in an overheated labour market and pressure to release more housing land, bearing in mind that earlier reserves of unemployed labour have largely disappeared.
- 7.4 Turning to the quality of jobs, it is a major regional objective to restructure the economy towards more knowledge-intensive, higher-skilled, higher-paid work. Our analysis confirms that this objective is particularly relevant to the Nottingham City Region. Employment land policy on its own cannot upgrade the mix of economic activity, but it needs to complement and support other initiatives serving this objective, such as Science City.
- 7.5 It is important to bear in mind that less-skilled residents also need jobs. In general, there is little risk that jobs will 'move up-market' ahead of workers' skills, because employers will not locate in places where the available labour supply does not match their needs. But particular circumstances apply in Nottingham City, because the City's labour catchment includes many high-skilled residents who live elsewhere in Nottingham City Region.
- 7.6 As we have seen, the City provides especially high-paid jobs, which seem to be filled disproportionately by such in-commuters, while residents of the City on average are relatively low-paid. As and when the City's workplace economy restructures towards higher-value activities, this imbalance might worsen. To avoid this danger, employment land policy needs to look after the employment sites that support less-skilled jobs for less-skilled workers, especially in and near the most deprived areas. This means protecting some 'secondary' employment sites from transfer to other uses, and where appropriate supporting their renewal and providing additional land for their occupiers to relocate and expand.

Offices

The Demand-Supply Balance 2003-16

- 7.7 In planning for employment land uses, before considering specific sites we need to answer three general questions: how much space is likely to be required in total over the plan period, how much of that land space will be provided by sites that the planning system has already identified, and hence how much additional land, if any, needs to be found.
- 7.8 Because the future is difficult to predict, these questions of course do not have certain answers. To deal with unavoidable uncertainty, we need to consider alternative scenarios, which frame the range of likely future outcomes. In answer to the first question, therefore, we have built two alternative demand scenarios:
 - ELPS, based on regional employment forecasts commissioned by emda,
 - ELPS Plus, which adds further jobs to reflect the potential impacts of Science City, Civil Service relocations and airport growth.
- 7.9 In answering the second question, to assess the supply of space currently identified by the planning system ('planned supply'), we have similarly built two scenarios:
 - The 'best-case scenario' assumes that during the plan period all development sites currently committed for employment uses come forward for development, and no existing, currently occupied employment sites are lost to other uses.
 - Conversely, the 'worst-case' scenario assumes that only those development sites which we have assessed as good-quality and immediately available come forward. Furthermore, it assumes that all those existing, occupied sites which our qualitative analysis recommends should be released to other uses or considered for release are in fact released.
- 7.10 For the City Region as a whole, the ELPS scenario shows a market requirement to 2016 for land to accommodate some 365,000 sq m of office floorspace, which at an assumed plot ratio of 40% would require approximately 91 hectares. Of this total requirement, 31 hectares represents land in the planning and development pipeline (the frictional margin), which if demand is to be met should be available throughout the plan period. The remaining requirement, some 4.5 hectares per year over the 13-year plan period, is the net take-up (net new development) needed to accommodate the forecast net growth in office jobs.
- 7.11 Against this forecast requirement of 91 hectares, our best-case analysis shows planned supply of sites suitable for offices of 84.1 hectares. This produces a nominal undersupply of 7.1 hectares, which means that land would run out about a year or two before the end of the plan period. In practice, this undersupply of course is barely significant. The analysis suggests that over the plan period to 2016 the market is in balance, but more land will be required immediately at the end of the period.
- 7.12 In the worst-case scenario, where only good-quality and immediately available development sites come forward and some existing sites are released for other uses, supply falls short of demand by 83 hectares. In this scenario, to replace the office sites lost and accommodate the expected net growth in office employment, the study area would need to find around 83 hectares of new employment land.

Policy

7.13 The first step in planning for employment land is to state how much land will be required over the plan period. At this stage, we suggest that these stated requirements should be based on the ELPS scenario, because the estimates of additional employment on which ELPS Plus is based are extremely uncertain. Thus, the Science

City job target is purely aspirational; there is no evidence as yet to suggest either how many new jobs will be associated with Science City or what proportion of these new jobs will be additional to the forecast (it may be that Science City will impact more on the mix of Nottingham's jobs than on their total number). The York Aviation figures we have used to estimate the impact of airport growth are provided without any visible factual or analytical basis and are no longer supported by emda. As regards potential Civil Service relocations to Nottingham, there is no indication as yet of how many jobs may be involved.

- 7.14 In these circumstances, it may be best to plan on the basis of the ELPS scenario, and deal with any additional 'ELPS Plus demand' through later adjustments to the demand forecast as more specific information becomes available. In any case, the demand forecasts should be updated at regular intervals, at least every five years and more often if major changes occur.
- 7.15 In assessing the balance of demand and supply, it is advisable to err on the side of generosity. This is partly because it would be more damaging to provide too little employment land than too much, though this is only true within reasonable limits: if far too much land is provided, developers and investors will be deterred by the potential oversupply, and unwanted employment sites will wastefully lie vacant for long periods when they could and should be beneficially used for other purposes.
- 7.16 Another reason to be generous is that our calculations are more likely to under- than over-estimate the land supply which comes forward in practice. Thus, we cannot guarantee that all allocated and permitted sites will come forward for development; given the limitations of our analysis. Even those sites which we have classified as available may have hidden constraints, whether physical or related to owners' aspirations. Furthermore, losses may be higher than we foresee, because market fluctuations can make even good sites financially unviable for employment schemes, and housing pressures can force even viable sites out of employment use. However, not all risks are on the downside; over the plan period windfall office developments are bound to come forward, though we cannot predict on what scale.
- 7.17 This analysis suggests that, if market requirements are to be met over the plan period to 2016, planning authorities should strictly control loss of existing office sites. Those sites which our qualitative assessment recommends to be retained should only be released where it can be demonstrated either that there is no demand for office space at the site, or that its continued use for offices would have unacceptable impacts on the environment or amenity. But sites which we advise should be 'considered for release' may be released if *either* the above conditions apply *or* if there are opportunities to replace them with better-quality sites.
- 7.18 With regard to new development, authorities should resolve development constraints at office sites already allocated, identify additional office sites, or, more likely, both. Even if all development constraints are removed, the analysis suggests that in the later years of the plan period the supply currently identified will become exhausted and more land for offices will be needed.
- 7.19 Following a sequential approach, the first location for these new sites should be Nottingham City Centre. The City Council should identify further large-scale office sites in the centre, to come forward in the later years of the plan period and beyond. The best opportunities are likely to be in the Regeneration Zones, though intervention may be required to overcome constraint in the Zones.
- 7.20 Outside the city centre, the focus of office development has been at out-of-town parks adjoining the M1 junctions, and more recently at ng², between the centre and the M1. There is further capacity at Nottingham Business Park and development potential at Stanton Regeneration Zone (Stanton Ironworks). Yet again, following the sequential principle, rather than further land close to motorway junctions it would be preferable to

identify new office sites in more sustainable, edge-of-centre locations between the city and the M1, following the example of ng². There should be opportunities to redevelop existing industrial sites as modern office parks. But land supply for out-of-centre business parks should be carefully controlled, so that it does not displace office development in Nottingham City Centre.

7.21 Away from the city centre and the M1, the office market is small, but there is demand for small modern office units, especially if offered freehold. Rather than formal land allocations, this demand could be met by small windfall developments, such as 'office villages' on the more modern industrial estates.

Industry and Warehousing

Market Balance 2003-16

- 7.22 For the City Region as a whole, in the ELPS scenario the market requirement is negative, indicating that over the plan period to 2016 there should be a fractional reduction of 38 hectares in the stock of industrial land which means virtually no change. This total requirement is the net outcome of:
 - A positive 66 hectares of land in the planning and development pipeline (the frictional margin), which should be provided from the beginning of the plan period.
 - A reduction in stock (negative demand) of some 8 hectares per year, which will occur gradually over the plan period.
- 7.23 In our best case scenario, where all committed development sites come forward and no existing sites are lost, the study area's planned supply of industrial/warehousing land is 310 hectares, producing a large oversupply of 348 hectares.
- 7.24 But the best case is not a realistic scenario, because some of the committed development sites are of poor quality, some are constrained, and there are bound to be further losses of existing industrial sites; our quantitative assessment has identified only an insignificant 16 hectares of existing sites that should definitely be released for other uses, but as much as 144 hectares that should be considered for release.
- 7.25 In the worst case scenario, where all of this 160 ha of existing sites is released and only good-quality and immediately available development sites come forward, the supply of industrial/warehousing land exceeds the requirement, but the oversupply falls to a modest 24 hectares.
- 7.26 Thus, in strictly quantitative terms, for the study area as a whole there is almost certainly enough, and probably too much, industrial land to meet the forecast market requirement. But the supply is geographically imbalanced, with too little land, and too little of the unconstrained land, in the more accessible locations to the west of Nottingham. In future, we also expect a serious shortage of lower-cost industrial sites to the east of the City, to accommodate the many businesses that will be displaced from Nottingham's Regeneration Zones, but this may not happen for some years, since the Zones are still at an early stage.

Policy

7.27 Our analysis suggests that there is scope to transfer substantial land from industry/warehousing to other uses over the plan period to 2016. But, if market requirements are to be met and demand-supply mismatches corrected, such transfer should be selective. On those existing sites which we recommend for retention, proposals to transfer land to other uses should only be permitted if it can be demonstrated that either there is no demand for continued industrial/warehousing use on the site or such use would have unacceptable impacts on the environment, amenity or adjoining uses. Existing sites close to areas of deprivation, which are concentrated

in the City of Nottingham and Hucknall, should be specially safeguarded, as providing employment opportunities for local residents.

- 7.28 As regards development sites, if demand is to be met there is a need to remove development constraints on the best-located sites, such as Eastwood Hall, which if its access problems were resolved would provide a high-quality development opportunity. Those committed sites which we have assessed as poor quality should be de-allocated, and some new, better-quality industrial sites should be identified in accessible locations close to the M1.
- 7.29 Finally, as part of planning for the Regeneration Zones a process which has barely started the City Council and its partners need to ensure that businesses displaced from these Zones find satisfactory alternative homes. This will require industrial land in the cheaper areas to the east of Nottingham, since the prime locations to the west will be too expensive for most of the displaced businesses.

How to Plan for Employment Land

- 7.30 Although our analysis analyses land demand and supply by local authority area, the discussion in this report focuses on the study area as a whole and broad subdivisions of it, rather than individual districts. This is partly because district-level forecasts are less robust, with wider margins of error. More important, much of the demand for employment space is footloose within the City Region, across local authority boundaries. Where businesses and jobs locate within the City Region is not just a function of the market; it will also depend on policy decisions about the location of land supply and infrastructure.
- 7.31 Further to this study, therefore, local authorities will need to work together:
 - To agree a distribution of employment land provision between them that takes account of land availability and policy objectives as well as the 'raw' demand forecast;
 - To identify key employment sites for future development/redevelopment.
- 7.32 Beyond these vital areas of common interest, each individual authority of course will wish to consider local issues and specific sites in its own area.