The Urban East Midlands in 2008

A report by *emda*

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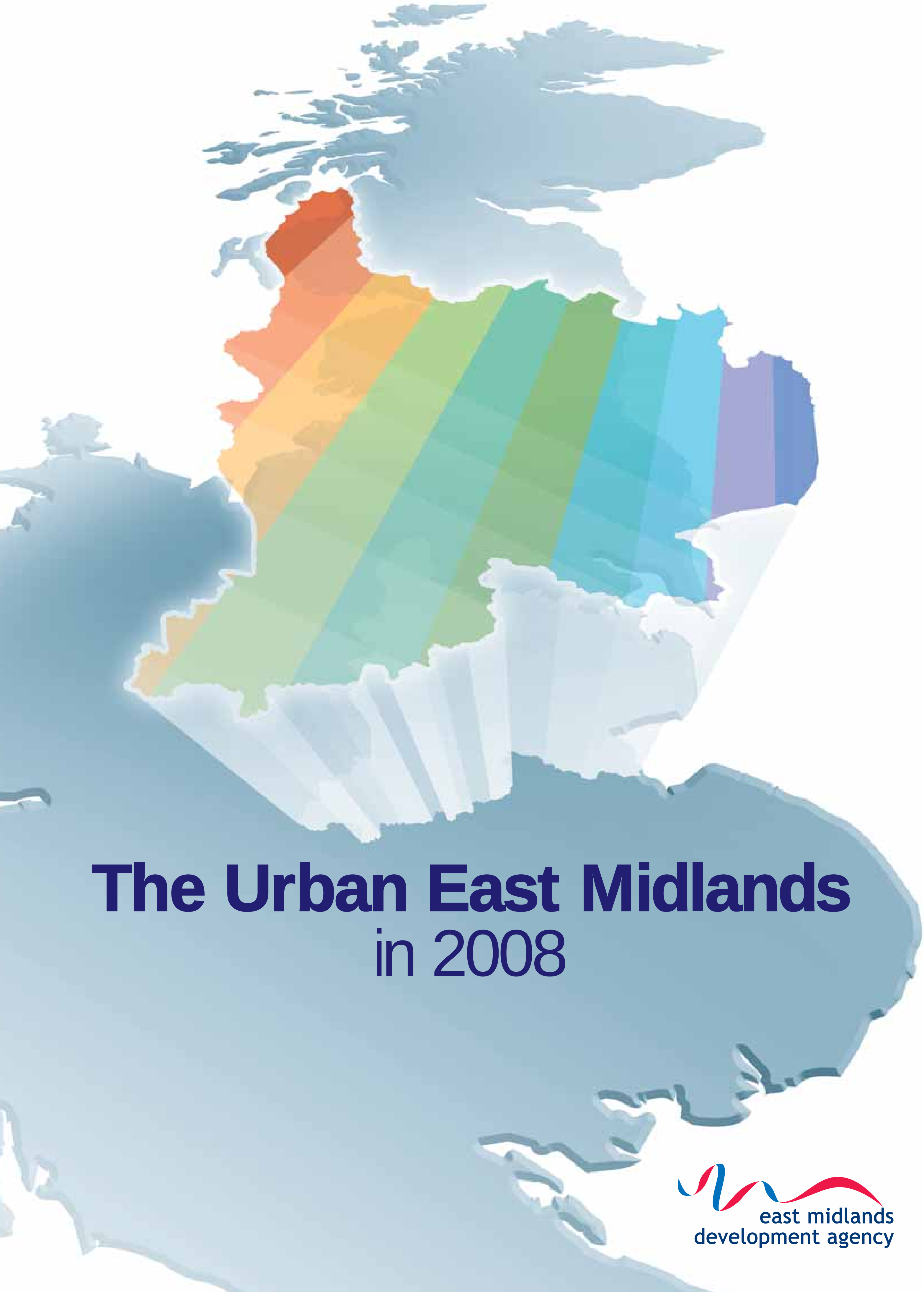

The Urban East Midlands
in 2008

east midlands development agency

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Introduction

The aim of this evidence base is to highlight key challenges and build a common understanding of the performance of the urban East Midlands on a range of demographic, economic, labour market, physical and environmental indicators.[1]

Changing demography

The population of the East Midlands is 4.3 million people, of which 45% (or 1.9 million) live in districts classified as Large Urban or Other Urban. The population of the region's urban areas tends to be younger than in more rural areas. The proportion of school age population does not differ significantly between the urban and rural areas but the proportion of working age population is slightly higher in urban areas than in rural. People of pensionable age account for a smaller share of the population in urban areas than in rural. A much larger proportion of the urban population are from ethnic minorities, compared to rural parts of the region. More than 19% of the population of Large Urban districts do not belong to the White British ethnic group, while in Other Urban districts the ethnic minority population represents 8.6% of the total. Leicester is by far the most ethnically diverse city in the East Midlands.

The East Midlands' urban areas have been experiencing significant demographic change in recent years. Since 1995 population growth in urban areas has been relatively slow (0.7% in Large Urban districts and 2% in Other Urban districts). These rates are much lower than in rural areas of the region. The principal driver of recent population change in the East Midlands has been migration. Migration into urban areas is characterised by an influx of predominantly young international migrants and by out-migration of managerial and professional people and their families to suburban or rural areas.

Population projections are for significantly slower population growth in urban areas than rural areas. While the population of urban areas is forecast to increase by only around 6% between 2004 and 2029, population growth in most rural areas is forecast to be more than 25%. The urban districts with the greatest forecast population growth over this period are Ashfield (13.6%) and Oadby and Wigston (12.5%). The slowest population growth is forecast in Corby (2.6%) and Mansfield (2.8%).

The urban economy

There are significant differences within the region in levels of output and Gross Value Added (GVA) per head, which tends to be higher in urban areas. However, these figures are influenced by commuting patterns. The areas with the highest GVA per head in the East Midlands are Nottingham, Derby and Leicester. In Nottingham, GVA per head was 42% higher than in the UK in 2004, and 49% higher than in the East Midlands. Forecasts for the next decade (2006-2016) suggest the highest GVA growth will be in Blaby (38.2%). Other Urban centres in Northamptonshire are also forecast to experience growth in GVA above the regional average of 30.5%. This reflects Northamptonshire's location within the Milton Keynes South Midlands Growth Zone.

The stock of VAT-registered businesses in urban areas is smaller than that in rural areas. There were 44,770 businesses in urban districts at the start of 2005, and 80,565 in rural districts. In recent years, business start-up rates in urban areas of the East Midlands have been consistently lower than in rural areas. Leicester City had the highest start-up rate of any urban district in 2005, at 40 per 10,000 adults, which is well above the East Midlands average of 34 per 10,000. Nottingham and its surrounding districts have the lowest business start-up rates at just 25 per 10,000 adults. Perhaps surprisingly, the density of businesses is also lower in urban areas.

[1] Urban areas can be defined in a number of ways. See section 2 for a summary of definitions used in this report.

There is an average of 288 businesses per 10,000 people of working age in urban districts and 418 per 10,000 people in rural districts. These differences reflect the fact that businesses tend to be larger in urban areas.

The industrial composition of businesses shows a significant difference between the urban and rural districts. Manufacturing businesses make up a larger share of the business stock in urban than in rural areas, accounting for between 11% and 15% of all businesses in urban areas, but less than 10% in rural districts. Urban areas also have a larger share of businesses in wholesale, retail and repair.

The East Midlands has faced significant structural changes during the last decade, which has had an impact on the composition of the business population. Between 1994 and 2005 the most significant increase in the number of businesses has been in the services sector, which has grown by more than 17% in urban districts, and more than 20% in the 'mixed' Significant Rural districts. Growth has been most marked in business services, with the number of businesses in financial intermediation more than doubling in some urban areas, and an increase of up to 88% in the number of businesses dealing in real estate, renting and business activities. At the same time the number of businesses in wholesale, retail and repairs and manufacturing has significantly declined in urban areas, particularly in Large Urban districts.

Labour market

The East Midlands' labour market is typified by high and stable rates of employment and economic activity. However, this overall figure masks significant differences within the region. Employment tends to be lower and inactivity significantly higher in urban areas compared to rural areas. In Nottingham and Leicester the employment rates were 64.9% and 68.6% respectively in 2006, more than 11 percentage points below the regional average. Employment rates are also relatively low in the former coalfield area of Mansfield (70.7%). The highest urban employment rate is in Northampton (77.4%) which has witnessed significant economic growth recently. Unemployment rates are generally higher in urban areas than in rural, at 5.1% on average compared to 3.5% in rural areas. However, the overall figure masks significant differences among urban districts. While the highest unemployment rate in the region is in Nottingham (7.4%), the lowest unemployment rate is in Blaby (1.8%).

The occupational structure of residents in urban areas is significantly different compared to rural areas. The proportion of residents employed as Managers and Senior Officials is generally lower in urban areas than in rural districts, which reflects commuting patterns. People employed in these higher level occupations often choose to live in rural areas, but commute to work in urban areas. The average annual earnings of those who live in the most rural parts of the region are around £1500 higher than those who work there. In contrast, employment in low value added and lower paid elementary occupations in the service sector tend to be concentrated in urban areas. Working arrangements are also different in urban and rural areas of the region. Due to the fact that home working tends to be more prevalent in rural areas, rates of self-employment tend to be higher in rural districts.

The skills profile of the workforce is also different in the urban areas compared to the rural parts of the East Midlands. A smaller proportion of the economically active adult population in urban areas has higher level qualifications and larger proportions have no qualifications compared to rural districts. An average of 12.5% of the economically active adult population in Large Urban districts have no qualifications, compared to 8.2% in the most rural areas within the region, and 10.2% in the East Midlands as a whole. The proportion of the adult population qualified to at least NVQ Level 4 (equivalent to a first degree) is 27.4% for Large Urban districts compared to 28.1% for the region.

Employment growth in the East Midlands is forecast to be 0.4% per year for 2006-2016. Employment growth is projected to be highest in rural districts and lowest in Large Urban areas, at 0.6% and 0.1% per year respectively. While employment growth is forecast to be highest in Transport and Communications, Financial and Business Services and Engineering, the fastest employment decline is forecast for Mining and Utilities and Other Manufacturing industries. This suggests a continuation of the restructuring of the regional economy that has been witnessed in recent years.

Deprivation and socio-economic inclusion

The spatial differences in labour market participation, the skills profile of the economically active population and geographical distribution of earnings result in a clear pattern of multiple deprivation. The highest levels of deprivation in the East Midlands are concentrated in the urban centres, as well as in the former coalfields, and the

Lincolnshire coast. Eight out of the ten most deprived local authorities in the region are urban. Nottingham City is classified as the most deprived district in the East Midlands, while Leicester and Mansfield are the second and third most deprived respectively. Concentrations of deprivation tend to be greater in major urban areas. There is also something of a north-south split in the region, with districts in the north generally having higher levels of deprivation than those in the south.

The spatial incidence of income poverty is correlated with the geographical pattern of weak economic performance and labour market participation. In general, larger proportions of East Midlands' households are in income poverty in urban than in rural areas. Large numbers of benefit claimants is a proxy for low levels of income and low levels of economic activity. The highest number of benefit claimants is found in urban centres, the former coalfields, and the Lincolnshire coast. The lowest number of people claiming key benefits are found in west Derbyshire, eastern and southern Leicestershire and western and southern Northamptonshire.

The spatial distribution of crime also correlates with patterns of multiple disadvantages. Rates of domestic burglaries and violent offences are about twice as high in urban districts as in rural. Rates of domestic burglary were highest in the urban centres and in the districts surrounding Nottingham. Nottingham City had by far the highest rate of domestic burglary of any local authority in the East Midlands, at 55.1 burglaries per 1,000 households in 2005.

Infrastructure and physical development

Adequate land and property provision is a necessary condition for economic competitiveness. There have been some notable changes in the commercial property market in recent years. There is an ongoing increase in the amount of floorspace committed to warehousing in the East Midlands as a whole, particularly in Northamptonshire. The so-called 'Golden Triangle' of Northampton, Coventry and Leicester remains the main location for logistics firms.[2] At the same time rental values for large city centre office accommodation have increased since 2003, due to shortage of space in city centres. Rents in offices away from town centres have also increased in recent years, as businesses have shifted away from the centre of cities where space is at a premium.

In the residential property market there has been – in line with national trends – house price inflation which has made home ownership increasingly unaffordable. Between 2000 and 2005 the region's average house price almost doubled, from £79,085 in 2000 to £155,286 in 2005. The lowest house prices in the region are found in urban areas, averaging £136,665 in 2005. This means that the average price of a house in rural areas (£189,509) is 39% higher than the average price for urban homes.

In line with house price inflation, the relative affordability of housing tends to be greater in urban districts than in rural, with house price to income ratios averaging 6.69 in the East Midlands. The urban areas with the lowest ratio of house price to individual income – and hence the most affordable house prices – are Derby (5.0), Nottingham (5.2) and Mansfield (5.4). The least affordable houses in urban areas are in Blaby, where the house price to income ratio is 7.8, Oadby and Wigston (7.3) and Northampton (7.2).

Homelessness tends to be more prevalent in urban than in rural areas. On average, the number of households defined as homeless and in priority need in urban districts was 4.8 per 1,000 households in 2005/06, whilst the figure for rural districts was 2.7 per 1,000 households. The highest level was in Nottingham, where 10 in every 1,000 households were homeless, whilst the smallest number of homeless households was recorded in Harborough – just 0.6 per 1,000 households.

Transport and accessibility are major issues for the region as a whole but particularly so in the region's urban areas. The East Midlands has been experiencing higher than average road traffic growth and relies more on private travel (the car) than other regions. The largest proportion of trips was for non-business purposes such as shopping, leisure journeys, and taking children to school. Work and business related journeys account for less than 20% of all trips undertaken in the East Midlands. Use of private motor vehicles in the urban areas is lower than in rural areas, with a correspondingly greater use of public transport and travel by foot or cycle in the urban areas. This travel behaviour can be seen as a function of the structure of the region's urban network and the proportion of the population living in rural areas.

[2] *East Midlands Regional Spatial Strategy Annual Monitoring Report, 2005/06*. East Midlands Regional Assembly (February 2007).

Environment and quality of life

During the last century temperatures across the East Midlands increased by over 0.5°C and it is anticipated to continue with a daily average temperature increase of up to 5°C by the 2080s. Consequently, summer rainfall could decrease by up to 60% in the southern part of the region and winter rainfall could increase by up to 30%. In the urban areas of the region this could result in greater damage to buildings through subsistence, flooding and disruption to transport.

Greenhouse gas emissions, a major contributor to climate change, have been reduced since 1993 in the UK. In 2004 emissions by end users[3] totalled 42,855 kilotonnes (kt) in the East Midlands. This total is equivalent to 10.3 tonnes CO_2 emissions per capita in the region. CO_2 emissions per capita tend to be lower in the region's urban areas. Urban areas had an average level of emissions of 7.5 tonnes per capita, which is 54% of the average level in the most rural areas. In Derby, Leicester and Nottingham the figures were 8.7 tonnes, 7.8 tonnes and 7.3 tonnes respectively in 2004. These compare with figures of 27.7 tonnes and 43.0 tonnes in High Peak and Rutland respectively, the highest in the region.

In 2005/06 households in the East Midlands generated 1.83 million tonnes of waste. The most common method of disposal remains landfill, which accounted for around 60% of waste managed in 2005/06. However, recycling/composting accounts for the second highest share, at around 28%. Composting rates tend to be lower in the urban areas within the region. The highest rates are to be found in Rushcliffe (50.3%) and North Kesteven (49.3%), whilst in Nottingham and Leicester the figures are 19.5% and 16.2% respectively.

[3] End users include industry and commercial use, domestic use and road transport.

The Urban East Midlands in 2008

1. Introduction

1.1 Context

The East Midlands in 2006, the Evidence Base for the current Regional Economic Strategy, highlighted the importance of a strong body of evidence to assist policy making. The role of urban areas in the regional ecomomy has led to the production of this evidence base tailored to urban areas. The catalyst for the development of the evidence base was the review of the East Midlands Urban Partnership Group (UPG). This group was established by *emda* and partners in 1999 as an informal network of senior urban regeneration practitioners from a range of sectors. The original aims of the UPG were to provide expert advice to *emda* on urban regeneration policy and activity, to assist with the formulation of Urban Action Plans, and to act as a forum for the exchange of ideas and good practice. In the light of changes to the regional policy context and delivery arrangements for urban regeneration, *emda* commissioned a review of the role and purpose of the UPG in 2006.

Stakeholders who were consulted as part of the UPG review expressed an interest in a strategy document that outlines the key issues facing the urban areas of the East Midlands. The Urban Evidence Base is intended to provide a reference point for the development of this new Urban Strategy for the East Midlands.

1.2 Purpose of the Evidence Base

The intention is for the new Urban Evidence Base to highlight key challenges and opportunities for urban areas in the East Midlands, across a range of topic areas, in order to guide thinking around the Urban Strategy. The evidence base includes both quantitative and qualitative information on demography, economy, labour market and skills, deprivation and social inclusion, infrastructure and regeneration, and environment and quality of life in the region's urban areas. Statistical information is presented alongside reviews of policy literature, in order to demonstrate how the performance of the region's urban areas compares with the national picture, and to identify common challenges faced by urban areas across the country.

2. Defining urban areas

A range of different geographical boundaries can be used to define urban areas, but the following principles need to be adhered to:

- Boundary definitions must be consistent. This enables comparisons to be made between urban areas within the East Midlands and with areas in other regions;
- They should be supported by a supply of robust and regularly updated official statistics across a number of themes, in order to assess change over time and comparative strengths and weaknesses;
- They should relate to clearly defined entities or areas – data is most readily available on a comparable basis for administrative areas;
- They should have recognised status at a regional and national level. A purely local or ad hoc arrangement would not be an appropriate geography to use at a regional level.

Two principal definitions of urban areas are used in the Urban Evidence Base, as outlined below.

2.1 Administrative boundaries (Unitary Authorities and Local Authority Districts)

These are boundaries that describe the territorial responsibility of a Unitary Authority, in the case of Nottingham, Derby and Leicester cities, or Local Authority Districts (LAD), in the case of other towns or cities such as Lincoln or Northampton.

The most regularly used proxy measure for a city in UK statistics is the Unitary Authority (UA). These describe the territory covered by single-tier administrations with responsibility for all areas of local government. They were established between 1995 and 1998 in a number of areas across the country, especially in medium-sized urban areas. Larger cities, like Manchester or Birmingham, are governed by Metropolitan District (MD) Authorities.

This level of geography (UA, LAD or MD) is covered by the greatest range of statistics. The two principal Office for National Statistics surveys – the Annual Business Inquiry and the Annual Population Survey/Labour Force Survey – are designed to be robust to this level. Only the Census and administrative data such as benefits information are available for smaller geographical areas, so there are limits to the range of characteristics of these smaller areas that can be measured in a timely fashion.

These administrative geographies can under-represent the physical extent of cities, and particularly fail to describe city regions. Therefore some urban areas could be described in terms of a combination of a central Unitary Authority and neighbouring Local Authority Districts. However, there are two problems with such an approach. First of all, it can significantly over-represent a city's physical boundaries. Secondly, in the absence of any official units for this level of statistical analysis it is problematic to develop comparable boundaries and assess performance across areas.

On this basis, Unitary Authorities and Local Authority Districts are recommended as the principal means of describing urban areas, as they correspond to clearly defined administrative bodies, have cross-regional comparability, and a wide range of statistics is available at this geographical level.

Defra has produced a district-level classification of urban and rural areas, which is described in Table 1. Five of the six classifications apply in the East Midlands (all except Major Urban).

TABLE 1

Classification of Local Authority Districts and Unitary Authorities in England, Defra 2005.

Major Urban	Districts with either 100,000 people or 50 percent of their population in an urban area with a population of more than 750,000.
Large Urban	Districts with either 50,000 people or 50 percent of their population in one of 17 urban areas with a population between 250,000 and 750,000.
Other Urban	Districts with fewer than 37,000 people or less than 26 percent of their population in rural settlements and larger market towns.
Significant Rural	Districts with more than 37,000 people or more than 26 percent of their population in rural settlements and larger market towns.
Rural 50	Districts with at least 50 percent but less than 80 percent of their population in rural settlements and larger market towns.
Rural 80	Districts with at least 80 percent of their population in rural settlements and larger market towns.

Significant Rural is essentially a 'mixed' urban and rural category. The following unitary authorities and local authority districts in the East Midlands are classified as Large Urban, Other Urban and Significant Rural:

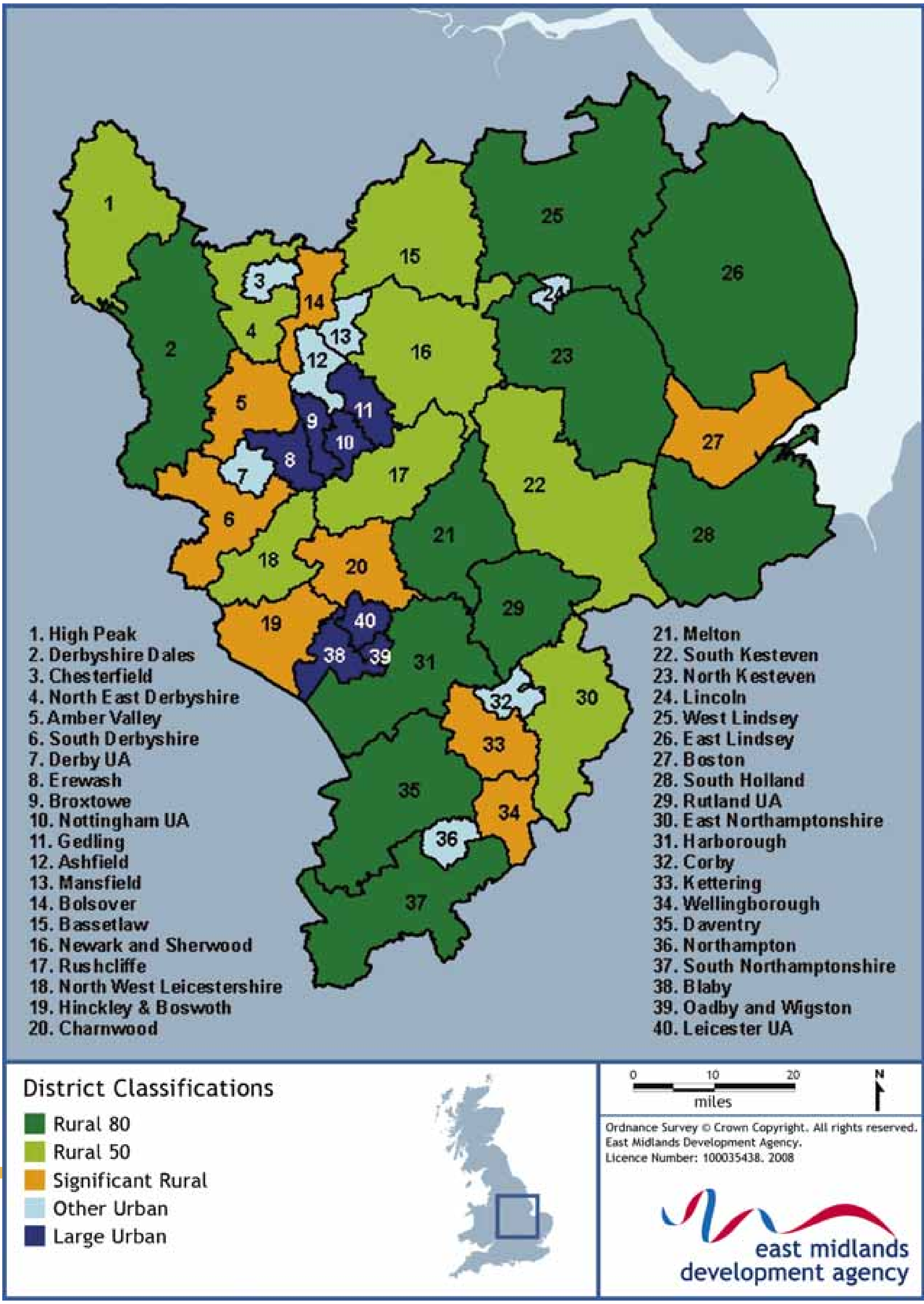
TABLE 2

East Midlands UAs and urban / 'mixed' LADs classified according to Defra's definition.

Large Urban	Other Urban	Significant Urban
Blaby	Ashfield	Amber Valley
Broxtowe	Chesterfield	Bolsover
Erewash	Corby	Boston
Gedling	Derby	Charnwood
Leicester	Lincoln	Hinckley and Bosworth
Nottingham	Mansfield	Kettering
Oadby and Wigston	Northampton	South Derbyshire
		Wellingborough

MAP 1

East Midlands by district classification



2.2 Primary Urban Areas (PUAs)

Primary Urban Areas are a new definition, created for the Government's *State of the Cities*[4] report. The PUAs are larger than local authorities and frequently contain several of them. A total of 56 PUAs were defined for the State of the Cities report, all with a minimum population of 125,000. Five PUAs were identified in the East Midlands:

- Derby
- Leicester (incorporating Leicester UA, Blaby, Oadby and Wigston)
- Northampton
- Nottingham (incorporating Nottingham UA, Erewash, Broxtowe, Gedling)
- Mansfield

There are limitations associated with this definition of urban areas – most notably that it is not consistent with standard administrative geographies. So although the State of the Cities Database contains a wealth of information on the 56 PUAs, data at this level of geography cannot be collected consistently in the future. Data in the State of the Cities Report is available for three points in time: the most recent period (2001, 2002 or 2003), the mid-1990s, and the beginning of the 1990s. However, this means that some of the statistics are quite dated and do not pick up on the most recent developments in the region's urban areas. Moreover, Lincoln is excluded from the list of PUAs as it does not meet the minimum population threshold, notwithstanding its clear role as a sub-regional centre of economic activity. Nevertheless, the State of the Cities Database is a very detailed additional source of information on the East Midlands' largest urban centres, and will be drawn upon alongside data at UA / LAD level in the Urban Evidence Base.

[4] ODPM, *State of the English Cities* (March, 2006).

Spotlight on city regions

Administrative boundaries and PUAs are not the only ways in which urban areas can be defined. The concept of the 'city-region' is a reflection of the fact that cities do not exist in isolation, but are intimately connected to their surrounding areas via the movement of people, goods and income. The city-region can be defined as the 'economic footprint' of a city – in other words, the area over which key markets operate, including labour markets (which the Government prefers to measure using Travel to Work Areas), housing markets and retail markets. It consists of a core urban area and a surrounding territory, from which the city draws labour and raw materials, while the city itself exports manufactured goods and services to its hinterland.[5] The trend in recent decades has been for de-concentration within city-regions, as population and employment have shifted from urban centres to surrounding rural areas, prompted in part by the negative externalities of cities (such as congestion, pollution, and rising land costs), and also by the greater possibilities for long-distance commuting and 'remote working'.

The concept of the city-region is a long-standing feature of geographical thinking, being used as the basis of 'functional regions' in the 1960s. It is currently enjoying a revival in the UK for a number of reasons. Firstly, the city is increasingly seen as an inappropriate unit, both for analysis and for local government, as it no longer adequately reflects the underlying structure of economic, social and environmental activities. The city scale is considered too small to be an ideal unit for decision-making in key areas such as transport, economic development, planning and housing.[6] Secondly, national delivery would appear to be remote and is likely to be inefficient. Thirdly, the region is now a more favoured spatial scale for intervention and regulation.[7] One of the fundamental messages from the Treasury's recent paper *Meeting the regional economic challenge: The importance of cities to regional growth*[8] was the need for cities and regions to co-operate in order to promote increasing prosperity and opportunity. This should involve greater collaboration between agencies at regional and local level.

In the East Midlands, four city-regions were identified by the then Office of the Deputy Prime Minister in the *State of the English Cities* report, as shown in Table 3 below:

TABLE 3

East Midlands city regions and their constituent local authorities, as defined in the State of the Cities project.

City Region	Constituent local authorities
Derby	Derby UA, Derbyshire Dales, South Derbyshire, East Staffordshire
Leicester	Leicester UA, Rutland, Charnwood, Harborough, Hinckley and Bosworth, Melton, North West Leicestershire
Northampton	Corby, Daventry, East Northamptonshire, Kettering, South Northamptonshire, Wellingborough
Nottingham	Nottingham UA, Amber Valley, Bolsover, Ashfield, Mansfield, Newark and Sherwood, Rushcliffe

Source: *State of the English Cities*, Office of the Deputy Prime Minister, 2005.

[5] HM Treasury, *Devolving decision-making: 3 – Meeting the regional economic challenge: the importance of cities to regional growth* (March 2006); J. B. Parr, *'Perspectives on the City-Region'*, Regional Studies, 39:5 (July 2005). The Government has defined city-regions based on Travel to Work Areas in its *State of the English Cities* report, but Parr notes that sole reliance on this criterion for defining city-region boundaries is restrictive.
[6] S. Marvin *et al, A Framework for City Regions* (ODPM, 2006), 5.
[7] Parr, *'Perspectives on the City-Region'*, 556.
[8] HM Treasury, *Devolving decision-making: 3 – Meeting the regional economic challenge: the importance of cities to regional growth* (March 2006); J. B. Parr, *'Perspectives on the City-Region'*, Regional Studies, 39:5 (July 2005). The Government has defined city-regions based on Travel to Work Areas in its *State of the English Cities* report, but Parr notes that sole reliance on this criterion for defining city-region boundaries is restrictive.

As noted in the discussion of Primary Urban Areas above, this classification neglects the functional role played by Lincoln in its sub-region. Despite its smaller population than the four centres identified in Table 3, Lincoln clearly acts as a centre of business and economic activity for a large hinterland in a way that some districts do not. Table 3 also shows that the ODPM identified Mansfield as part of the Nottingham city region, reflecting the linkages and patterns of commuting between the two areas.

The city-regional scale of governance and policy delivery continues to find favour in Government. The recent Eddington Transport Study, for instance, recommended that city regions be prioritised for transport investment, reflecting the fact that the built-up area of cities has expanded and commuting distances have lengthened. The Leitch Review also recommended the establishment of City Region Skills Boards to ensure a better fit between the supply of skills and employer demand. And in its *Review of Sub-national Economic Development and Regeneration*, the government recognises the fact that many economic markets operate at a city-region level, and thus proposes to support local authorities to work together on economic development at the sub-regional level.[9] The implications of this policy focus on city-regions are complex and uncertain, given the complex and diverse geographical and economic structure of the region.

Rather than there being a single dominant conurbation providing a 'ready-made' focus for a city-region, such as Birmingham or Manchester, the East Midlands contains a number of urban areas of significant economic importance – Nottingham, Leicester, Northampton, Derby and Lincoln. Atherton and Johnston's comparative study of agglomeration economies in the East Midlands and Yorkshire and the Humber [10] found that the economic structure of the former was more diverse, with agglomeration effects spread out amongst a larger group of urban centres.

In addition, the East Midlands' regional boundary is not a strong functional divide. Many places towards the fringes of the East Midlands are more closely connected to towns and counties outside the region than to places within it. For instance, the Peak areas of Derbyshire have connections with Manchester and Stoke, whilst Northamptonshire is oriented increasingly towards the South East. Northern parts of the region are linked to Sheffield and Doncaster – indeed the Sheffield city-region, as defined in the *Northern Way*[11], includes parts of the East Midlands. This makes it difficult to delimit distinct city-regions within the East Midlands.

Reflecting the structure of the East Midlands urban system, the 'Three Cities' of Nottingham, Leicester and Derby submitted a business case to Government in 2006, following the Nottingham Core City Summit in November 2005. This provides an overarching framework for collaboration across the three cities on delivering economic development and associated services within a 'Tri-Centric' City Region. The intention is that the three cities be viewed as a single entity within which each city has a functional specialism (such as distinctive cultural facilities). There are potentially some benefits from collaboration between the three cities, particularly in the areas of transport and congestion policy, or cross-university links.

Key points: defining urban areas

- **A range of different boundaries can be used to define urban areas. These include administrative boundaries, Primary Urban Areas (groups of districts) and city regions.**
- **On the basis of data availability and comparability, Unitary Authorities and Local Authority Districts are recommended as the principal means of describing urban areas.**

[9] HM Treasury, *Review of sub-national economic development and regeneration* (July 2007).
[10] A. Atherton and A. Johnston, *Mapping the structure of regional economies: A framework for assessing regional distributions of economic activity*, Policy think piece to support the RES Evidence Base, 2005.
[11] The Northern Way is a collaboration between the three Northern RDAs: Yorkshire Forward, North West Regional Development Agency and ONE North East. It is a 20-year strategy to transform the economy of the North of England, and its aim is to bridge the £30 billion output gap between the North and the average for England.

3. Changing demography

3.1 Introduction

The East Midlands' urban areas have been experiencing significant demographic change in recent years, fuelled in large part by changing migration patterns. An influx of predominantly young international migrants has been matched by out-migration of managerial and professional people and their families to suburban or rural areas. This chapter examines several aspects of the changing demography of the region's urban areas, including population growth, migration flows, age structure, and ethnic composition of the population.

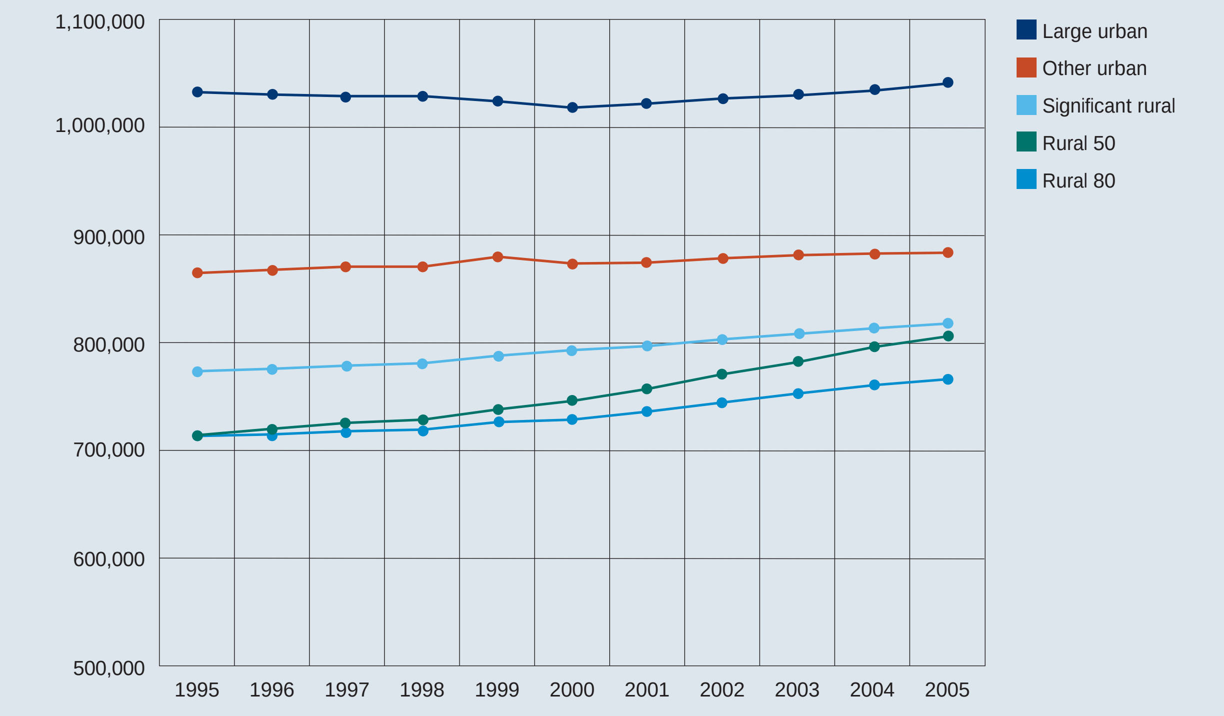
3.2 Population growth

There were 1.9 million people living in districts classified as Large Urban or Other Urban in the East Midlands in 2005, which represents 45% of the region's total population of 4.3 million. A further 760,300 people, or 18% of the region's population, lived in the 'mixed' Significant Rural districts.

There were 4.3 million people living in the East Midlands in 2005, which is 5.2% higher than in 1995. Since 1995, population growth in urban areas has been relatively slow. The population of Large Urban districts increased by just 0.7% between 1995 and 2005, while Other Urban districts experienced population growth of 2% over the same period. This compares to an 8.7% increase in rural areas of the region. Some urban districts have in fact experienced population decline between 1995 and 2005. The population of Mansfield, for example, declined by 2%, whilst in Broxtowe there was a fall of 1.6%. Amongst the region's largest cities, population growth was fastest in Derby, at 2.6%, whereas in Nottingham City the population increased by just 0.4%, and in Leicester the population declined by 1.3%.[12]

CHART 1

Population by district classification, 1995-2005.



Source: ONS Crown Copyright, Mid-Year Population Estimates, 1995-2005, from NOMIS, 6th December 2006.

[12] ONS Crown Copyright, Mid-Year Population Estimates, 1995-2005, from NOMIS, 6th December 2006.

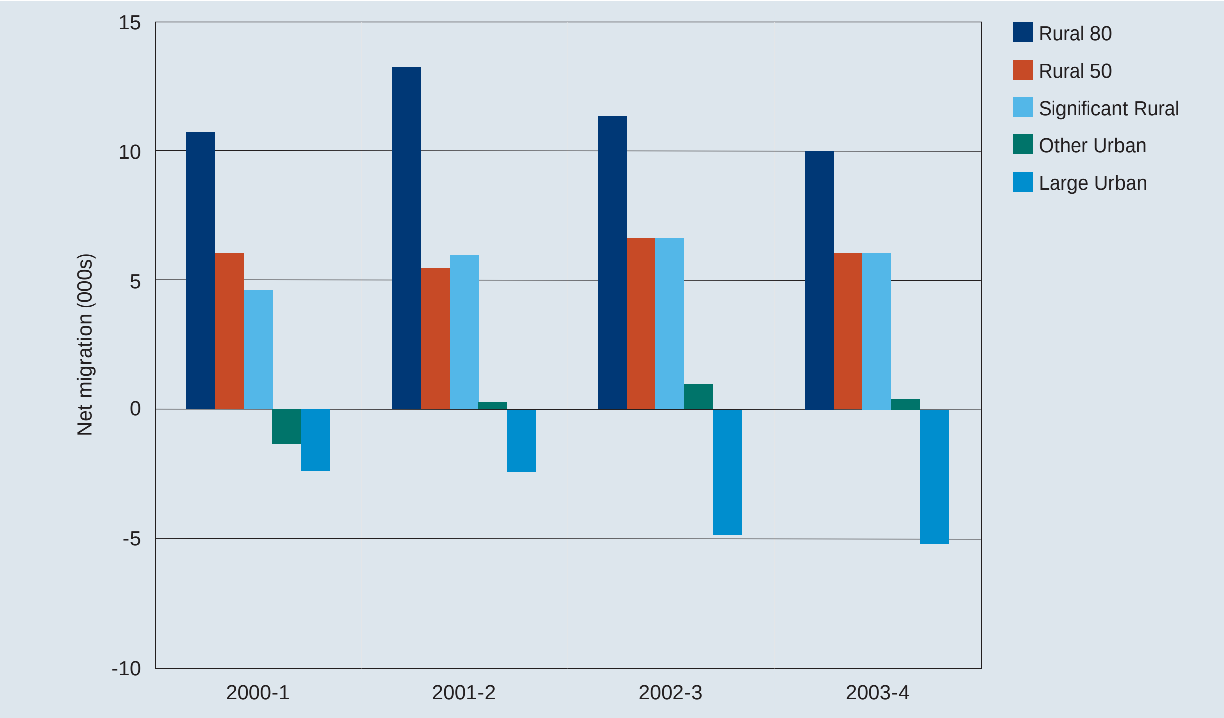
3.3 Migration

The principal driver of recent population change in the East Midlands has been migration from other regions. As Chart 2 demonstrates, migration appears to have driven a significant proportion of sub-regional population change as well.

- Those districts which have experienced the smallest population growth in recent years have also seen the smallest net migration.[13]
- Large Urban areas have experienced increasing levels of out-migration, while districts classified as Other Urban have seen only limited net in-migration since 2001. As in England as a whole, the East Midlands has been witnessing a growing trend of urban to rural migration (see *Spotlight on city flight*). Chart 2 clearly shows the high levels of net in-migration in the rural areas.
- Large Urban districts lost between 3,300 and 5,100 people each year between 2000 and 2004 through out-migration, whilst Other Urban districts gained no more than 1,300 people per year through net in-migration in this period.

CHART 2

Net internal migration by district classification, 2000-2004.



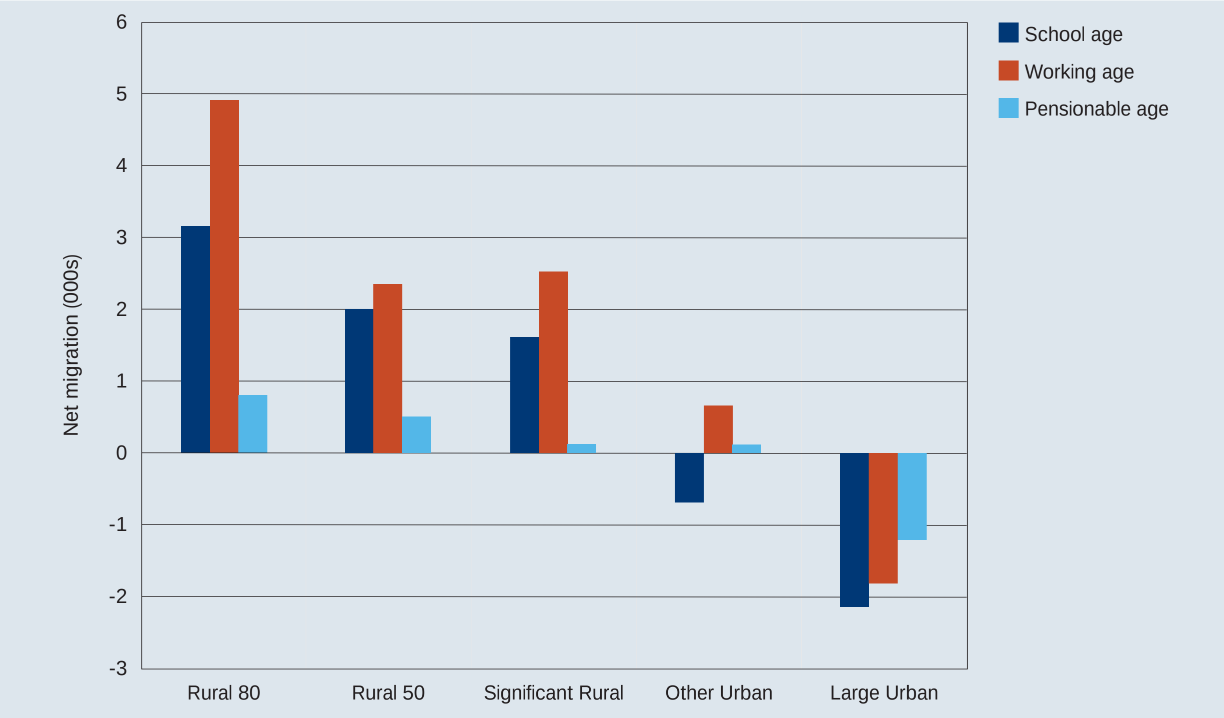
Source: ONS Internal Migration Estimates, 2005, from Commission for Rural Communities, *'The State of the Countryside 2006'*, regional data, July 2006.

[13] Net migration is the difference between total in-migration and total out-migration. For example, if 10,000 people moved into an area over a given time period, and 8,000 people moved out of that area over the same period, this would mean that there had been a net in-migration of 2,000 people into that area.

Looking at the age of internal migrants, the largest number of movers are of working age, with migrants of school age also accounting for a significant number. This reflects the fact that people often move for employment reasons and migrate with any children they have. As Chart 3 shows, there has been a net out-migration of all age groups from Large Urban districts, but most particularly the school age and working age groups. In 2003-04 there was a net out-migration of 2,100 children of school age and 1,800 people of working age from Large Urban districts in the East Midlands. In Other Urban districts, however, there was a net in-migration of 600 people in 2003-04.

CHART 3

Net migration by age and district classification, 2003/04.



Source: ONS Internal Migration Estimates, 2005, from Commission for Rural Communities, *'The State of the Countryside 2006'*, regional data, July 2006.

Whilst rural areas of the East Midlands have tended to gain migrants from other parts of the UK, and lose migrants to overseas locations, the opposite is true of urban areas. Over the period 1997 to 2005, urban areas gained 21,800 migrants from overseas, but lost 38,000 migrants to other parts of the UK.[14]

In recent years there has been out-migration from large urban ares

[14] *The contribution of migration flows to demographic change in the East Midlands*. Experian Business Strategies (November 2006).

Since 2004, migration patterns have altered, mainly due to the expansion of the European Union and the subsequent flows of people from the 'A8' countries[15] seeking work in the UK. National Insurance number registrations present a fuller picture of the recent addition to the UK workforce by overseas nationals than any other single data source (because every overseas national who is legally employed or self-employed in the UK requires a national insurance number). The majority of overseas nationals registering for a National Insurance number (NINo) since 2004 have been concentrated in urban areas. A total of 24,550 migrants from overseas registered for a NINo in urban areas of the East Midlands in 2005/06, which represented nearly two thirds (64%) of the 38,540 NINo registrations in the East Midlands. Most of the migrants registering for a NINo in urban areas were concentrated in Leicester City (7,620), Northampton (4,570) and Nottingham (4,530).[16]

TABLE 4

Change in National Insurance registrations by non-UK nationals in the East Midlands, 2002/03 to 2004/05.

Area definition	2002/2003	2005/2006	% change 2002/2003 to 2005/2006
Large Urban	6,470	13,730	112%
Other Urban	3,570	10,820	203%
Significant Rural	1,470	5,820	296%
Rural 50	920	3,360	265%
Rural 80	980	4,810	391%
East Midlands	13,410	38,540	187%

Source: *Migrant Workers in the East Midlands Labour Market*, Institute for Employment Research, 2006.

The number of Workers Registration Scheme[17] (WRS) approvals were more evenly spread between urban and rural areas. There were 19,429 WRS approvals in urban areas between May 2004 and June 2006 (which represents 1.5% of the total working age population in urban areas in 2005), whilst there were 17,674 approvals in rural areas (accounting for 1.1% of the working age population in these areas). Again, those migrant workers registering in urban areas were concentrated in Northampton (7,519), Nottingham (2,867) and Leicester (2,687).[18]

Although there has been a tendency for larger numbers of migrant workers to move to the region's urban areas, the growth in numbers of migrants has been more marked in rural areas, as Table 4 shows. The number of overseas nationals registering for a National Insurance number increased by 41% between 2002 and 2005 in Large Urban areas and by 86% in Other Urban areas, whilst the numbers trebled in the most rural areas (the Rural 80) and more than doubled in Rural 50 and Significant Rural districts.

[15] There are eight central and eastern European Accession countries - Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic and Slovenia – which since they are outside of the EU 15, they have to register with the Workers Registration Scheme before they can work in the UK.
[16] Institute for Employment Research on behalf of *emda*, *Migrant workers in the East Midlands labour market* (November, 2006).
[17] The Workers Registration Scheme was put in place in May 2004 specifically for migrants from the 8 Accession countries in the EU, to regulate their access to the UK labour market.
[18] Institute for Employment Research on behalf of *emda*, *Migrant workers in the East Midlands labour market* (November 2006).

Spotlight on city flight

Population migration data shows clear trends of particular socio-economic groups of people leaving many urban areas for more rural or suburban residential locations. Urban regeneration activity is often based upon success in encouraging larger numbers of people to live in urban centres, but whilst recent years have seen considerable urban residential development, the trend of out-migration has continued. In particular, families and professionals (the Higher Managerial and Professional group) are continuing to leave the urban centres for locations elsewhere, some moving to more suburban locations within the conurbation area, whilst others move further out into surrounding rural areas.

The RES has identified 'city flight' as a "….key concern for many urban areas, including the Three Cities, and it is likely that this pattern is not solely related to the quality and mix of housing but is due to a range of quality of life factors such as services, quality of education, crime levels and environmental quality. It also highlights the need to improve the built environment of towns and cities through high quality design more generally".

Such trends over the longer-term have implications for urban (and wider) labour markets, urban economic competitiveness and attractiveness to inward investment, skills and socio-economic profiles, and also for patterns and demands of land-use development and transport movements. There are also implications for regeneration activity and future strategies and investments.

In order to better understand and assess the issue of city flight, *emda* recently commissioned a research project on the nature, causes and implications of city flight in the East Midlands (city flight 1 study).[19] This study unpacks the city flight concept with a specific focus on the situation in the three cities of Nottingham, Leicester and Derby. The study includes a literature review, a summary of the relevant current policy frameworks, and an examination of the policy priorities and opportunities in the Three Cities collectively and also individually. The study reveals that all the Three Cities appear to be losing Higher Managerial and Professional (HMP) people. All the cities are seeing HMP people move out to nearby more rural areas at a faster rate than most other large English cities. The study included stakeholder interviews with key partners from each of the Three Cities who are involved in regeneration and housing provision, and using this and existing data helped identify some of the key drivers behind these moves. It demonstrated that the migration flows are complex and two-way (in and out of urban areas), and that 'life-course' considerations – i.e. actions determined by age and changing lifestyle choices and requirements – and environmental quality are two of the main drivers behind decisions to move out of urban centres. However, a wide range of issues are relevant to the city flight trends. The study includes the following list of policy options to help address city flight:

- Improved city educational services, and better secondary schools in particular;
- Tackling city problems of crime and anti-social behaviour;
- Improving public transport on high density corridors;
- Facilitating new employment growth sectors which favour clustering in cities;
- Upgrading and extending urban and suburban retail and leisure facilities;
- Providing a more diverse housing 'offer' in the main urban areas;
- Putting further emphasis on development on brownfield sites; and
- Improving access to open space and enhancing the quality of the local environment including the public realm.

In June 2007 *emda* commissioned the follow-on study 'Responding to city flight in the East Midlands' which aimed to identify how *emda* and key regional partners could effectively respond to and influence city flight trends and secure regeneration in the longer term. The study focused on the six Priority Urban Areas of Nottingham, Leicester and Derby (Three Cities), Corby, Lincoln and Northampton. The final report will be available in spring 2008.

[19] Centre for Urban and Regional Development Studies on behalf of *emda*, *city flight migration patterns in the East Midlands* (April 2007).

3.4 Age structure

Understanding the age structure of the population is crucial to planning for housing, education, healthcare and other services. The key age groups are the school age, working age and pensionable age populations.[20] Maps 2 to 4 illustrate the proportions of the total population in each of these age groups for each district within the region in 2005.

- Slightly larger proportions of the population in urban areas are of school age, compared to rural areas, at 17.8% and 17.7% respectively. Amongst the region's urban districts, Corby and Leicester City have the highest proportions of people of school age, at 19.6% and 19.5% respectively. The Greater Nottingham area has the smallest proportions of school age, with around 16% of the population of Broxtowe, Nottingham City and Gedling being under the age of 16.

- The proportion of the population of working age is slightly higher in urban areas than in rural, at 63.7% and 62% respectively. There is something of an east-west split in the region, with higher proportions in Northamptonshire, Leicestershire, south Derbyshire and south Nottinghamshire, but smaller proportions in Lincolnshire. In Charnwood, for example, 65.8% of people are of working age, whilst in East Lindsey the figure is 57.8%.

- The urban districts with the smallest proportion of people of working age include Chesterfield, Mansfield and Ashfield (at a little over 62%). The larger cities tend to have higher proportions of people of working age, in part reflecting the concentration of employment opportunities in urban areas. For instance, 68.6% of Nottingham's population is of working age, whilst the figure for Leicester is 65.9%, for Lincoln 65.7% and for Northampton 65.5%.

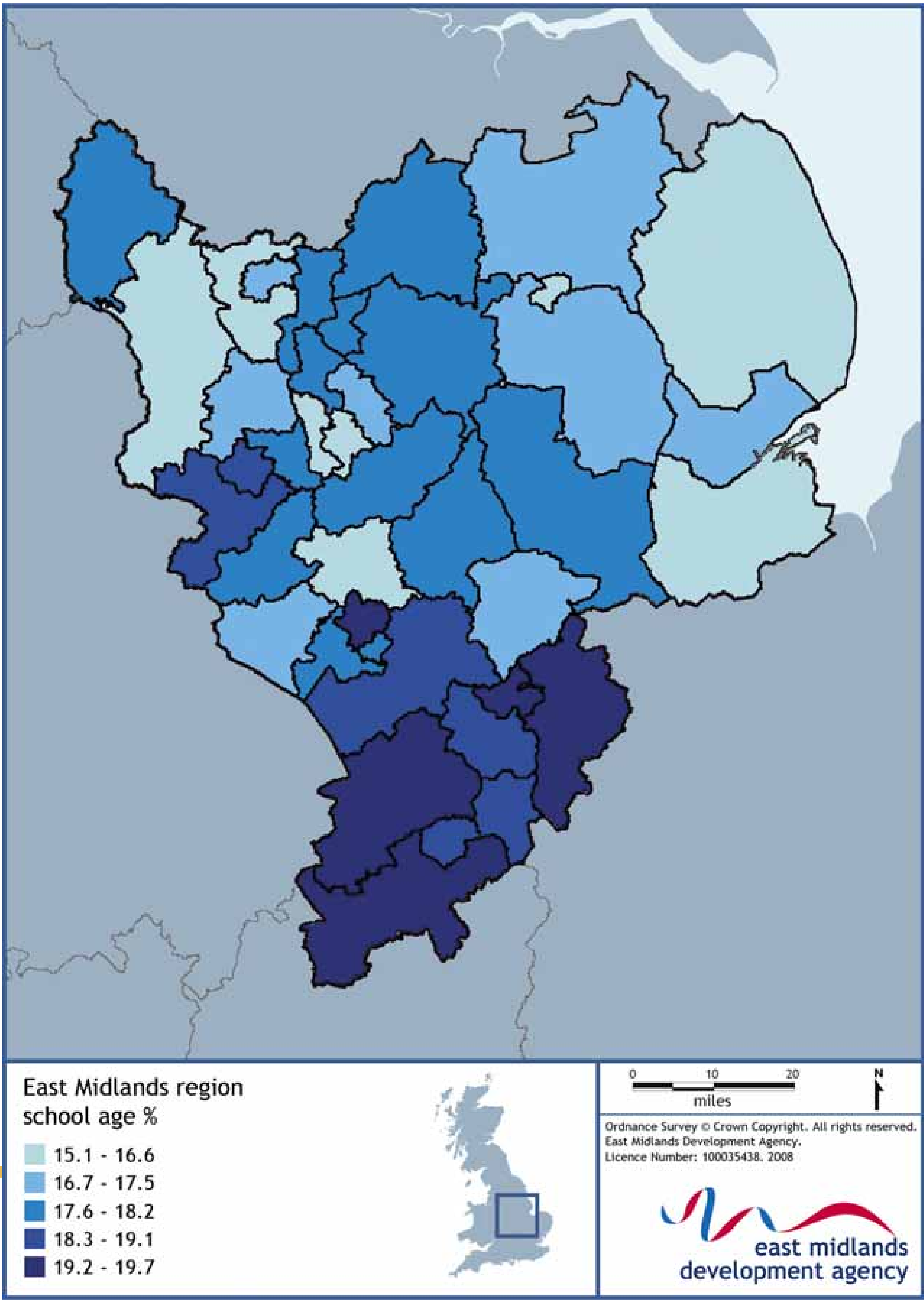
- People of pensionable age account for a smaller share of the population in urban areas than in rural, at 18.5% compared to 20.3%. The proportion of people of pensionable age is lowest in the large urban centres. In Leicester City, just 14.6% of people are of pensionable age, while in Nottingham the figure is 14.9%. The highest proportions of people of pensionable age tend to be found in the outer suburbs of the cities. In Oadby and Wigston, for example, 21.3% of the population are of pensionable age, while the figure is 20.8% in Gedling.[21]

> The population of urban areas is relatively young

[20] School age refers to children aged 15 and under; working age refers to women aged between 16 and 59 and men aged between 16 and 64; and pensionable age describes women aged 60 and over and men of 65 years old and above.
[21] ONS Crown Copyright, Mid-Year Population Estimates, 2005, from NOMIS, December 2006.

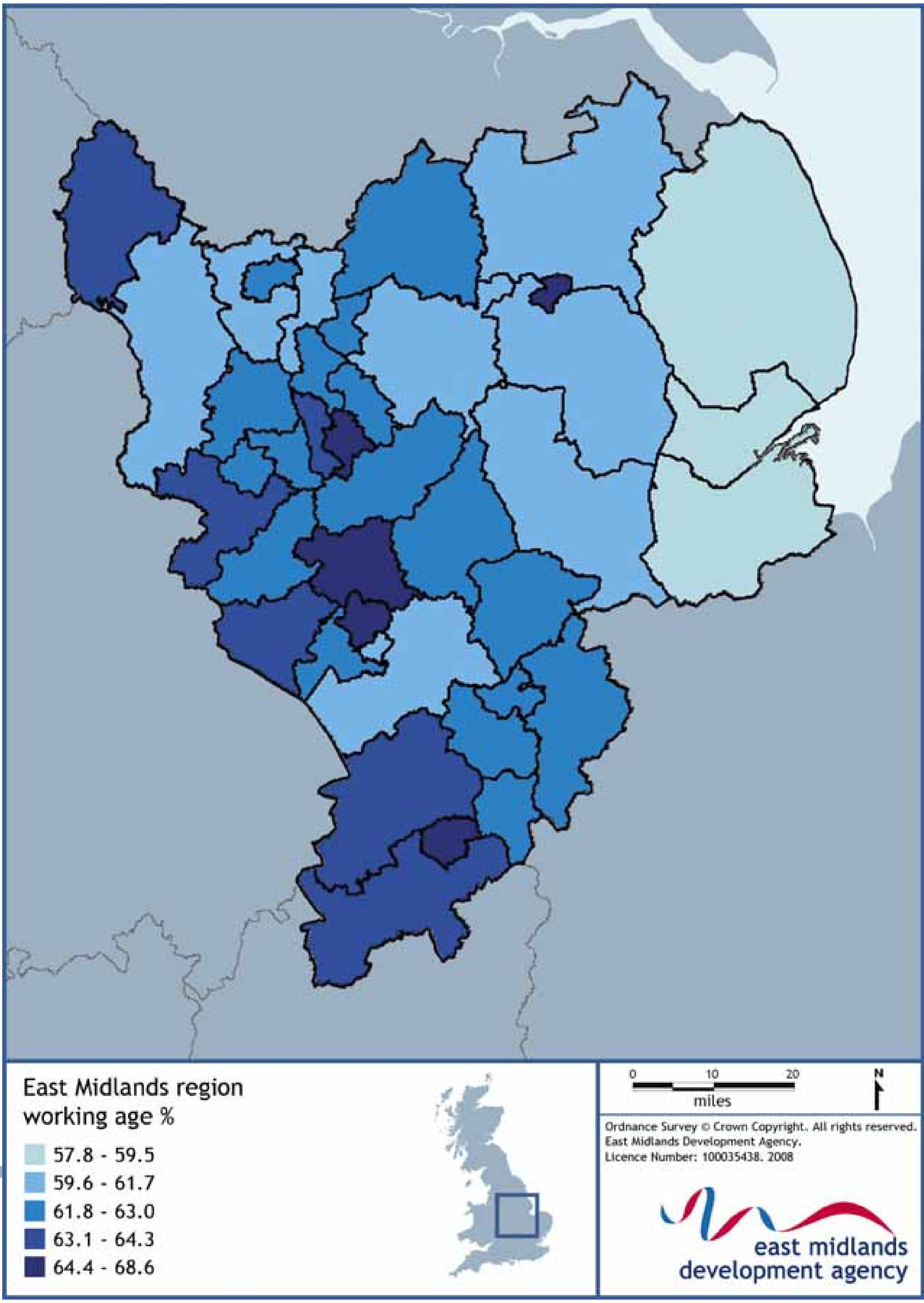
MAP 2

Residents of school age as a proportion of total population, 2005. (%)



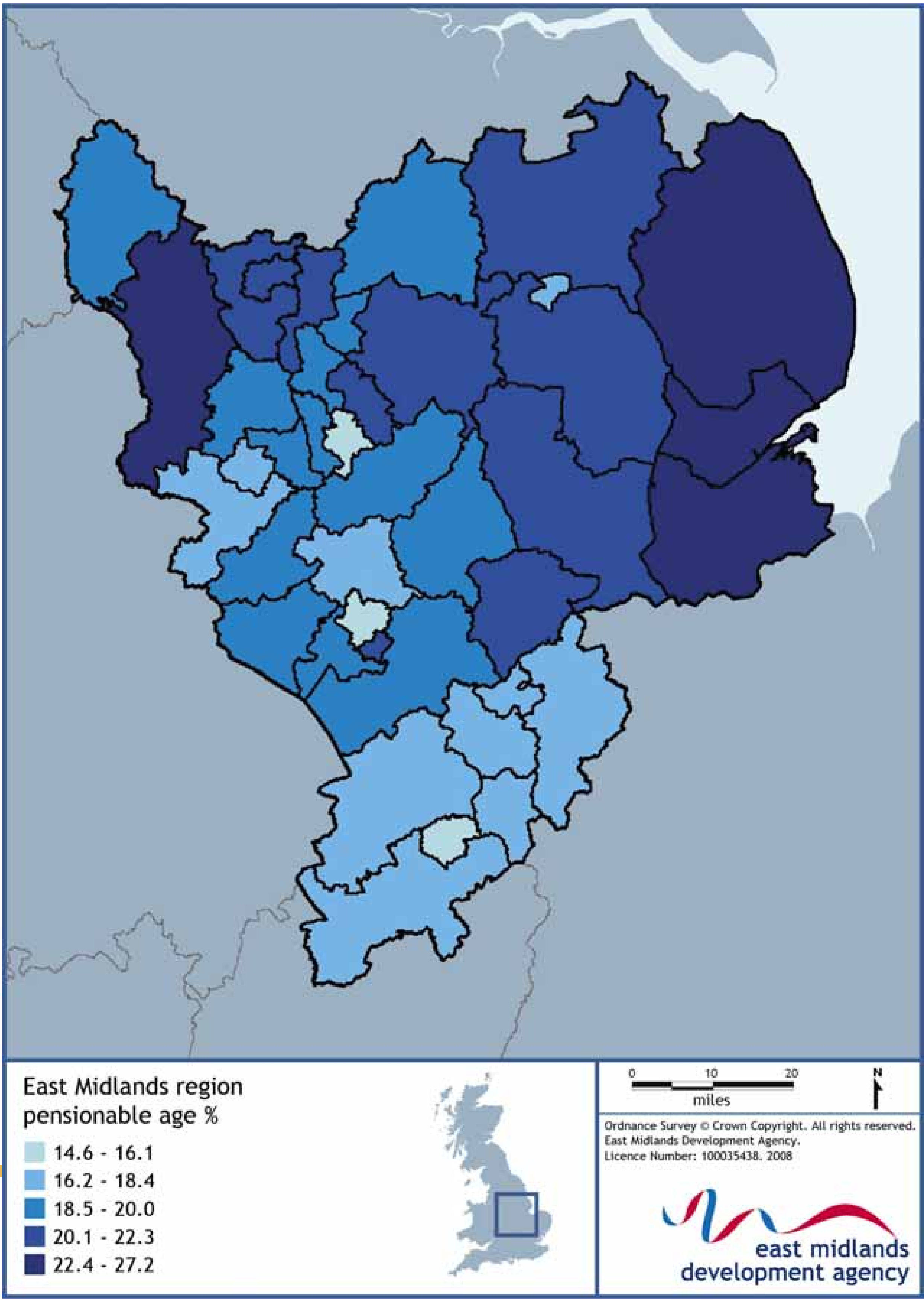
MAP 3

Residents of working age as a proportion of total population, 2005. (%)



MAP 4

Residents of pensionable age as a proportion of total population, 2005. (%)



3.5 Ethnicity

TABLE 5

Total White British and ethnic minority populations, by district classification, 2001.

	Total population	White British (%)	Total non-white British ethnic group population	Non-white British as % of total population
Large Urban	1,022,451	80.8	196,006	19.2
Other Urban	863,318	91.4	73,933	8.6
Significant Rural	733,399	94.2	42,392	5.8
Rural 50	792,767	96.5	27,962	3.5
Rural 80	759,929	96.9	23,840	3.1
East Midlands	4,171,864	91.3	364,133	8.7

Source: ONS Crown Copyright, 2001 Census, from NOMIS, 24th November 2006.

Much larger proportions of the urban population are from ethnic minorities, compared to rural parts of the region, as Table 5 shows. More than 19% of the population of Large Urban districts do not belong to the White British ethnic group, while in Other Urban districts the ethnic minority population represents 8.6% of the total.

A more detailed ethnic breakdown of the population is given in Table 6 below, which shows that Asian or Asian British people form the largest non-White ethnic group in the region's urban districts (particularly the Large Urban), with significant numbers of Black or Black British people also resident in Large Urban areas. The figures for rural districts are substantially lower, although there is a concentration of Asian or Asian British residents in Significant Rural districts. Chinese and Other White ethnic groups are more evenly distributed between urban and rural areas.

TABLE 6

Broad ethnic breakdown of the population, by district classification, 2001.

	Total population	White British	Mixed	Asian or Asian British	Black or Black British	Chinese or other ethnic group	Other White (including Irish)
Large Urban	1,022,451	826,445	19,095	116,450	23,304	8,035	29,122
Other Urban	863,318	789,385	9,939	27,383	9,601	4,677	22,333
Significant Rural	733,399	691,007	5,295	16,982	3,358	3,329	13,428
Rural 50	792,767	764,805	4,803	4,799	1,808	2,542	14,010
Rural 80	759,929	736,089	3,917	3,176	1,338	1,657	13,752
East Midlands	4,171,864	3,807,731	43,049	168,790	39,409	20,240	92,645

Source: ONS Crown Copyright, 2001 Census, from NOMIS, 24th November 2006.

Leicester PUA is by far the most ethnically diverse city in the East Midlands, with more than 19% being of Indian origin. Derby also has a relatively substantial Asian population, with nearly 8% of people in the PUA being of Indian or Pakistani origin. In Nottingham, by contrast, over 91% of the population are of White origin, and no other ethnic group accounts for more than 2% of the population of the PUA.[22]

3.6 Future population growth

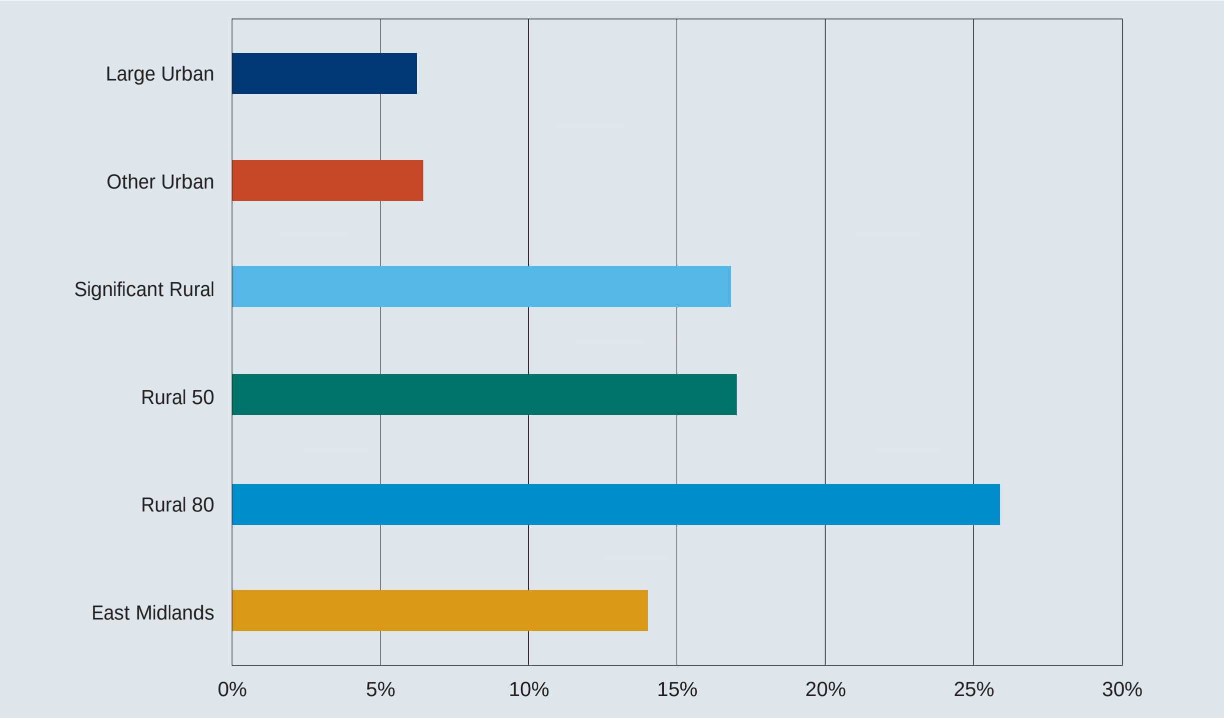
The ONS produce population projections, based on the Mid-Year Estimates (MYE). The latest available are based on the 2004 MYE, and go up to 2029. Chart 4 shows total projected population growth rates from 2004 to 2029 for the five different categories of urban and rural districts in the East Midlands.

As the chart demonstrates:

- Urban areas are projected to continue experiencing significantly slower population growth than rural areas. The population of Large Urban and Other Urban areas is forecast to increase by only around 6% in the 25 years from 2004;
- In rural areas, by contrast – particularly the more remote rural areas (the Rural 80) – population growth will continue to be most rapid. The population of districts classified as Rural 80 is forecast to increase by more than 25% between 2004 and 2029;
- Population growth in the 'mixed' Significant Rural districts is forecast to be relatively strong, at 16.9% – in line with the projected growth for Rural 50 districts.

CHART 4

Total projected population growth rates by district classification, 2004-2029.



Source: ONS Crown Copyright, '2004-based sub-national projections', 2006.

[22] State of the Cities Database (2001 Census).

- The urban districts with the greatest forecast population growth are Ashfield (13.6%) and Oadby and Wigston (12.5%). The slowest population growth is forecast in Corby (2.6%) and Mansfield (2.8%).

Key points: Changing demography

- **The population of the East Midlands is 4.3 million, of which 45% live in districts classified as Large Urban or Other Urban.**
- **The population of the urban areas tends to be younger than that of rural areas, and urban areas have a relatively larger working age population.**
- **A relatively large proportion of the population of urban areas is from ethnic minorities. Leicester is the most ethnically diverse city in the East Midlands.**
- **Past population growth in the region's urban areas has been relatively low, and this trend is expected to continue.**
- **Migration is the key driver of population change in the urban areas.**

4. The urban economy

4.1 Introduction

There is now a growing academic and policy literature focussing on cities as sources of economic growth. The shift to the 'knowledge economy' has prompted many observers to highlight the role of cities – and wider city regions – as engines of both regional and national growth, drawing on examples from Europe and the USA. Economically successful cities, in the Government's view, are crucial to regional prosperity and the development of sustainable communities, as well as tackling disparities between places. A recent Treasury paper sums up the Government's current thinking:

> Given the importance of cities as places where the majority of people live and work, and the strong links between city and regional economic growth in an increasingly integrated global economy, lifting the economic performance of cities is critical to improving the economic prospects of regions and to tackling disparities between regions.[23]

In 2003, 58% of the English population lived in cities, and the proportion of people who worked in urban areas was even larger. The 2001 Census showed that 63% of employment in England is concentrated in 56 cities that have a population above 125,000. These 56 cities accounted for 61% of the net increase in jobs (or 834,300 net new jobs) in England between 1998 and 2004. Between 1995 and 2001 the greatest increases in productivity and Gross Value Added (GVA) occurred in England's cities.[24] However, the apparent economic strength of cities should not disguise the fact that they also face significant economic challenges, with areas of severe multiple deprivation often situated alongside more affluent localities.

One of the main reasons why cities are seen as promoting increased economic growth, productivity and innovation is the presence of agglomeration economies. This term refers to the productivity gains derived from the geographical concentration of firms and people. Such concentration is usually found in urban centres, which by their nature have a greater density of firms, customers and employees.[25] The benefits to firms from agglomeration economies include access to pools of skilled labour, proximity to large and accessible markets, lower infrastructure costs (since costs are spread over a greater number of users), lower information and transaction costs because of the greater range and availability of face-to-face contacts, spill-over effects from other firms' innovative activity, and the ability to draw on specialised suppliers. These advantages in turn attract more firms, thus perpetuating the agglomeration effect.[26] The benefits of proximity are particularly important to high-value, knowledge intensive sectors (such as business and financial services) where frequent face-to-face contacts are important.[27]

A key aim of the RES is to close the productivity gap that exists between the East Midlands and the UK, and increase economic growth in the region. Our urban areas have an important role to play in this. The Government has identified five drivers of productivity: investment, innovation, skills, enterprise, and competitiveness. However, it is difficult to measure many of these factors at sub-regional level because of the unavailability of data at smaller geographies. Therefore the focus of this chapter will be on providing an overview of the economic performance of the region's urban areas, highlighting key trends in industrial structure, business activity and GVA.

The first part of the chapter gives a broad overview of the economic performance of urban areas, discussing differences in GVA between urban and rural parts of the region. Commuting patterns have a significant effect on GVA differentials, and demonstrate how a city's linkages with its surroundings can be as important as intra-urban connections. The second part presents a more detailed picture of the urban economy, providing a sectoral profile of businesses in urban areas and discussing recent growth or decline in particular sectors. This includes a more detailed analysis of the Construction industry, since this is one of the RES priority sectors, and plays an important role in the ongoing regeneration and infrastructure development in the region's towns and cities. In the third part, the latest figures on business start-up rates are reported, as a measure of enterprise in urban areas. A case study will focus on the creative industries, which represent a significant growth sector amongst small businesses. Creative industries have recently been the focus of much research and policy interest in the UK, being seen as symbolic of the cultural renaissance taking place in towns and cities.

[23] HM Treasury, *Devolving decision-making: 3 – Meeting the regional economic challenge: The importance of cities to regional growth* (March 2006), 5.
[24] HM Treasury, *Devolving decision-making: 3 – Meeting the regional economic challenge*, 16; G. Athley, P. Lucci and C. Webber, *Two-track cities: The challenge of sustaining growth and building opportunity*, Centre for Cities discussion paper no. 11 (July 2007).
[25] A. Atherton and A. Johnston, *Mapping the structure of regional economies: A framework for assessing regional distributions of economic activity*, Policy think-piece commissioned as part of the RES Review, 2005.
[26] M. Polese, *'Cities and national economic growth: a reappraisal'*, Urban Studies, 42:8 (July 2005), 1431-2.
[27] HM Treasury, *Devolving decision-making: 3 – Meeting the regional economic challenge*. It is important to note that there are diseconomies associated with agglomeration, such as congestion and rising land costs.

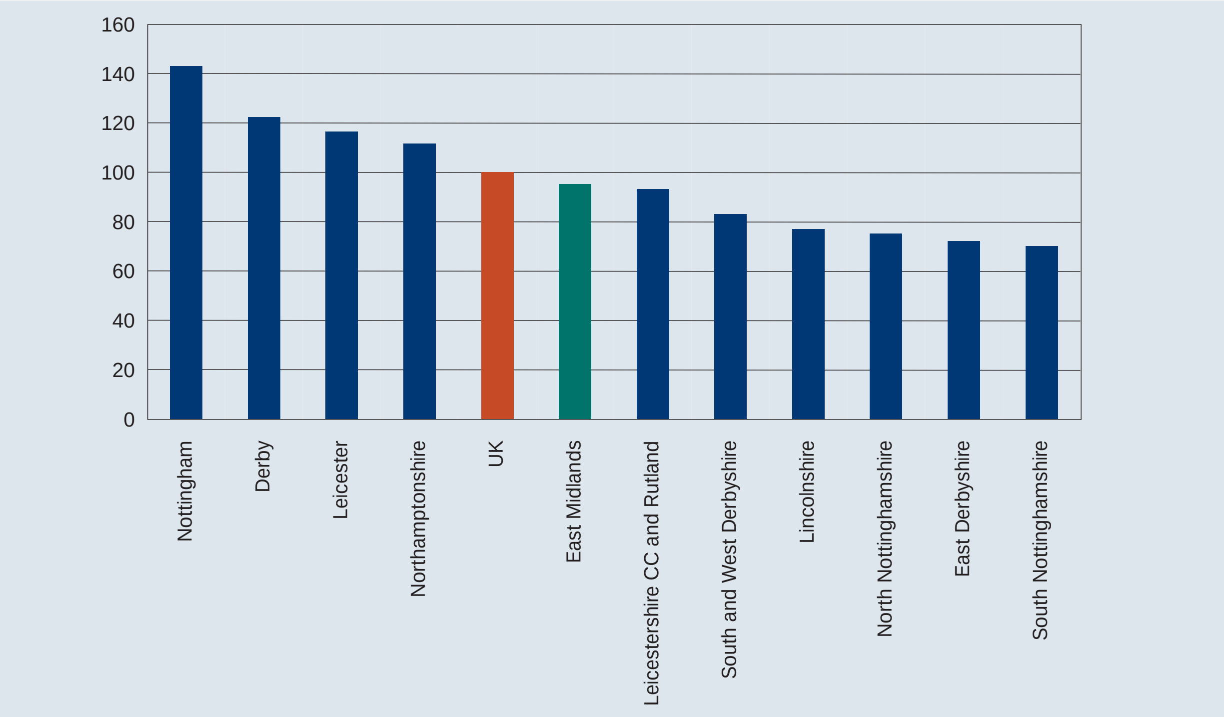
The fourth part of the chapter discusses the links between urban areas and science and innovation. Nottingham's designation as a Science City will be used as an illustration of the successful use of science as a catalyst to improve business performance, urban regeneration, and educational opportunities. Finally, a series of GVA forecasts for the next decade are presented. At the outset it should be noted that these are forecasts and not statements of fact about the future performance of the economy in the East Midlands' urban areas. They are an independently produced assessment of prospects and do not represent *emda's* aspirations for the region. Less emphasis should be placed on the numbers and more on the direction of travel and the general magnitude of change.

4.2 Gross Value Added

Gross Value Added (GVA) is the measure of economic output used at regional level.[28] There are significant differences in levels of output and productivity at sub-regional level, reflected in the varying levels of GVA shown in Chart 5. This chart presents GVA for groups of districts within the East Midlands (known as 'NUTS3' regions), and compares them with the UK and the region as a whole. The numbers presented here are not the actual values of GVA per head; instead index numbers are used. These enable a comparison of GVA relative to the UK average, which is designated as 100.

CHART 5

GVA per head by NUTS3 region in the East Midlands, 2004 (UK=100).



Source: Office for National Statistics, December 2006.

[28] GVA is an internationally recognised way of assessing the contribution of a business, industry or region to the economy, by taking the sum of its outputs less the sum of intermediate purchases (such as the cost of raw materials or heating). GVA is a measure of output at basic prices, whereas GDP (Gross Domestic Product) is a measure of output at market prices. The difference between the two is down to the treatment of taxes and subsidies: GDP = GVA + taxes – subsidies. It is not possible to measure taxation and subsidies at regional level which is why GVA is used.

- GVA per head tends to be higher in urban areas than in rural. The areas with the highest GVA per head in the East Midlands are Nottingham, Derby and Leicester. The only other area above the UK average is Northamptonshire. In Nottingham, GVA per head was 42% higher than in the UK in 2004, and 49% higher than in the East Midlands. However, these figures should be treated with a degree of caution, as they are influenced by commuting patterns. GVA per head is calculated on a workplace basis, which means that output generated by those who live in rural areas and work in urban areas is measured in the urban area.

- Areas in the north and east of the region, such as Lincolnshire, North Nottinghamshire and East Derbyshire, have the lowest levels of GVA per head, at less than 80% of the UK average.

- The lowest level of GVA per head is in South Nottinghamshire (72% of the UK average). This can be explained in part by the effect of high levels of out-commuting from this area.

- Rural areas in the south of the region (in Leicestershire, Rutland and Northamptonshire) exhibit levels of GVA per head closer to the UK average.

There have been significant changes in the relative positions of the NUTS3 sub-regions in the East Midlands between 1995 and 2004. Derby, Leicester, East Derbyshire, South Nottinghamshire and Northamptonshire have all improved relative to the UK average. South and West Derbyshire, Nottingham, North Nottinghamshire, Leicestershire & Rutland and Lincolnshire have all declined relative to the UK.

Given that the measurement of GVA is strongly influenced by patterns of commuting, the following sub-section outlines the magnitude and geography of commuting flows to urban areas in the East Midlands.

4.2.1 Commuting flows

Although the East Midlands has a high, and rising net outflow of commuters to other parts of the UK, the region's urban centres continue to attract a sizeable number of commuters both from within and outside the East Midlands. In 2001, almost 600,000 East Midlands residents worked in a different district from the one in which they lived. The key urban centres of Nottingham and Leicester attract the most people to work.

Because large cities and towns typically sustain a larger number and wider range of employment opportunities, they tend to have a large volume of net in-commuting. Nottingham UA has the highest level of net in-commuting by a significant margin, with over 70,000 more people coming into the city to work than flow in the opposite direction. Leicester also has a significant net commuter in-flow (43,134), while Derby, Northampton and Lincoln are the only other districts to have net inflows of more than 10,000 (Table 7).

TABLE 7

Size of commuter flows to and from the largest urban areas in the East Midlands.

District / UA	Commuter inflows [29]	Commuter outflows	Net in-commuting
Nottingham	98,139	27,470	70,669
Leicester	70,739	27,605	43,134
Derby	37,895	22,615	15,280
Northampton	36,423	21,577	14,846
Lincoln	21,574	11,526	10,021

Source: ONS Crown Copyright, 2001 Census. Analysis by Experian Business Strategies on behalf of *emda*, April 2007.

[29] Commuter inflows in this table refers to the number of people who commute into the given district either from other East Midlands districts or from other regions.

The large flows into Nottingham mean that it is more reliant on in-commuting to make up the workforce than any other local authority in the East Midlands. Along with Blaby and Oadby and Wigston, in Nottingham more than half of the workforce are commuters from elsewhere in the East Midlands. Of all the local authorities in which more than one third of the workforce is made up of commuters from elsewhere in the East Midlands, just two (Rushcliffe and North West Leicestershire) are not classified as either Urban or Significant Rural (Table 8).

TABLE 8

Percentage of workforce made up by commuters from elsewhere in the East Midlands.

District / UA	Total employment	Commuter inflows [30]	%
Nottingham	172,330	93,323	54
Blaby	41,064	21,050	51
Oadby and Wigston	19,038	9,545	50
Broxtowe	35,266	16,058	46
Leicester	154,678	66,548	43
Bolsover	21,802	9,336	43
Lincoln	47,297	20,213	43
Ashfield	44,586	18,633	42
Rushcliffe	35,931	14,620	41
Gedling	33,040	13,105	40
North West Leicestershire	45,008	17,042	38
Mansfield	36,462	13,470	37
Amber Valley	49,100	16,963	35
Wellingborough	33,395	11,523	35
Erewash	39,813	13,620	34

Source: ONS Crown Copyright, 2001 Census. Analysis by Experian Business Strategies on behalf of *emda*, April 2007.

The largest proportions of residents commuting out to other parts of the East Midlands are in the districts surrounding the large urban centres of Leicester, Nottingham, Derby and Northampton. Gedling accounts for more out-commuting than any other district, with 70% of all Gedling's out-commuters working in Nottingham. Similarly strong commuting flows exist from South Northamptonshire, where 76% of all out-commuters work in Northampton, and from Oadby and Wigston, where 68% of all outflows are to Leicester.

The largest flows between districts, in absolute terms, are over relatively short distances, from outer urban districts into inner urban areas. The largest single flow is between Gedling and Nottingham (23,000). At 18,000 each, the next largest flows are also into Nottingham but from Rushcliffe and Broxtowe. There are four other flows within the region that exceed 10,000 commuters – three of which are into Leicester, from Blaby, Charnwood and Oadby and Wigston, and the last is from North Kesteven into Lincoln.

Interestingly, flows between urban centres in the East Midlands are generally small. The largest flow in 2001 was the 2,394 people who made the journey from Derby to Nottingham to work, while 1,284 people commuted in the opposite direction. Just 575 people in Leicester commuted to Nottingham, and only 222 travelled to work in Derby. Commuting flows to and from the three cities to Lincoln or Northampton were generally extremely small, although 214 people travelled from Leicester to Northampton each day, while 198 travelled in the opposite direction.

[30] The slightly different number of commuter inflows compared to Table 7 is due to the fact that this table shows commuters who are East Midlands residents who live and work in different East Midlands districts.

Cross-border flows are also important, although given that most people travel relatively short distances to work, it is the urban centres close to the East Midlands border which tend to attract the largest number of commuters. For instance, 8,034 people commuted to Northampton from outside the East Midlands in 2001, while Derby received 5,758 such commuters. There are also significant outflows – almost 20,000 people commute out of the region into Sheffield and over 15,000 into Peterborough.

Commuting flows have a significant impact on the economic geography of the East Midlands, redistributing incomes across space and influencing the overall efficiency, and output, of the economy. Extensive commuting between different parts of the East Midlands has a significant effect on the geographical distribution of employment incomes, as income flows out of the main centres of employment (usually towns and cities) to suburbs and surrounding areas.

Larger cities such as Nottingham and Leicester generate the most income through employment, but a large proportion of this income flows out to other areas, where the workforce lives. For instance, in Nottingham UA, more than 60% of total workplace earnings flow out of the city (£2,125 million to other places in the East Midlands and £123 million to other regions), while in Leicester the figure is nearly 50% (£1,493 million to other East Midlands districts and £114 million to other regions). In contrast, Northampton is the most self-contained of the region's urban centres, with 63% of employment income from Northampton workplaces being retained by local households. Meanwhile, in districts surrounding the cities, a high proportion of residents' earnings are derived from income generated through commuting. For instance, in Gedling, Broxtowe and Oadby and Wigston, more than two thirds of total residents' earnings are derived from commuter income in-flows.[31]

4.3 Business stock

At the beginning of 2005 the Small Business Service reported that there were 125,170 VAT-registered businesses[32] in the East Midlands, which is 6.9% of the UK total.

The stock of VAT-registered businesses in urban areas is smaller than the number in rural areas. There were 44,770 businesses in urban districts at the start of 2005, and 80,565 in rural districts. Perhaps surprisingly, the density of businesses is also lower in urban areas. There is an average of 288 businesses per 10,000 people of working age in urban districts and 418 per 10,000 people in rural districts. These differences reflect the fact that businesses tend to be larger in urban areas, and thus the total number of businesses is smaller, but the total number of employees may not be any lower than in rural areas.

This suggestion is confirmed by looking at the average size of workplaces in urban and rural areas, as shown in Table 9.[33] The average number of employees in workplaces in urban areas is 15 while the average number in rural districts is 9. Indeed the spread of small workplaces tends to increase with greater rurality, with Rural 80 districts having the smallest average size of workplaces with 8 employees.

TABLE 9

Average size of workplaces by rural-urban district classification, 2005.

	Average number of employees per workplace
Large Urban	15
Other Urban	15
Significant Rural	11
Rural 50	9
Rural 80	8
East Midlands	12

Source: ONS Crown Copyright, Annual Business Inquiry, workplace analysis, 2005.

[31] Experian Business Strategies analysis, based on Census 2001 and Annual Survey of Hours and Earnings 2006. See Experian on behalf of *emda*, *Commuting flows in the East Midlands* (April 2007).
[32] As of April 2005, a business is required to register for VAT when it has a turnover of more than £60,000. The stock of VAT registered enterprises is the number of enterprises registered for VAT at the start of the year. This is an indicator of the size of the business population. Since over 99% of registered enterprises employ fewer than 50 people, it is also an indicator of the small business population. However, it should be noted that only 1.8 million of the estimated 4.3 million UK businesses are registered for VAT.
[33] Note that the Annual Business Inquiry measures the number of workplaces rather than the number of business enterprises, so it is not a completely accurate count of all businesses.

Table 10 shows the distribution of the VAT registered business stock by sector. The largest proportions (approximately one quarter of all businesses) are classified as 'real estate, renting and business activities' – a broad category capturing many types of office-based work including estate agents, legal services, accountancy, call centres and many types of consultancy. 'Wholesale, retail and repairs' accounts for the second largest percentage of all businesses, in both urban and rural districts, though the proportions are slightly lower in rural areas.

As would be expected, the proportion of businesses engaged in agriculture, forestry and fishing is significantly lower in urban areas, at just 1.4% in Large Urban districts and 1.1% in Other Urban, compared with 17.5% in Rural 80 and 9.5% in Rural 50 districts. By contrast, manufacturing businesses make up a larger share of business stock in urban than in rural areas, accounting for between 11% and 15% of all businesses in urban areas, but less than 10% of business stock in rural districts.

TABLE 10

Business stock by sector and district classification, 2005. (%)

Industrial class	Rural 80	Rural 50	Significant Rural	Other Urban	Large Urban
Agriculture; forestry and fishing	17.5	9.5	7.7	1.1	1.4
Mining and quarrying; electricity, gas and water supply	0.1	0.2	0.1	0.2	0.1
Manufacturing	7.8	9.4	11.2	11.8	15.3
Construction	11.9	12.5	12.9	13.3	11.6
Wholesale, retail and repairs	19.2	21.6	22.5	25.6	25.4
Hotels and restaurants	6.4	6.7	6.8	7.8	6.8
Transport, storage and communication	4.9	5.4	5.8	5.0	4.2
Financial intermediation	0.7	0.9	1.0	1.0	1.7
Real estate, renting and business activities	23.4	26.0	23.9	26.1	26.4
Public administration; other community, social and personal services	6.6	6.4	6.5	6.3	5.6
Education; health and social work	1.4	1.6	1.5	1.9	1.5
Total stock (no. of businesses)	**32,065**	**26,255**	**22,245**	**19,495**	**25,275**
Residents aged 16+ (MYE 2004)	652,700	659,500	615,500	710,100	846,500
Stock per 10,000 people	**492**	**398**	**362**	**275**	**299**

Source: Small Business Service 2005. VAT Registrations and De-registrations.

Manufacturing businesses are more prevalent in the largest urban areas

To complement this 'snapshot' picture of urban businesses, it is useful to consider how the size of different business sectors has changed over the period from 1994 to 2005, which is illustrated in Table 11.

- There has been an increase in the number of businesses in all parts of the region. Growth in the large urban areas was around 9.0% (close to growth experienced in Significant Rural and Rural 80 areas). Growth in other urban areas was 15.7%, similar to those seen in Rural 50 areas.
- Growth has been most marked in business services, with the number of firms in financial intermediation more than doubling in some urban areas.
- The only sectors in which the number of businesses has declined in urban areas are agriculture, forestry and fishing (though the numbers involved are small, as noted earlier); wholesale, retail and repairs, and manufacturing, with the decline being particularly marked in Large Urban districts.
- The slowest growth has been in the public administration and community and social services sector, where the number of organisations has remained static since 1994 in Other Urban districts and has grown by a little over 2% in Large Urban areas.

TABLE 11

Changes in business stock by sector, 1994-2005. (%)

Industrial class	Rural 80	Rural 50	Significant Rural	Other Urban	Large Urban
Agriculture; forestry and fishing	-14.6	-11.9	-15.8	-23.2	-17.4
Mining and quarrying; electricity, gas and water supply	16.7	50.0	20.0	133.3	0.0
Manufacturing	0.2	1.4	-7.9	-1.5	-11.7
Construction	10.7	16.3	14.4	13.9	7.1
Wholesale, retail and repairs	-8.5	-8.6	-12.0	-9.1	-15.9
Hotels and restaurants	14.5	21.7	15.6	18.7	20.7
Transport, storage and communication	4.0	4.9	14.6	22.5	19.7
Financial intermediation	76.0	96.0	104.5	56.0	127.0
Real estate, renting and business activities	86.0	89.8	88.0	87.6	77.5
Public administration; other community, social and personal services	8.2	10.6	12.0	0.0	2.2
Education; health and social work	30.0	37.7	37.5	17.2	-3.8
Total percentage change	**10.3**	**16.1**	**11.9**	**15.7**	**8.9**

Source: Small Business Service, 2005. VAT Registrations and De-registrations.

Spotlight on the Construction industry

With the region's cities witnessing large-scale regeneration projects, involving improvements to the built environment, transport infrastructure and housing stock, the Construction industry is a prominent player in the urban, and wider regional economy. Its influence is clearly broader than just the number of people it employs and the direct economic output it generates. Major infrastructure projects have wider economic benefits, helping to attract inward investment as well as income from tourism.

The Construction sector is one of just nine sectors in the East Midlands in which productivity exceeds the UK average for that sector. Productivity is more than 20% higher in the Construction sector in the East Midlands compared to the UK (as it is in the Agriculture, Forestry and Fishing, Minerals and Metals and Transport Equipment sectors).[34] The RES identifies four 'priority sectors' which were selected for support during the lifetime of the strategy. A number of criteria were used to determine which sectors should be chosen. These criteria included the contribution made by a sector to total output and employment in the East Midlands

[34] *emda* / Experian Scenario Impact Model, July 2005.

economy; the ‘concentration’ of that sector in the East Midlands relative to the UK; productivity per worker relative to the UK; forecast output, employment and productivity growth over the next decade; the number of large employers in the sector (as a guide to its strategic significance); and average earnings (as a proxy for the quality of employment in the sector). The four priority sectors – Construction, Food and Drink, Health and Transport Equipment – were all selected because of their strong performance on these criteria, relative to other sectors.

Construction is one of the larger sectors in the East Midlands, accounting for 7.1% of the region’s economy and 8.7% of employment in 2006. Output growth in this sector in the region between 2004 and 2014 is forecast to be higher than the national average, at 27% compared to 24% for the UK. Employment growth is forecast to be twice as fast as that for the UK, and could be higher as this baseline forecast includes only half of the proposed Milton Keynes South Midlands development.[35] Average annual earnings in the Construction sector were around 5% above the East Midlands average in 2004, suggesting an above average quality of employment.

Construction firms account for around 12% of all businesses in urban areas of the East Midlands, and the number of such businesses has grown in recent years. Between 1994 and 2005, there was an increase of 7.1% in the number of construction businesses in Large Urban districts, and a 13.9% increase in the number in Other Urban districts. In the ‘mixed’ Significant Rural districts, growth was higher still, at 14.4%. The fastest growth in the number of construction businesses was in Mansfield and Ashfield (35.2% and 31.6% respectively).

In recent years, there has been a growth in the value of construction contractors’ output. In 2004, the total value of all construction undertaken in the East Midlands was £7,030 million, of which £4,259 million was new work and £2,772 million was repair and maintenance.

Total contractors’ output in the East Midlands has more than doubled since 1994, but the region’s share of the total for England has remained fairly stable, at around 8%.

Of the new work undertaken in 2004, £1,519 million (22% of total contractors’ output) was accounted for by private housing, which represents an increase of £311 million from 2003. Infrastructure accounted for £408 million, reduced slightly from £429 million in 2003. Public buildings (such as hospitals and schools) accounted for £769 million – a significant increase from £658 million in 2003. Construction output related to private industrial and commercial buildings also increased: £463 million was spent on industrial buildings in 2004 compared to £378 million in 2003; and £944 million was spent on commercial buildings in 2004 compared to £858 million the previous year.[36]

4.4 Business start-ups

Business start-ups are measured by the number of VAT registrations per 10,000 adult population. They represent one indicator of levels of enterprise and entrepreneurship amongst the population. In recent years, business start-up rates in urban areas of the East Midlands have been consistently lower than in rural areas, as demonstrated in Chart 6. At the same time, start-up rates in both urban and rural areas have been characterised by small fluctuations rather than significant change over time. Between 2000 and 2005, rates of business start-up have fluctuated between 29 and 32 per 10,000 adults in urban areas, while in rural areas, rates have been higher, ranging between 37 and 42 business starts per 10,000 adults. Business start-up rates in rural areas of the region are comparable with those in England, whilst urban areas lag behind both the East Midlands and English averages.

This aggregate picture of urban and rural areas masks significant differences in business start-up rates between individual districts in the region, which are illustrated in Map 5.

> Business start up rates in the urban areas are lower than the average

[35] Experian assume that half of the proposed development will go ahead in their baseline forecast. It should be remembered that this is an independent forecast and cautious assumptions are made on the basis of the significant risks associated with a project of this scale.
[36] Department of Trade and Industry (DTI), *Construction Statistics Annual 2005*, October 2005.

MAP 5

VAT registrations per 10,000 resident adults, 2005.

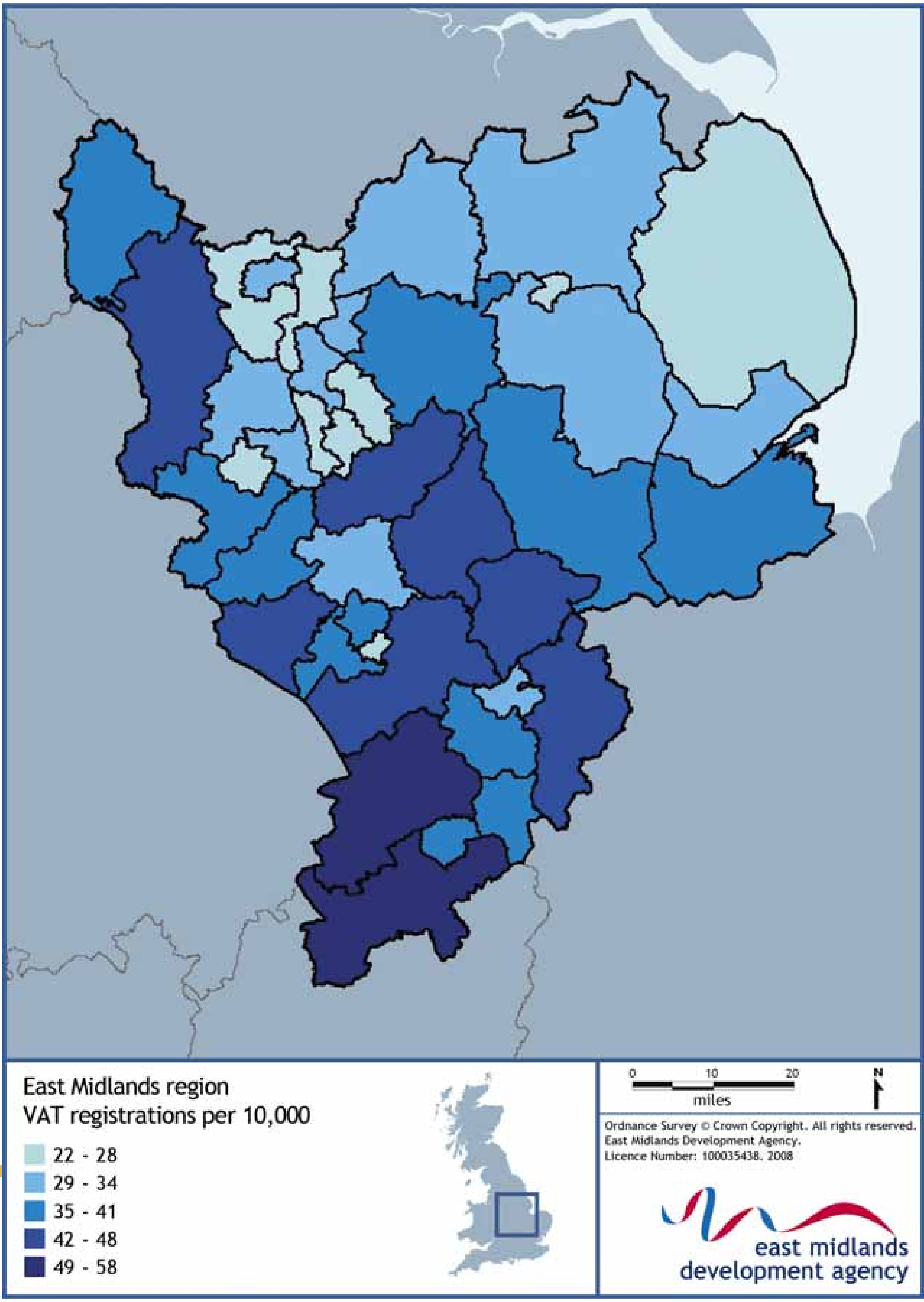
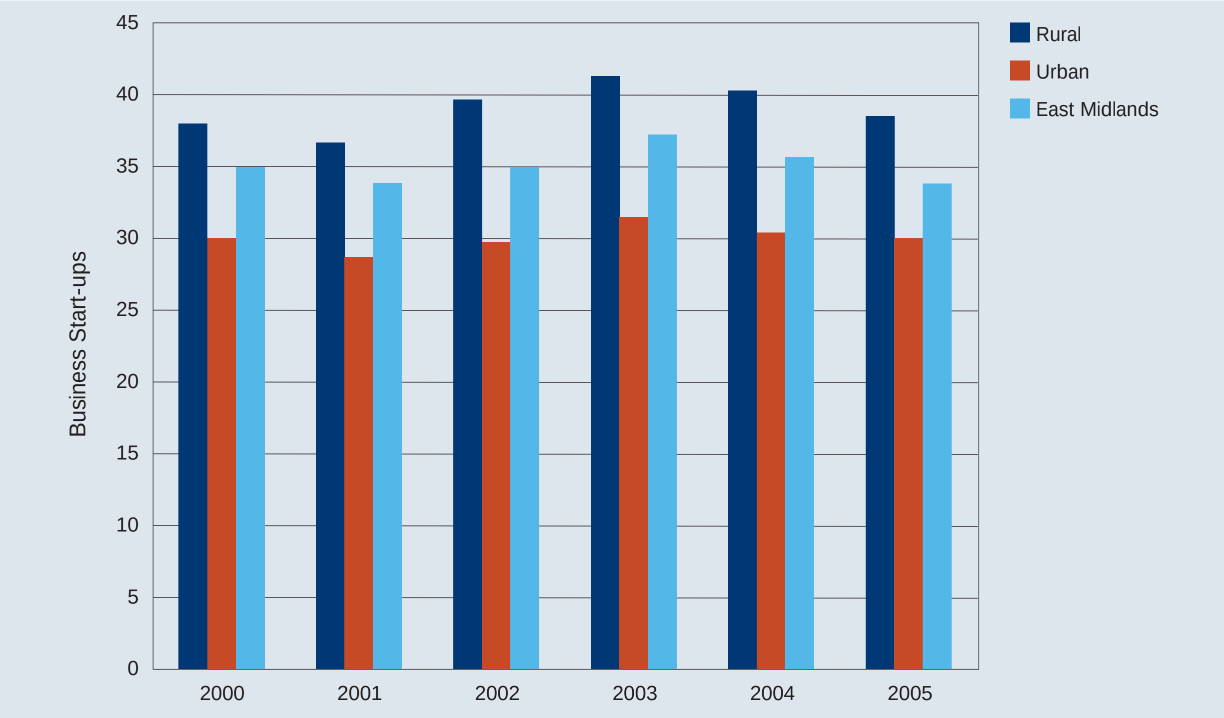


CHART 6

Business start-ups per 10,000 population, 2000-2005.



Source, Small Business Service, 2006, VAT Statistics.

- Business start-up rates tend to be higher in urban areas of Leicestershire and Northamptonshire. Leicester City had the highest start-up rate of any urban district in 2005, at 40 per 10,000 adults, which is well above the East Midlands average of 34 per 10,000. Hinckley and Bosworth (classed as Significant Rural) had an even higher start-up rate of 45 per 10,000 adults, while in Blaby the rate was 39 per 10,000. Start-up rates in Northampton, Kettering and Wellingborough were also above the regional average, at 35, 37 and 39 per 10,000 adults respectively.

- Nottingham and its surrounding districts have the lowest business start-up rates amongst the region's urban areas. At 22 per 10,000 adults, Gedling has the lowest rate of any district in the East Midlands, while in both Broxtowe and Nottingham City the figure is just 25 per 10,000. Levels of enterprise are not much greater in the urban centres of Derby and Lincoln, where business start-up rates in 2005 were 27 and 26 per 10,000 adults respectively.

- Comparing the five PUAs in the East Midlands with others in England, Nottingham PUA had the lowest rate of business start-up in 2005, placing it in the bottom 25% of the 56 PUAs. The majority of PUAs which perform more poorly than Nottingham are in the North of England. Derby is ranked 40th out of the PUAs on this measure, while Northampton is ranked 16th and Leicester 9th.[37]

- In rural areas, business start-up rates tend to be highest in the more remote rural districts in the south of the region, such as Daventry and Harborough, and lower in the peripheral rural areas of Lincolnshire, north Nottinghamshire and north Derbyshire.[38]

[37] CLG, State of the Cities Database, 2006.
[38] Small Business Services, VAT Statistics, 2006.

Spotlight on innovation and science

Innovation can be described as the successful exploitation of new ideas – either new products or new processes. A stream of constant, successful innovation is therefore essential if an economy is to remain competitive and standards of living are to increase. Innovation is not just about products and processes that are completely new but also about those that are new to a particular firm i.e. the diffusion of new products and processes.

Empirical evidence shows a positive correlation between levels of innovation indicators and measures of economic performance. In a global economy where the scope to compete on a cost basis is increasingly limited, innovation is one way in which developed economies can maintain competitive advantage – 'it offers firms a high road – high wage, high growth – strategy.'[39]

A number of critical success factors have been identified as contributing to a successful innovation system.[40] These include: the capacity to absorb and exploit knowledge and technology, the regulatory framework and competition regime, access to finance, sources of new technological knowledge and the extent and depth of networks and collaboration.

It should be noted that data on innovation is largely limited to national and regional data, limiting sub-regional analysis in this section. On some measures of innovative activity the East Midlands compares well to the national average but overall the picture is mixed. For example Business Enterprise Research & Development in the region was equivalent to 1.5% of GVA in 2003, compared to 1.4% for the UK. The region has outperformed the UK on this measure since 1995. However the proportion of sales and turnover that can be attributed to new, improved or novel products was only 5% in the East Midlands compared to 11% for the UK.[41]

The East Midlands has a proud tradition of scientific excellence and research breakthroughs including the development of Magnetic Resonance Imaging (MRI) at The University of Nottingham, and Genetic Fingerprinting at Leicester University. The most recent Research Assessment Exercise identified a number of strong departments in the regions universities. These include the 5* rated departments in Biological Sciences at the University of Leicester and the Built Environment at Loughborough. In addition there are 5 rated departments in science and engineering disciplines at the Universities of Nottingham, Leicester and Loughborough.

The region has a history of linking research with manufacturing innovation. These links must be developed and harnessed in order to maximize the contribution of the regions HEIs to the economic growth of the region. In addition there are upwards of 40 innovation centres, incubators and science parks in the East Midlands with several infrastructure facilities planned or under construction. Research for *emda*[42] has set out a number of characteristics that dedicated physical infrastructure for innovation would possess: innovation and technology objectives of the infrastructure are clearly stated, target clients are identified as depending upon technology or other sources of innovation for competitive advantage and having on-site access to both business and technology management advice. This research suggests that few of the identified facilities in the region possess all of these characteristics. This research has also identified a lack of suitable grow-on space in the region. It should be noted that this is based on the views of a limited number of stakeholders and there is a lack of systematic evidence in this area.

Nottingham has been designated as one of the UK's Science Cities and the opportunity exists for the city to build on its science and technology base for the benefit of the East Midlands.

> The East Midlands has a tradition of scientific excellence and research break throughs

[39] *Innovation Policy*, C Oughton and M Frenz, Birkbeck, University of London, Policy think piece to support the RES evidence base, August 2005.
[40] *Competing in the Global Economy- The Innovation Challenge*, Economics Paper No7, Department for Trade & Industry, November 2003.
[41] Source: CIS4, Department of Trade & Industry, July 2006.
[42] *Review of Infrastructure Facilities to Support Innovation Across the East Midlands*, CM International, March 2005.

4.5 GVA forecasts

The final section of this chapter sets out forecasts for the performance of the East Midlands economy over the next decade, based upon an econometric model of the region developed by Experian for *emda* – the Scenario Impact Model. It is important to reiterate that these are forecasts and not by any means a statement of fact about the future performance of the East Midlands economy. The GVA forecasts take into account both historical trends and expected changes in macroeconomic conditions in the UK, filtering these down into the regional model. Map 6 illustrates the projected growth in GVA over the period 2006-2016 for each district in the East Midlands. The key points to note are:

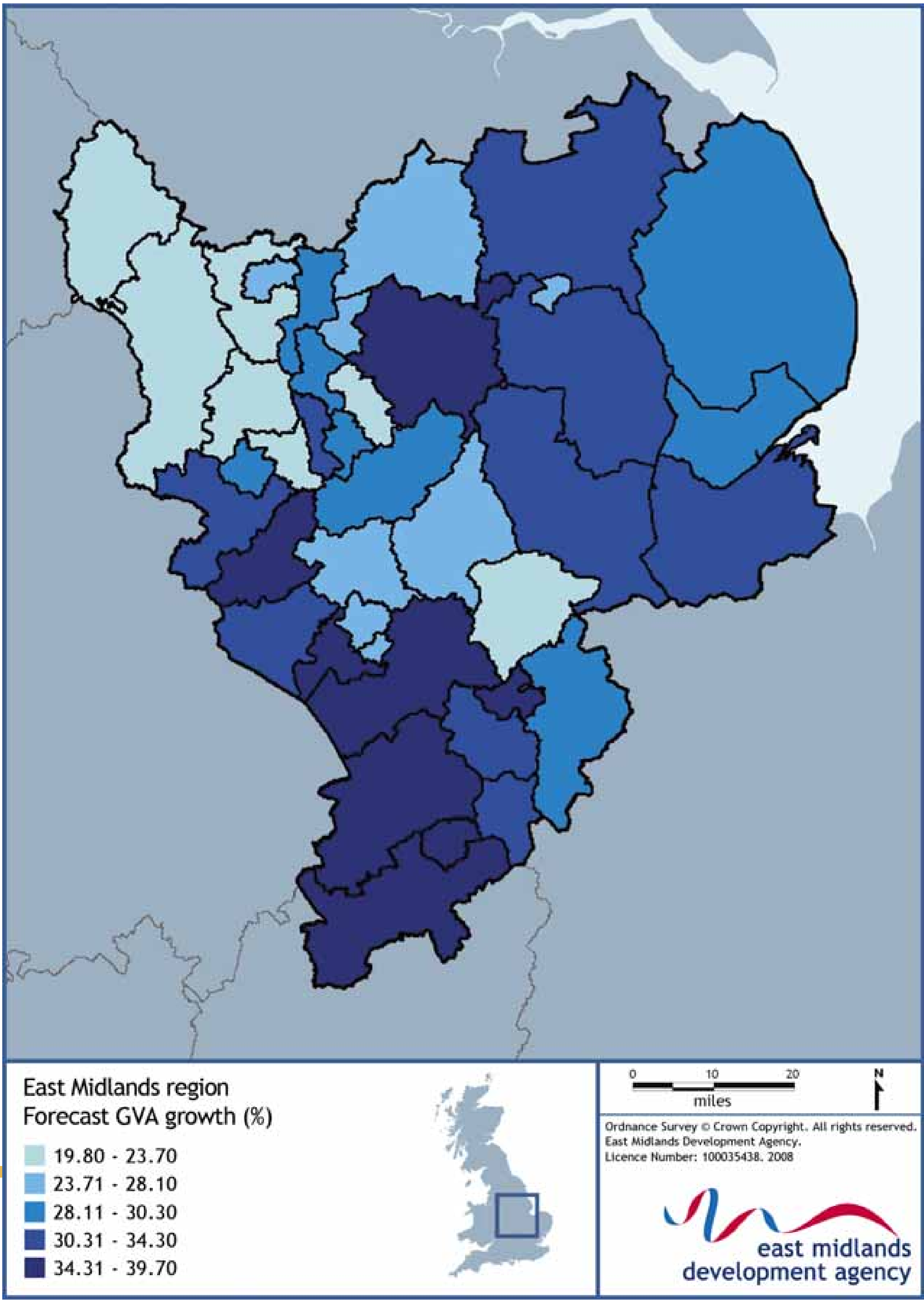
- The largest percentage growth in GVA over the decade 2006-2016 in urban areas is forecast to be in Blaby (38.2%), which is one of the highest growth rates projected for any district in the East Midlands.
- Urban centres in Northamptonshire are also forecast to experience growth in GVA above the regional average of 30.5%. This reflects Northamptonshire's location within the Milton Keynes South Midlands Growth Zone. GVA is projected to grow by 35.4% in Northampton and by 33.2% in Corby, for example.
- As with business start-ups, the slowest growth in GVA in urban districts is projected to be in the districts around Nottingham. In Gedling, growth is forecast at just 21.5% between 2006 and 2016, while in Erewash the projected growth in GVA is 22.8% and in Mansfield 25.1%.
- Taking the region as a whole, the largest percentage growth in GVA is forecast to be in the south-west and north-east of the region, with the highest growth being in North West Leicestershire (41.4%) and North Kesteven (37%). Meanwhile the slowest growth is projected to be in the districts around Nottingham.[43]

Economic growth is forecast to be highest in the south of the East Midlands

[43] *emda*, / Experian Scenario Impact Model, December 2006.

MAP 6

Forecast GVA growth, 2006-16, by district. (%)



Key points: The urban economy

- **GVA per head tends to be higher in urban areas. Nottingham has the highest GVA per head in the region, 42% above the UK average.**
- **The number of VAT business registrations per 10,000 population is generally lower in urban areas. Leicester is an exception with a registration rate above the regional average.**
- **Urban areas have a larger share of businesses in the manufacturing and wholesale, retail and repair sectors.**
- **Growth in the number of businesses in urban areas has been most rapid in business services.**
- **Economic growth is forecast to be lower in the urban districts surrounding Nottingham.**

5. Labour market

5.1 Introduction

Human capital is recognised as an important contributor to economic performance, both in terms of the 'quantity' of labour (the proportion of the population who are economically active) and the 'quality' of labour (principally the level of skills available in the workforce). Although the employment rate is relatively high and unemployment is low in the East Midlands as a whole, certain groups within parts of the region's urban areas face serious barriers to employability. In order to improve the economic performance of our urban areas it is important both to get more people into work and to raise the skill level of urban residents, enabling them to compete for jobs in the urban labour market.

This chapter provides an assessment of labour market participation in urban areas and discusses the skills profile of the urban workforce, using qualifications as a proxy for skills.[44] This is followed by an analysis of earnings, highlighting how the average pay of urban residents often lags behind that of people living in rural areas – something which is associated with out-commuting of higher earners from many rural districts into the urban areas in the region. The chapter concludes by presenting forecasts of employment growth for the East Midlands' urban areas.

5.2 Employment and unemployment

Overall the East Midlands region is typified by high and stable rates of employment and economic activity. The employment rate in the region remains above the England average, at 76.3% in 2006, compared to 74.3%. In urban parts of the region, employment rates are generally lower than the regional average, and unemployment tends to be slightly higher. The average employment rate for all East Midlands urban districts is 72.9%, 3.4 percentage points below the regional average, whilst the average unemployment rate for urban LADs is 5.1%, about 1 percentage point above the regional average.

Chart 7 shows the proportions of the population who are in employment, economically inactive and unemployed, by district classification in 2006. The key points to note are:

- Smaller proportions of the population are in employment in urban areas than in rural. Employment rates are lowest in districts classified as Large Urban (71.7%) compared with 80% for the most rural districts – the Rural 80. Urban employment rates tend to be higher in Northamptonshire and lower in Nottinghamshire and Leicester. The highest urban employment rate is in Northampton (77.4%) which has witnessed significant economic growth recently.[45] In Nottingham and Leicester the employment rates were 64.9% and 68.6% respectively in 2006, more than 11 percentage points below the regional average. Employment rates are also relatively low in the former coalfield area of Mansfield (70.7%).

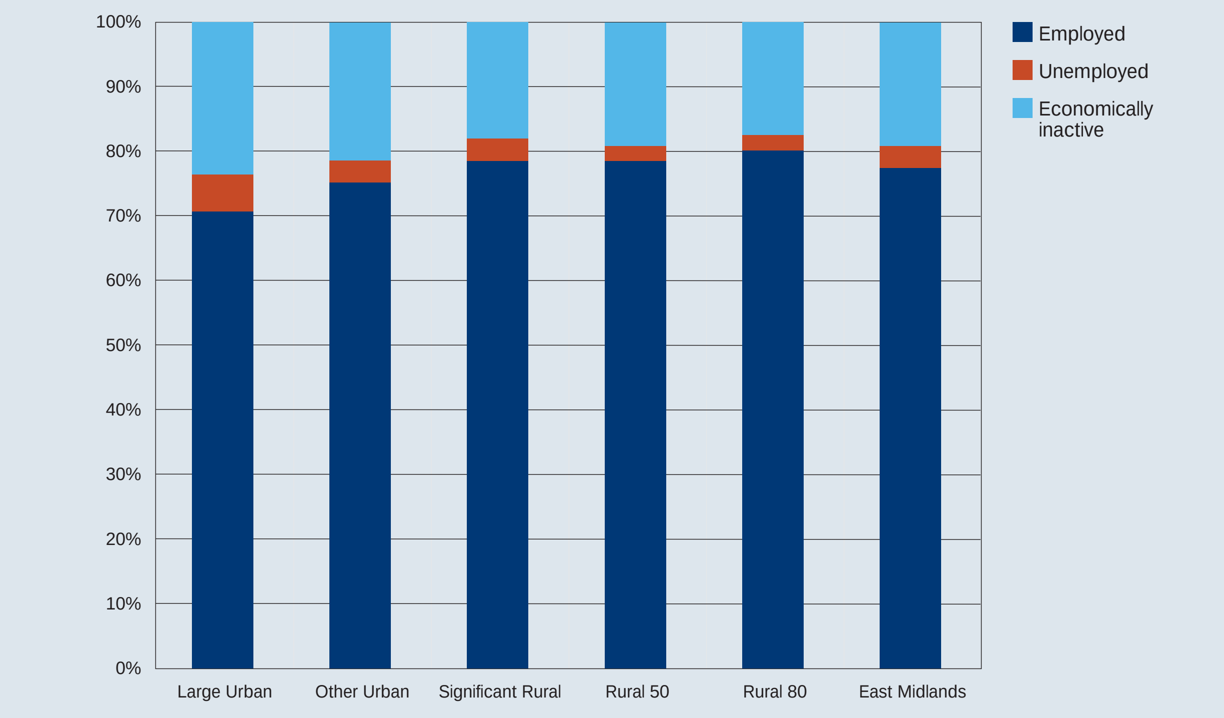
- Unemployment rates [46] are generally higher in urban areas than in rural, at 5.1% on average compared to 3.5% in rural areas. However, these overall figures again mask significant differences between urban areas. The unemployment rate is highest in Nottingham (7.4%) and Chesterfield (6.5%). At the same time there are Large Urban areas where unemployment is much lower. For example, just 1.8% of the working age population in Blaby are unemployed, which could be explained by the fact that a large share of residents in Blaby take advantage of employment opportunities elsewhere in the East Midlands, particularly in Leicester. Indeed, more than 10,000 people commute from Blaby to Leicester each day.[47]

- Economic inactivity rates (those who are neither in employment nor unemployed) tend to be higher in urban districts compared to both the regional and the rural averages. The average inactivity rate for all East Midlands urban districts was 22% in 2006, 2.5 percentage points above the regional average and 4.7 percentage points above the rural average. However, this overall picture masks significant differences between cities. The economic inactivity rate is highest in Nottingham (27.6%) which is 8 percentage points higher than the East Midlands average, while the inactivity rate in Northampton (17.9%) is almost 2 percentage points lower than the regional average. The figure for Nottingham is affected by the large number of students in the city.

[44] It is recognised that qualification levels are an imperfect proxy for skills, since they often represent educational attainment in quite discrete subjects, and fail to measure 'tacit' skills gained through experience, or more general skills, such as communication or customer service. Nevertheless, qualifications are arguably the most useful measure of skills trends and the 'mix' of different levels of skills in the workforce.
[45] For more information, see Centre for Urban and Regional Development Studies, *City Regions and Policycentricity: the East Midlands urban network*, policy paper commissioned for the RES Review (December 2005).
[46] This is the ILO definition of unemployment and includes those who are available for work in the next two weeks and have actively searched for work in the last four weeks.
[47] Experian Business Strategies on behalf of *emda, Commuting flows in the East Midlands* (April 2007).

CHART 7

Employment status of the working age population in the East Midlands, by district classification, 2006. (%)



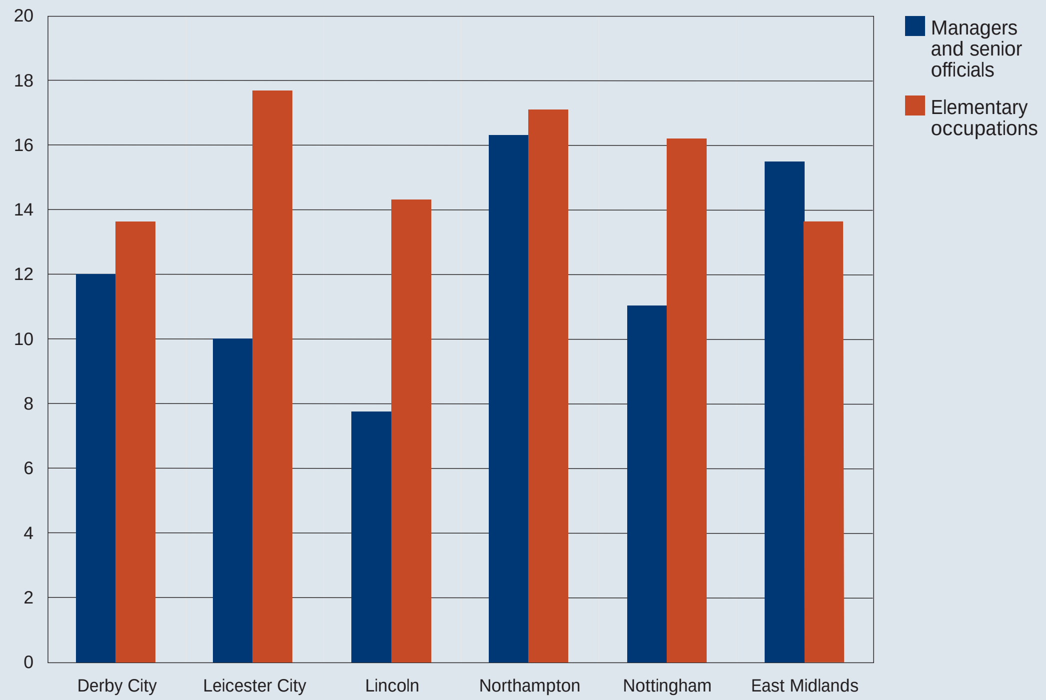
Source: ONS Crown Copyright, Annual Population Survey, January 2006 – December 2006, from NOMIS, 21st August 2007.

This analysis highlights the fact that labour market participation is far from uniform not only across the region but also amongst urban areas. There are also significant differences in occupational structure between urban local authorities. The proportion of residents employed as Managers and Senior Officials is generally higher in rural areas than in the cities, which reflects commuting patterns. People employed in these more senior positions can often afford to live in rural areas, but commute to work in urban areas. While the proportion of urban residents in managerial occupations was 13% in 2006, the average for rural residents was 17%. In contrast, employment in low value added, low paid, elementary occupations in the service sector tends to be concentrated in urban areas.

Labour market participation varies across urban areas

CHART 8

Chart 8: Residents employed in Managerial and Elementary occupations in the East Midlands' larger cities, 2006. (%)



Source: ONS Crown Copyright, Annual Population Survey, January 2006 – December 2006, from NOMIS, 23rd August 2007.

Focusing in more detail on the East Midlands' large cities, Chart 8 shows that the largest proportion of residents employed in Managerial positions is in Northampton (16.2%), which is the result of the city's location in relation to London and the South East.[48] Lincoln has the smallest proportion of residents employed in Managerial occupations, at 7.7%. The largest percentage of people working in Elementary occupations is in Leicester, where 17.6% of residents are employed in such jobs – significantly above the regional average of 13.7%.

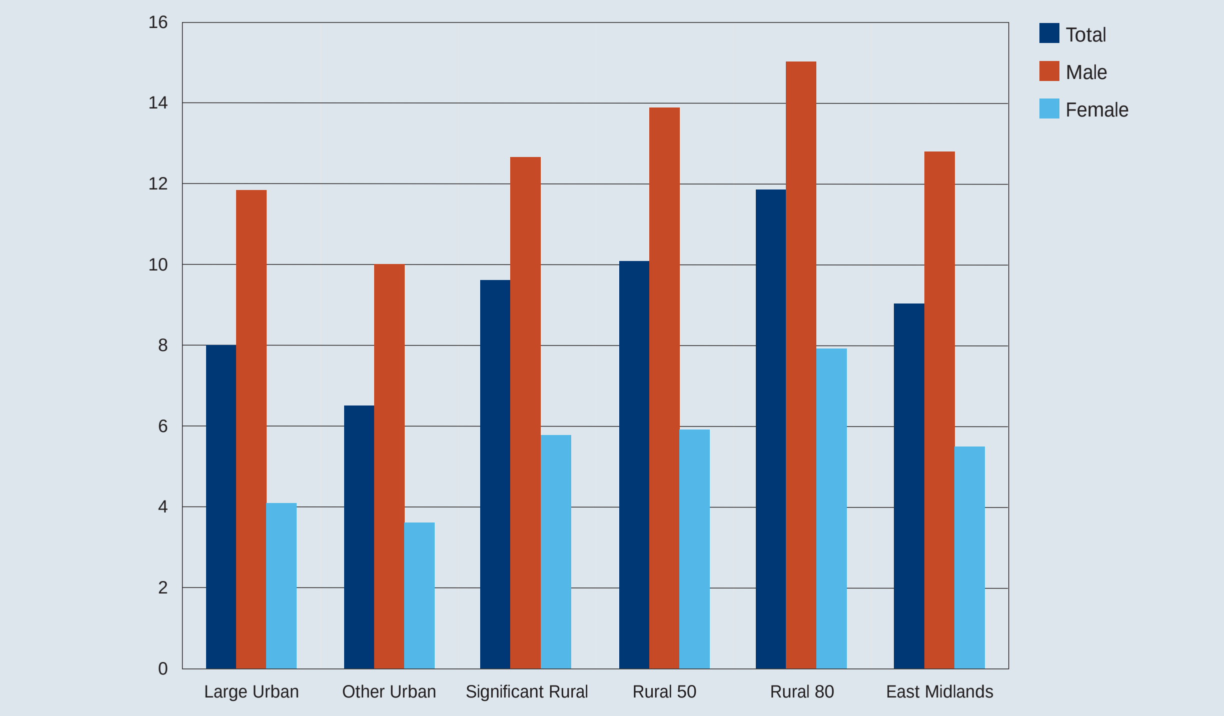
In the region's urban areas, certain groups within the population face barriers to labour market participation as well as multiple deprivation.[49] Sub-populations affected by multiple deprivation are people excluded from the labour market, such as those with care responsibilities for children or the elderly, people with disabilities, those from an ethnic minority background, and older workers.

[48] Centre for Urban and Regional Development Studies, *City Regions and Policycentricity: the East Midlands urban network* (December 2005).
[49] For more information, see *emda, The East Midlands in 2006: Section 4 – Deprivation and Economic Inclusion in the East Midlands*, July 2006.

5.3 Self-employment

CHART 9

Self-employment rate, by gender and rural-urban district classification, 2006. (%)



Source: ONS Crown Copyright, Annual Population Survey, January 2006 – December 2006, from NOMIS, 8th September 2007.

Rates of self-employment tend to be lower in urban areas than in rural areas, as Chart 9 shows. Other Urban districts have the lowest self-employment rates, at 6.9% in 2005/06. Amongst urban districts, the self-employment rate is highest in Blaby (13.9%) and lowest in Corby (4.1%). In contrast, rural areas have higher self-employment rates. Rates tend to be highest in Rural 80 districts, at 11.7%, which is 2.6 percentage points above the regional average. The differences between urban and rural districts reflect the fact that home working tends to be more prevalent in rural areas, because the range of employment opportunities is smaller than in urban areas, and access to employment can be more difficult. Meanwhile, some of the occupations characteristic of rural areas (such as farming) by their nature have very high rates of self-employment.

In common with other regions, self-employment rates are significantly higher amongst men than women. Male self-employment in urban areas (11%) is below the regional and UK averages (12.6% and 13.3% respectively). Female self-employment rates are also below average in urban areas. In Large Urban districts, an average of 4.1% of women of working age are self-employed, and 3.4% in Other Urban districts, compared to 5.2% of women in the East Midlands as a whole. The female self-employment rate is highest in Blaby (8.8%) and lowest in Leicester (2.6%). Rates of male self-employment show a similar picture, being highest in Blaby (7.8%) and lowest in Derby City (2.2%).

5.4 Qualifications

The quality of labour, principally the level of skills available in the workforce, is an important contributor to economic performance. From this point of view there are significant differences between urban and rural areas. In general, smaller proportions of the economically active adult population in urban areas have higher level qualifications and larger proportions have no qualifications compared to rural areas. An average of 12.5% of the economically active adult population in Large Urban districts has no qualifications, compared to 8.2% in Rural 80 areas, and 10.2% in the East Midlands as a whole. The proportion of the adult population qualified to at least NVQ Level 4 (equivalent to a first degree) is 27.4% for Large Urban districts compared to 30.1% for Rural 80 areas and 28.1% for the region.

An NVQ Level 2 (equivalent to 5 GCSEs or 1 A Level) is considered to be an 'entry-level' requirement for the majority of jobs. Without this level of qualification, the range of employment opportunities open to an individual, and the earnings potential they can enjoy, are much more limited. Urban areas again perform worse than rural areas on this measure, with just 56.7% of the economically active adults of Large Urban districts having reached at least a Level 2, compared to 61.7% in Rural 80 areas. As Table 12 shows, at all qualification levels, the proportion of the economically active adult population in urban areas who have achieved a particular qualification lags behind the proportion in rural areas and is below the regional average.

TABLE 12

Economically active adult population qualified to different levels, by district classification, 2006.

	NVQ 4+ (%)	NVQ 3 + (%)	NVQ 2 + (%)	NVQ 1 + (%)	No qualification (%)
Large Urban	27.4	41.3	56.7	72.4	12.5
Other Urban	25.4	42.9	59.3	76.8	10.7
Significant Rural	27.3	43.0	60.0	74.9	9.4
Rural 50	30.6	46.3	61.4	75.9	9.2
Rural 80	30.1	47.2	61.7	77.0	8.2
East Midlands	28.1	44.0	59.7	75.3	10.2

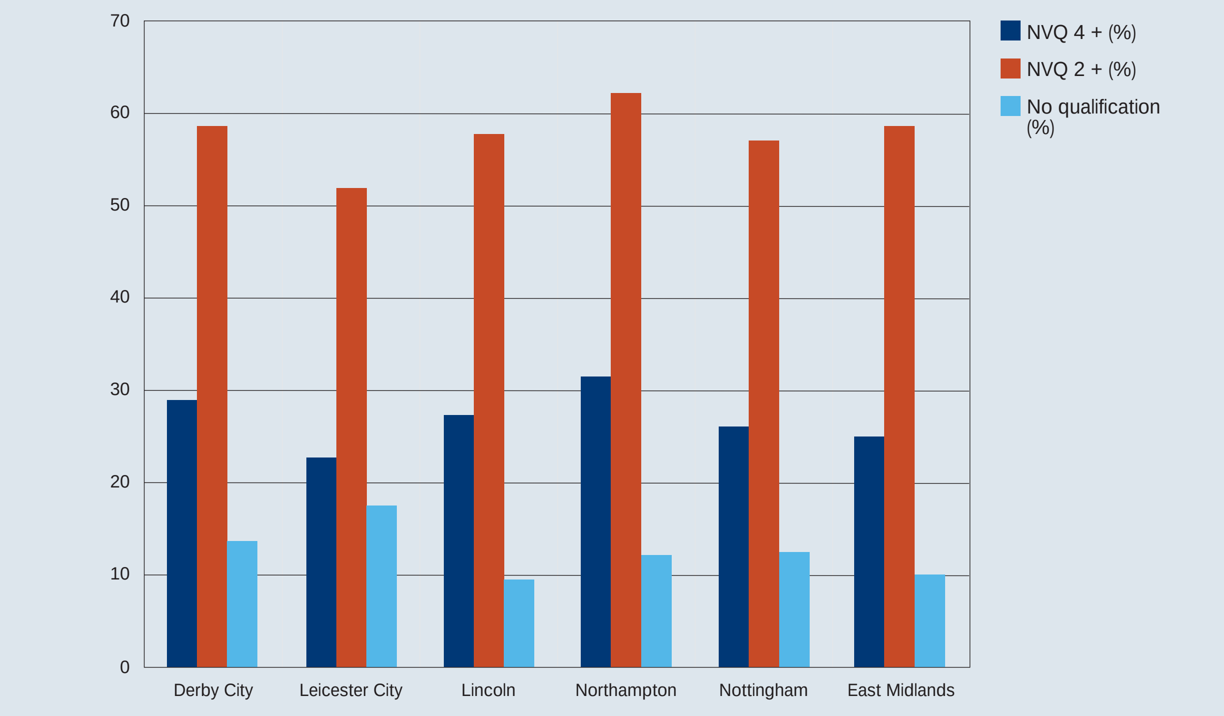
Source: ONS Crown Copyright, Annual Population Survey, January 2006 – December 2006, from NOMIS, 1st October 2007.

When looking at the proportions of the economically active population qualified to NVQ Level 4 and above (Map 8), there is a clear distinction between the south and west of the region (where people are more likely to be qualified to this high level) and the north-east of the region (where the proportions are significantly lower).

The proportions of adults with no qualifications are highest in the larger urban areas and in districts in the north of the region, particularly in north and west Nottinghamshire, north and east Derbyshire and Leicestershire. Moreover, there are variations between urban areas, as Chart 10 shows.

CHART 10

Economically active adult population qualified to different levels, East Midlands urban areas, 2006. (%)



Source: ONS Crown Copyright, Annual Population Survey, January 2006 – December 2006, from NOMIS, 1st October 2007.

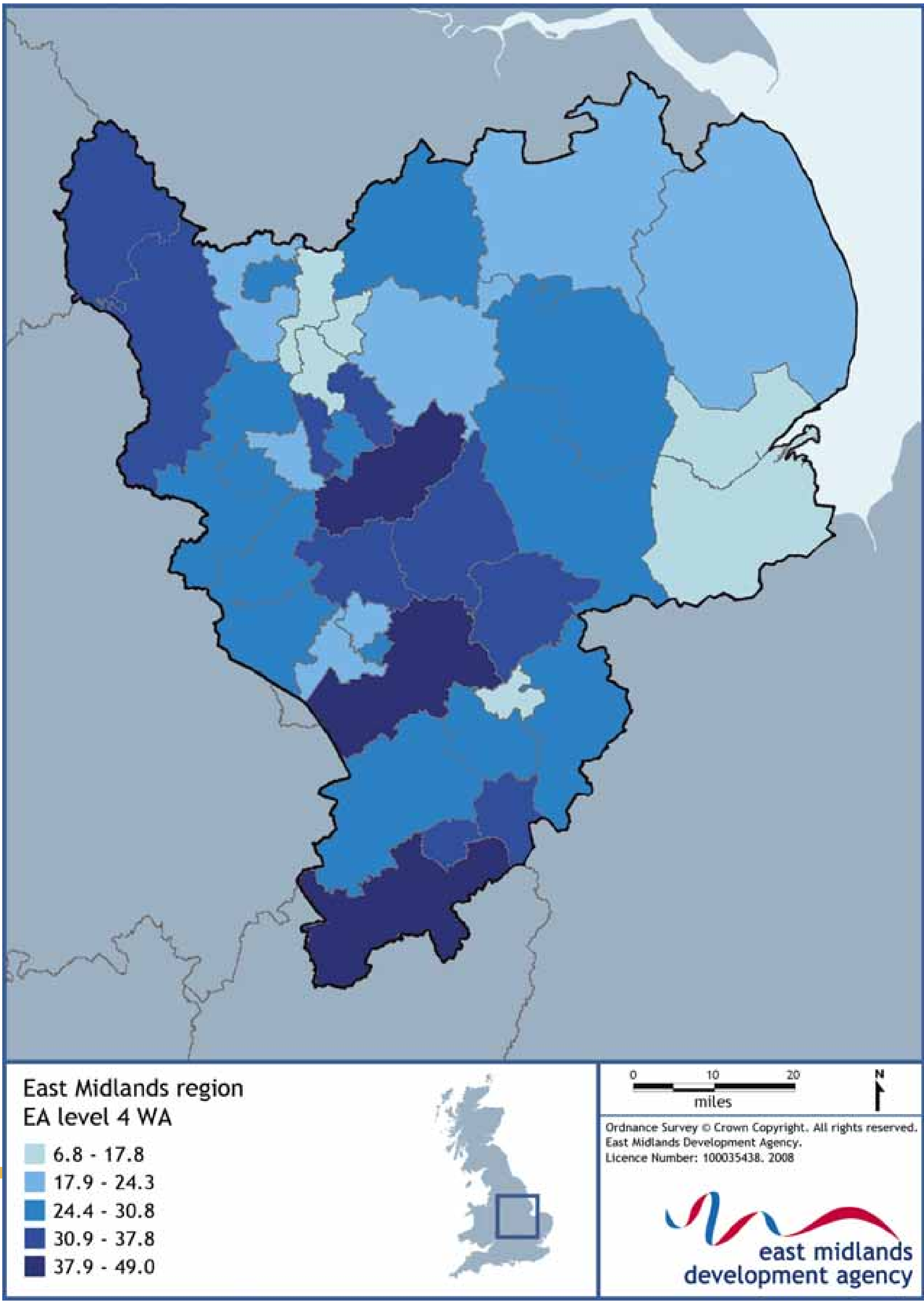
Leicester City and Derby City have the highest proportion of the economically active population with no qualifications, at 17.7% and 14.5% respectively, considerably above both the regional and UK averages.

The proportions of economically active adults with an NVQ 4 or above are highest in Rushcliffe and Harborough at 49% and 42.8% respectively. Amongst Large Urban districts Broxtowe and Gedling perform best on this measure, with 37.8% and 33.7% respectively of their economically active populations qualified to degree level. The concentration of highly qualified residents in these areas can be explained by commuting flows. The largest commuting flow is identified between Gedling and Nottingham while the second and third largest flows are between Nottingham and Broxtowe and between Nottingham and Rushcliffe.[50] Maps 7 and 8 provide a more detailed picture of the variations in qualification levels by district, based on data from 2006.

[50] Experian Business Strategies on behalf of *emda, Commuting flows in the East Midlands* (April 2007).

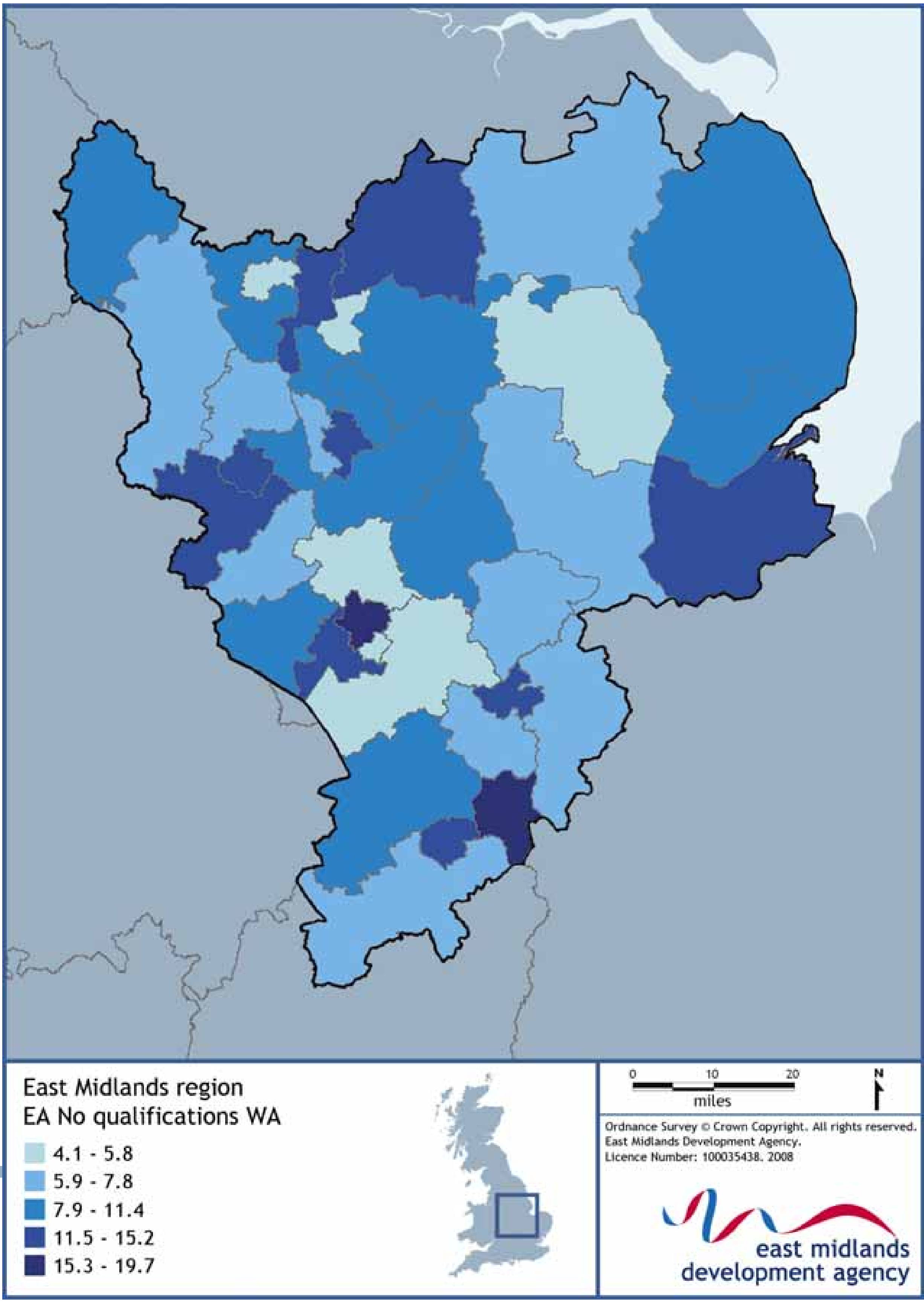
MAP 7

Economically active adults with level 4+ qualifications, 2006. (% working age)



MAP 8

Economically active adults with no qualifications, 2006. (% working age)



Spotlight on high technology industries

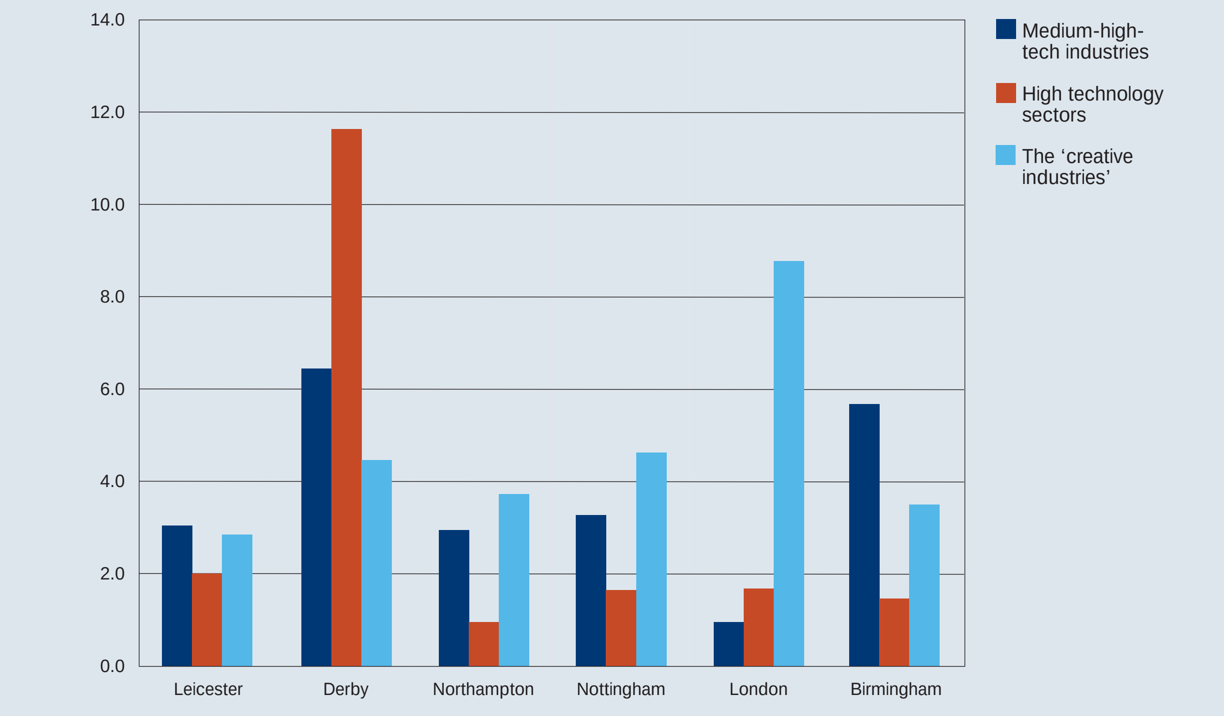
As emphasised in the RES, the East Midlands has the smallest proportion of people working in sectors classed as 'knowledge intensive' of all the English regions.[51] The reason for this is the weak demand for higher level skills which can be associated with a comparatively small number of businesses engaged in high value production and service activities. Unfortunately data is not available to assess the knowledge intensity of employment on this basis at sub-regional level. Instead we look at employment in high and medium-high technology sectors. The definition of high and medium-high technology sectors is based on that specified by the Organisation for Economic Cooperation and Development (OECD).[52]

Large cities and major towns are the centres of high and medium technology sectors and they are key drivers of regional economic performance. Chart 11 compares the proportion of employees in these sectors in the East Midlands' major cities, and in London and Birmingham. As the chart shows, the proportion of employees in high technology sectors is by far the highest in Derby. This reflects the fact that Derby has been at the forefront of technological developments in transport in recent years. At the same time employment in medium-high-tech and creative industries is also relatively high in Derby. Derby's success is based on the established railway and aerospace industries, and on the significant expansion of the transport manufacturing sector with the arrival of Toyota.[53]

The proportion of employment in creative industries tends to be lower than average in the East Midlands and the reason for this is the low demand from businesses that deal with a range of activities from architecture and art, to fashion, printing, graphic design and software design.

CHART 11

Full-time employees in key sectors, 2005. (%)



Source: Annual Business Inquiry, Nomis (2003-2005) and Annual Employment Survey Rescaled, January 2005 – December 2005, from State of the Cities Database (SOCD), 28th August 2007

[51] Sectors are classified according to the proportion of graduates they employ: those sectors with more than 40% of their workforce at graduate level are classed as K1 sectors while those with less than 15% of their workforce accounted for by graduates are classed as K4 sectors.

[52] The definition of high technology specified by the Organisation for Economic Cooperation and Development (OECD) in 1997 covers pharmaceuticals, office machinery and computers, aerospace and electronics-communications. The definition of medium-high technology includes sectors such as scientific instruments, motor vehicles, electrical machinery, chemicals, other transport equipment and non-electrical machinery (See Annex of *Regional Competitiveness and State of the Region*, ONS DTI), July 2006 .

[53] **http://www.locateinderby.com/01companies.asp**

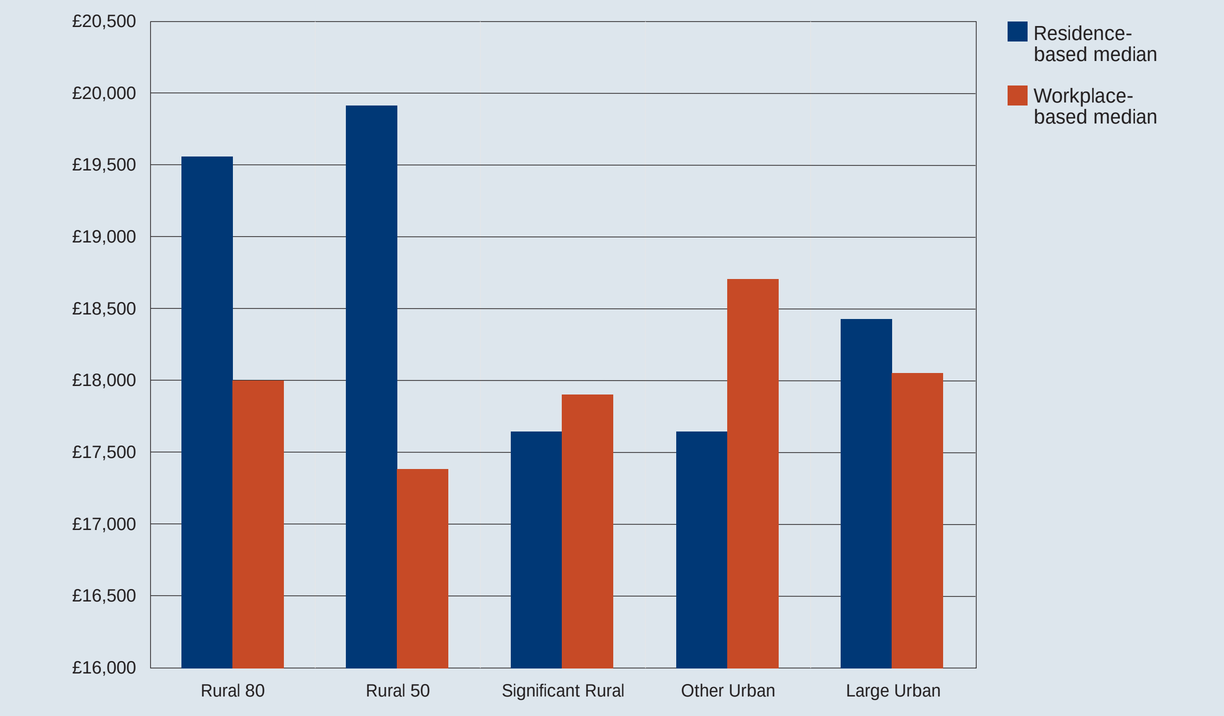
5.5 Earnings

Comparisons of earnings indicate that there are substantial differences between those populations who live and those who work in an area. This suggests that many individuals in better paid, higher skilled employment live in rural areas and commute to work in urban areas. This section explores this proposition. At the outset of this section it should be noted that data on earnings at district level should be treated with some caution, as the sample sizes in some districts are very small and therefore the figures are not always statistically reliable. For this reason, rather than quoting precise figures, earnings will be discussed in approximate or relative terms in this section. The figures should be treated as indicative rather than definitive.

Chart 12 demonstrates the clear differential between residence and workplace based earnings, particularly in the more rural districts (the Rural 50 and Rural 80). The average earnings of those who work in Other Urban districts are about £1000 a year higher than the earnings of those who live in these districts. At the same time the pattern is the reverse for the Large Urban areas. Annual residence-based earnings in these districts are about £450 higher than the earnings of those who work in these areas. For the East Midlands as a whole (both urban and rural areas), the average residence-based earnings are around £19,000 and the average workplace-based earnings are about £18,000.

CHART 12

Workplace-based and residence-based earnings (median), by district classification, 2006.



Source: ONS Crown Copyright, Annual Survey of Hours and Earnings, from NOMIS, 29th November 2006.

A more detailed comparison of workplace-based and residence-based earnings is provided in Map 9, which presents workplace-based estimates against residence-based estimates as a ratio at LAD level. A value of 1 represents an exact match between the two earnings estimates. A value of greater than 1 represents a higher workplace based estimate relative to residence base. A value less than 1 reflects higher residence-based earnings relative to workplace.[54] From Map 9 we can see that:

- The areas with the highest workplace-based to residence-based earnings ratios are in and around the region's urban centres, suggesting that a significant proportion of individuals in higher paid jobs commute to these areas from elsewhere. Indeed the largest volumes of net in-commuting are in the region's five main urban centres: Nottingham, Leicester, Derby, Northampton and Lincoln. Nottingham is responsible for almost 16% of East Midlands' internal in-commuting while Leicester is responsible for about 11%. Derby, Northampton and Lincoln together are responsible for about 14% of overall internal in-commuting in the region.[55]

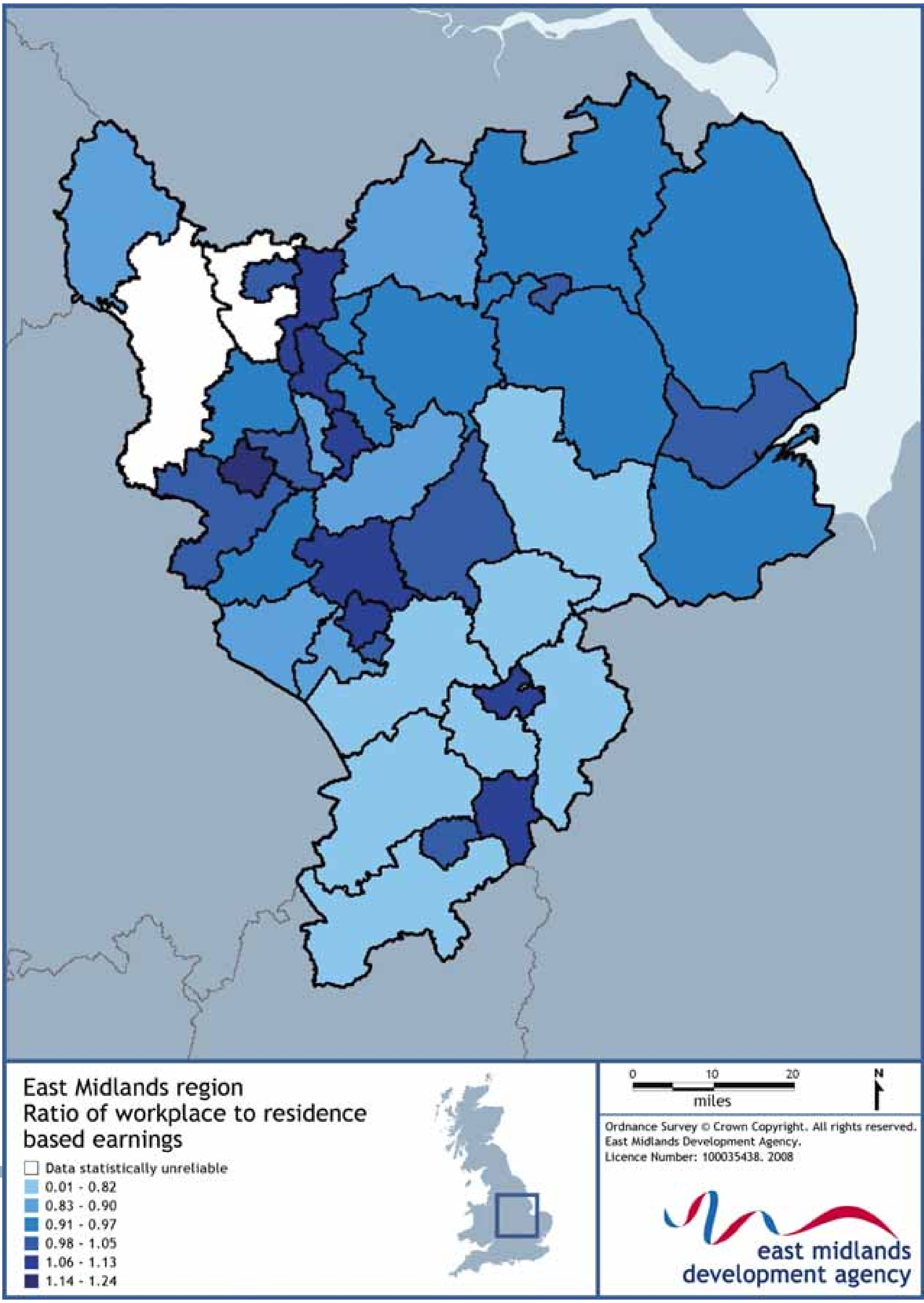
- The paler blue colours on Map 9 indicate those districts with the highest residence-based compared to workplace-based earnings, suggesting that in these areas individuals in higher paid jobs commute to work elsewhere, often to one of the five main urban centres. These districts are mostly located in the south-east of the region, in Rutland, Northamptonshire and south Lincolnshire. Significant numbers of residents in these areas commute to London and other centres in the South East.

Commuting is a key influence on the pattern of earnings in the region

[54] It should be noted, that mean earnings have been used for this map. This is because the median value is not available for all districts due to the small sample size at this level of geography. As a result, the data presented in Map 9 should not be compared to the earlier median based analysis.
[55] Experian Business Strategies, on behalf of *emda, Commuting flows in the East Midlands* (April 2007).

MAP 9

Ratio of workplace to residence based earnings (mean), 2006.



The implication that many people in better-paid employment commute to work outside of the rural districts in which they live is borne out by data on rural-to-urban employment flows. As Table 13 shows, the percentage of rural-dwelling employees in the East Midlands who work in urban areas is the largest of any English region, at 26.8%.

TABLE 13

Regional rural-urban employment flows, 2001.

Region	Rural to urban net flow	% flow of rural employees to urban
East Midlands	161,238	26.8
East of England	216,610	26.2
North East	38,995	18.8
North West	24,914	6.3
South East	142,970	15.9
South West	124,656	15.8
West Midlands	59,050	14.5
Yorkshire and The Humber	120,635	25.2

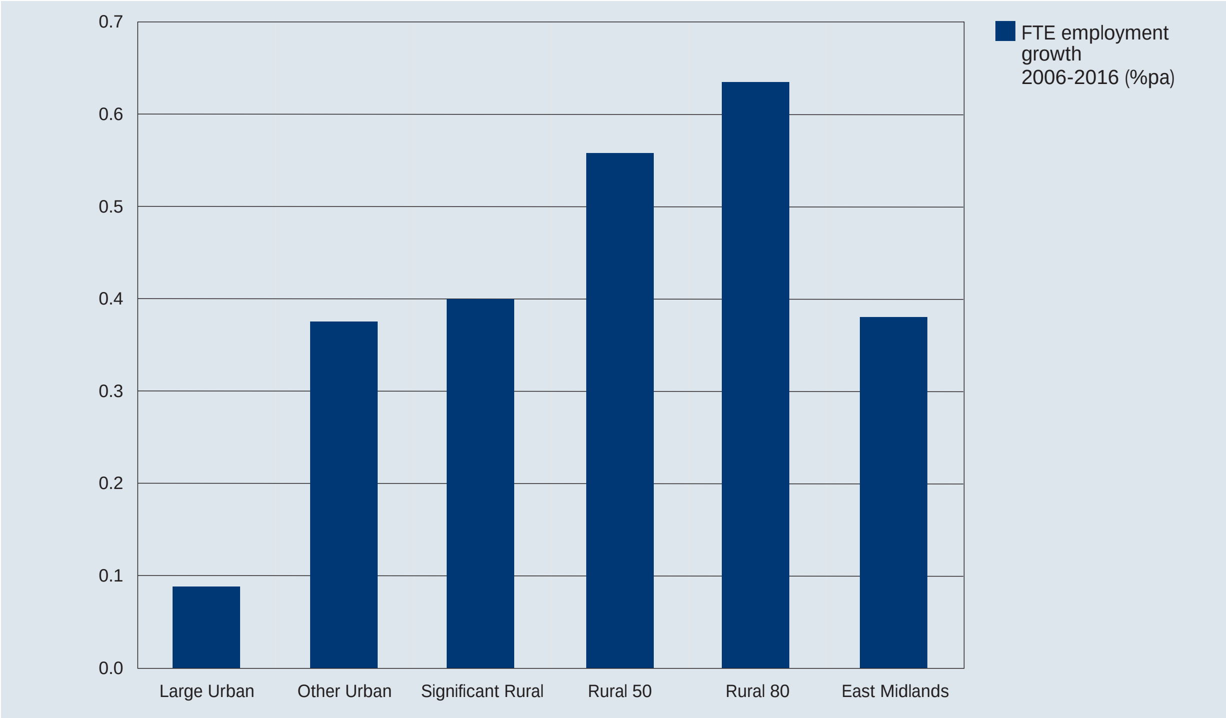
Source: ONS Crown Copyright, 2001 Census.

5.6 Forecast employment growth

This section presents forecasts of future employment growth in the East Midlands, based on the Scenario Impact Model (SIM), developed by Experian Business Strategies on behalf of *emda*. It should be noted that these are forecasts and not statements of fact about the future performance of the economy in the East Midlands. They are an independently produced assessment of prospects and do not represent *emda's* aspirations for the region. Less emphasis should be placed on the numbers and more on the direction of travel and the general magnitude of change.

CHART 13

FTE employment growth 2006-2016. (%pa)



Source: *emda* / Experian Scenario Impact Model, 2007.

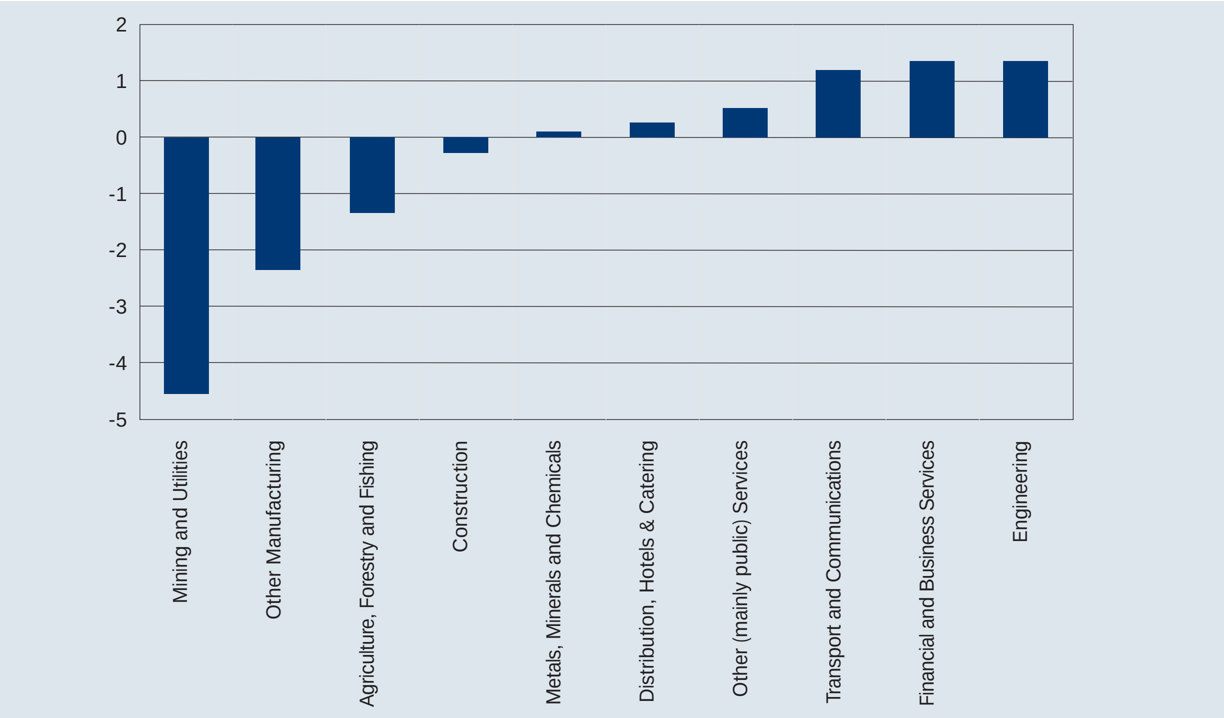
Based on the Scenario Impact Model the overall Full Time Equivalent (FTE)[56] employment growth in the East Midlands is forecast to be 0.4% per year for 2006-2016. Employment growth is projected to be highest in rural districts and lowest in Large Urban areas, at 0.6% and 0.1% per year respectively. However, this overall picture tends to hide a number of differences amongst the region's urban areas. For example, employment growth is forecast to be highest in Blaby (1% per year), Northampton (0.7% per year) and Lincoln (0.5% per year). In contrast, employment is forecast to decline in Erewash and Gedling (-0.1% per year).

Employment growth is forecast to be highest in the most rural parts of the region

[56] Full Time Equivalent (FTE) employment is the sum of full-time employment, self-employment and 40% of part-time employment.

CHART 14

FTE employment growth in the East Midlands 2006-2016. (%pa)



Source: *emda* / Experian Scenario Impact Model, 2007.

The overall FTE employment growth in the East Midlands of 0.4% per annum for 2006-2016 conceals a number of differences between sectors (Chart 14). The fastest employment decline is forecast for Mining and Utilities and Other Manufacturing industries, whilst employment growth is forecast to be highest in Transport and Communications, Financial and Business Services and Engineering. This suggests a continuation of the restructuring of the regional economy that has been witnessed in recent years – in particular the decline of ‘traditional’ manufacturing industries and the growth of services and knowledge intensive industries.

Changes in the sectoral balance of employment are forecast to vary between cities in the East Midlands, as Chart 15 shows. The increase in employment in Transport & Communication is forecast to be highest in Leicester and Northampton, at 1.9% per year and 1.8% per year respectively. While employment growth in engineering is forecast to be highest in Derby (1.6% per annum), Leicester and Nottingham are projected to witness further employment decline in this sector.

CHART 15

FTE employment growth in Mining & Utilities, Engineering and Financial & Business Services 2006-2016. (%pa)

Source: *emda* / Experian Scenario Impact Model, 2007.

Key points: The labour market

- **Rates of employment and inactivity tend to be lower in the region's urban areas. For example, employment rates in Nottingham and Leicester are more than 11 percentage points below the regional average.**
- **The highest unemployment rates in the region are to be found in the urban areas, and Nottingham has the highest unemployment rate in the East Midlands.**
- **There is significant out commuting from rural areas into urban areas in the East Midlands. This tends to cover those in higher level occupations who choose to live in rural areas of the region.**
- **Larger proportions of the economically active population in the regions urban areas have no qualifications.**
- **Employment growth is forecast to be below the regional average in the urban areas.**

6. Deprivation and socio-economic inclusion

6.1 Introduction

Although the UK has enjoyed a period of sustained economic growth, and maintained high levels of employment and low levels of unemployment in comparison to all of its major competitors, the benefits of economic growth have not flowed equally to all groups in society. Whilst some parts of the UK, including parts of the East Midlands, can be described as being in a state of near full employment, many communities suffer from deep-seated inter-generational unemployment and poverty. Within the region's urban areas, prosperous localities are often juxtaposed with areas of severe deprivation. The spatial disparities in income, employment prospects, health and security across a city can be as large as, or larger than, those across the region.

This chapter explores socio-economic inclusion in the region's urban areas, focussing on deprivation, income, benefits and crime, and drawing comparisons both between urban and rural areas and between different urban areas within the East Midlands and elsewhere in England. The chapter concludes with a discussion of community cohesion, which is an area of current concern in urban areas, particularly given the diversity and fluidity of their populations. The arrival of migrant workers is one illustration of both the challenges and the opportunities for community cohesion in urban areas.

6.2 Measuring deprivation

'Deprivation' is not the same as 'poverty'. While 'poverty' relates to not having enough financial resources to meet needs, 'deprivation' refers to a lack of resources of all kinds, not just financial. There has been much academic and policy debate about the extent to which 'deprived people' are concentrated in 'deprived areas' and about the appropriateness of using area-based initiatives to tackle deprivation. Nevertheless, there is concern about the persistence of area-based concentrations of deprivation, and about the impacts of living in deprived areas on life chances.[57]

The Index of Multiple Deprivation 2007 (IMD 2007) is an area-based summary measure of multiple deprivation at Lower Super Output Area [58] level. Rather than providing an absolute indicator of deprivation in an area, it measures deprivation relative to other areas. It is important to remember that an area measured as relatively deprived may contain people who are not deprived, and vice versa.

The IMD is constructed using seven domains: income; employment; health and disability; education, skills and training; barriers to housing and services; the living environment; and crime. These domains are a combination of individual indicators. The domains have been weighted to reflect current understanding of the contribution each makes to overall levels of deprivation. Consequently income and employment deprivation are weighted more heavily than environmental deprivation or crime. Each district and unitary authority in England is given an IMD score and a rank. The higher the score, the lower the rank and the more deprived the district. Overall, higher levels of deprivation in the East Midlands are concentrated in the urban centres, as well as in the former coalfields, and the Lincolnshire coast, as Map 10 shows.

- Nottingham City is classified as the most deprived district in the East Midlands (being ranked 12th out of the 354 local authorities in England). Eight out of the ten most deprived local authorities in the region are urban. Leicester and Mansfield are the second and third most deprived local authorities in the East Midlands, being ranked at 23rd and 34th respectively in England.

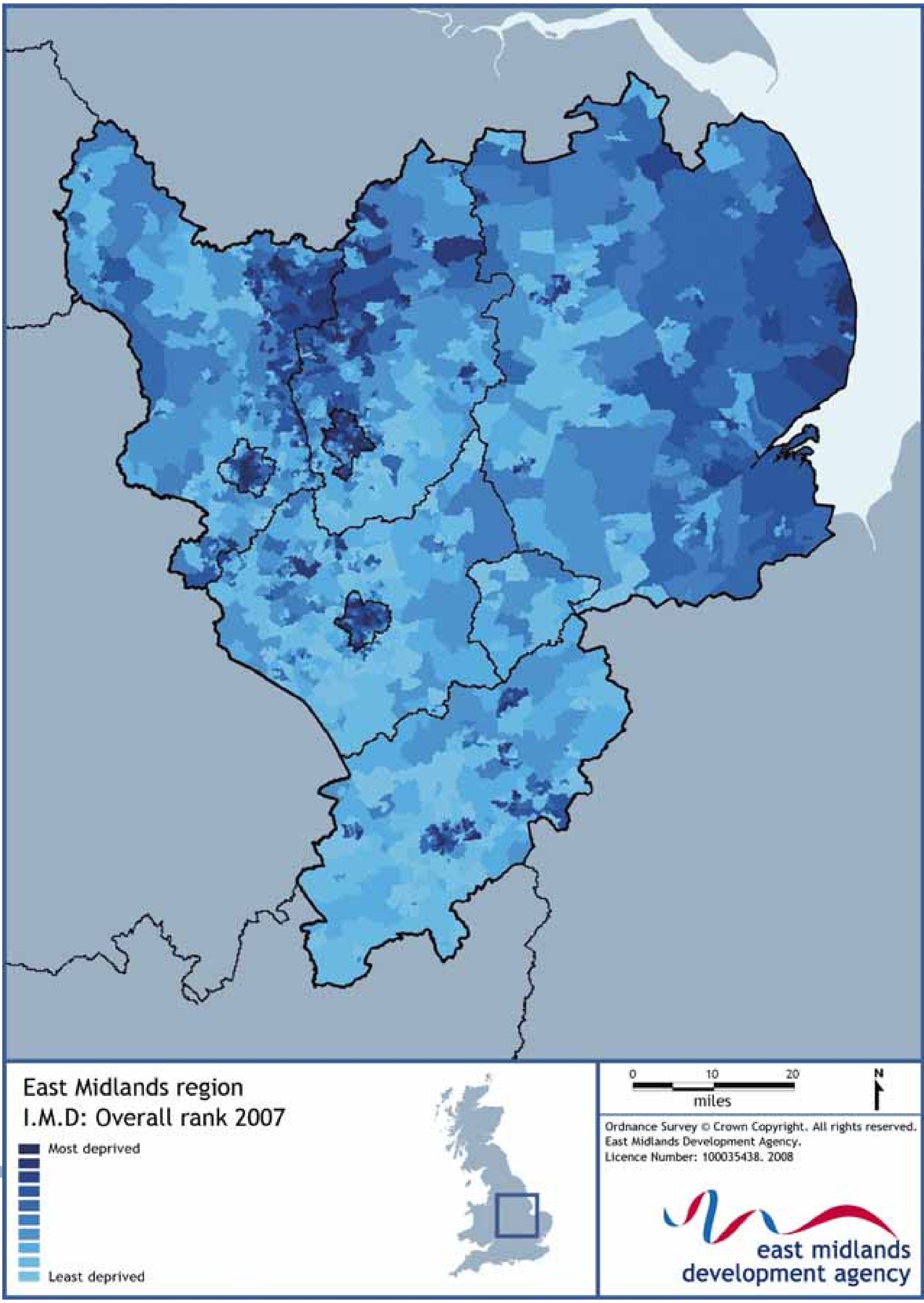
- Only two of the ten least deprived districts in the region are urban. Blaby is ranked 324th out of the 354 English local authorities, while Oadby and Wigston is ranked at 297th.

- There is something of a north-south split in the region, with districts in the north generally having higher deprivation scores than those in the south. There are also significant pockets of deprivation in the coastal areas of Lincolnshire.

[57] Anne Green, *Mapping deprivation in the East Midlands – implications for policy*, policy paper commissioned for the RES Review (August 2005).
[58] Lower Super Output Area are aggregates of Census Output Areas – small geographical units originally used for the 2001 Census and developed by the ONS to replace wards as the preferred unit for small area statistics.

MAP 10

Indices of deprivation 2007: overall rank.



Although most of the region's urban areas are characterised by high levels of deprivation, there are interesting patterns of deprivation within cities. In Nottingham, high levels of deprivation are found across the city, with the exception of the south-west corner, bordering on Broxtowe. In Derby, the centre of the city is the most deprived, and overall levels of deprivation lessen as one moves towards the periphery of the urban area. In Leicester and Northampton, high levels of deprivation are evident in some inner areas and outer estates, but other much less deprived neighbourhoods (such as Stoneygate in Leicester) sit alongside these concentrations of deprivation. Meanwhile, in Lincoln the areas of greatest deprivation are mostly concentrated on the eastern side of the city.

6.3 Income

Household incomes vary significantly across the East Midlands, and tend to be lower in urban areas, and in more sparsely populated areas, as Table 14 shows. Median household incomes are higher in less sparse areas, and in less sparse villages median household income is almost 30% higher than in urban areas.[59]

TABLE 14

Median household income, by rural and urban definition.

Area definition	Median household income (£)
Hamlet and isolated dwellings – Less sparse	31,372
Hamlet and isolated dwellings – Sparse	23,717
Village – Less sparse	31,603
Village – Sparse	23,722
Town and fringe – Less sparse	27,473
Town and fringe – Sparse	20,214
Urban >10K – Less sparse	24,551
Urban >10K – Sparse	20,653

Source: CACI, Paycheck, 2006.

In recent years there has been an increase in household incomes in all English regions (see Table 15). In less sparse areas, the increase has been generally greater in rural than in urban settlements, while in sparse areas the increase has been greater in urban settlements. The growth in incomes in less sparse town and fringe areas in the East Midlands between 2004 and 2006 was amongst the lowest of any region, at 16.7%. Meanwhile, the increase in incomes in sparse town and fringe areas was the highest of any region, at 22.6%.[60] For comparison, the average rise in household incomes for the East Midlands as a whole between 2004 and 2006 was 18.9%, compared to an English average of 18.2%.

Although incomes have been rising in urban areas, a significant proportion of households remain in income poverty. Households in income poverty are defined as those with an income of less than £15,861, which is 60% of the English median household income. Chart 16 illustrates the extent of income poverty in urban and rural areas of the East Midlands in 2006.

[59] The classification of areas on the basis of sparsity was developed by the Rural Evidence Research Centre at Birkbeck College, and is known as the Rural and Urban Definition. It defines urban areas as those with a population above 10,000, and then classifies urban and rural areas as either sparse or less sparse, on the basis of population density.
[60] CACI, Paycheck, 2006.

TABLE 15

Change in median incomes across the regions, 2004-06. (%)

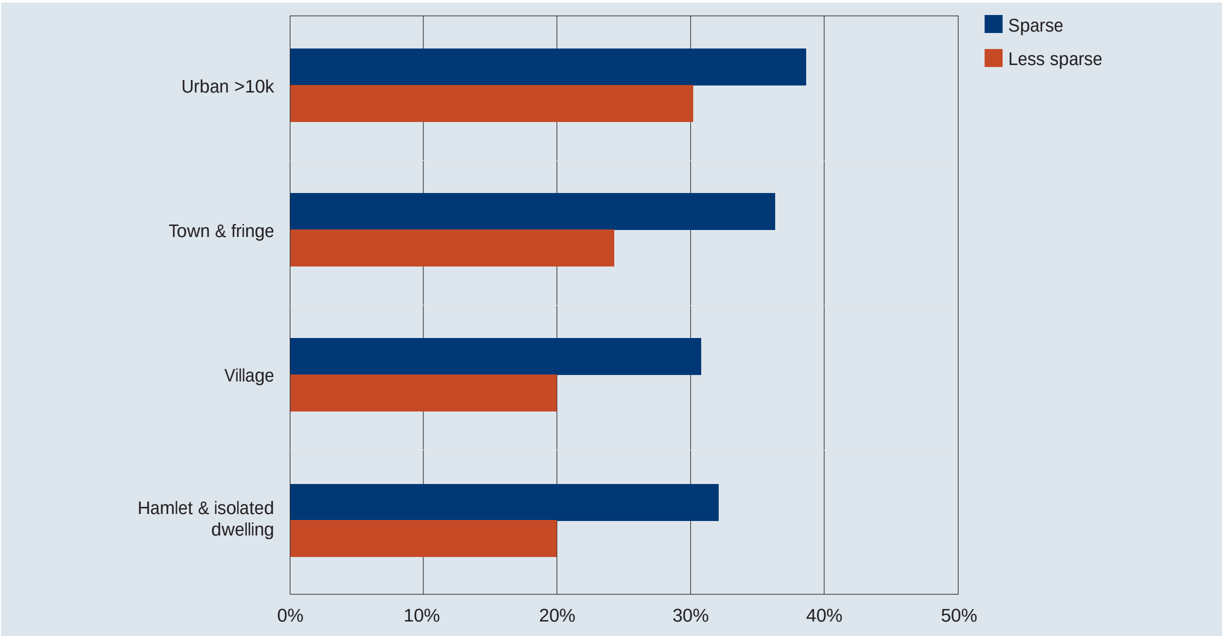
	Less sparse				Sparse			
	Hamlet and isolated dwellings	Village	Town and fringe	Urban >10K	Hamlet and isolated dwellings	Village	Town and fringe	Urban >10K
East Midlands	22.0	18.7	16.7	17.7	19.2	15.0	22.6	19.4
East of England	19.7	17.3	17.8	16.2	27.8	18.7	17.8	-
North East	21.5	20.9	18.5	18.3	18.0	17.7	15.9	26.9
North West	20.9	16.9	17.6	18.0	12.7	19.1	16.0	17.6
South East [61]	19.0	16.5	16.6	15.6	-	-0.6	-7.8	-
South West	19.4	17.1	16.8	16.9	14.8	19.7	19.3	23.7
West Midlands	20.2	18.7	16.9	17.9	19.1	20.6	20.0	13.5
Yorkshire and The Humber	19.6	20.0	18.3	18.5	22.5	18.0	19.0	23.1

Source: CACI, Paycheck, 2004-6.

In general, larger proportions of East Midlands' households are in income poverty in urban than in rural areas. For instance, 39% of households in sparse urban settlements are in income poverty, compared to just over 30% in sparse villages, hamlets and isolated dwellings.

CHART 16

East Midlands households in income poverty (60% of English median income), 2006. (%)



Source: CACI, Paycheck, 2006. Analysis by Commission for Rural Communities, 2006.

[61] Figures for sparse Villages and Town and fringe areas should be treated with care as they are based on a very small number of output areas (4 and 1 respectively).

6.4 Benefits

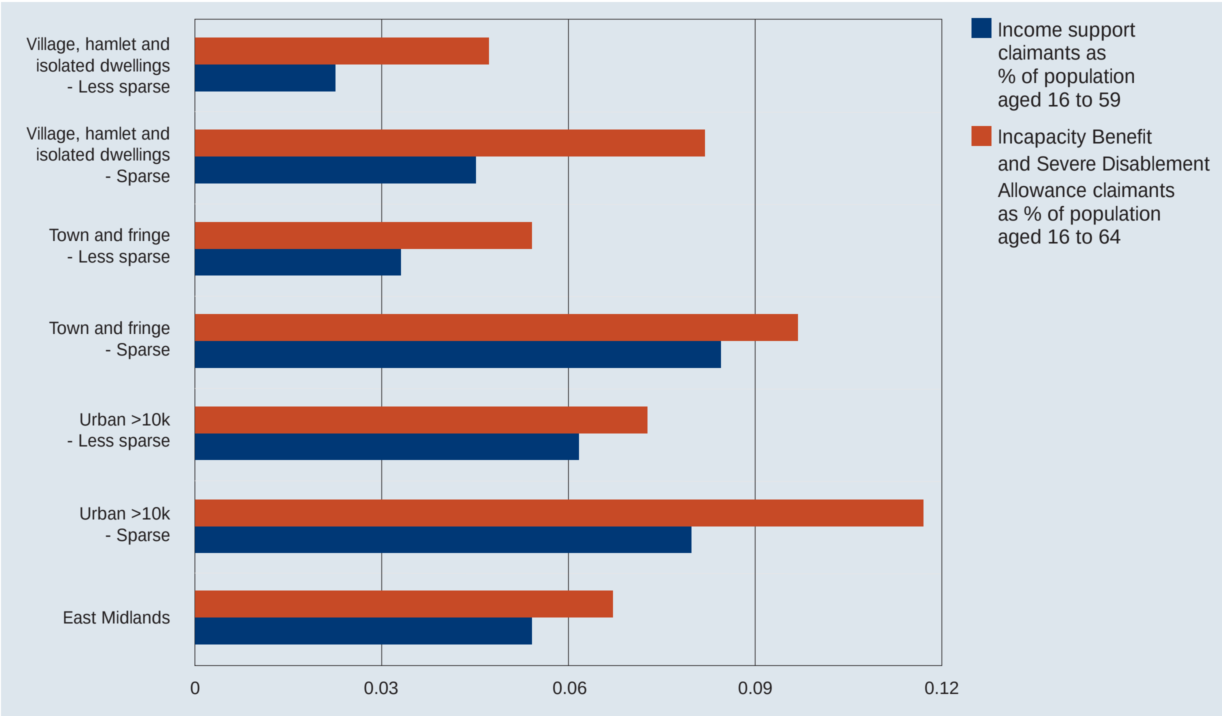
The pattern of deprivation suggested by the distribution of household income poverty is borne out by data on benefit claimants. A larger proportion of the population claim benefits in urban areas than in more rural settlements, and in all areas the percentages of claimants are higher in sparser settlements.

As Chart 17 shows:

- In all areas, the proportion of the working age population claiming Income Support is lower than the proportion receiving Incapacity Benefit (IB) and Severe Disablement Allowance (SDA). In urban areas an average of 7.5% of the working age population claim IB or SDA, compared to an average of 6.2% who claim Income Support.
- The proportion of the population claiming benefits tends to be lower in rural areas: 2.4% of the population in areas classified as village, hamlet and isolated dwelling claim Income Support, while 4.9% of the working age population receive IB and SDA in these areas.
- Benefits claimants represent a larger proportion of the working age population in sparse than in less sparse areas. In urban areas the proportion of Income Support claimants is 1.9 percentage points higher in sparse than in less sparse areas, and the proportion of IB and SDA claimants is 4.4 percentage points higher in sparse than in less sparse areas.

CHART 17

Working age population claiming Incapacity Benefit and Severe Disablement Allowance and Income Support, 2004.[62] (%)



Source: DWP, 2005.

[62] Income support claimants are calculated as a percentage of the population aged between 16 and 59 (as at the 2001 Census), while IB and SDA claimants are presented as a proportion of the population aged 16-64 (as at the 2001 Census).

There is little difference between urban and rural areas in the proportion of the pensionable age population claiming the state pension, as Table 16 shows. Between 90% and 93% of the population over 60 claim the pension in all areas except those classified as Urban >10K – Less sparse, where the proportion is slightly lower, at 88.5%.

TABLE 16

Population aged 60 and over claiming the state pension, 2004.

Area definition	All claimants as % of population aged 60+
Village, hamlet and isolated dwellings – Less sparse	92.2%
Village, hamlet and isolated dwellings – Sparse	91.6%
Town and fringe – Less sparse	92.7%
Town and fringe – Sparse	90.8%
Urban >10K – Less sparse	88.5%
Urban >10K – Sparse	93.2%
East Midlands	89.8%

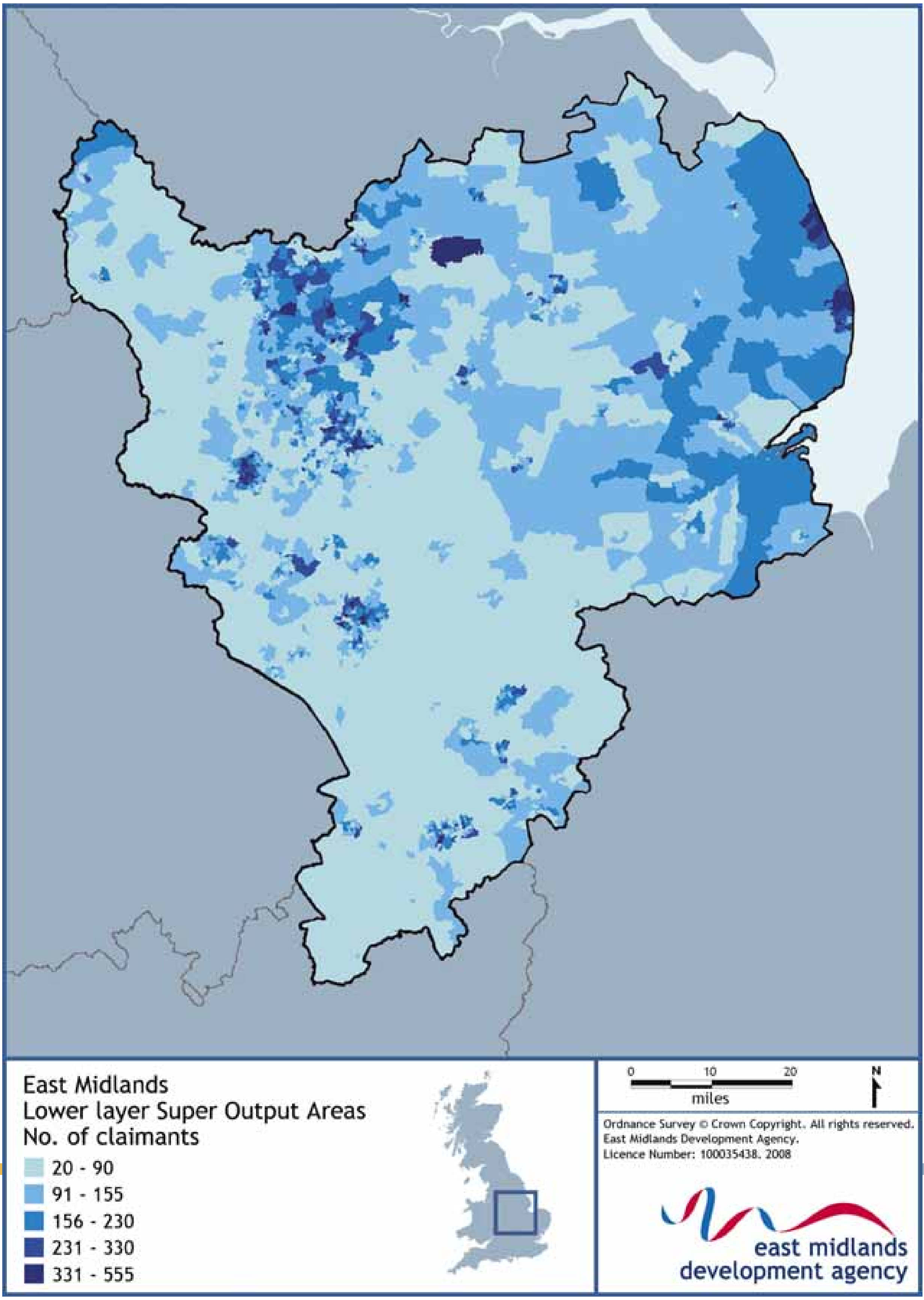
Source: DWP, 2005

A more detailed picture of the variations in working age benefit claimants across the region is provided in Map 11, which shows the number of people claiming key benefits in Lower Super Output Areas[63] in the East Midlands. The Department for Work and Pensions includes the following in its list of 'key benefits': Jobseeker's Allowance (JSA); Incapacity Benefit (IB); Severe Disablement Allowance (SDA); Disability Living Allowance (DLA); and Income Support (IS). As the map demonstrates, the areas with the highest number of benefit claimants correspond to the areas of greatest deprivation (shown on Map 10): the urban centres, the former coalfields, and the Lincolnshire coast. The lowest number of people claiming key benefits are found in west Derbyshire, eastern and southern Leicestershire and western and southern Northamptonshire.

[63] Super Output Areas (SOAs) are small geographic units created by the Office for National Statistics. They are designed to be of consistent size with fixed boundaries. SOAs are built from Output Areas, which are the smallest geographical units used for the 2001 Census. Disclosure requirements mean that some sets of data can be released for much smaller areas than others. To support a range of potential requirements, three layers of SOA were created. Lower Layer SOAs have a minimum population of 1000 and a mean population of 1500. They are built from groups of Output Areas (typically 4 to 6).

MAP 11

Number of people claiming key benefits, May 2006.



6.5 Crime

Rates of domestic burglaries and violent offences are about twice as high in urban districts as in rural (Chart 18). In 2004/05 there was an average of almost 30 burglaries per 1,000 households in Large Urban districts, and 20 per 1,000 in Other Urban districts. This compares to 10.4 per 1,000 households on average in rural areas, and 16.6 in the East Midlands as a whole. The rates of violent offences in Large Urban and Other Urban districts were 25.7 and 24.6 per 1,000 residents respectively, compared to 13.6 per 1,000 rural residents, and 18.7 per 1,000 for the East Midlands as a whole.[64] Map 12 shows the rates of domestic burglary in East Midlands districts.

- Rates of domestic burglary were highest in the urban centres and in the districts surrounding Nottingham, whilst they were lowest in the west of Derbyshire and in southern Lincolnshire. Nottingham City had by far the highest rate of domestic burglary of any local authority in the East Midlands, at 55.1 burglaries per 1,000 households.

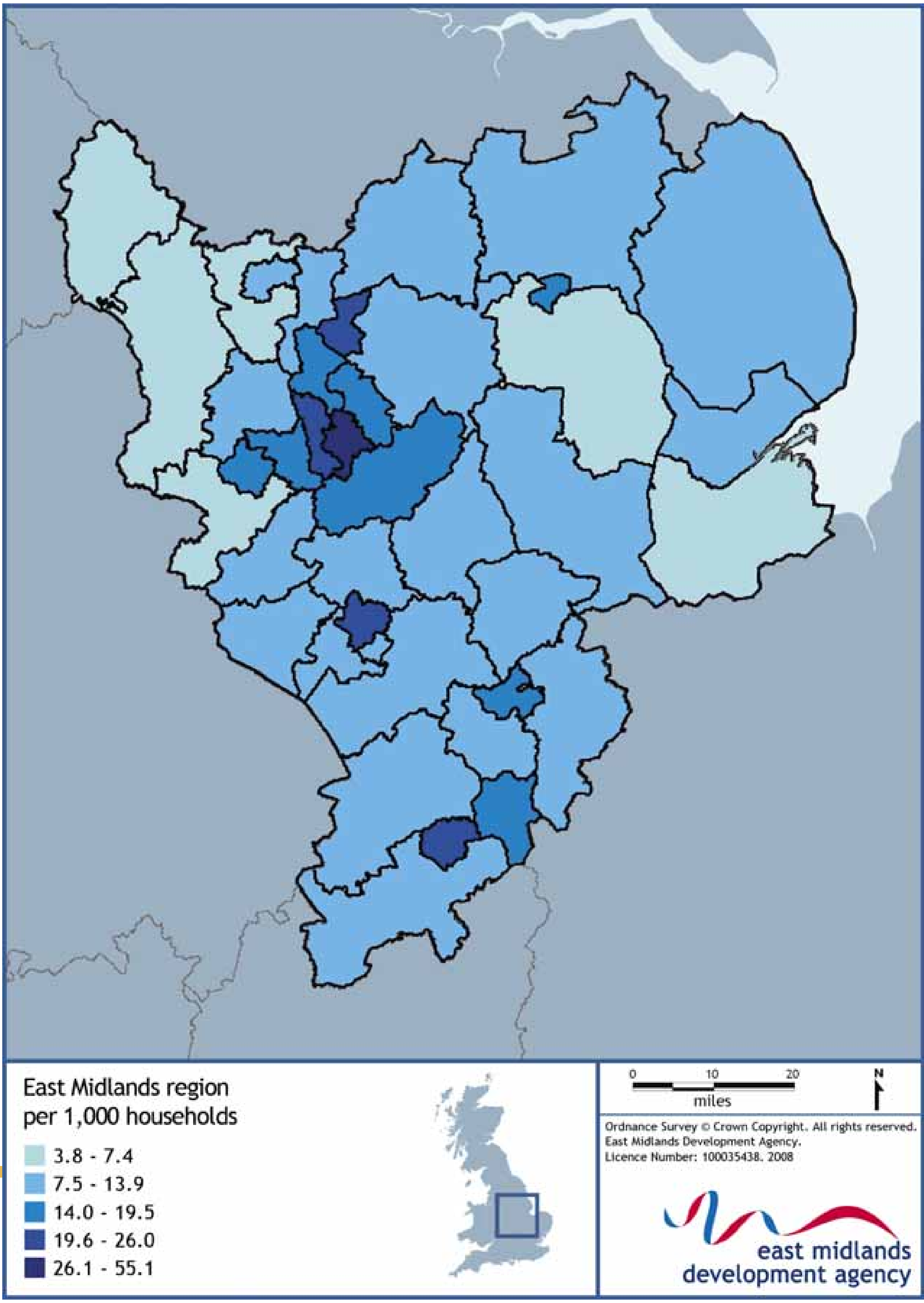
- The lowest rates of domestic burglary in urban districts were in the less deprived areas surrounding Leicester: in Oadby and Wigston there were 10.3 burglaries per 1,000 households and in Blaby 11.1.

- The PUAs of Nottingham and Northampton both have some of the highest rates of burglaries of any of the 56 PUAs in England. In 2005/06, there were 30.7 burglaries per 1,000 households in Nottingham PUA (second only to Hull) and 23.5 per 1,000 in Northampton. Mansfield and Leicester were both also in the top half of all PUAs on this measure.[65]

[64] Home Office Recorded Crime Statistics, 2004/05.
[65] State of the Cities Database, 2006.

MAP 12

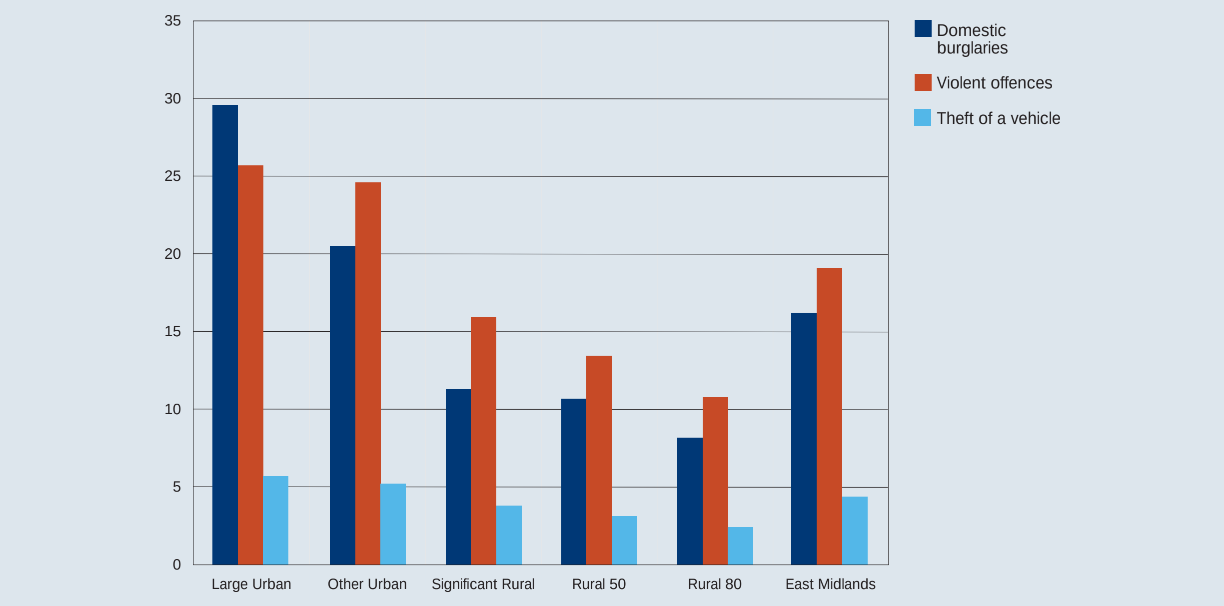
Domestic burglaries per 1,000 households, 2004/05.



Theft of a vehicle was a less common type of crime in both urban and rural areas, as Chart 18 shows. There was an average of 5.6 offences per 1,000 population in urban districts, compared to 3.1 per 1,000 in rural districts. The average for the East Midlands as a whole is 4.2.

CHART 18

Rates of domestic burglaries, violent offences and theft of a vehicle, by rural-urban classification, 2004/05.



Source: Home Office Recorded Crime Statistics, 2004/05

6.6 Community life

It is difficult to capture data on the nature, extent and perception of community activities in urban areas, mostly because of the paucity of official data at district or lower geographical levels. One source we can use is the Best Value General Survey, undertaken by the Department for Communities and Local Government which asks residents of every local authority district in England and Wales for their opinion on local services. These views are used as one way of assessing the performance of local authorities on community activities. The latest data available is drawn from the 2003/04 Survey. By definition this is a subjective survey and is by no means a definitive measure of the quality of local services. However, in the absence of other relevant data at this level the Survey provides a useful picture of the differences in levels of satisfaction with community activities across the region.

- Satisfaction with community activities is generally higher in rural areas than in urban. The proportion of residents who think that community activities have got better or stayed the same over the last three years were highest in Rushcliffe and South Northamptonshire, at 91.7% and 91.2% respectively. Satisfaction with community activities was lower in urban areas, ranging between 75.1% in Nottingham and 88.3% in Derby.

- There tends to be greater satisfaction with cultural activities in urban than in rural districts: the most satisfied citizens live in Chesterfield (95.8%), Mansfield (95.6%), Northampton (93.6%) and Derby (94.2%), whilst satifaction levels are lower in Bassetlaw (67.7%) and East Northamptonshire. This is likely to be a reflection of the greater range of cultural activities on offer in urban areas, because of their larger populations.

- There was no noticeable variation between urban and rural areas in satisfaction with sports and leisure facilities, although satisfaction was slightly greater in urban areas.

Spotlight on community cohesion

'Cohesive communities' is one of ten strategic priorities in the latest Regional Economic Strategy for the East Midlands. Whilst it is widely agreed that promoting community cohesion is important, there is debate as to what exactly is meant by the term. In the RES, the emphasis is on giving communities themselves the opportunity to promote cohesion and integration, by engaging in neighbourhood renewal, in order to improve economic and employment opportunities in their own areas. But what cohesion means for different communities in the East Midlands is dependent on the demography, social make-up and history of that community, as well as influences from new arrivals. Community cohesion is closely linked to integration, because it aims to build communities where people feel confident that they belong and are comfortable mixing and interacting with others, especially people from different racial backgrounds or different faiths.

The Government defines a cohesive community as one where:[66]

- The diversity of people's different backgrounds and circumstances are appreciated and positively valued;
- Those from different backgrounds have similar life opportunities;
- Strong and positive relationships are developed between people from different backgrounds and circumstances, in the workplace, in schools and within neighbourhoods.

One of the recent developments witnessed in urban areas (and the region as a whole) which has an impact on community cohesion is the arrival of migrant workers. As discussed in Chapter 3, the majority of overseas workers arriving in the East Midlands are concentrated in urban areas, even though the rate of increase in the numbers of new arrivals has been more marked in rural areas. The majority of these workers are young, single and temporary residents, but it is important to ensure that they are able to take an active part in their local community whilst they are resident in the East Midlands.

Recent studies of migrant workers have identified English language skills as crucial in enabling the integration of migrants into the local community and labour market. These skills are important for communicating and understanding instructions, especially where health and safety is a prime concern – such as in the construction industry. Many migrants also lack awareness of English culture (both within and beyond the workplace) which acts as a barrier to integration.

Multi-agency working is important in assisting the integration of migrant workers. Improving the publicity of services and training opportunities should be a particular priority, given the relatively poor knowledge amongst migrant workers of the services available to them.

Addressing tensions between migrants and the indigenous population is important. Information and activities are needed to help dispel myths and promote the facts about the role of migrants in the local economy and their use of local resources. The recent *emda*-commissioned study of migrant workers by the Institute for Employment Research demonstrated that migrant workers make an overwhelmingly positive contribution to the economy in the East Midlands.[67] The employment of migrants contributed 9.6% to regional GVA in 2005. The vast majority of migrants are in employment, with only negligible numbers claiming benefits. Migrants fill important skills and staff shortages, especially in industries that may be experiencing difficulties in recruiting to replace staff that retire or leave. Although migrants are more likely to work in low pay sectors, there is no evidence that the employment of migrants depresses wage growth. Moreover, regional unemployment rates have remained low and very stable despite significant increases in the workforce since the enlargement of the EU in 2004.[68] Anecdotally employers report the advantages of migrant workers as lower labour turnover and absenteeism, preparedness to work longer and more flexible hours, and a more favourable work ethic.

[66] Our Shared Future, Commission on integration and cohesion, June 2007.
[67] Institute for Employment Research, on behalf of *emda, Migrant workers in the East Midlands labour market* (November 2006).
[68] Institute for Employment Research, on behalf of *emda, Migrant workers in the East Midlands labour market* (November 2006).

Migrant communities, like others, are not homogenous social entities. There is no such thing as a ‘typical’ migrant. Therefore, approaches to encouraging integration of migrants into the local community need to be tailored to the specific needs and concerns of a particular group of migrants. At the same time, the degree to which migrants are able to integrate depends on the nature of the local community, including:

- the local socio-economic context;
- history of previous settlement and ethnic profile;
- actual and perceived ethnicity and identity of new immigrants;
- local media portrayals of immigration and the success of local agencies in mediating between established and incoming populations.

A number of factors are identified in the literature as being important to achieving community cohesion more generally, and there are numerous examples from the East Midlands’ urban areas of how these have operated successfully in practice. Firstly, it is important to encourage local people themselves to take an active part in developing a cohesive community. A successful example of this is the Leicester North West Regeneration Programme. Covering five estates, the programme ran from 1999 to 2005 and demonstrated how community cohesion can be achieved by bringing local people together through active involvement in the regeneration of their local area. The single biggest project was to work with local residents to transform the fabric of the Beaumont Leys estate to create a safe and more attractive environment. As a result, anti-social behaviour and crime decreased, and there is now a waiting list of tenants to move in to the estate.

The second point to note is that community cohesion is closely linked to economic growth. This growth not only promotes cohesive communities, but is itself built on the foundations of a cohesive society. An example of this is the Supporting Normanton project in Derby, being jointly delivered by a private developer, Jobcentre Plus, the LSC and Derby City Council. Normanton is an area of high unemployment situated next to the Eagle Centre shopping complex, which has been redeveloped and expanded. The project aims to help local residents develop the skills they need to get retail jobs that will arise from the shopping centre expansion. In other words, by involving residents in local regeneration, both economic activity and community cohesion can be boosted. It is important to remember, however, that a variety of factors – social, cultural and environmental, as well as economic – promote successful community cohesion.

If community cohesion is to be achieved, promoting social capital is important. Social capital describes the institutions, networks and relationships that characterise a thriving civil society – including community groups, cultural opportunities, sport and leisure clubs, faith organisations, local business networks, and youth groups. In other words, social capital acts as the ‘glue’ that binds different groups and networks of people together.

All communities have stocks of ‘bonding’ social capital (strong links between family, friends and neighbours). But the challenge is how to mobilise and transform this social capital to create new links between people in particular localities. This includes links between people of different backgrounds, as well as links between people whose circumstances are similar.

One example of how this can work in practice is in the Far Cotton area of Northampton, which suffers from multiple deprivation. The objective of the Far Cotton Community Resource Centre project, established in 2005, is to provide a learning and resource centre for the local community, at which a number of services are co-located. These include a library; access to learning, job opportunities and grants; health facilities; pre-school learning facilities; enterprise development and support activity; a theatre space; and ICT learning facilities. The presence of the community centre helps to promote social capital within the neighbourhood by encouraging community engagement in a variety of activities. For instance, all parts of the community have access to a wide range of lifelong learning opportunities, and the health of the community can be enhanced by the provision of sport and leisure facilities and a pharmacy.

As demonstrated here, there is a wide variety of approaches to achieving community cohesion. At the heart of the most successful projects is collaboration between agencies at local and regional level, between the public and private sector, and between policy-makers and practitioners 'on the ground'.

Key points: Deprivation and socio economic inclusion

- **The highest levels of multiple deprivation in the East Midlands can be found in the urban centres.**
- **Nottingham and Leicester are the two most deprived areas in the region.**
- **The highest number of benefit claimants are to be found in the region's urban centres.**
- **Levels of crime are also relatively high in the region's largest urban centres.**

7. Infrastructure and physical development

7.1 Land and development

Adequate land and property provision is a necessary condition for economic competitiveness. Well functioning and responsive markets for land will facilitate economic progress. At the same time, economic developments themselves lead to changes in the pattern of land and property use in regions and cities. For example, there has been a decline in demand for large scale manufacturing units in the East Midlands, and an increase in the number of units to support the growth of business services, leisure and entertainment.

7.1.1 Floorspace

Table 17 shows the floorspace occupied by retail, offices, factories and warehouses in the three largest cities in the East Midlands. By far the largest amount of floorspace is occupied by factories, with offices generally having the smallest floor area. Between 2004 and 2005 there was a small increase in retail floorspace in Leicester and Nottingham, but a decline in Derby (though the redevelopment of the Eagle Centre shopping complex in the city means that there is likely to have been an increase in retail floorspace more recently).

Following an increase in the amount of floorspace occupied by offices between 2000 and 2004, since then there has been a decline in the East Midlands as a whole. This is also the case for Leicester and Nottingham, although Derby has seen a slight increase in office floorspace. Activity in the office market has been muted recently, with the major urban centres having a shortage of new buildings. This shortage of space has prompted a shift to out of town developments.

TABLE 17

Floorspace occupation (1000m²), Three Cities and East Midlands, 2005 (2004 in brackets).

	Retail	Office	Factory	Warehouse
Derby	496 (568)	434 (422)	1,466 (1,487)	543 (470)
Leicester	714 (705)	576 (614)	2,078 (2,150)	1,015 (1,031)
Nottingham	768 (752)	843 (871)	1,125 (1,165)	1,033 (1,030)
East Midlands	7,516 (7,977)	5,125 (5,259)	24,334 (24,861)	16,048 (15,787)

Source: *East Midlands Regional Spatial Strategy Annual Monitoring Report, 2005/06*. East Midlands Regional Assembly, February 2007.

There has been a fall in the amount of floorspace occupied by factories in the three cities, as well as in the East Midlands as a whole. In 2005 the take-up of industrial space in Leicester and Derby was the lowest since 1998, and in Nottingham it was barely half its 1998 peak.[69] However, whilst the total floorspace occupied by factories has declined, the *number* of factory hereditaments[70] has increased in the East Midlands. This suggests that there has been a move away from larger to smaller premises.

There continues to be an increase in the amount of floorspace committed to warehousing in the East Midlands as a whole, particularly in Northamptonshire. The so-called ‘Golden Triangle’ of Northampton, Coventry and Leicester remains the main location for logistics firms.[71] There was also a noticeable increase in warehouse space in Derby between 2004 and 2005.

[69] *East Midlands Regional Spatial Strategy Annual Monitoring Report, 2005/06.* East Midlands Regional Assembly (February 2007).

[70] Hereditament is a legal term for any kind of property that can be inherited.

[71] *East Midlands Regional Spatial Strategy Annual Monitoring Report, 2005/06.* East Midlands Regional Assembly (February 2007).

7.1.2 Rentals

The demand for different types of floorspace across the East Midlands is partly reflected in the differences in rentals earned by different types of property. Information on rentals for industry, shops and offices in major urban areas comes from the Valuation Office Agency. Industry information is provided for five types of industrial building:

- Type 1 Small starter units 25-75 m^2
- Type 2 Nursery units 150-200 m^2
- Type 3 Industrial / warehouse units circa 500 m^2
- Type 4 Industrial / warehouse units circa 1,000 m^2
- Type 5 Converted ex-mill units

TABLE 18

Rental values for industry in the East Midlands (£ per m^2 per annum), July 2006 (July 2003 in brackets).

	Type 1	Type 2	Type 3	Type 4	Type 5
Lincoln	53 (43)	47(38)	42 (28)	40 (27)	N/A
Nottingham	68 (65)	60 (58)	50 (50)	48 (48)	20 (20)
Derby	75 (65)	69 (63)	64 (48)	48 (40)	N/A
Leicester	66 (60)	66 (60)	56 (40)	54 (40)	N/A
Northampton	85 (78)	85 (78)	55 (53)	50 (53)	N/A

Source: Valuation Office Agency Property Reports.

Table 18 shows the rental per square metre in July 2006 for the major urban areas in the East Midlands, with the rentals per square metre for July 2003 in brackets. Rentals have increased on all types of industrial building in each of the urban areas, with the exception of Nottingham, where rental values have stagnated for the larger units (Types 3, 4 and 5).

Table 19 shows rental values per square metre per annum for three types of retail premises in the East Midlands' major urban areas:

- Type 1 Prime position in principal shopping centre
- Type 2 Good secondary off-peak position in principal shopping centre
- Type 3 Modern, purpose built, non-food warehouse unit, circa 2,500 m^2 – 5000 m^2. Edge of town location with car parking.

TABLE 19

Rental value for retail premises in the East Midlands' major cities (£ per m^2 per annum), July 2006 (July 2003 in brackets).

	Type 1	Type 2	Type 3
Lincoln	1,500 (1,300)	600 (500)	200 (100)
Nottingham	2,600 (2,300)	1,100 (800)	300 (300)
Derby	1,700 (1,600)	900 (700)	200 (200)
Leicester	2,000 (2,000)	900 (900)	200 (100)
Northampton	1,400 (1,400)	800 (900)	300 (200)

Source: Valuation Office Agency Property Reports

Rental values for retail are significantly higher than for industry. Within the retail sector, rentals for outlets in prime positions in principal shopping centres are at least twice as high as the values for outlets in good secondary off peak positions, and about 10 times as high as the values for edge of town warehouse units. Rental values are highest in Nottingham in all three location classes, and are lowest in Lincoln (for Types 2 and 3) and Northampton (for Type 1).

Rentals for retail outlets in principal shopping centres (Types 1 and 2) have increased in Lincoln, Nottingham and Derby since 2003 (most markedly in Nottingham), whilst remaining the same or declining in Leicester and Northampton. Stagnating rents tend to be associated with a small number of new entrants to the retail sector.

Office rental values for the East Midlands' major urban areas are shown in Table 20. The different types of offices are as follows:

Type 1 Town centre location, self-contained suite over 1,000 m^2 in office block erected in last 10 years.

Type 2 As Type 1, but suite in range of 150 m^2 – 400 m^2

Type 3 Converted former house usually just off town centre, 50-150 m^2

TABLE 20

Rental value for offices in the East Midlands' major cities (£ per m^2 per annum), July 2006 (July 2003 in brackets).

	Type 1	Type 2	Type 3
Lincoln	105 (70)	120 (75)	85 (70)
Nottingham	145 (140)	155 (155)	105 (100)
Derby	95 (83)	105 (95)	110 (105)
Leicester	145 (140)	100 (100)	105 (100)
Northampton	140 (160)	135 (118)	150 (135)

Source: Valuation Office Agency Property Reports

Rental values for large city centre office accommodation have increased since 2003, due to shortage of space in city centres. Rents in offices away from town centres (Type 3) have also increased in recent years, as businesses have shifted away from the very centre of cities where space is at a premium. Rents in town centre offices are highest in Nottingham, but the increase in rent since 2003 has not been as great as in other urban centres in the region.

7.1.3 Employment land

Ensuring an adequate supply of quality employment land is crucial to successful economic development. The amount of employment land available in urban centres tends to be smaller than in rural areas, given the much higher population densities in towns and cities. Derby's employment land supply is currently healthy and is meeting its requirement to meet different market needs. The amount of land developed for employment uses is higher in Derby than in Leicester or Nottingham, and the amount of employment land under construction is by far the highest of the three cities. Derby also has a very large area of committed employment land relative to the other two cities. (Table 21). Current employment land sites under development in Nottingham include Nottingham Business Park and expansion at the Boots site.

TABLE 21

Employment land completed and under construction (2005/06) and committed (2006).

	Completed employment land 2005/06 (ha)	Employment land under construction, 2005/06 (ha)	Employment land commitments, 2006 (ha)
Derby	5.9	25.5	250.7
Leicester	2.0	2.7	47.7
Nottingham	3.1	N/K	89.4
East Midlands	264.9	199.9	3085.7

Source: *East Midlands Regional Spatial Strategy Annual Monitoring Report, 2005/06* – East Midlands Regional Assembly, February 2007.

Spotlight on public realm

The public realm has been identified as a priority through the work of the East Midlands Rural Affairs Forum (EMRAF) and the Urban Partnership Group (UPG).[72]

Public realm is considered an essential element in attracting private sector investment. Evidence suggests it can regenerate specific locations; encourage increased footfall and business location decisions. It is felt to play an important role in enhancing civic pride and the image or perceptions of town or city centres, and can have positive impacts on environmental and quality of life measures. High quality city destinations require high quality urban parks, green spaces and corridors – as evidenced by leading city destinations across the globe. A recent 'satisfaction study' in Leicestershire market towns identified public realm as being key to resident and visitor satisfaction.

To deliver quality public realm for the East Midlands there is a need to provide evidence of the economic impact of public realm. To this end in March 2007 *emda* commissioned a study[73] into the economic impact and benefits of the public realm which will provide a framework and rationale for influencing funding and investment decisions by public and private sector organisations.

It is widely recognised that the public realm is very difficult to define – in 2004, consultation with local authority representatives revealed that the vast majority did not have an operational definition of public spaces that went much beyond parks[74]. However, the following definition was coined by the Bartlett School of Planning in 2004 and was adopted by the Office of the Deputy Prime Minister (ODPM) in its 'Caring for Quality' report:

'Public space relates to all those parts of the built and natural environment where the public has free access. It encompasses: all the streets, squares, and other rights of way, whether predominantly in residential, commercial or community/civic uses; the open spaces and parks; and the public/private' spaces where public access is unrestricted (at least during daylight hours). It includes the interfaces with key internal and external and private spaces to which the public normally has free access.'[75]

It has been argued that at one time the United Kingdom (UK) was trailing behind the rest of Europe in respect of awareness of the potential benefits of a good public realm but that a change in policy focus and a greater recognition of the value of the public realm now means that the UK has *"become street wise and now provides the most exciting opportunities in the field of public realm improvements"*[76]. A range of factors impact on the quality of the public realm:

- public versus private management;
- a fragmented approach to management;
- financing the public realm;
- demands on the public realm;
- traffic and ease of movement;
- crime and safety;
- an integrated space;
- local distinctiveness; and
- engagement.[77]

[72] *East Midlands Urban Action Plan 2005-2011*, 2005, Urban Partnership Group (UPG).
[73] *Economic Impact of the Public Realm*, ECOTEC.
[74] *Living Places: Caring For Quality*, 2004, ODPM.
[75] The Bartlett School of Planning, 2004.
[76] *Designing for the Public Realm* – in Architects Journal Specification Supplement, 2006, Hooftman E.
[77] *Economic Impact of the Public Realm, Phase 1 report*, ECOTEC, June 2007.

7.2 Housing

From an economic development perspective, access to high quality housing and the creation of balanced housing markets are crucial to enhancing regional competitiveness, promoting social inclusion and supporting sustainable communities. The Treasury commissioned Barker Review of Housing Supply reviewed the issues underlying the lack of supply and responsiveness of the UK housing market, and the interaction of the house building industry with the planning system and government sustainability targets.

The Barker report showed that house price inflation has made home ownership increasingly unaffordable for many groups in the population, particularly first-time buyers, with knock-on impacts on rent levels in the private sector and on demand for social housing. The report recommended significant increases in private and social house building in order to reduce the trend in house prices and cope with the flow of new households. Failure to address these issues will result in increasing social problems and hamper economic performance.

7.2.1 Housing tenure

Over recent years, in line with national trends, there has been a change in the tenure balance of housing in the East Midlands, with a growth in owner occupation and decline in local authority ownership. The proportion of residences in the region that were owner occupied increased from 70% in 1991 to 75% in 2004, whilst the proportion of housing stock that was privately rented declined from 9% to 8%. Social rented housing declined from 21% of all stock to 17% over the same period, with an increase to 5% in stock rented from registered social landlords[78] and a decrease to 12% in council housing to rent from local authorities.

In 2005, a total of 14,394 new permanent dwellings were completed in the East Midlands. Of these, one third (4,688) were built in urban districts. As Table 22 shows, the vast majority of new houses, in both urban and rural areas, were built through private enterprise. In Other Urban districts, for example, 97% of homes were privately built, while the figure was 94% in Large Urban districts. For comparison, 89% of new homes in England as a whole were built by private enterprise in 2005. There was little difference between urban and rural areas in the proportion of houses built by social landlords, though in England the proportion tends to be higher in urban areas. The largest proportion of homes built by social landlords (6%) was in Large Urban districts.

TABLE 22

Permanent dwellings completed by tenure type and district classification, 2005.

Area definition	Private enterprise	Social landlords [79]	Local authorities	Total
Rural 80	4,147	315	17	4,479
Rural 50	2,637	57	4	2,698
Significant Rural	2,427	102	-	2,529
Other Urban	2,812	81	-	2,893
Large Urban	1,679	116	-	1,795
East Midlands	13,702	671	21	14,394
England	131,039	15,975	100	147,114

Source: CLG, Housing Completions, 2005.

[78] Registered social landlord (RSL) was a term introduced by the 1996 Housing Act, applying to housing associations registered with the Housing Corporation. RSLs have access to the Social Housing Grant which allocates public funding for the capital costs of providing housing.
[79] Often referred to as Housing Associations.

7.2.2 Housing affordability

House prices increased dramatically in both urban and rural areas of the East Midlands between 2000 and 2005, as Table 23 shows:

- House prices more than doubled in all settlement classes except less sparse villages and hamlets. In the East Midlands as a whole, average prices increased by 100.7% in this period, from £70,464 in 2000 to £153,286 in 2005.
- The lowest house prices in the region are found in urban areas, averaging around £136,000 in 2005. This means that the average price of a house in rural areas of around £190,000 is significantly higher than the average price for urban homes. House prices are lower in the sparse Urban and Town and Fringe areas than in the less sparse.
- The rate of increase in house prices between 2000 and 2005 was higher in Sparse Urban areas than in Less Sparse (123% compared to 110%).

TABLE 23

Average house prices, 2000-2005. (£)

Area definition	2000	2001	2002	2003	2004	2005	% increase 2000-05
Hamlet and isolated dwellings - Less sparse	127,507	147,672	177,131	214,297	241,741	252,039	97.7
Hamlet and isolated dwellings - Sparse	80,345	101,791	109,861	149,985	183,918	169,532	111.0
Village - Less sparse	125,398	137,948	164,666	202,745	223,262	237,899	89.7
Village - Sparse	80,856	89,018	120,624	143,406	166,945	187,673	132.1
Town and fringe - Less sparse	81,537	89,592	108,626	133,792	155,824	164,195	101.4
Town and fringe - Sparse	54,564	60,121	76,498	93,723	115,717	125,721	130.4
Urban >10K - Less sparse	64,925	72,495	88,204	111,070	129,257	136,503	110.2
Urban >10K - Sparse	61,341	69,671	80,225	106,227	128,624	136,827	123.1

Source: HM Land Registry, House Prices, analysis by Commission for Rural Communities, 2006.

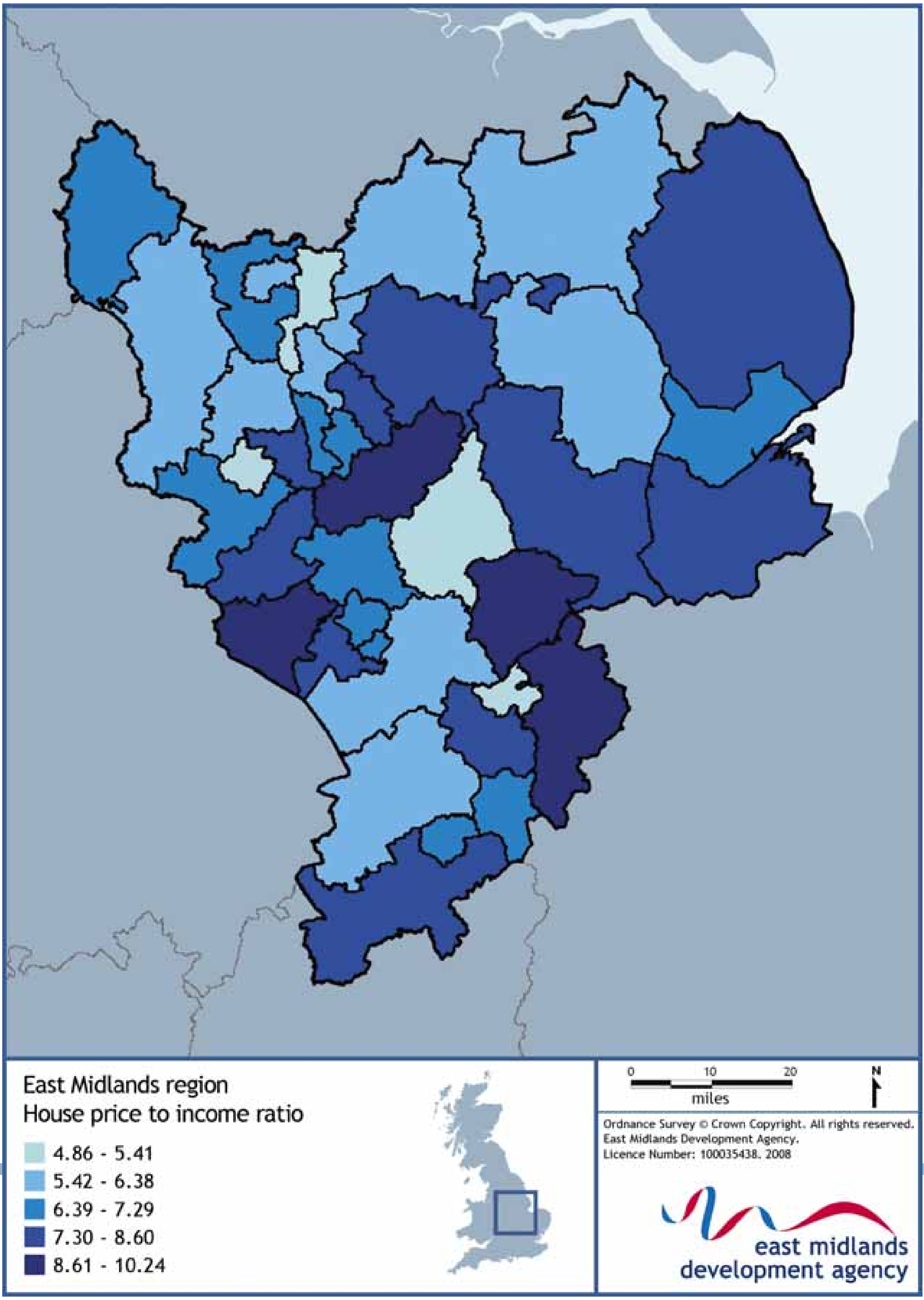
A way of measuring the relative affordability of housing in different areas of the region is to calculate the ratio of house price to income. There are different methods of calculating the ratio; the data displayed in Map 13 is drawn from CLG's Housing Statistics, calculated using lower quartile house prices and lower quartile individual income.[80] Higher ratios indicate that houses are less affordable. As Map 13 shows:

- The house price to income ratio tends to be lower in urban districts than in rural, averaging 6.69 in the East Midlands.
- The urban areas with the lowest ratio of house price to individual income – and hence the most affordable house prices – are Derby (5.0), Nottingham (5.2) and Mansfield (5.4).
- The least affordable houses are in Blaby, where the house price to income ratio is 7.8, Oadby and Wigston (7.3) and Northampton (7.2). In the East Midlands as a whole, the least affordable houses are in the rural district of Derbyshire Dales, where the ratio of lower quartile house price to lower quartile individual income is 10.2.

[80] Note that in the RES Evidence Base the calculation is based on average house prices (from HM Land Registry) and average income (from the Annual Survey of Hours and Earnings) and is mapped by Housing Market Area rather than by district. The figures in that document are therefore not directly comparable with the data presented here.

MAP 13

Ratio of lower quartile house price to lower quartile individual income by district, 2006.



Given that house prices have been rising rapidly and the growth in incomes is not keeping pace in many parts of the region, the government has recognised the need to provide more affordable housing. New affordable housing provided by housing associations is funded through a mix of grant from the Housing Corporation and borrowing through private finance. Funds are allocated sub-regionally according to local need, with priority areas including projects that contribute to the wider regeneration of city centres. Map 14 illustrates the wide variation in the proportion of new houses classified as affordable across the districts of the East Midlands.

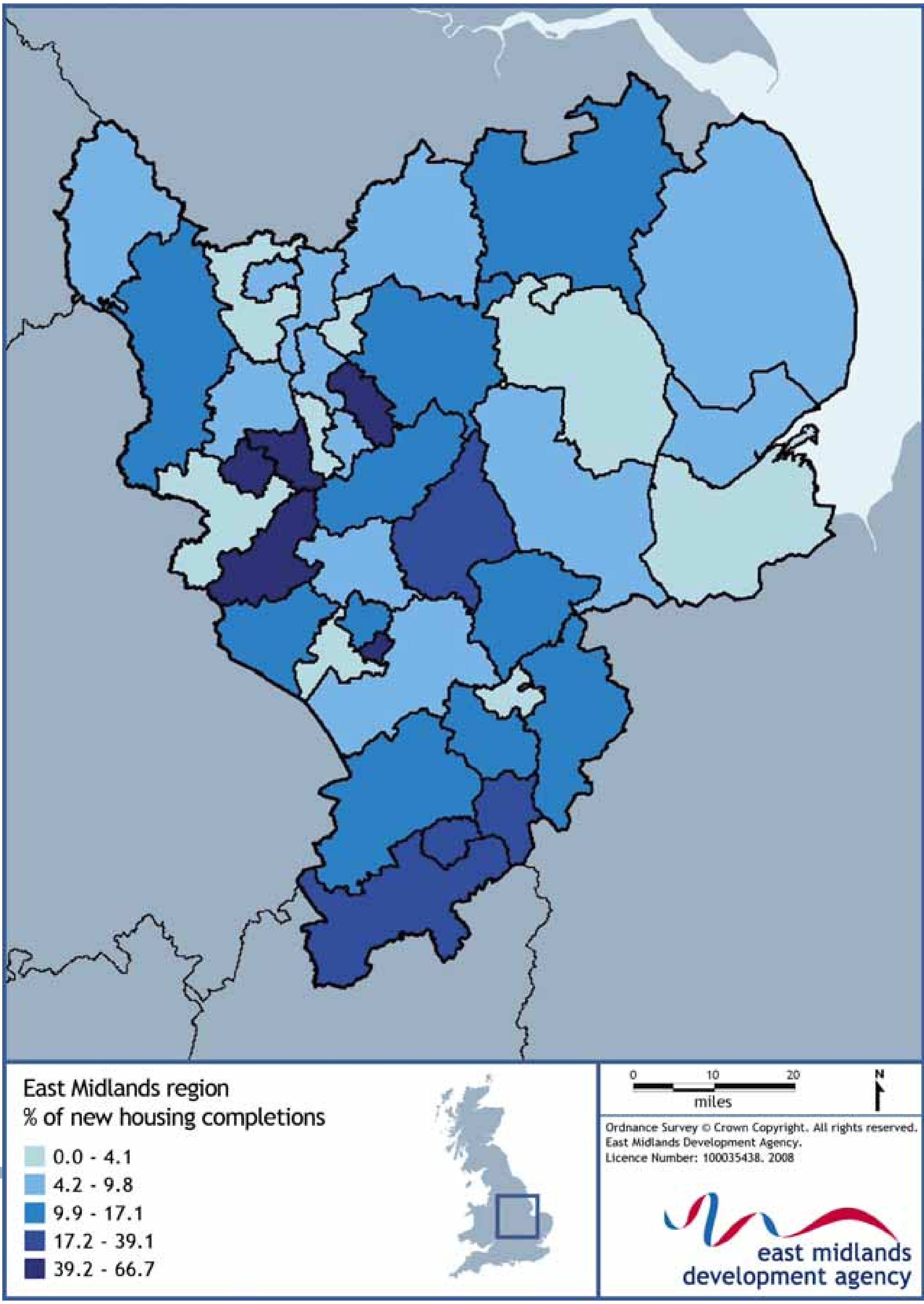
- Affordable homes make up a larger proportion of new dwellings in the region's largest cities, and in parts of north Leicestershire and south Northamptonshire. The highest proportion in urban areas in 2004/05 was in Oadby and Wigston, where two thirds (66.2%) of new homes were classed as affordable. More than half of all new homes in Gedling, Nottingham and Derby were classed as affordable in 2004/05.
- Much lower proportions of affordable homes (less than 12% of all new homes) were built in Lincolnshire and parts of north Nottinghamshire and north Derbyshire. Within urban districts, there were no affordable homes built in Broxtowe, Derby and Mansfield in 2004/05, and the proportion of new affordable homes was just 1.3% in Lincoln and 1.9% in Blaby.

In 2006-08, the number of new affordable homes built in the East Midlands as a whole is expected to increase to 5,300, consisting of a mix of affordable housing to rent with approximately 25% for low cost home ownership.[81]

[81] Housing Corporation, Announcement of National Investment Programme, March 2006.

MAP 14

Affordable dwellings as a percentage of all new housing completions 2004/5. (%)



7.2.3 Homelessness

Homelessness tends to be more prevalent in urban than in rural areas, as might be expected given that those who are homeless tend to gravitate towards towns and cities where there are more services available for them. On average, the number of households defined as homeless and in priority need in urban districts was 4.8 per 1,000 households in 2005/06, whilst the figure for rural districts was 2.7 per 1,000 households. The highest level was in Nottingham, where 10 in every 1,000 households were homeless, whilst the smallest number of homeless households was recorded in Harborough – just 0.6 per 1,000 households.[82] Homeless households were also less prevalent in parts of Lincolnshire and in south Northamptonshire. Since 2005, increased funding to local authorities to address the causes of homelessness, including working more closely with private landlords and voluntary agencies, has led to reductions in homeless acceptances and in the use of temporary accommodation in the East Midlands.[83]

Spotlight on New Growth Points

The Government confirmed 29 New Growth Points in October 2006, including four Growth Points in the East Midlands – 3 Cities & 3 Counties, Grantham, Lincoln and Newark. The proposals will deliver a substantial number of new homes and related economic growth. Taken together these locations aim to deliver around 100,000 more homes over the 10 years from 2006-2016 than in plans in existence in 2003, when the Sustainable Communities Plan was published. The initiative intends to take forward the Government's growth agenda outside of the South East and the already established 'growth areas', such as Milton Keynes South Midlands, which includes Northamptonshire.

The New Growth Points will share in start up funding to support infrastructure, unlock sites for new housing and to assess and mitigate environmental impacts. The initiative is a crucial part of delivering an increase in house building in England in response to the Barker review of housing supply. The Barker review found that over the last 30 years house building rates have halved whereas over the same period demand for new homes has increased by a third.

The table below shows the housing figures relating to the Growth Points in the region:

TABLE 24

East Midlands Growth Points Housing Numbers.

New Growth Point – East Midlands	Total number of homes proposed by New Growth Point 2006 - 2016
'3 Cities & 3 Counties' – Derby, Leicester and Nottingham	81,500
Grantham	6,300
Lincoln	16,500
Newark on Trent	5,000
Totals East Midlands	**109,300**

Source: Communities and Local Government

New Growth Points will help to concentrate future growth at existing urban centres and present a significant opportunity for the new communities to become exemplars of sustainability.

The 3 Cities & 3 Counties is the largest and most complex of the 29 New Growth Points in England. It aims to deliver some 81,500 new homes in the period 2006-2016, and the same again in the period 2016-2026. The 3 Cities & 3 Counties Growth Point is also working to deliver the largest additional housing growth of all the Growth Points (25% of the national total).

The region's other Growth Points are focused on Lincoln, Grantham, and Newark and the table above shows the number of additional homes to be provided via the Growth Points – these figures are in addition to those homes already planned for via Local and Regional Planning policy.

[82] DCLG Housing Statistics, 2006.
[83] CLG, P1E Homelessness Statistics, 2005.

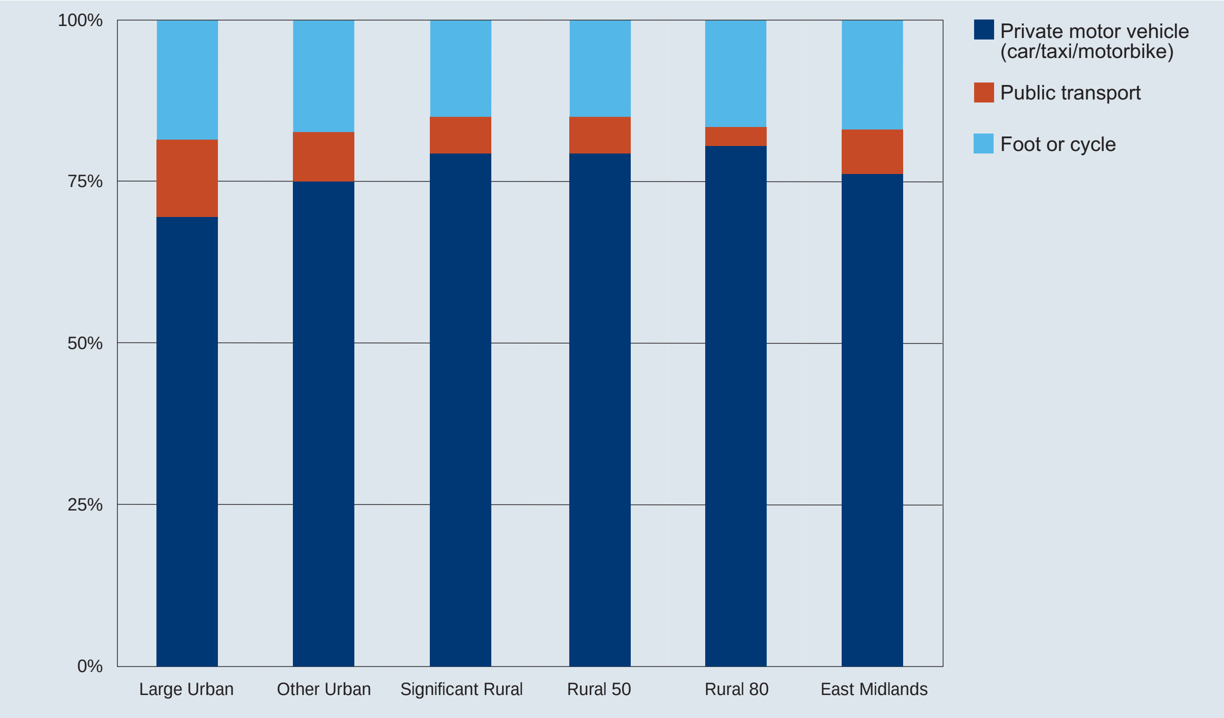
7.3 Transport

Transport and accessibility are major issues for the region as a whole but particularly so in the region's urban areas. Accessibility and connectivity are important to economic, social and environmental agendas, and are key elements of creating sustainable and attractive urban areas.[84]

Data from the National Travel Survey reveals that the East Midlands has been experiencing higher than average road traffic growth and relies more on private travel (the car) than other regions. It also shows that compared to England as a whole, East Midlands residents tend to travel further by private transport than public transport. Many of the trends may in part be explained by the geographic configuration of the region and the dispersal of housing and employment centres. In particular, travel behaviour and patterns can be seen as a function of the structure of the region's urban network and the proportion of the population living in rural areas.[85]

CHART 19

Resident population who travel to work by different types of vehicles, 2001. (%)



Source: Census 2001.

Work and business related journeys account for less than 20% of all trips undertaken in the East Midlands. The largest proportion of trips was for non-business purposes such as shopping, leisure journeys, and taking children to school. This is interesting in the context of the common assumption that it is commuting that creates the most travel movements. However, an important point not reflected in these figures is that many business or commuting trips are focused on the morning or evening peak times, and so can play a more significant role in creating congestion and many of the costs or disbenefits associated with travel.[86] Chart 19 shows that use of private motor vehicle in the urban areas is lower than in rural areas, with a correspondingly greater use of public transport and travel by foot or cycle in the urban areas.

[84] Page 47, *East Midlands Urban Action Plan 2005-2011*.
[85] Page 218, *The East Midlands in 2006: Evidence Base for the East Midlands Regional Economic Strategy, 2006-2020*.
[86] Page 220, *The East Midlands in 2006: Evidence Base for the East Midlands Regional Economic Strategy, 2006-2020*.

Over the decade between 1994/95 and 2004/05 the number of bus and light rail journeys in the East Midlands fell from 208 million to 203 million journeys, a decline of 2.4%, although there was a small increase between 1994/5 and 2000. This suggests that car use has been increasing in importance in the East Midlands.

The only light rail system operating in the East Midlands is the Nottingham tram (NET), which currently consists of one line and is proving successful in terms of patronage figures. In the first year 8.4 million trips were made against a target of between 7.5 and 8 million. In year 2 (which ended in March 2006) 9.7 million trips have been made.[87] NET Phase Two is the collective term for the project to build extensions to Line One of NET. The Project is managed jointly by the promoters of NET – the City Council and County Council. There are two extensions currently in development.[88]

However, the East Midlands has experienced the second largest increase in heavy rail patronage of any English region. Rail patronage in 2004/2005 increased by 60% from the 1995/1996 level, compared to 38% in England as a whole.[89]

In addition to the movement of people, the other key transport movements for the regional economy are of freight – both materials and parts for processing or production (inputs) and finished products or components to market (outputs). The East Midlands (and Midlands generally) is an attractive location for distribution activity, and there is an above average number of key national and regional distribution centres in the region. This has both transport and land-use implications, and can create additional congestion on the region's roads.[90]

Besides land based transport, the other major transport mode for transferring people and freight in the East Midlands is air transport. Passenger traffic at East Midlands Airport (EMA) between 1994 and 2004 increased by 175%, from 1.6 million to 4.4 million. This was one of the largest percentage increases of any region. There has been a particularly large increase in freight handled at EMA. It now handles four and a half times the amount in 1994 (from 55.1 thousand tonnes lifted in 1994 to 253.1 thousand tonnes lifted in 2004), with its share of total air freight in England increasing from 3.6% to 11.2%.[91]

As part of EMA's continued growth, the opportunity for non-operational airport related activities to be developed off-site, within the broader Three Cities sub-area will reduce the need for employees from urban areas to travel to the Airport site.

In May 2004 EMA, Nottingham City Council and *emda* with the support of the Three Cities Collaborative Group established a pilot bus service between Nottingham and EMA named 'Skylink'. Its key objective was to improve sustainable accessibility to the airport complex for existing and new employees whilst at the same time capturing business travellers and tourists. Its aim was to become fully commercial after five years of operation and current numbers are extremely positive. Leicester Skylink service was launched in October 2006, and is showing steady growth in its first year of operation, now serving over 1,000 passengers a week and with similar growth to the first year of the Nottingham Skylink. Derby and Loughborough Airline Shuttle has carried half a million passengers since it began its enhanced operating schedule in July 2005.

The construction of a new parkway station has begun in 2007. It is anticipated to open in December 2008. The station is intended to act as a Parkway facility for London travellers, a park and ride access to Derby, Nottingham and Leicester and to improve public transport access to East Midlands Airport.

Spotlight on congestion

Most congestion occurs in urban areas and on strategic long-distance routes in the vicinity of urban areas. It is worst during the morning and afternoon peaks. Although congestion is often connected with travel to and from work, other causes include travel to and from school, as well as holiday traffic on certain routes at certain times, and the effects of accidents.

The RES draws attention to the growth in road traffic and the potential implications for the efficiency and reliability of the region's road networks. In order to better understand the impact of this growth in December 2006 *emda* commissioned a report on the subject, *Economic Costs of Congestion in the East Midlands*. It is intended that the study will be of interest to, and used by, a range of partners to help inform ongoing regional and sub-regional debate and policy development work relating to the issues of congestion and demand management in the region. This is expected to include, but not be limited to, the Congestion Transport Innovation Fund (TIF) project being undertaken in the Three Cities sub-area.

[87] Page 223, *The East Midlands in 2006: Evidence Base for the East Midlands Regional Economic Strategy, 2006-2020*.
[88] Nottingham Express Transit Phase 2 Development, November 2007, **http://www.netphasetwo.com/**
[89] Pages 223-224, *The East Midlands in 2006: Evidence Base for the East Midlands Regional Economic Strategy, 2006-2020*.
[90] Page 229, *The East Midlands in 2006: Evidence Base for the East Midlands Regional Economic Strategy, 2006-2020*.
[91] Pages 230-231, *The East Midlands in 2006: Evidence Base for the East Midlands Regional Economic Strategy, 2006-2020*.

The study sits in the context of a clear regional policy, captured in the Regional Spatial Strategy (RSS) and more recently in the current RES, to promote behavioural change and manage demand and the need to travel.

While it is understood that the issues relating to congestion are complex, with implications for a range of policy themes and agendas, it is important to note that the objective of this study was to approach this issue from an economic perspective. The study has, for instance, not considered the environmental impacts of congestion (and the potential resultant indirect economic costs, or lost opportunities). However, it is important to note that these impacts would represent additional 'costs' of congestion to the region, and so in focusing on the economic perspective this study gives just a partial picture.

Analyses were undertaken for both the strategic (motorway and trunk road) network and for urban areas in the region.

In the case of the local authority road networks, within the urban areas, it was found that:

- The total delays are, by a considerable margin, highest in the two largest urban areas of Greater Nottingham and Central Leicestershire;
- Delays appear to be lower but still significant in Derby and Northampton;
- Lincoln has the lowest levels of total delay, by a large margin, of the five PUAs. This reflects its small relative size and comparably low levels of congestion;
- Congestion in Mansfield, which is of a similar size to Loughborough, is only a quarter of that of the latter; and
- Congestion in the smaller towns is much less than the larger towns.

Congestion data is not currently available for a large number of urban centres, including some large towns such as Chesterfield. It was therefore necessary to make a series of estimates and assumptions in calculating the potential economic costs of congestion for these centres.

On the basis of the available data, it is estimated that the total direct costs of congestion are around £825 million per annum, which comprise around £430 million incurred by business users and £395 million incurred by other users. In addition, it is estimated that the wider economic impacts of congestion (including competition, agglomeration and labour market effects) total around £110 million per year. In total, it is therefore estimated that congestion costs the East Midlands economy around £935 million per annum.[92]

The wider economic impacts appear, in general, to be modest, and are primarily due to competition effects and agglomeration diseconomies in the larger urban centres. The analyses suggest that congestion has no impact on overall participation in the labour market of the region.

The economic costs of congestion were then compared to the economic outputs of the region. Overall, across the whole region, congestion is estimated to result in costs of around 0.7% of annual GVA, with an economic cost of around £270 per employee in GVA terms.

The economic costs are highest in the Three Cities sub-area, at 0.7% of GVA, and lowest in the Northern, Eastern and Peak sub-areas, exerting costs equivalent to only 0.1-0.2% of annual GVA. It is important to recognise that, in the latter cases, this congestion would be focused on particular hotspot areas, generally in urban areas such as Lincoln and Chesterfield.

Road traffic in the East Midlands is increasing – between 1994 and 2004 traffic on major roads increased faster than in any other region[93] – and the costs of congestion can therefore be expected to increase unless these trends are altered. There is therefore a strong economic case to continue to pursue measures to tackle congestion in the region.

[92] For more information, see Atkins, *Economic Costs of Congestion in the East Midlands*, June 2007.
[93] Chart 2, Page 219, *The East Midlands in 2006: Evidence Base for the East Midlands Regional Economic Strategy, 2006-2020*.

Key points: Infrastructure and physical development

- **There is an ongoing increase in the amount of warehouse space in the region, particularly around the urban centres to the south.**
- **Rental values for city centre office accommodation have increased since 2003.**
- **In the residential property market, the average house price in the urban areas of the region was around £137,000 in 2005, significantly below the regional average of £155,000.**
- **The use of private cars is lower in urban areas of the region, and use of public transport correspondingly greater than in rural areas.**

8. Environment and quality of life

This section of the analysis focuses on some of the relationships that exist between economic development and the environment, looking at the way the environment is both affected by and affects economic growth and society. The environment acts as a source of inputs for economic activity (raw materials and fuels for example), and a sink for some of the outputs (such as waste and air emissions). Environmental hazards such as flooding can constrain economic growth in some areas, while the environment also provides amenities that contribute to individuals' quality of life.

8.1 Climate change

It is now without doubt that average global atmospheric and sea surface temperatures are rising. Average annual temperatures in central England have risen by almost 1°C over the last 100 years, with the three warmest years on record all occurring since 1998. Greenhouse gas emissions, a major contributor to climate change, have been reduced since 1993 in a number of Western European countries, including the UK. Despite this, forecasts from Defra indicate that annual temperatures averaged across the UK may rise by between 2 and 3.5°C by the 2080s, with winters becoming wetter and summers drier, while sea levels around the UK will continue to rise. Climate change will have wide-ranging impacts, both on the natural environment and on economic and social activity. Adaptation to cope with more frequent weather extremes and to plan for the longer-term changes needs to begin now.

During the last century temperatures across the East Midlands increased by over 0.5°C and it is anticipated that this will continue. The predicted climate changes for the East Midlands are expected to be amongst the most substantial in England, with daily average temperatures possibly increasing by up to 5°C by the 2080s and the mean annual temperature by 4.5°C. Summer rainfall could decrease by up to 60% in the southern part of the region and winter rainfall could increase by up to 30%.[94]

The economic, social and environmental effects brought about by climate change in the urban areas of the East Midlands could include:

- Greater damage to buildings through subsidence, and consequent economic impact due to an increase in insurance claims;
- More flooding around rivers. Much of the East Midlands is low lying and vulnerable to flooding, including urban areas along the River Trent and the River Nene;
- Higher temperatures, leading to deterioration in working conditions and potential disruption to transport;
- Less water available for domestic and commercial purposes;

Spotlight on adapting to climate change

In response to the challenge of climate change, the UK government has set a target of achieving a 60% reduction in carbon emissions by 2050 in an effort to slow down it's damaging effects. More attention is now being given to adaptation but technically the subject is in its infancy. It is clear that climate change is happening and some degree of adaptation will be necessary regardless of curbs on emissions, as the climate and ocean systems will take many decades to respond. The Government and devolved administrations are taking a lead in preparing to adapt to climate change. Strategic decisions that are made now have long lifetimes: to reduce risks, minimise damages and take advantage of potential benefits, adaptation must be factored in at an early stage. The more excessive regional temperature increases and precipitation changes may only be felt in a few decades time, but many investment and infrastructure decisions are designed to last this long.

The built environment has been identified as a key area for change in order to meet the targets set by the government. This will be delivered in a number of ways:

- Promotion of resource and energy efficiency in future construction developments to reduce CO_2 emissions;
- Promoting land use patterns for future development plans to reduce the requirements of car travel and provide greater focus on public transport systems;
- Delivery of small and large scale renewable energy projects across communities;

[94] East Midlands Regional Assembly, *East Midlands Regional Environment Strategy*, 2003.

- The restriction and potential halt to development that has the potential of a large impact on the contribution to CO_2 emissions;
- Promotion of sustainable techniques and education to society in order to achieve greater understanding and awareness of issues.

The Nottingham Declaration on Climate Change includes partners from the Environment Agency, the Energy Saving Trust and ICLEI – Local Governments for Sustainability. Leicester was Britains first environment city and Nottingham is now aiming towards becoming a national leader in climate change strategy, as a city of ambition in the European Cities for Climate Protection Campaign.

8.2 Greenhouse gas emissions

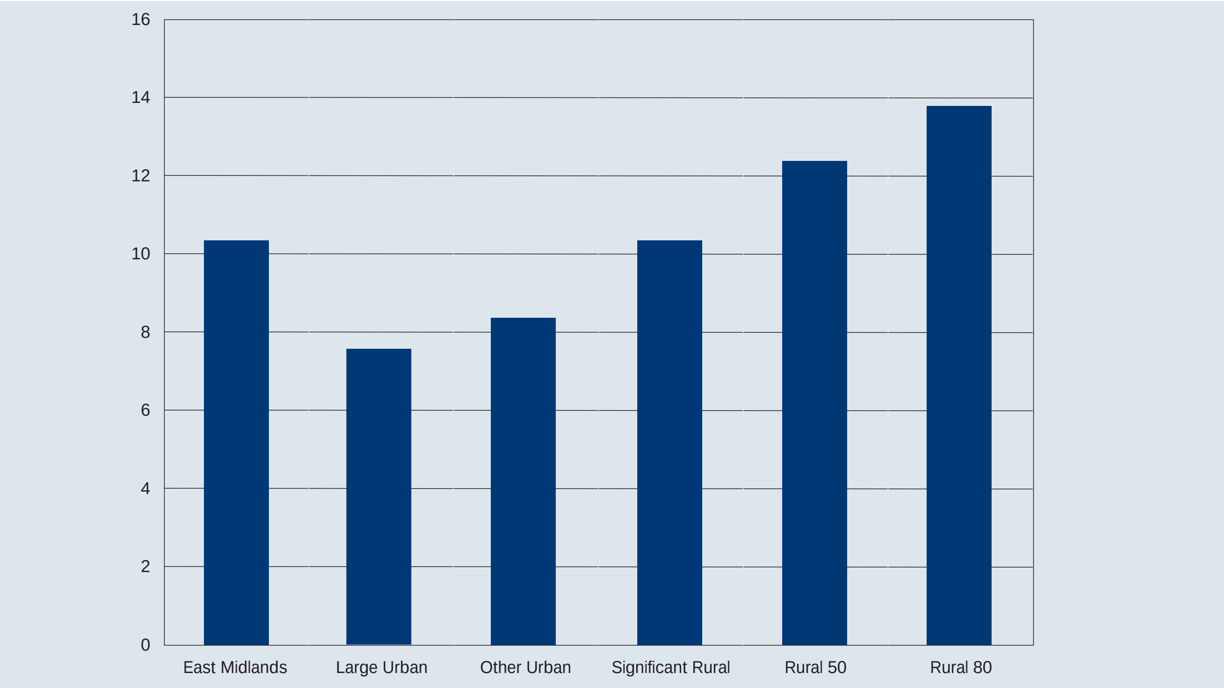
Carbon dioxide (CO_2) is the main greenhouse gas emitted in the East Midlands. The region has some major point sources of CO_2 emissions, such as Ratcliffe power station to the south of Nottingham. However this serves demand from users in the East Midlands and beyond so in this section the emphasis is on 'end user' emissions. End users include industry and commercial use, domestic use and road transport.

In 2004 emissions by end users totalled 42,855 kilotonnes (kt). Of this 44% was from industry and commercial use, 25% from domestic use and the remaining 31% from road transport. This total is equivalent to 10.3 tonnes per capita in the East Midlands.

CO_2 emissions per capita tend to be lower in the region's urban areas. In Derby, Leicester and Nottingham the figures were 8.7 tonnes, 7.8 tones and 7.3 tonnes respectively in 2004. These compare with figures of 27.7 tonnes and 43.0 tonnes in High Peak and Rutland respectively, the highest in the region.

CHART 20

CO_2 emissions per capita 2004 (tonnes).



Source: Department for Environment, Food and Rural Affairs.

Chart 20 shows that CO_2 emissions per capita increase with greater rurality. Large urban areas had an average level of emissions of 7.5 tonnes per capita, which is 54% of the average level in Rural 80 areas. In Other Urban areas the average level of emissions is 8.3 tonnes per capita.

The composition of CO_2 emissions varies by area. In the Large Urban areas 27% of emissions are accounted for by road transport, compared to 36% in the Rural 80 areas. In contrast, emissions from domestic use account for a greater share in urban areas.

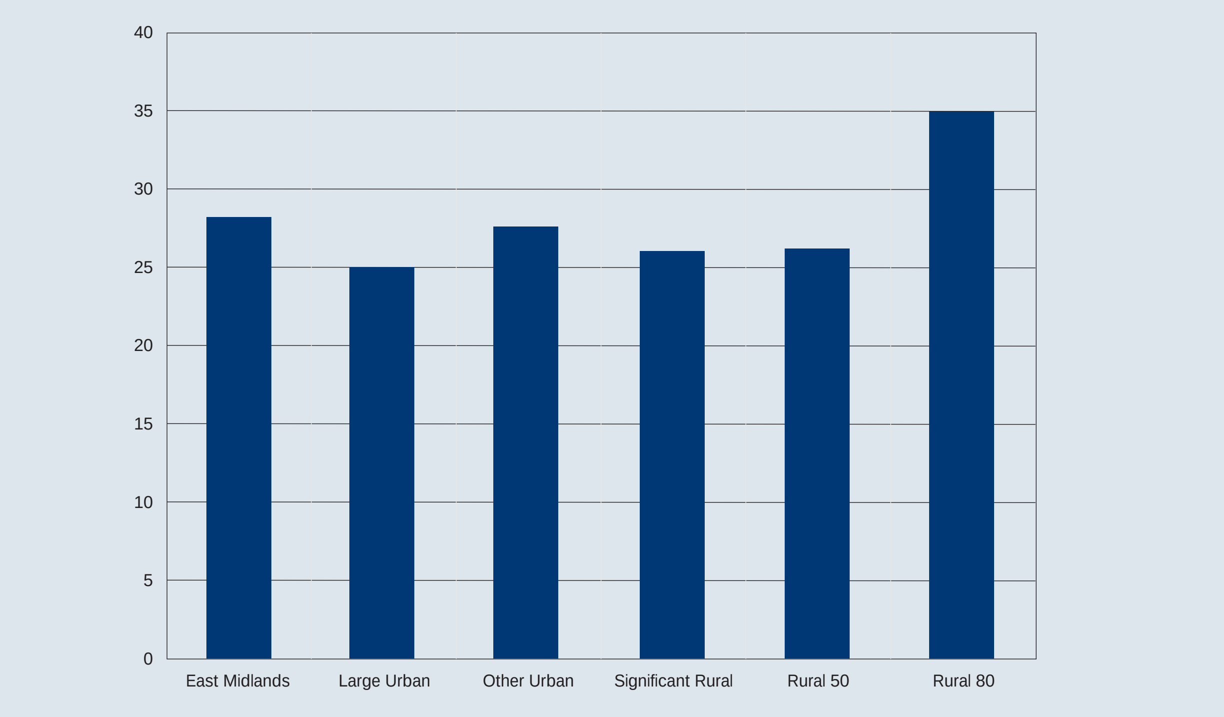
8.3 Waste

Data is available at district level that shows levels of household waste arising. In 2005/06 households in the East Midlands generated 1.83 million tonnes of waste. The most common method of disposal remains landfill, which accounted for around 60% of waste managed in 2005/06. However, recycling/composting accounts for the second highest share, at around 28%.

Chart 21 shows how recycling/composting rates vary within the East Midlands. These rates are lowest in the large urban areas within the region, but at 25% are not significantly below the regional average. The most notable feature of the chart is that recycling/composting rates are highest in the most rural parts of the region. The average rate for the Rural 80 areas is just under 35%.

CHART 21

Household recycling/composting rates 2005/06. (%)



Source: Department for the Environment, Food and Rural Affairs.

At district level there is no clear spatial pattern to rates of recycling/composting. The highest rates are to be found in Rushcliffe (50.3%) and North Kesteven (49.3%), whilst the lowest rates are in High Peak (11.6%) and Bolsover (12.8%).

8.4 Environmental and historic assets

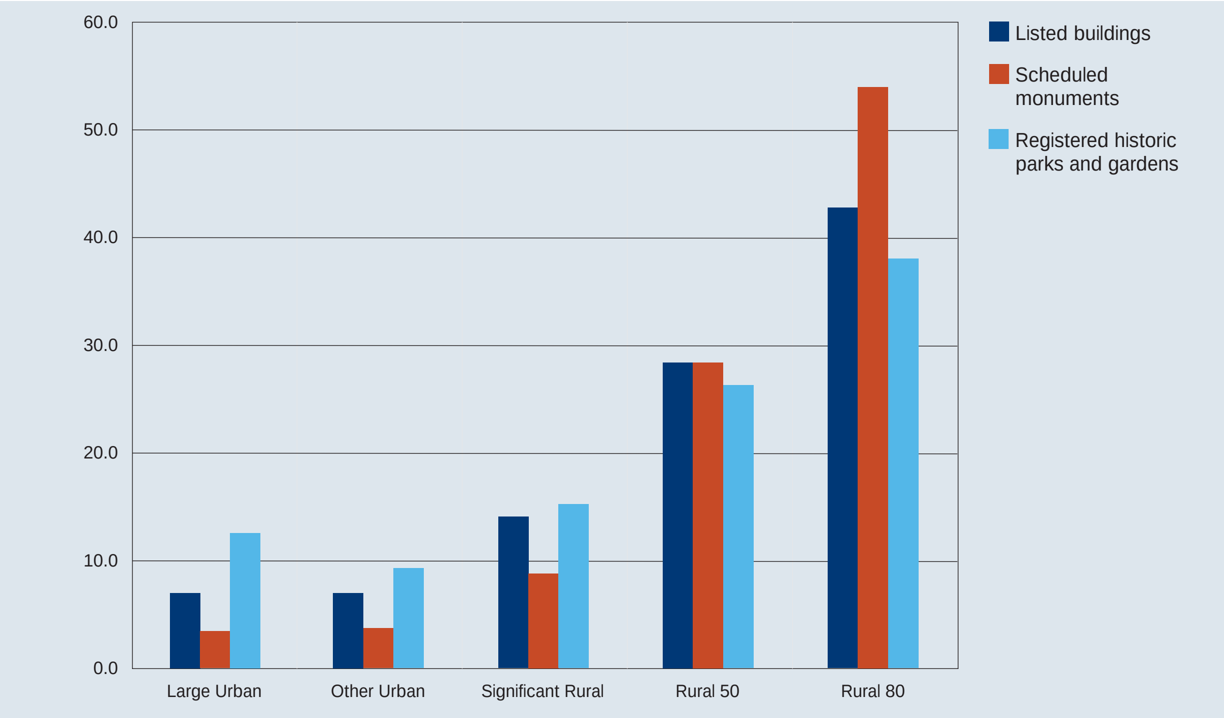
The region's urban areas contain many environmental, cultural and heritage assets. These assets are diverse and are valued not only for their landscape, biodiversity and heritage quality, but also for their recreational, educational and tourism value.

English Heritage identified a total of over 31,000 heritage assets in the East Midlands in 2006. Of these, almost 30,000 were listed buildings, 1,600 were scheduled monuments and almost 150 were registered historic parks and gardens. Chart 22 shows how these are distributed by area classification within the East Midlands.

The chart shows that the majority of heritage assets are located in the rural parts of the region, but there are a significant number in the region's urban areas. Large Urban and Other Urban areas account for a total of 13.5% (around 4,000) of the region's listed buildings, 8% of scheduled monuments and 22% of registered historic parks and gardens. Significant Rural areas account for 14.5%, 8.9% and 15.4% respectively of these assets.

CHART 22

Heritage assets in the East Midlands 2006. (%)



Source: *The State of the East Midlands Historic Environment 2006*, English Heritage.

Spotlight on Green Infrastructure

"Green Infrastructure is a network of multi-functional greenspace which sits within, and contributes to, the type of high quality natural and built environment required to deliver 'sustainable communities'. Delivering, protecting and enhancing this network requires the creation of new assets to link with river corridors, woodlands, nature reserves and urban greenspace and other existing assets. If properly planned and managed, Green Infrastructure should also contribute to wider Environmental Infrastructure through local climate and air quality amelioration, floodplain management, and coastal sea defences".[95]

[95] *Green Infrastructure in the East Midlands - A Public Benefit Mapping Project*. EMRA, July 2006.

Green Infrastructure should provide, where possible, multi-functional uses i.e. wildlife, recreational and cultural experience, as well as delivering ecological services, such as flood protection and microclimate control. It should also operate at all spatial scales from urban centres through to open countryside.

Well-designed and integrated Green Infrastructure improves environmental quality, health and well-being, sense of community and provides an opportunity for exercise, sport and informal recreation. Green Infrastructure contributes to and enhances the quality of life of both present and future residents and visitors through:

- Providing an enhanced environmental backdrop that respects existing landscape character and that will assist in attracting and retaining inward investment in the area;
- Protecting and enhancing existing biodiversity, creating new areas for biodiversity and reversing the fragmentation of habitats by restoring the connectivity between them;
- Providing new and enhanced links to the countryside.

The report *'Green Infrastructure in the East Midlands – A Public Benefit Mapping Project'* provides an overall picture of the "hot spots" around the region in terms of the multiple public benefits that can be accrued from investments in Green Infrastructure delivery. The report shows that the greatest depth of public benefit will generally be derived where greatest need and opportunity coincide and where multiple objectives can be delivered in parallel.

Both the Regional Economic Strategy and Draft East Midlands Regional Plan highlight the importance of Green Infrastructure. A regional Green Infrastructure Network has been set up to promote a vision for Green Infrastructure in the region and drive the agenda forward.

Key points: Environment and quality of life

- **Climate change could impact on the region's urban areas by causing damage to buildings through subsidence, increased flooding and disruption to transport services and infrastructure.**
- **CO_2 emissions tend to be lower in urban areas, at 7.5 tonnes per capita compared to an average of 10.3 tonnes per capita for the region.**
- **Recycling/composting rates tend to be lower in the urban areas of the region.**

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مارکیٹنگ ڈیپارٹمنٹ سے فون نمبر 0115 988 8509 پر رابطہ کریں۔

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૦૧૧૫ ૯૮૮ ૮૩૦૦ પર સંપર્ક કરો.

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