Secondary Centres of Economic Activity in the East Midlands

A research report prepared for *emda*

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SECONDARY CENTRES OF ECONOMIC ACTIVITY IN THE EAST MIDLANDS

Final Report

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Section 1 – Introduction

Background to the Project

1.1 This report outlines the findings of a study of secondary centres of economic activity in the East Midlands. The study builds on previous work undertaken in the 'GDP Growth in the East Midlands and Yorkshire and Humberside regions' project by the Enterprise Research and Development Unit on behalf of *emda* and Yorkshire Forward.

1.2 The 'GDP Growth' project focused primarily on the Principal Urban Areas (Derby, Leicester, Lincoln, Northampton and Nottingham) and large towns in the East Midlands. This study focuses on 'secondary centres' and their contribution to the East Midlands economy. We have defined secondary centres as urban settlements that are smaller than a Principal Urban Area, but still significant as a centre of economic activity. In this study, secondary centres include a range of settlements, from large industrial towns to small market towns.

Aims and Objectives

1.3 The aims of the project are to:

- To explore the roles in regional economic development terms of secondary centres, i.e. those towns and villages which are less economically significant than the principal urban areas in the East Midlands, but which are still vital for the economic health of the region;
- To develop a framework and typology which enables these centres to be classified, and their roles and contributions to be assessed;
- To provide a guide to policy and decision making in relation to the economic, spatial and skills strategies, which will enable different types of centre to contribute to regional economic development in the most effective way.

Agglomeration Effects in Urban Centres

1.4 Research undertaken for the 'GDP Growth' project suggested that spatial distributions of settlements in the East Midlands tend to focus on hierarchies of cities and towns with greater levels of market concentration. The distribution and location of firms is influenced by the relative strength, or attractiveness, of competing urban markets.

1.5 In addition to the benefits of locating close to customers, firms also benefit from locating close to other firms. The 'agglomeration effects' that firms enjoy by locating in close proximity to each other include access to concentrations of employees, support institutions, and other services. The agglomeration of firms in urban areas also creates demand for, and supports, transport and communications infrastructure.

1.6 Existing theory suggests that agglomeration effects are most likely occur in large urban centres, where there are large concentrations of firms. The corollary of this is that firms in centres with small or dispersed resident and business populations are less likely to experience agglomeration effects. There are a number of exceptions to this: (i) where the price of land/premises in large urban areas is much higher than in other centres, this may incur costs for firms that wish to remain and continue to benefit from agglomeration effects; (ii) dense concentrations of firms/population, and high volumes of flow of goods/inputs, may bring about transport congestion and this may be associated with increased transport time and costs; (iii) agglomeration of firms may occur outside of urban areas where associated with primary production (mining and agriculture) or with transport and logistics, such as around airports or road interchanges.

1.7 This study seeks to explore the potential for agglomeration effects to occur outside the principal urban areas in the region. The analysis will focus on secondary urban centres, and will explore the factors that drive or constrain economic activity in these centres.

Flow Effects in Urban Centres

1.8 The 'GDP Growth' project also outlined the role of 'slippiness' in regional economies, i.e. the costs to companies of transportation of goods and services to customers and other firms. These costs are considered to be a key determinant of firm location, as firms are more likely to locate in areas where transport costs are minimised and income maximised.

1.9 These 'flow' effects of goods and inputs through transport and communication infrastructure determine regional patterns of economic activity. Regions where infrastructure enables flow effects are more likely to see higher levels of flows in economic activity than regions were infrastructure is not as enabling.

1.10 The efficiency of transport infrastructure, such as road, rail and air, is therefore likely to have a major influence on economic activity within urban settlements in a region. The corollary of this is that settlements that have poor transport and communications infrastructure, and are remote from customers and suppliers, will have reduced flow effects and this will affect business activity. This study will seek to explore the impact of flow effects on firm agglomeration and economic activity within secondary urban centres in the region.

Defining Secondary Centres

1.11 We have used the term 'secondary centre' in this study to refer to urban settlements that are smaller than principal urban areas but are still significant to the regional economy. The nature of these settlements varies widely, from small rural market towns to large industrial towns that provide a source for employment for the sub region. The secondary centres are defined by a common characteristic: they are a focus of business activity for the surrounding area.

1.12 In this study, we have chosen not to use the term 'market town' to refer to all secondary centres. This is because 'market towns' can be associated with a specific type of centre, i.e. a town which has traditionally served a rural hinterland and, more specifically, as the location of produce or livestock markets. Elsewhere, however, the term 'market town' has been used as an inclusive definition for all small and medium sized urban settlements. For example, the Countryside Agency, now Natural England, which led a number of initiatives to support market towns across England, defined market towns as "towns with a wide variety of backgrounds, including seaside resorts and fishing ports, as well as mining and manufacturing towns"[1].

Existing Studies

1.13 A number of studies have examined the role and contribution of secondary centres in the UK. Several of these point to the limited amount of research that has been conducted into the functionality of secondary centres and their roles within the economy. For example, Courtney and Errington (2000)[2] state that there is a "dearth of information on how they [market towns] function in their local economy" and that the topic has not been the focus of much systematic research. Hart and Powe (2007)[3] criticise the broad definitions that are currently applied to market towns and state that national and regional policy initiatives do not have a basis, or framework of analysis, for a clear differentiation between types of settlements.

1.14 The lack of a clear framework for conceptualising secondary urban centres is pertinent when, according to a number of sources, towns are characterised by an increasing level of heterogeneity and are undergoing rapid change. The diversity of towns is thought to be emphasised by a range of factors, such as transforming industrial and employment structures and changing commuting patterns. Some towns face extreme challenges to their communities and economies, while others are able to benefit from a changing social and economic climate.

[1] The Countryside Agency (2003) *Market Towns Initiative: Evaluating the First Year* Research Note CRN 60
[2] Courtney, P and Errington, A (2000) 'The Role of Small Towns in the Local Economy and Some Implications for Development Policy' *Local Economy* 15 (4) 280-301
[3] Hart, T and Powe, N (2007) 'Understanding Market Towns' *Town and Country Planning* 441-445

1.15 Common challenges facing secondary centres include a general decline in manufacturing and agriculture, centralisation of key services, and increasing competition from large shopping centres[4]. Towns are also subject to an increasing 'reach' from large urban areas[5], both in terms of employment opportunities and service provision. These challenges can lead to a number of problems, such as a decline in service provision, reduction in employment opportunities, a lack of available and affordable housing, a decline in the physical environment and appearance of the centre, and poor public transport provision[6].

1.16 Changes in transport and communications infrastructure, however, have brought about opportunities for some secondary centres. Improvements in road and broadband infrastructure in particular have helped to attract businesses and entrepreneurs to rural areas. Entrepreneurs may be attracted to some secondary centres because they offer a desirable residential environment[7]. Centres that are well connected to large urban areas may develop a commuter settlement role, while those in attractive rural areas may develop a visitor economy[8].

1.17 Hart and Powe (2007) have identified five key functional roles for market towns:

***Service Centres*:** servicing the population of the town and rural hinterland
***Visitor Attractions*:** more remote towns in national parks and coastal areas attracting day-trippers and holiday-makers
***Employment Centres*:** towns with a dominant employer or employment sector
***Housing Commuters*:** towns that offer desirable residential locations but limited employment opportunities
***Housing the Retired*:** towns that have become popular locations for retirement for older people who like to have access to a variety of services

National Policy

1.18 The Countryside Agency launched the **Market Towns Initiative (MTI)** in May 2001, and 120 towns in the England took part. The Initiative aimed to help towns identify 'weak spots' where their services fell short of agreed levels. A 'health-check' was developed which helped communities to assess the economic, environmental and social vitality of their towns[9]. In the East Midlands, the Initiative was operated by the Countryside Agency and *emda*, and involved 30 market towns across the region. The Initiative ran until 2006 and best practice was disseminated in a series of Countryside Agency publications.

1.19 A number of national organisations support market towns. These include **Action for Market Towns** and the **Association of Town Centre Managers**. Action for Market Towns is a charity that seeks to represent market towns at a national level and raise awareness of the issues facing market towns, such as centralisation of services, competition from large retail centres, and congestion. It supports representatives of market towns by providing information and advice, and research and best practice.

1.20 In 2008 the **Taylor Review**[10] was commissioned by the Prime Minister to explore how land use planning could be better used to enable rural business and support affordable housing. It identified that market towns are likely to be the subject of significant growth by 2020. For many rural market towns the scale of new housing planned over this period will have a dramatic impact on the size and nature of the present communities. How this development takes place will significantly influence their future character.

1.21 The Review also highlights the importance of 'strong rural economies' and states that there is insufficient recognition of the role that economic growth plays in ensuring sustainable rural communities. High wages and low deprivation in market towns, often as a result of the presence of high commuter populations, can mask the relatively low wages of those who work in the local area. While business formation rates are higher in rural than urban areas, this tends to be in affluent and well connected rather than remote rural areas. The Review calls for promotion of all businesses in all rural areas to improve the sustainability of

[4] Caffyn, A (2004) 'Market Town Regeneration; Challenges for Policy and Implementation' *Local Economy* 19(1)
[5] Powe, N and Hart, T (2008) 'Market Towns: understanding and maintaining functionality' *Town Planning Review* 79(4) 347-370
[6] Caffyn, A (2004) 'Market Town Regeneration; Challenges for Policy and Implementation' *Local Economy* 19(1)
[7] Keeble, D and Tyler, P (1995) 'Enterprising Behaviour and the Urban-Rural Shift' *Urban Studies* 32 (6) 975-997
[8] Powe, N and Hart, T (2008) 'Market Towns: understanding and maintaining functionality' *IPR* 79 (4) 347-370
[9] The Countryside Agency (2004) *Three Market Town Healthcheck Stories* CRN77
[10] Taylor, Matthew (2008) *Living Working Countryside: the Taylor Review of Rural Economy and Affordable Housing* Communities and Local Government Publications

communities, an adequate supply of business premises and sites, and better support for small and home-based businesses.

Regional and Local Policy

1.22 To some extent, issues that affect secondary centres are cross-cutting and are likely to reflect the wider economic, social and environmental conditions in a region. The secondary centres included in this analysis are diverse in size, the nature of their communities, and the economic roles that they play. Larger centres, such as Chesterfield and Mansfield, may be affected by typically 'urban' issues, such as industrial decline and transport congestion. Smaller centres such as Wainfleet and Alford in Lincolnshire may be affected by rural challenges such as loss of services and the struggle to maintain viable communities.

1.23 The **Economic Strategy for the East Midlands,** ***A Flourishing Region 2006-2020,*** emphasises the importance of secondary centres to the regional economy, stating:

> *"a common feature throughout the region is the relatively high number of market towns compared to other regions and the important 'stepping stone' that they provide as a service centre for their outlying rural areas and as a feeder to the region's larger towns and cities. There is a real interdependence between the urban and rural areas of the East Midlands"*.[11]

1.24 The Strategy sets out a number of challenges and priorities of relevance to secondary centres. These include the need to diversify and strengthen the economic base of the region, reduce intra-regional disparities, realise the full potential of urban areas as the "drivers of regional economic performance", and stimulate the renewal of rural communities. The strategic priorities that are most pertinent to the vitality of secondary centres include: employment, learning and skills; enterprise and business support; transport and logistics; cohesive communities; and economic inclusion.

1.25 The **East Midlands Rural Affairs Forum, EMRAF**, is a partnership of public, private and third sector organisations that work together to promote regional initiatives and improve quality of life in rural areas. EMRAF has produced a Rural Action Plan which sets out a number of actions to improve the economy of rural areas, including ensuring that businesses in rural areas can access mainstream business support, and that SMEs and micro-businesses are part of the innovation and enterprise culture[12].

1.26 The ***Regional Spatial Strategy for the East Midlands (RSS)*** sets out a broad framework for new housing provision across the region as well as priorities for economic development, infrastructure, and the environment. At a regional level, the RSS emphasises the need to concentrate development in urban areas, stating that "*most people already live within urban areas, which offer the greatest opportunity to ensure that homes, jobs and services are related to one another and hence maximise accessibility*"[13]. The Strategy indicates that development should be located primarily within the five Principal Urban Areas of Derby, Leicester, Lincoln, Northampton and Nottingham, and the three growth towns of Corby, Kettering and Wellingborough. 'Appropriate' development should be located within 12 Sub-Regional Service Centres, which include Chesterfield, Mansfield, Grantham, Market Harborough and Loughborough.

1.27 For rural areas, market towns are recognised as important for rural service provision. It outlines a number of policy priorities for rural areas, including providing for housing and a range of services in market towns to serve a wider hinterland, and providing for employment development to strengthen the vitality and viability of market towns. The Strategy states:

> *"market towns play a key role in the region's rural areas, serving as centres for shopping, employment and service delivery. The future vitality of many rural areas will depend increasingly upon market towns. It is therefore crucial that the economic and service base of these settlements is consolidated and where appropriate enhanced".*[14]

[11] *emda* (2006) *A Flourishing Region*, Regional Economic Strategy for the East Midlands 2006-2010, p 20
[12] EMRAF (2007) *East Midlands Rural Action Plan 2007-2013*
[13] *Government Office for the East Midlands* (2005) Regional Spatial Strategy for the East Midlands, p 16
[14] *Government Office for the East Midlands* (2005) Regional Spatial Strategy for the East Midlands, p 18

1.28 This approach is reflected in **Local Development Frameworks**[15] which are developed to identify requirements for homes, jobs and strategic development at district or unitary authority level. The preparation of local development frameworks involves the identification of a hierarchy of settlements, which is used to guide where housing and employment growth should be concentrated. This is similar to the approach set out in the Regional Spatial Strategy, in that local authorities are advised via national planning guidance to concentrate housing and employment growth in market towns and large villages. Development in smaller rural settlements is restricted to where it assists community viability or meets local needs. Secondary centres are, therefore, likely to be the main focus of housing and business growth within a local area. As the Taylor Review highlights, many of these are likely to be subject to significant housing growth over the next 20 years. The challenge will be to ensure that there is sufficient provision of services and employment, and that the communities remain distinct and sustainable.

[15] Communities and Local Government (2008) *Planning Policy Statement 12: Local Spatial Planning*

Section 2 – Approach

2.1 The research approach for this study has involved secondary data collation and analysis, and in-depth qualitative interviews to gather local information on the economies and characteristics of each secondary centre. The approach has involved four stages of research activity:

2.2 **Stage One** A review of policy documents and prior research into secondary urban centres both in the East Midlands and elsewhere. The aim of this stage was to identify the key policy initiatives related to secondary centres, and any secondary data sources that could contribute to the study. The following sources were examined:

- East Midlands Regional Economic Strategy 2006-2010
- East Midlands Regional Spatial Strategy
- Housing Market Assessment for East Midlands HMA areas
- Local Development Frameworks and related documents

2.3 **Stage Two** The identification of secondary centres to be included in the study. This stage started with a comprehensive list of 'census urban areas' in the East Midlands provided by the ONS East Midlands Regional Team. The list ranged from Nottingham, as the largest urban area in the region, to settlements with a 1,500 resident population as a minimum. As a starting point, all settlements with a population of 5,000 or more were selected. Where the population fell below 5,000, the resident and business population were compared. Where there were at least 200 businesses in the centre, the settlement was selected for inclusion. Additional research was conducted on parish and town council websites to explore whether the settlements was defined as a 'market town' or village. A total of 98 settlements were selected for inclusion in the analysis, from Chesterfield with a population 70,260 to Wainfleet with a population of 1,965.

2.4 **Stage Three** Collation and analysis of indicators of agglomeration, business composition, and flow effects for each secondary centre. Each indicator is discussed below, in terms of how it was calculated and its significance:

i. Firm Density: total number of firms divided by total area of the census urban centre in hectares. Firm density provides an indication of the likelihood of agglomeration economies occurring. The number of firms for each urban area was provided by the ONS East Midlands Regional Team and was sourced from the Inter-Departmental Business Register (IDBR) for 2007. This is a snapshot of local business units registered for VAT or PAYE as of autumn 2007 by Census Urban Area (Output Area equivalent).

ii. Population Density: total population divided by total area, in hectares. This provides one indication of the density of available workforce, together with potential for demand for goods and services from the resident population, within a settlement. This information was sourced from the 2001 Census for Census Urban Areas.

iii. Workforce Density: total economically active population (defined as part- and full-time employees, self-employed, unemployed, and students) divided by total area in hectares. This provides an overall indicator of the density of the workforce within a settlement, independent of the presence and density of firms. This information was sourced from the 2001 Census for Census Urban Areas.

iv. Connectivity: measured using a number of indicators including distance and journey time to nearest large city (principal urban area or town over 100,000 population), airport and London. The travel time to London has been calculated as travel time by car to the nearest mainline station plus the duration of the train journey to London. The 'efficiency' of journey times is also explored, using number of minutes per mile. These indicators have been developed to reflect the efficiency of transport infrastructure in an area, and whether centres are proximate to or remote from potential customers, suppliers, and employment sites in the capital, larger cities and overseas. This information is sourced from the AA and National Rail Enquiries for 2008.

v. Jobs Density: defined as the number of filled jobs in an area divided by the working-age population resident in that area. Areas with a high jobs density (a high number of jobs per head of working-aged population) are likely to attract in-commuters from other areas. Conversely, areas with low jobs densities

offer a low number of jobs compared with the size of the resident working aged population, and are more likely to see out-commuting. This information has been sourced from NOMIS for 2006. The indicator incorporates data from the Annual Business Inquiry (ABI) and Mid-Year Population Estimates (MYE) produced by the Office of National Statistics. It is available at Local Authority District, rather than urban area, level so has been used as a supplementary indicator as the same figure applies to more than one settlement within a district.

vi. Business Characteristics: measured using a number of indicators, including the proportion of businesses that employ 20 people or more and the business premises vacancy rate. The proportion of businesses employing 20 people or more has been used as a broad indicator of the proportion of larger firms in an area. This information has been sourced from the IDBR for 2005. The proportion of business premises that are vacant can be used as one indicator of the overall attractiveness of the centre for business. High vacancy rates may suggest an area undergoing industrial decline or restructuring. This information has been sourced from Commercial and Industrial Property Vacancy Statistics supplied by Communities and Local Government (CLG). As these sources are for Local Authority District level, they have been used as supplementary indicators, as the same figure applies to all settlements with the same district.

vii. Socio-Economic Characteristics and Integration: the social and economic cohesiveness of an area, including the extent to which communities are prosperous or deprived, have access to essential services, and have a sense of community identity and belonging. This information was gathered via the stakeholder interviews, outlined in stage four.

2.5 **Stage Four:** Consultation with key stakeholders in the East Midlands to explore:

(i) perceptions of secondary centres and their contribution to the regional economy;
(ii) strategies for business promotion and development in secondary centres;
(iii) views on the development of a typology of secondary centres in the East Midlands.

Interviews were undertaken with eighteen stakeholders involved in economic development and planning at a regional, county and district level. A snowball sampling approach was used to identify consultees, starting at regional and county level. District level contacts were identified via discussion with county level contacts. The interviews were used to explore the role of secondary centres from an economic development and policy perspective.

Section 3 – Agglomeration in Secondary Centres

Firm Agglomerations in East Midlands Secondary Centres

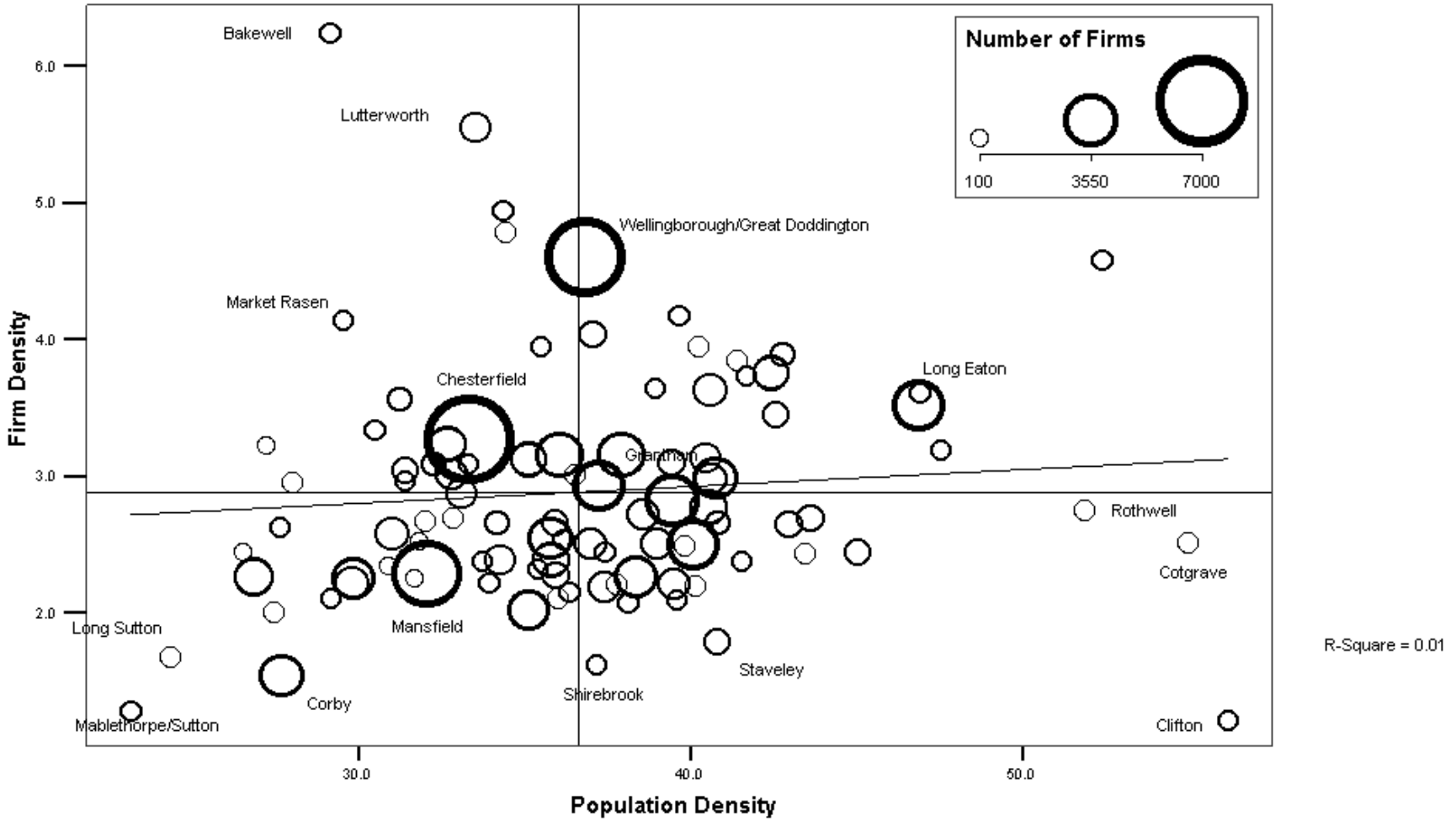
3.1 The charts in this section set out firm densities (the number of firms per hectare) and population densities (resident population per hectare) for secondary urban settlements in the East Midlands. Firm densities provide one indication of the likelihood of agglomeration effects occurring as a result of businesses locating close to each other within a defined area. The total number of firms in each secondary centre is represented by the size of the bubble provided. This allows the size of the business population of each centre to be easily identified and compared. Reference lines are provided to show the mean values for population density (x axis) and firm density (y axis). The mean reference line provided is for all East Midlands secondary centres and, therefore, provides a comparison for all centres against the regional average. Where possible, a best fit line and R^2 are provided to indicate the degree of correlation between firm and population density.

3.2 Analysis of firm and population densities across all secondary centres in the East Midlands, shown in Graph 3.1, suggests that – at a regional level at least - there is no clear relationship between the two variables. Although many centres are clustered around the mean for population and firm density, there is a high degree of variation between the settlements, and a number of outliers. This lack of a clear relationship is indicative of the heterogeneity of secondary centres in the East Midlands in terms of the economic roles they play, their size and connectivity. An initial observation from Graph 3.1 is that secondary centres in the East Midlands are dominated by three large economies. These are Chesterfield and Wellingborough/Great Doddington, which both have more than 6,000 firms, and Mansfield which has almost 5,000. Together, these three settlements account for 14% of the total businesses in the sample. This suggests a clear hierarchy of settlements which is characterised by a relatively small number of large centres for business and population, and a large number of small centres.

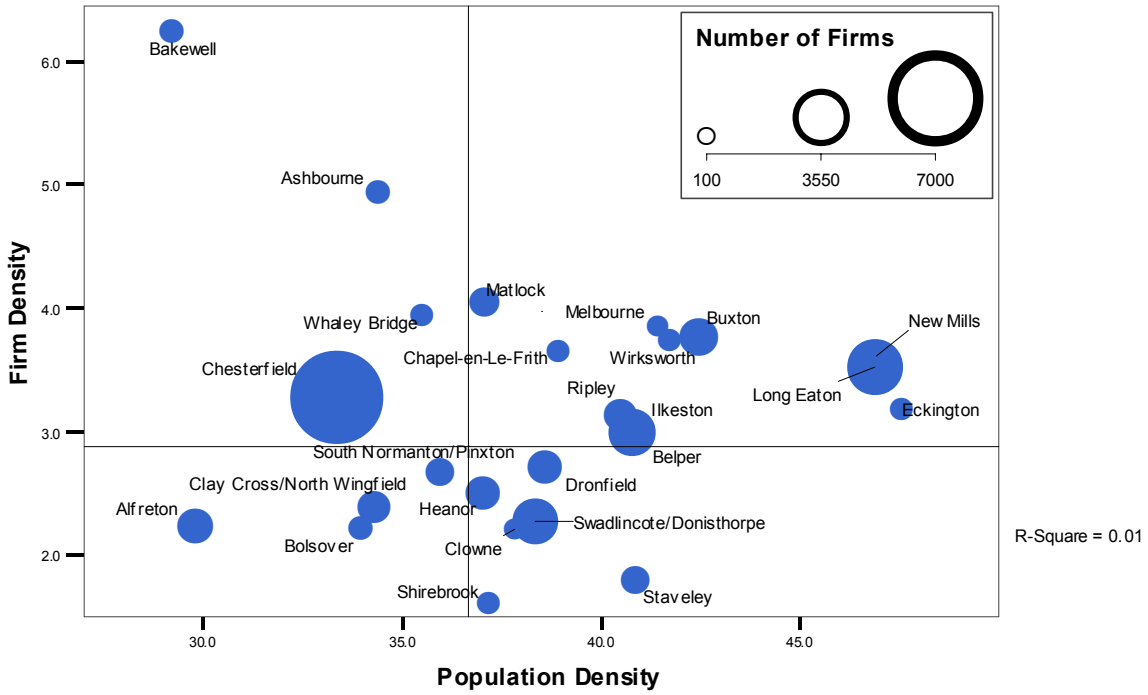
3.3 Previous analysis undertaken into agglomeration effects in the East Midlands suggests that there is a moderately strong relationship between firm and population densities for principal urban areas and large towns. Among these large urban centres, firm density tends to increase in line with population density. This suggests that the agglomeration of firms tends to coincide with greater concentrations in the labour market, whether because firm agglomerations lead to migration of the population/labour or concentrations in the population attract firms. The R^2 of 0.01 shown for graph 3.1 suggests this relationship does not apply to smaller secondary centres and that there may be a threshold, or 'tipping point', for size in terms of resident and/or firm population which is needed for agglomeration effects to occur.

3.4 Analysis of the distribution of centres on Graph 3.1 shows that the two largest centres of firm agglomeration, Chesterfield and Wellingborough, lie above the regional mean for firm density and below the mean for population density. These centres show clear indications of critical mass for firms, and their below average population densities suggest that they serve a population beyond their immediate boundaries for employment and/or service functions. Mansfield, the centre with the third largest firm population, is below the regional mean for both firm and population densities. This suggests that Mansfield does not perform such a strong employment or service function role, and that it may be 'under performing' in terms of the level of business activity taking place here. There are a number of outliers in the sample. These include: Bakewell, Lutterworth and Market Rasen (with high firm densities, low population densities); Long Eaton, Towcester and New Mills (high firm and population densities); Long Sutton and Mablethorpe (low firm and population densities); and Cotgrave, Clifton and Rothwell (low firm and high population densities). These will be discussed in more detail in the county level analysis.

Graph 3.1 – Firm and Population Densities across all Secondary Centres *(Source: ONS Crown Copyright, Census 2001 and Inter-Departmental Business Register 2007)*



Graph 3.2 – Firm and Population Densities in Derbyshire Secondary Centres *(Source: ONS Crown Copyright, Census 2001 and Inter-Departmental Business Register 2007)*



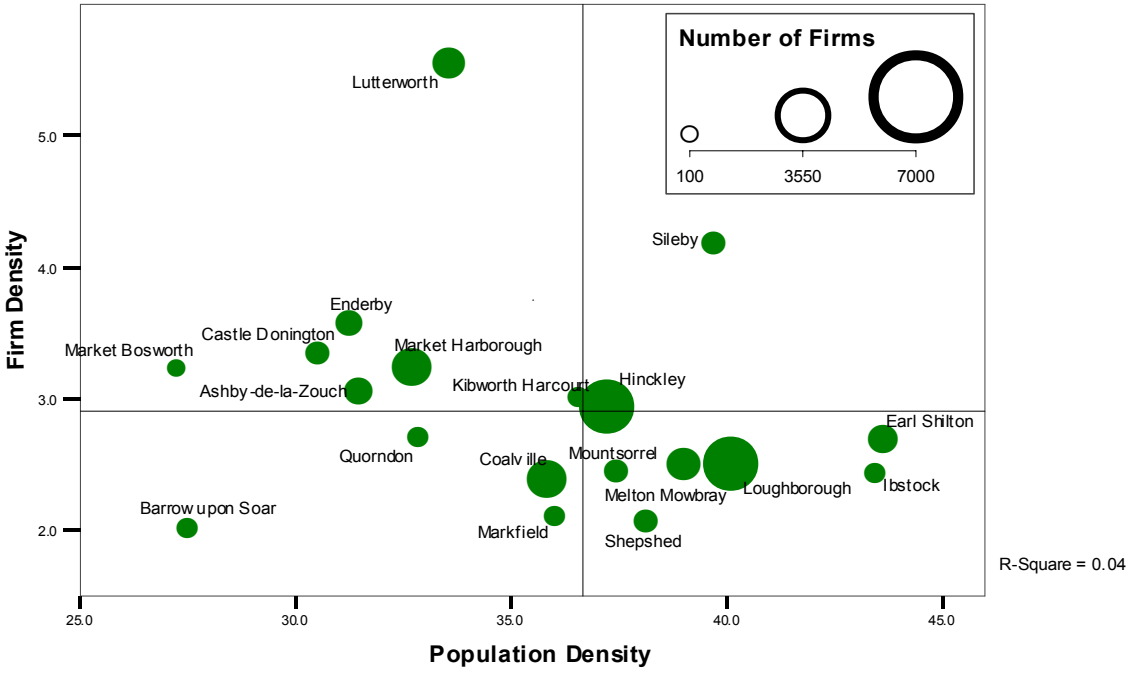
3.5 Graph 3.2 suggests that, at a county level, there is no clear relationship between firm and population for centres in Derbyshire. More detailed examination of the distribution on the graph suggests that, with the exception of Bakewell and Ashbourne, most centres cluster around the mean for firm density, but there is wide dispersal for population density, which may suggest a high degree of heterogeneity. Derbyshire also has a high number of settlements with above average firm and population densities, which suggests the presence of a number of strong economies. These include Long Eaton, Ilkeston and Belper, which are proximate to Derby and Nottingham and may be considered part of these larger urban areas.

3.6 Other centres with high firm and population densities include Buxton, Matlock, Chapel-en-le-Frith, and Wirksworth. These small towns are located in the High Peak and Derbyshire Dales districts in the rural, western area of Derbyshire. They are more likely to demonstrate high firm densities due to their remote locations and the need to be self-contained. Bakewell and Ashbourne demonstrate a significantly greater density of firms than population. These centres may provide a service function role for their own and surrounding rural 'hinterland' population. The high number of visitors to the Peak District National Park is also likely support business activity in these towns. Whaley Bridge and New Mills, in the most western area of Derbyshire, are close to Stockport and can be considered, to some extent, part of the wider Manchester economy.

3.7 Chesterfield is the largest town in Derbyshire and a key centre for employment. The higher firm than population density suggests that Chesterfield experiences an influx of labour. It also serves as an important sub-regional service centre for settlements in the Peak District to the west, and adjoining urban areas to the north and east such as Staveley and Dronfield.

3.8 Staveley, Dronfield, Shirebrook, Clowne, Swadlincote and Heanor demonstrate high population and low firm densities. Some of these settlements function as 'commuter settlements' for larger urban areas, such as Chesterfield and towns in the West Midlands for Swadlincote. Bolsover, South Normanton, Alfreton, and Clay Cross sit below the regional mean for both firm and population density. This suggests limited potential for agglomeration economies, either because of a lack of critical mass, or industrial decline or restructuring. Many of these settlements, together with Clowne and Shirebrook, are situated within a former mining area and are associated with high levels of deprivation.

Graph 3.3 – Firm and Population Densities in Leicestershire Secondary Centres *(Source: ONS Crown Copyright, Census 2001 and Inter-Departmental Business Register 2007)*



3.9 Graph 3.3 shows that, at a county level, there is no clear relationship between firm and population density in Leicestershire. However, with the exception of Lutterworth and Sileby, there is a slightly negative relationship between firm and population densities. Larger centres appear to have a marginally higher population density and marginally lower firm density. This suggests high concentrations of population around large settlements perhaps for amenities or community benefits, regardless of firm density.

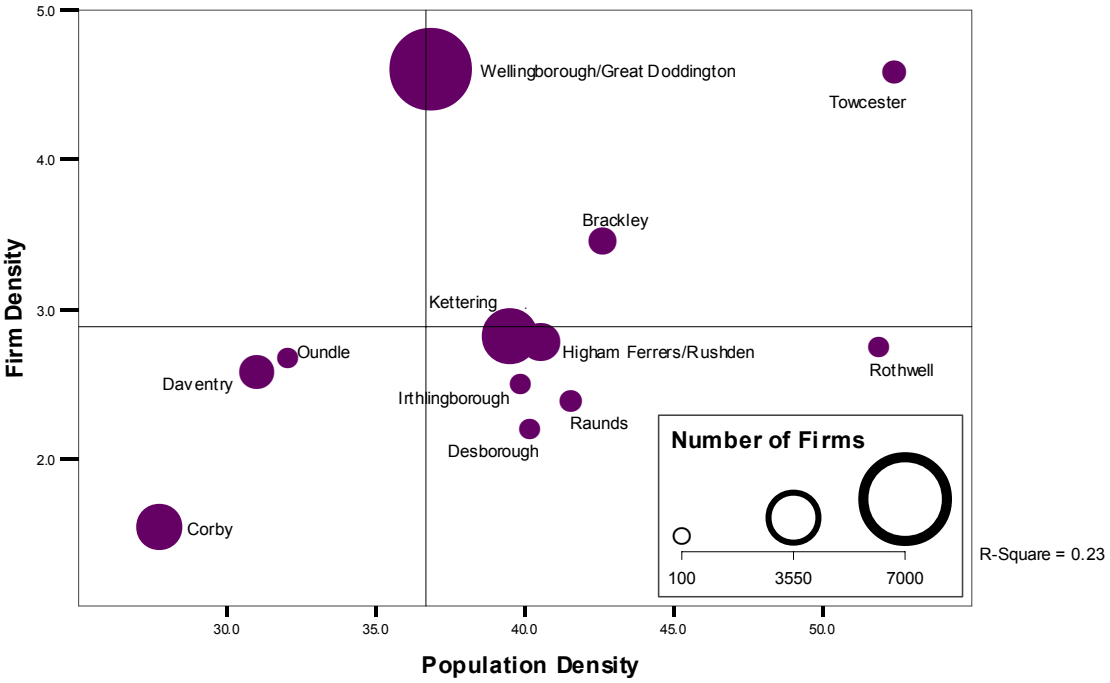
3.10 Overall, settlements in Leicestershire demonstrate low firm densities when compared with other counties. The proximity of large urban areas, together with good transport connections, may mean that there is reduced demand for services and employment at local centres. Hinckley, the second largest economy in Leicestershire, is the only large town to show firm and population densities above the regional mean. This suggests that Hinckley has a strong economy and is well served in terms of employment and services.

3.11 Loughborough, the largest urban settlement outside Leicester, Melton Mowbray, Shepshed, and the smaller towns of Mountsorrel, Earl Shilton and Ibstock, have fewer firms than expected for their populations. Their high population densities may suggest that they fulfil commuter settlement roles for larger centres. Loughborough, Shepshed and Melton Mowbray may, to some extent, provide commuter centre roles for the nearby cities of Leicester and Nottingham.

3.12 Lutterworth and Sileby, together with Market Bosworth, Ashby, Castle Donington, Market Harborough, Enderby and Kibworth have higher firm than population densities. Lutterworth has a significantly higher firm than population density, which can be partly explained by Magna Park logistics centre. Castle Donington, close to East Midlands Airport, has a number of airport-related companies in the town. The high firm densities in these towns could also suggest that they serve a hinterland beyond their immediate populations, and this is likely to be the case in Market Bosworth and Market Harborough.

3.13 Barrow upon Soar, Quorndon, Markfield, and Coalville exhibit low population and firm densities. For the former three, this may indicate a lack of critical mass as a result of the small size of these settlements. Coalville, the third largest secondary centre in Leicestershire, is reported to have experienced some decline as a service centre, due to competition from nearby towns and Fosse Park shopping centre on the M1. Nearby Bardon Industrial Estate, however, is a key employment site for the surrounding area, with mainly large companies.

Graph 3.4 – Firm and Population Densities in Northamptonshire Secondary Centres *(Source: ONS Crown Copyright, Census 2001 and Inter-Departmental Business Register 2007)*



3.14 Graph 3.4 shows that there is a weak/moderate relationship between firm and population densities for secondary centres in Northamptonshire. With an R^2 of 0.23, it is a slightly higher correlation than for Derbyshire and Leicestershire and, as population density increases, firm density increases for most centres. However, this may not tell the whole story, and it is possible to identify a number of groupings within the distribution shown on the graph.

3.15 Five settlements in Northamptonshire have firm densities which lie on or above the regional mean. These include Wellingborough which, with Great Doddington, is the county's largest secondary centre, Kettering, Brackley and Towcester. Wellingborough and Kettering, with Corby, have been identified as growth towns in the Regional Spatial Strategy and are considered to provide sub-regional service roles.

3.16 Wellingborough, together with Towcester and Brackley, are shown to have above average firm and population densities, which suggests that these are vibrant economies. Towcester and Brackley are the most southerly secondary centres in the sample. Both have high firm densities, which are partly a result of their roles as local service centres, and partly attributed to nearby Silverstone motor circuit and the local motor sports industry.

3.17 Despite being fairly large centres (49,222 and 21,731 population respectively), Corby and Daventry demonstrate below average population and firm densities. Both towns experienced significant expansion during the 1960s, and have low densities of housing and industry associated with the style of building development at that time. Both towns have undergone change in their industrial structures and the low firm densities are partly a reflection of the dominance of larger employers. In Corby, 15% of businesses employ more than 20 people, which is the highest rate in the region. However, despite having a similar population to Wellingborough, Corby has fewer than half the number of firms.

3.18 Kettering and Rushden lie on the mean for firm density and above the mean for population density. This may suggest that these centres may have some dependence on, or play a dormitory role, for other large urban centres. Both towns are thought to provide commuter settlement roles for Northampton. Smaller towns such as Rothwell, Desborough, Irthlingborough and Raunds also fall within this group. There are also strong commuting out-flows from these centres in south and eastern Northamptonshire, to Milton Keynes and London in particular.

Graph 3.5 – Firm and Population Densities in Nottinghamshire Secondary Centres *(Source: ONS Crown Copyright, Census 2001 and Inter-Departmental Business Register 2007)*

3.19 The firm and population densities for secondary centres in Nottinghamshire are compared in Graph 3.5. There is no apparent relationship between the two variables, with an R^2 of 0.1. Overall, secondary centres in Nottinghamshire demonstrate lower firm densities than any other county. The majority of settlements, 12 out of 18, have lower firm densities than the regional mean. As in Leicestershire, the proximity of principal urban areas and good transport infrastructure may mean there is a reduced need for all services and/or employment sites at local secondary centres

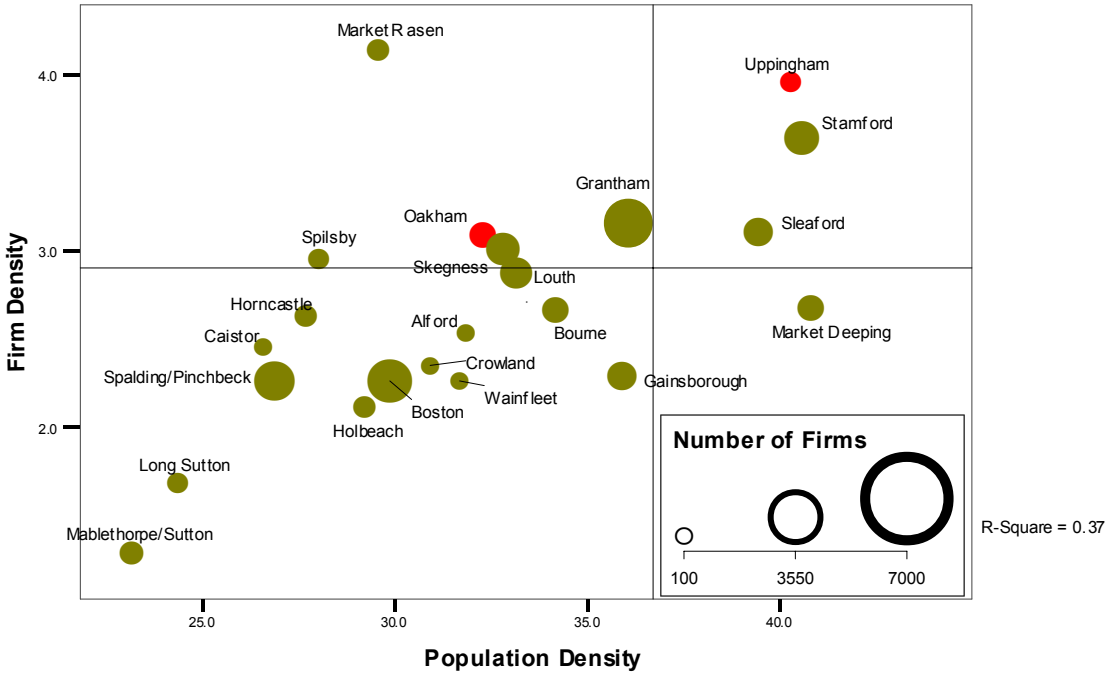
3.20 Two centres, Newark and Bingham, demonstrate above average firm and population densities. These towns, in the more sparsely populated east of Nottinghamshire, provide a range of services for their own populations and act as service centres for a rural hinterland.

3.21 Tuxford, Retford, Ruddington and Southwell all demonstrate higher firm than population densities. In the case of Tuxford, a small town in the east of Nottinghamshire, the firm density is significantly higher than the regional average. This is thought to be a result of two business parks located close to the town. Southwell and Retford are market towns which act as service centres for a number of surrounding villages. Ruddington, a small town close to the south of Nottingham, may almost be considered part of the urban conurbation and, as such, may benefit from the agglomeration effects of the city.

3.22 Mansfield, Worksop and Sutton in Ashfield all lie below the regional means for firm and population density. This suggests that these settlements do not perform such as a strong employment or service centre role as other centres, and may be 'under performing' in the level of business activity taking place.

3.23 Six settlements demonstrate higher population than firm densities. These include Cotgrave, Mansfield Woodhouse, Eastwood and Hucknall. These settlements are all located close to Nottingham and are considered to rely heavily on the city for services and employment opportunities.

Graph 3.6 – Firm and Population Densities in Lincolnshire and Rutland Secondary Centres
(Source: ONS Crown Copyright, Census 2001 and Inter-Departmental Business Register 2007)



3.24 Graph 3.6 shows a moderate relationship between firm and population densities for settlements in Lincolnshire and Rutland. These two counties have been combined for sub-regional analysis because Rutland has just two centres in the sample. Lincolnshire and Rutland is also a policy area for a number of organisations, such as the Learning and Skills Council, and Connexions. The R^2 of 0.37 is the highest correlation of all the settlements in the region. This suggests that residents in Lincolnshire and Rutland settlements are most likely to have access to a range of firms within the same centre. The relatively remote location of centres in this eastern area of the region may increase demand for local services and the availability of local employment opportunities.

3.25 Three centres have population and firm densities above the regional means. These are Uppingham, Sleaford, and Stamford. These towns in the relatively well connected south and west of the area are, therefore, likely to be fairly self-contained and provide a variety of services for their local populations.

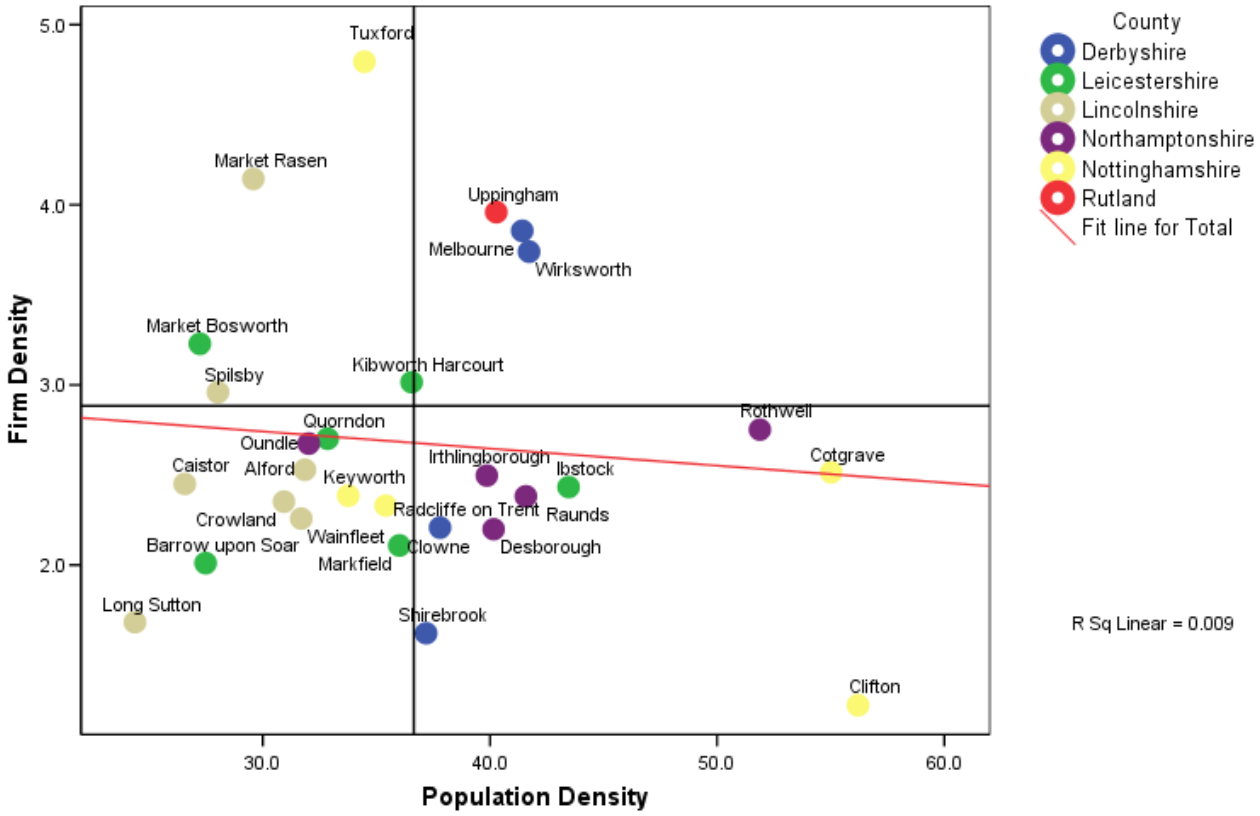
3.26 Six settlements demonstrate higher firm than population densities. These include Grantham, which is the largest economy outside of Lincoln, as well as Skegness, Louth and Oakham. The high firm densities in these towns may suggest that the firms serve a population beyond that of the centre itself. Connectivity data shows that these centres are remote from key centres of population and, therefore, have a wide hinterland. In the case of Skegness, it offers a dual role of service centre for the surrounding area and a centre for tourism. Market Rasen, a small town with less than 5,000 population, has a firm density which is significantly above the regional mean. Its location in a sparsely populated area north of Lincoln may suggest that it serves a wide rural hinterland.

3.27 The majority of secondary settlements in Lincolnshire, 13, lie below the regional mean for both firm and population density. For many smaller settlements, such as Spilsby, Wainfleet, Alford and Caistor, this may indicate a lack of critical mass of population needed for agglomeration effects to occur. The larger centres of Gainsborough, Boston and Spalding also demonstrate low firm and population densities. This may indicate industrial decline/restructuring, which has occurred in Gainsborough, and/or the presence of larger firms, which is the case in Spalding and Pinchbeck.

3.28 Only one settlement, Market Deeping, demonstrates a low firm and high population density. This, together with its close proximity to Peterborough, suggests that it fulfils a commuter settlement role.

Firm and Population Density by Size of Secondary Centre

Graph 3.7: Centres with up to 499 firms *(Source: ONS Crown Copyright, Census 2001 and Inter-Departmental Business Register 2007)*



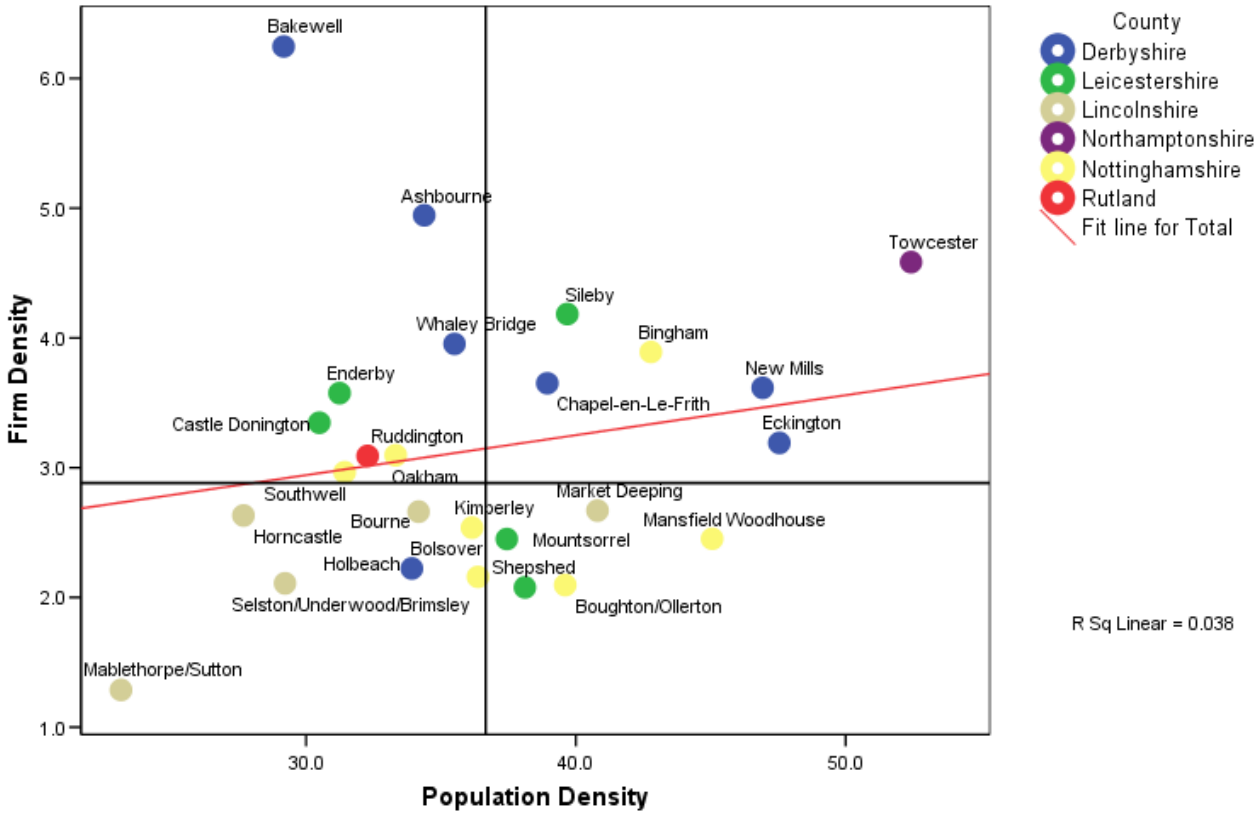
3.29 Graph 3.7 sets out the population and firm densities of the smallest secondary centres in the sample – those that have fewer than 499 firms. At first glance there appears to be little relationship between firm and population density for secondary centres of this size. However, it is possible to identify a number of groupings.

3.30 A small number of centres demonstrate high firm and population densities. These include Uppingham, Melbourne and Wirksworth. This suggests that these are small self-contained towns with vibrant economies. Tuxford, Market Rasen, Spilsby and Market Bosworth demonstrate higher firm densities then population densities. This suggests that these are vibrant small towns that have a greater than expected number of firms, and may serve a population beyond their urban boundaries.

3.31 Many centres fall below the mean for firm density, with many of these also demonstrating population densities that are below the regional average. A number of small rural settlements in Lincolnshire and Leicestershire, such as Alford, Caistor, Markfield and Barrow, fall within this group. This suggests that these centres lack critical mass of firms and population for agglomeration effects to occur.

3.32 The outliers in the bottom right quadrant, Rothwell, Cotgrave and Clifton, all demonstrate low firm densities but high population densities. This may indicate that these are 'dependent' communities which look to larger urban centres for services and employment.

Graph 3.8 Centres with 500-999 Firms *(Source: ONS Crown Copyright, Census 2001 and Inter-Departmental Business Register 2007)*



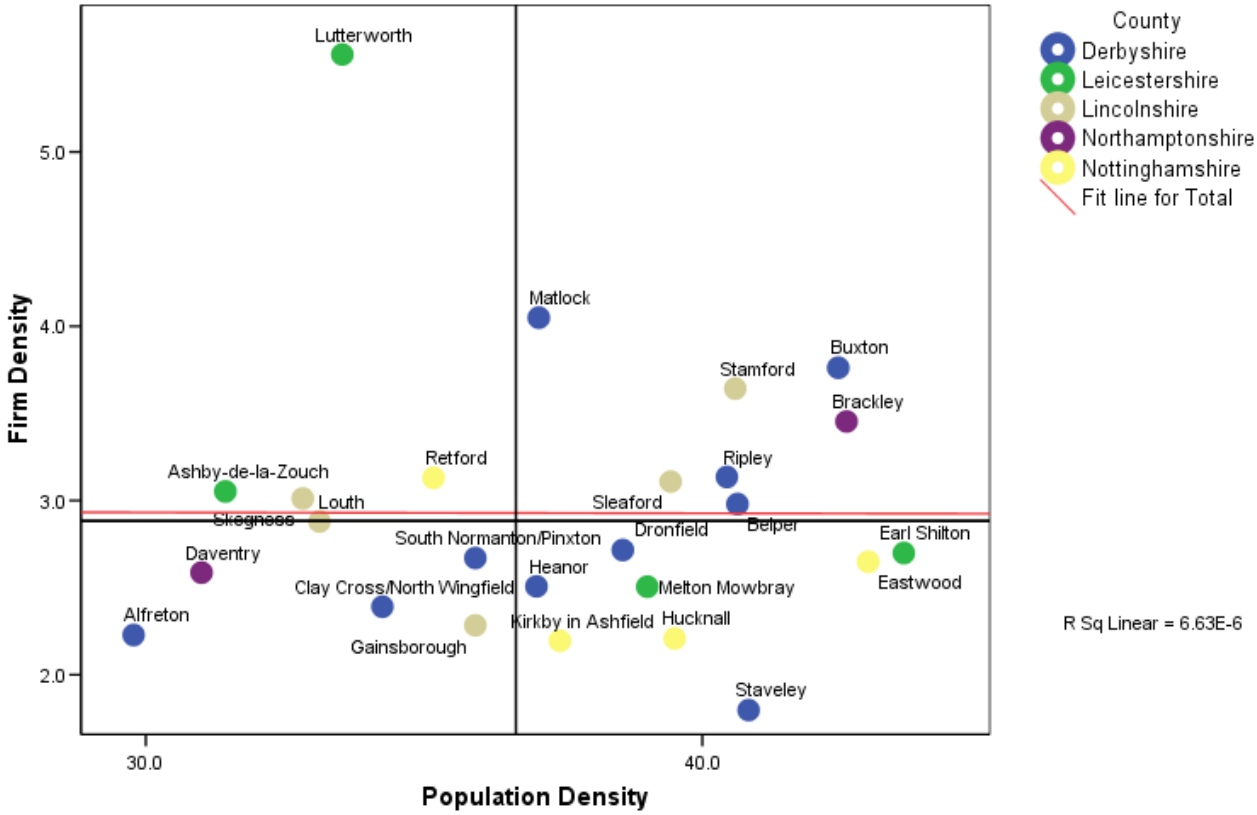
3.33 Graph 3.8 shows population and firm densities for small-medium sized centres; those with between 500 and 999 firms. The graph shows that these centres are more dispersed across the axes, which perhaps indicates a greater degree of heterogeneity. A higher proportion – more than half – demonstrate high firm densities which may suggest that these larger centres are more likely to benefit from agglomeration effects.

3.34 It is possible to identify a number of groupings from the distribution shown on the graph. The first includes centres that demonstrate below average population densities, and firm densities that are around the mean. These include towns such as Horncastle, Bourne, Ruddington and Oakham. These are centres that perhaps have low concentrations of population, but that have fairly high levels of business activity.

3.35 A second group includes centres with high population and low firm densities, such as Market Deeping, Mansfield Woodhouse, Mountsorrel and Shepshed. These are settlements that may be dependent on nearby large towns and cities for employment and services, which may affect levels of business activity within the centre. Other centres may have structural challenges that affect business activity, such as Mablethorpe which is regarded as a deprived coastal area, and the former mining centres of Bolsover and Boughton/Ollerton.

3.36 A number of centres have significantly higher firm densities than would be expected for their population. These include Bakewell and Ashbourne which, located in rural Derbyshire, are thought to serve a rural hinterland as well as tourist visitors. Other 'strong' centres include Towcester, Sileby, Bingham and several centres in Derbyshire. These are strong economies which are supported by a strong population base.

Graph 3.9 – Centres with 1,000-1,999 Firms *(Source: ONS Crown Copyright, Census 2001 and Inter-Departmental Business Register 2007)*



3.37 Graph 3.9 shows firm and population densities for medium sized centres – those with between 1,000 and 1,999 firms. This distribution of centres of this size is characterised by clustering around or below the mean for firm density but dispersal along the population density (x) axis. The distribution of the majority of these centres below the mean for firm densities suggests that a low proportion of centres in this size group act as sub-regional services centres or as 'magnets' for employment.

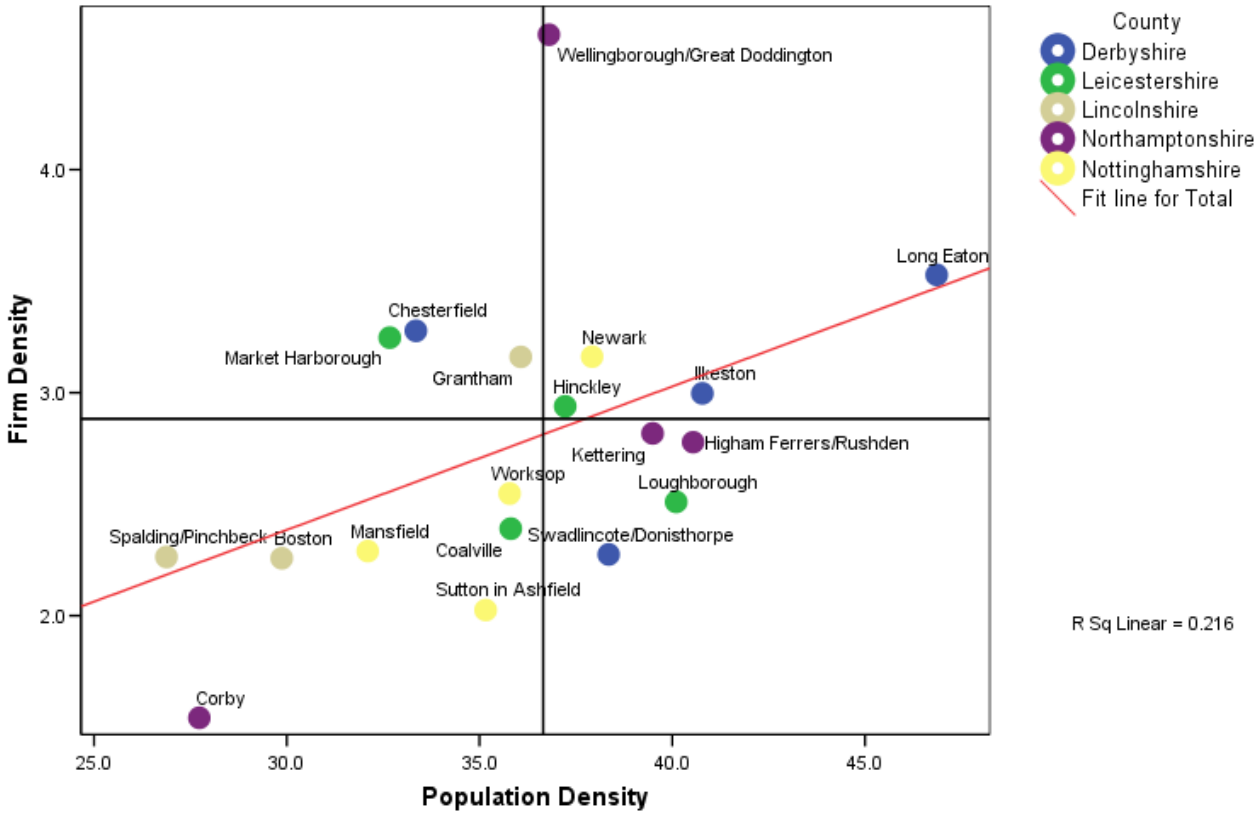
3.38 The outlier of Lutterworth is a clear exception, with a firm density significantly beyond what would be expected for the concentration of population in the town. This suggests that this centre acts as a focus for services or employment for the surrounding area, and may be explained by the presence of Magna Park distribution centre. To a less extent, Ashby, Louth, Retford and Skegness also demonstrate high firm densities which may indicate that they serve as sub-regional service centres.

3.39 Matlock, Stamford, Buxton, Sleaford, Ripley and Belper emerge as strong local economies with above average firm and population densities.

3.40 Industrial centres, some of which were formerly associated with mining and heavy manufacturing, tend to lie towards to the bottom left quadrant of the graph. The low population and firm densities may suggest that these centres lack critical mass, and may also be indicative of the presence of larger employers and low density industrial development.

3.41 Centres such as Melton, Dronfield, Heanor and Staveley demonstrate lower firm than population densities, which suggests that residents in these areas may rely on other nearby urban areas for employment and/or services. Later analysis in this report shows these centres to be very well connected to nearby large centres of population, and within easy access of employment opportunities elsewhere.

Graph 3.10 – Centres with 2,000 Firms or More *(Source: ONS Crown Copyright, Census 2001 and Inter-Departmental Business Register 2007)*



3.42 Graph 3.10 shows firm and population densities for the largest secondary centres in the East Midlands; those with 2,000 firms or more. This group represents the most economically significant in the sample.

3.43 Unlike the graphs 3.7-3.9, this graph demonstrates a relationship between the variables which, although weak, suggests that as population density increases firm density tends to increase for these centres. There is, therefore, a broad equilibrium with most centres demonstrating a concentration of firms which relates to and serves its resident population. There are just two outliers – Wellingborough and Corby.

3.44 More than half (11 out of 19) of centres in this size group lie below the mean for firm density. Those in the bottom left quadrant also demonstrate low population densities. These are centres that may be 'under performing' in terms of the level of business activity taking place, and may be experiencing structural challenges. They include a number of former industrial centres, the largest of which is Mansfield, and centres associated with manufacturing such as Spalding and Boston.

3.45 Those with high population and low firm densities include Loughborough, Rushden, Kettering and Swadlincote. These appear to have a low number of firms compared with high concentrations in population. This may indicate that residents in these areas may need to travel to other centres for employment and services and that these are, in effect, dependent or dormitory settlements.

3.46 Those lying above the mean for firm densities are the most economically significant secondary centres in the region. It is interesting to note that the first, second and fourth largest centres in terms of firm population also demonstrate high firm densities. Wellingborough, in particular, and Chesterfield both show firm concentrations which are significantly higher than would be expected for their populations. Long Eaton, the fourth largest centre, and located within what could be described as a greater Nottingham conurbation, also demonstrates high firm and population densities

3.47 Market Harborough, Grantham, Newark, Hinckley and Ilkeston emerge as strong economies. These are all well connected centres that operate both as commuter settlements and sub-regional services centre.

Section 4 – Connectivity

Connectivity to Nearest Large Urban Area

4.1 Table 4.1 sets out the principal urban areas and towns (with at least 100,000 population) that have been calculated as the 'nearest' for each secondary centre in terms of journey time. For each city, the number of secondary centres that are closer to that city than any other is shown, together with the mean number of miles, minutes and minutes per mile for all 'nearest' centres.

Table 4.1 – Connectivity to Nearest Large Urban Area *(Source: the AA, 2008)*

Nearest City	Number of Nearest Centres	Miles to Nearest City	Minutes to Nearest Large City	Minutes per Mile
Coventry	1	14.30	25.00	1.75
Derby	8	14.61	25.25	1.80
Leicester	20	13.95	25.25	1.90
Lincoln	14	29.26	43.64	1.51
Manchester	3	17.33	32.00	1.85
Northampton	9	16.54	25.44	1.55
Nottingham	23	12.23	21.30	1.83
Peterborough	9	18.78	30.78	1.69
Sheffield	11	17.54	27.64	1.59
Total	98	16.98	27.95	1.73

4.2 The two cities of Nottingham and Leicester are the nearest large urban areas for approaching half, 43, of the urban centres. These two cities also show the lowest mean number of miles from the secondary centres, at 13.95 miles for Leicester and 12.23 miles for Nottingham. This reflects the high number, and dense concentration of, secondary centres around the three cities region and especially around and between the two largest economies of Nottingham and Leicester.

4.3 Lincoln is the closest large urban area for 14 secondary centres, including those in the north and east of Lincolnshire, and centres in eastern Nottinghamshire such as Newark and Tuxford. The sparsity of the eastern area of the region is reflected in the mean number of miles from these centres to Lincoln which, at 29.26, is over twice the mean distance for centres around Derby, Leicester and Nottingham.

4.4 Northampton is the nearest large urban area for 9 secondary centres, all of which are in Northamptonshire. They include Wellingborough, Rushden, and Kettering to the east, and Towcester, Brackley and Daventry to the south and west. The mean number of miles to Northampton is 16.54, which suggests that the settlements are more sparsely distributed than those around Leicester and Nottingham.

4.5 Derby is the closest city for 8 secondary centres. These include Belper and Ripley to the north of Derby, Ashbourne and Matlock in Derbyshire Dales, and Castle Donington in Leicestershire. The mean number of 14.61 miles between these centres and Derby suggests a dense clustering of settlements around the city.

4.6 For 24 secondary centres, just under a quarter of the sample, the nearest large urban area lies outside the East Midlands. Sheffield and Peterborough both lie close to the boundary of the region to the north and east respectively and, together, are the nearest cities for 20 secondary centres. Sheffield is the closest city for 11 secondary centres, including Dronfield, Chesterfield, Buxton and Bakewell in Derbyshire, and Worksop and Retford in Nottinghamshire. For 9 secondary centres in the East Midlands, Peterborough is the nearest city. These include Market Deeping, Bourne and Stamford in Lincolnshire, and Oundle in Northamptonshire. Coventry is closest for Hinckley in Leicestershire, and Manchester for towns in the west of High Peak district in Derbyshire.

4.7 Tables 4.2 and 4.3 set out the most and least 'connected' secondary centres in terms of shortest and longest journey times to the nearest large urban area by car. The shortest journey times are shown to be for centres in Nottinghamshire, Derbyshire and Leicestershire. Of all centres, Dronfield is shown to have the shortest journey time to its nearest city, Sheffield. At a distance of 6.8 miles, this is a more efficient journey time than for Clifton and Ruddington which are closer to the nearest city of Nottingham, but have a slower travel time.

Table 4.2 – Centres most 'Connected' to Large Urban Areas (shortest journey times)
(Source: the AA, 2008)

Urban Centre	County	Nearest City	Minutes	Miles	Mins/Mile
Dronfield	Derbyshire	Sheffield	11.0	6.8	1.6
Ruddington	Nottinghamshire	Nottingham	12.0	5.7	2.1
Radcliffe on Trent	Nottinghamshire	Nottingham	12.0	7.0	1.7
Clifton	Nottinghamshire	Nottingham	13.0	5.7	2.3
Kibworth Harcourt	Leicestershire	Leicester	13.0	8.4	1.6
Enderby	Leicestershire	Leicester	14.0	6.4	2.2
Belper	Derbyshire	Derby	15.0	8.3	1.8
Long Eaton	Derbyshire	Nottingham	16.0	7.7	2.1
Kimberley	Nottinghamshire	Nottingham	16.0	7.8	2.1
Bingham	Nottinghamshire	Nottingham	16.0	10.3	1.6

4.8 The centres with the longest journey times to the nearest large urban areas are shown in Table 4.3. These least connected centres in the East Midlands, with journey times of an hour or more, are shown to be Skegness, Wainfleet, and Mablethorpe/Sutton on Sea in Lincolnshire. Buxton in Derbyshire and Retford in Nottinghamshire are shown to have journey times of more than 45 minutes to the nearest cities.

Table 4.3 – Centres least 'Connected' to Large Urban Areas (longest journey times)
(Source: the AA, 2008)

Urban Centre	County	Nearest City	Minutes	Miles	Mins/Mile
Holbeach	Lincolnshire	Peterborough	44.0	28.5	1.5
Retford	Nottinghamshire	Sheffield	47.0	32.1	1.5
Louth	Lincolnshire	Lincoln	49.0	26.8	1.8
Buxton	Derbyshire	Sheffield	50.0	28.4	1.8
Long Sutton	Lincolnshire	Peterborough	51.0	33.0	1.6
Boston	Lincolnshire	Lincoln	52.0	36.1	1.4
Alford	Lincolnshire	Lincoln	57.0	38.5	1.5
Skegness	Lincolnshire	Lincoln	60.0	42.5	1.4
Wainfleet	Lincolnshire	Lincoln	70.0	48.4	1.5
Mablethorpe/Sutton	Lincolnshire	Lincoln	72.0	46.0	1.6

Distance to Nearest City and Airport

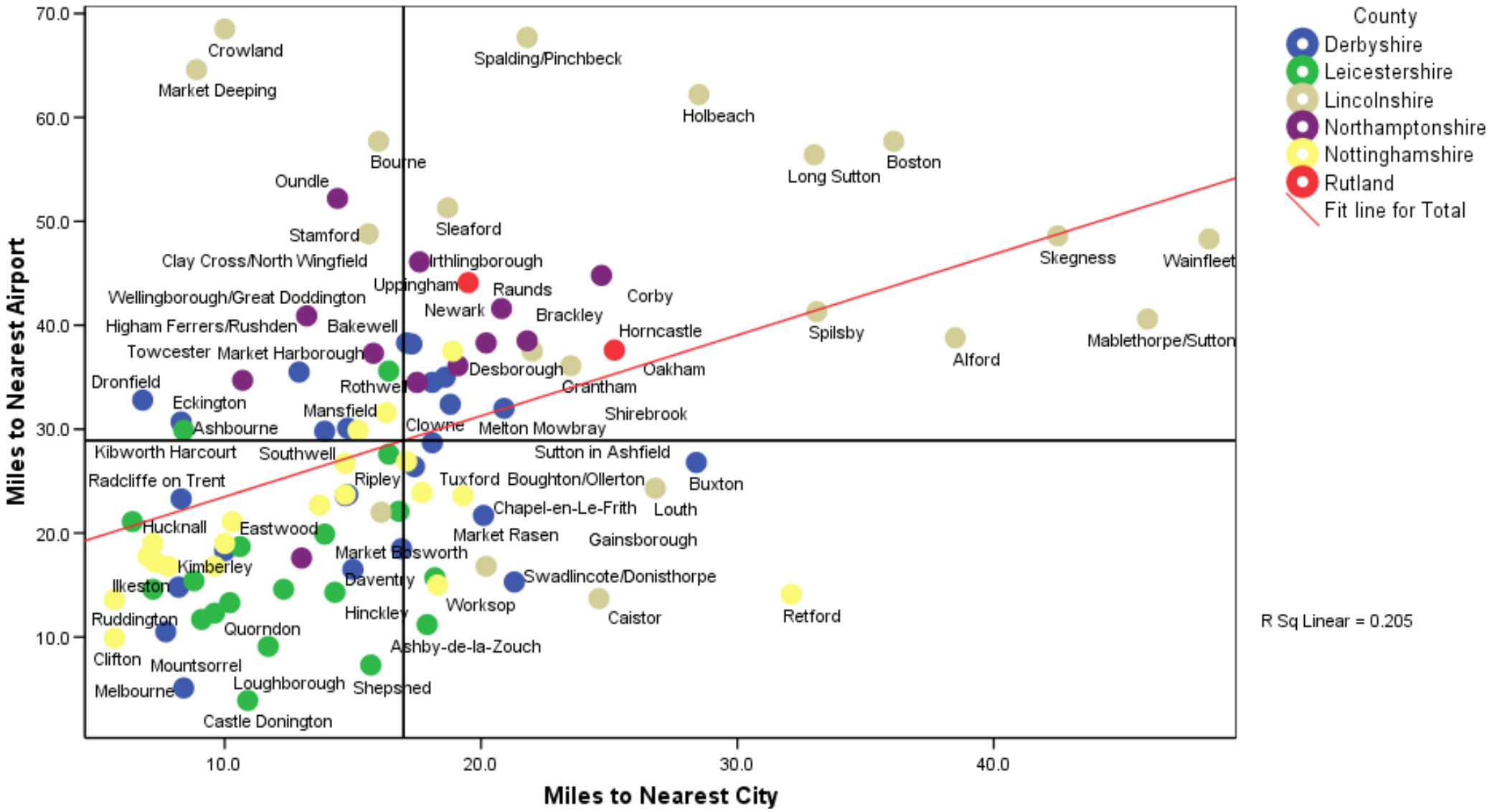
4.9 Graph 4.1 shows distance in miles to the nearest city and airport for all secondary centres. The distribution shown on the graph suggests that the majority of centres are well connected to both cities and airports, with a 'clumping' of centres within and around the bottom left quadrant. The vast majority are within 25 miles or a large urban area and 50 miles of an airport.

4.10 The most proximate centres to cities and airports are those in central areas of the East Midlands and, in particular, those located in the three cities region and close to East Midlands Airport.

4.11 Centres in the south of the region, including south Lincolnshire and Northamptonshire, are shown to be very well connected to cities such as Peterborough, Northampton and Milton Keynes, but more remote from airports. The nearest airports for this area are Luton, Norwich and Coventry.

4.12 The most remote centres from both cities and airports are primarily in the east and south of Lincolnshire, some of which are more than 40 miles from the nearest city, Lincoln, and more than 40 miles from Humberside and East Midlands Airports.

Graph 4.1 – Distance to Nearest City and Airport for all Secondary Centres *(Source: the AA, 2008)*



Distance to Nearest City and Efficiency of Journey

4.13 Graph 4.2 shows the distance to nearest large urban area for all secondary centres, together with the number of minutes per mile. The minutes per mile provides an indication of the efficiency of the travel time, in other words, whether the journey is likely to be free-flowing or congested.

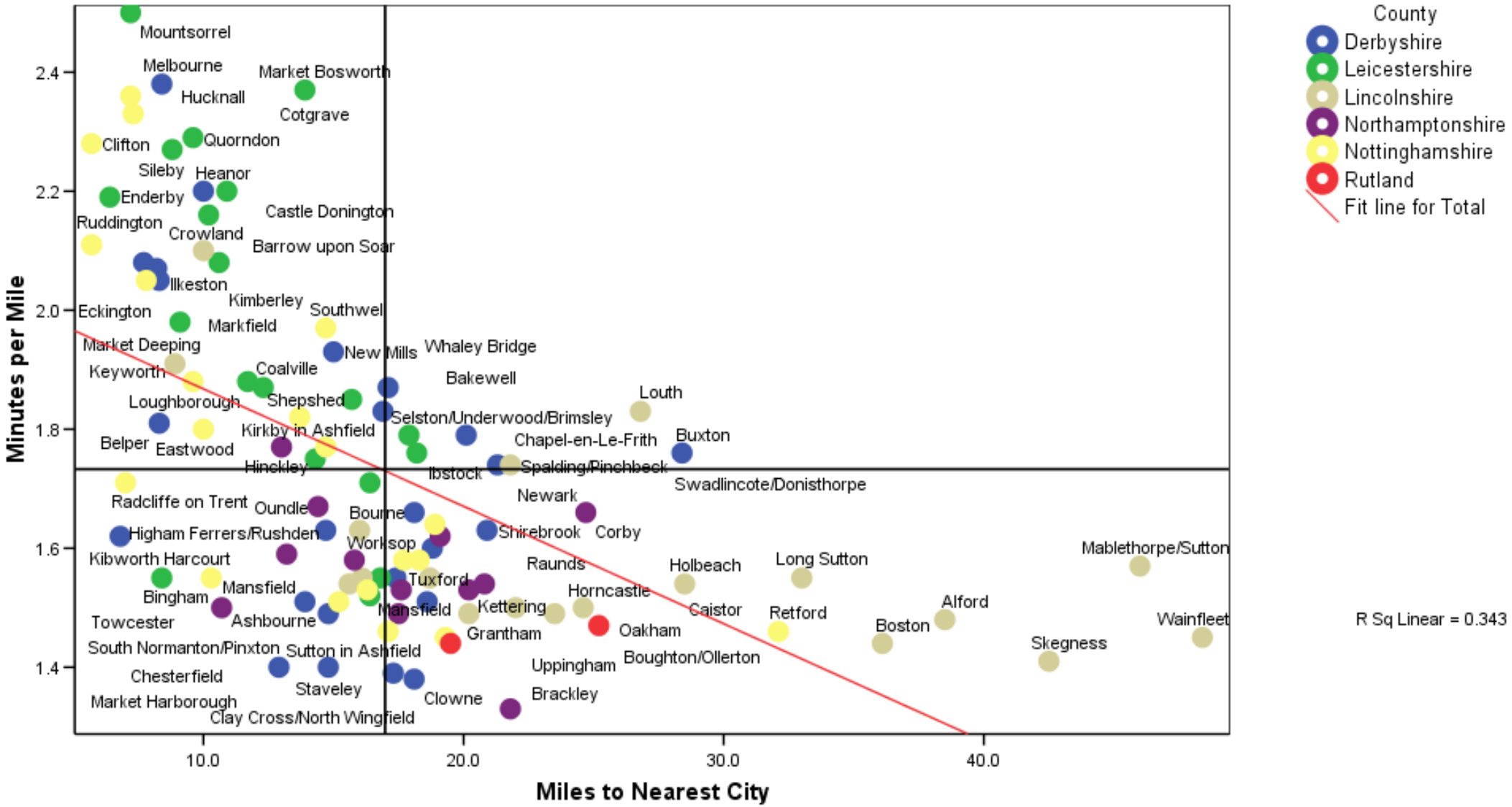
4.14 Centres in Nottinghamshire, Leicestershire and Derbyshire are the closest to large urban areas. However, as the graph shows, many of these centres, including Mountsorrel, Clifton, Hucknall, and Melbourne, have the least efficient journey times. The high density of settlements around these large cities may be associated with road congestion, reduced speed of traffic flow and less reliable journey times.

4.15 Centres closest to large urban areas and *with* efficient journey times include Dronfield, Chesterfield, and Staveley, all of which have good road connections to Sheffield via the M1 motorway. Towcester, Rushden, and Welling borough are all within 16 miles of Northampton and also have efficient journey times, suggesting an efficient road infrastructure in the south and west of Northamptonshire.

4.16 The majority of secondary centres in Lincolnshire and Rutland have above average distances from the nearest large urban areas, but demonstrate efficient journeys speeds of around 1.5 minutes per mile. So, although geographically remote, these settlements are connected to large urban areas by relatively uncongested and free flowing road infrastructure.

4.17 For a small number of settlements, the distance to nearest city and average speed of travel both lie above the regional means. These include Louth, Buxton, Chapel-en-Le-Frith, Spalding, Swadlincote, Ibstock, and Ashby-de-la-Zouch. This suggests that these settlements are remote from large urban areas and also poorly connected in terms of the efficiency of the road infrastructure.

Graph 4.2 – Distance to Nearest City (miles) and Efficiency of Journey (miles per minute) for all Secondary Centres *(Source: the AA, 2008)*



Connectivity to London

4.18 Tables 4.4 and 4.5 set out the total journey time to London for the centres are the most connected (shortest journey time) and least connected (longest journey time). The total journey time refers to train journey time plus the time to travel to the nearest mainline station, where there is no mainline station within the centre.

4.19 Of the 10 centres most connected to London, 8 are in Northamptonshire. Three centres - Wellingborough, Kettering and Rushden – have journey times of an hour or less. Market Harborough and Lutterworth in Leicestershire have journey times of just over an hour. The short journey times for these centres suggests that they are most likely to have economic links with London, either in terms of commuting or as a source of customers or suppliers.

Table 4.4 – Centres most 'Connected' to London (shortest total journey time)
(Source: British Rail Enquiries, 2008)

Urban Centre	County	Mainline Station	Minutes
Wellingborough/Gt.Doddington	Northamptonshire	Wellingborough	49.00
Kettering	Northamptonshire	Kettering	57.00
Higham Ferrers/Rushden	Northamptonshire	Wellingborough	60.00
Towcester	Northamptonshire	Milton Keynes	64.00
Rothwell	Northamptonshire	Kettering	66.00
Raunds	Northamptonshire	Wellingborough	67.00
Market Harborough	Leicestershire	Market Harborough	68.00
Desborough	Northamptonshire	Kettering	70.00
Lutterworth	Leicestershire	Rugby	71.00
Corby	Northamptonshire	Kettering	71.00

4.20 The least connected secondary centres to London lie primarily in Derbyshire and Lincolnshire and, in particular, the east of Lincolnshire and the north and west of Derbyshire. All these centres have a total journey time of at least two and a half hours to London. For these centres, London is not likely to be as relevant as a source of employment or business activity.

Table 4.5 – Centres least 'Connected' to London (longest total journey time)
(Source: British Rail Enquiries, 2008)

Urban Centre	County	Mainline Station	Minutes
New Mills	Derbyshire	Stockport	150.00
Eckington	Derbyshire	Chesterfield	151.00
Louth	Lincolnshire	Newark	152.00
Whaley Bridge	Derbyshire	Stockport	153.00
Ashby-de-la-Zouch	Leicestershire	Leicester	153.00
Bakewell	Derbyshire	Chesterfield	155.00
Alford	Lincolnshire	Grantham	156.00
Chapel-en-Le-Frith	Derbyshire	Stockport	157.00
Mablethorpe/Sutton	Lincolnshire	Peterborough	159.00
Buxton	Derbyshire	Stockport	164.00

Travel Time to London and Nearest City

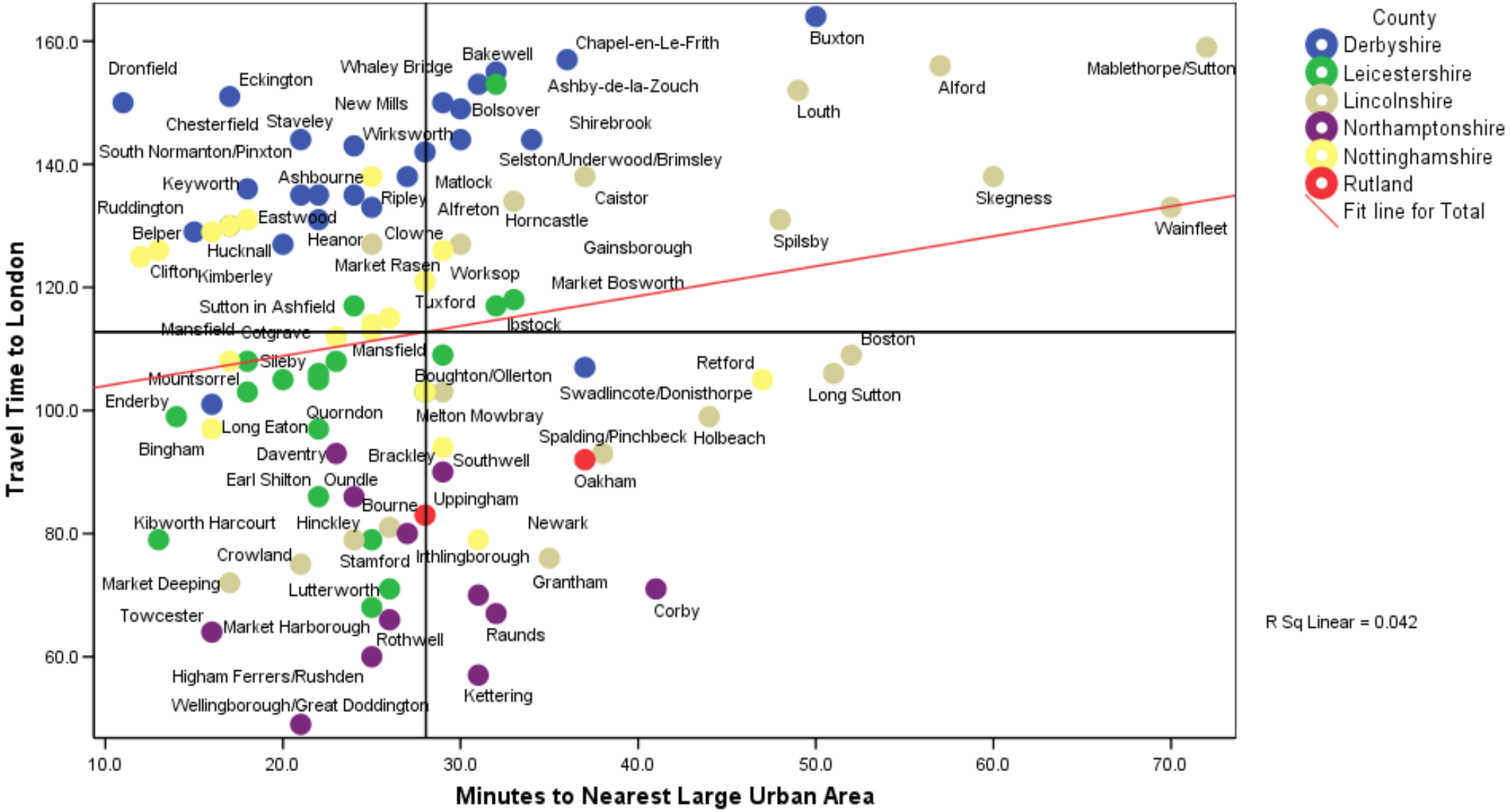
4.21 Graph 4.3 compares the travel time to London and nearest city for all centres. Again, a significant proportion is shown to be well connected. The vast majority are within a 30 minute drive of a city and a 2 hour total journey time to London.

4.22 Those most connected to *both* London and nearest city are primarily in Northamptonshire and Leicestershire, including Towcester, Wellingborough, Market Harborough and Lutterworth. Centres in south of Lincolnshire are also shown to be well connected due to their proximity to Peterborough.

4.23 A number of settlements have above average (above the regional mean) journey times to nearby large urban areas but below average journey times to London. These include Kettering, Corby, Grantham, and Oakham. This may suggest that connectivity to London has a stronger influence on these centres than for other centres which are more proximate to large urban areas.

4.24 Centres proximate to nearby cities but with long travel distances to London include those in Derbyshire (including Dronfield and Staveley, close to Sheffield) and Nottinghamshire (including Radcliffe on Trent and Castle Donington). Centres that have longer than average travel times to both London and large urban areas – and are therefore not well connected to either – include those in eastern Lincolnshire such as Mablethorpe, Skegness and Alford, and the west of Derbyshire, such as Buxton and Chapel-en-Le-Frith.

Graph 4.3 – Travel time to Nearest City and London for all Secondary Centres *(Source: the AA and British Rail Enquiries, 2008)*



Connectivity to Nearest Airport

4.25 A variety of airports emerge as being the closest for secondary centres in the East Midlands, as Table 4.6 shows. The mean distance to the nearest airport is 29 miles for all secondary centres, with a mean journey time of 45 minutes. East Midlands Airport, the only international airport in the region, is the closest airport for more than half, 53, of secondary centres. This reflects its location close to the three cities of Nottingham, Leicester and Derby, and the high number of secondary centres clustered around these principal urban areas. For centres closest to East Midlands Airport, there is an average distance of 25 miles to the airport, taking an average of 38 minutes.

4.26 For the remaining 45 secondary centres, the nearest airports lie outside the region. Humberside and Doncaster Sheffield are both situated in Yorkshire and Humberside, close to the northern boundary of the East Midlands region, and together are the nearest airports for 22 secondary centres in northern Lincolnshire and north Nottinghamshire. Coventry is the nearest airport for 11 centres in the south and west of Leicestershire, with an average distance of 31 miles and journey time of 42 minutes. Luton is the nearest airport for centres in the south of Northamptonshire, and Manchester for western Derbyshire. Norwich is the nearest airport for two centres in South Lincolnshire: Crowland and Long Sutton.

4.27 In terms of efficiency of journey times, East Midlands and Doncaster Sheffield have journeys with the lowest average speed of travel, suggesting travel through built up and/or congested areas. Luton has the longest average journey time from settlements in Northamptonshire but, at 1.49 miles per minute, the journey is likely to be relatively efficient and uncongested.

Table 4.6 – Connectivity to Airports *(Source: the AA, 2008)*

Airport	Number of 'Nearest' Centres	Miles to Nearest Airport	Travel Time to Nearest Airport	Minutes/ Mile to Nearest Airport
Coventry	11	30.59	41.73	1.44
East Midlands	53	24.86	38.28	1.65
Humberside	10	37.28	58.70	1.58
Luton	5	48.10	71.40	1.49
Manchester	5	24.36	35.20	1.45
Norwich	2	59.30	86.00	1.45
Doncaster Sheffield	12	27.14	43.83	1.67
Total	98	28.93	43.94	1.60

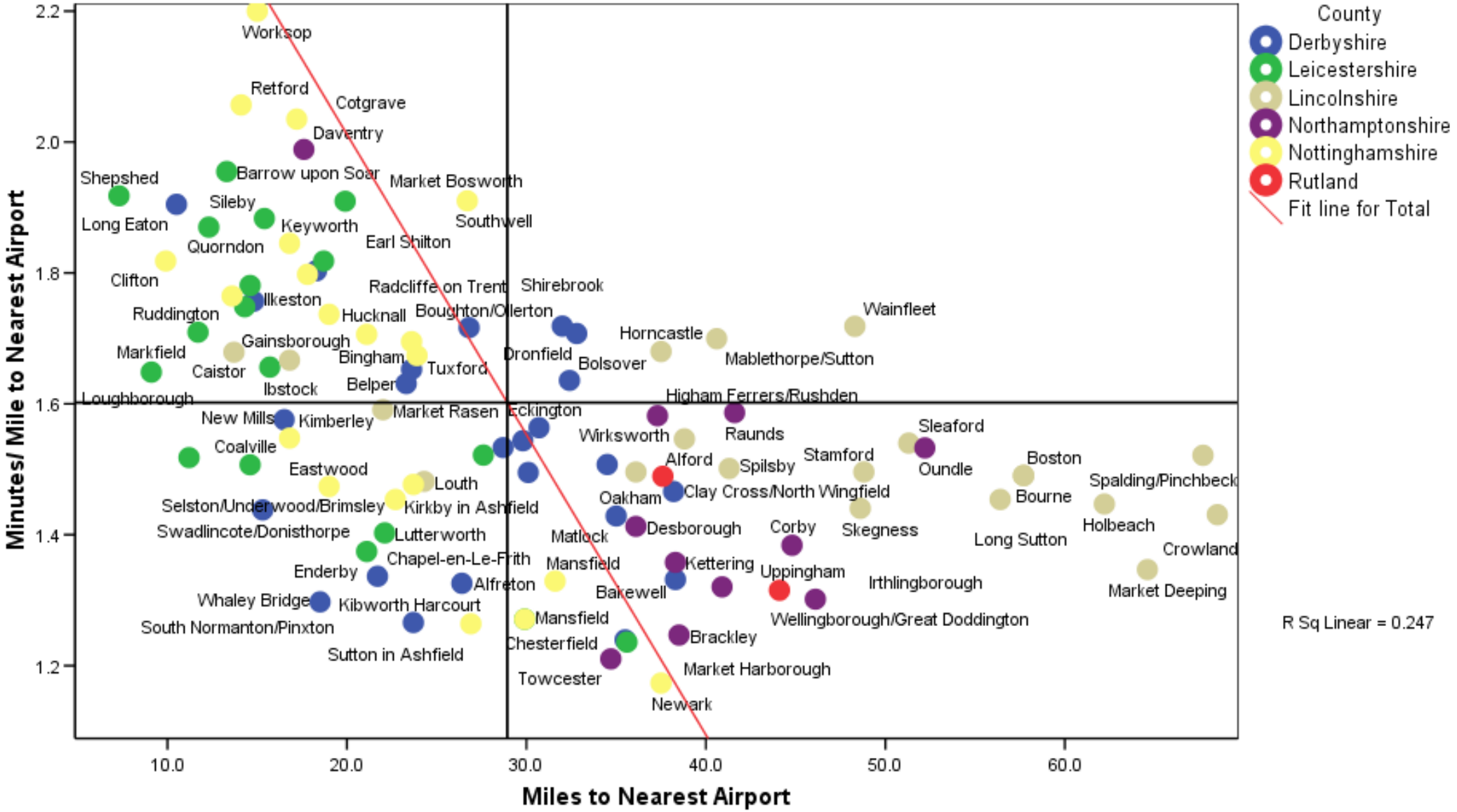
Distance to Nearest Airport and Efficiency of Journey

4.28 Graph 4.4 shows the distance between each secondary centre and its nearest airport, together with the efficiency of the journey time (minutes per mile). The centres with greatest access to a local airport are those in Leicestershire, Nottinghamshire and Derbyshire which are proximate to East Midlands Airport. The centres most proximate to an airport, and with the most efficient journey times include Ashby-de-la-Zouch and Coalville in Leicestershire, and Swadlincote and Alfreton in Derbyshire. These are centres with efficient road transport connections to East Midlands Airport.

4.29 Settlements which are proximate to an airport but with inefficient journey times include Worksop and Retford. These are the closest secondary centres to Doncaster Sheffield Airport but have the least efficient journey times, perhaps due to the need to travel on smaller roads and through settlements such as Bawtry.

4.30 Despite being more remote from their nearest airport, secondary centres in Northamptonshire, such as Towcester, Rothwell and Brackley, demonstrate efficient journey times. This suggests good road transport infrastructure between these centres and Luton Airport. Secondary centres in the east of Lincolnshire are most remote from their nearest airport but also demonstrate efficient journey times, suggesting primarily uncongested roads between these centres and Humberside and East Midlands Airports.

Graph 4.4 – Distance to Nearest Airport and Efficiency of Journey Time (Minutes per Mile) for all Secondary Centres *(Source: the AA, 2008)*



5. Participation in the Labour Market – Economic Activity

5.1 The centres with the highest rate of participation in the labour market (those in employment or actively seeking work) are mostly concentrated in the south and west of the region. Six of these centres are in Northamptonshire, with Brackley and Towcester demonstrating a rate of well over 75%. These centres are the most southerly in the region, and are well connected to Northampton, Oxford, Milton Keynes as well as London by train.

5.2 Three centres in Leicestershire – Lutterworth, Shepshed and Sileby – also demonstrate high levels of economic activity. Again, these centres are well connected via roads such as the M1 and M42 and to the nearby cities of Leicester and Nottingham. The high rate of economic activity in Market Deeping makes it an exception in Lincolnshire, and this can be partly explained by its proximity to Peterborough.

Table 5.1- Centres with Highest Rates of Economic Activity *(Source: ONS Crown Copyright, Census 2001)*

Urban Centre	County	Economic Activity Rate
Brackley	Northamptonshire	.80
Towcester	Northamptonshire	.77
Market Deeping	Lincolnshire	.76
Daventry	Northamptonshire	.75
Raunds	Northamptonshire	.75
Irthlingborough	Northamptonshire	.75
Desborough	Northamptonshire	.74
Lutterworth	Leicestershire	.74
Shepshed	Leicestershire	.74
Sileby	Leicestershire	.74

5.3 The ten centres with the lowest rates of participation in the labour market include six from Lincolnshire, and two from Derbyshire. In Mablethorpe and Sutton on Sea, less than half the adult population participate in the labour market. More detailed analysis reveals that 31% of the adult population are retired and 31% suffer from a limiting long-term illness. In Skegness, the largest coastal town in Lincolnshire, 13% of the adult population are retired while 22% suffer from a limiting long-term illness.

5.4 In Shirebrook and Bolsover in Derbyshire, and Boughton/Ollerton in Nottinghamshire, a high proportion of the population suffer from a limiting long-term illness. This accounts for almost a third of the adult population in Shirebrook (28%), and a fifth (20%) in Bolsover and Boughton/Ollerton. The mining history of these areas, and the change in the employment structure in this area after the mining closures, are associated with high levels of deprivation.

5.5 The low economic activity rate in Loughborough may be explained by the presence of the University and the high number of students. Students account for 20% of the town's adult population. Without the student population, Loughborough would have an economic activity rate of 0.74%, similar to nearby Shepshed.

Table 5.2 - Centres with Lowest Rates of Economic Activity *(Source: ONS Crown Copyright, Census 2001)*

Urban Centre	County	Economic Activity Rate
Mablethorpe/Sutton	Lincolnshire	.42
Shirebrook	Derbyshire	.52
Wainfleet	Lincolnshire	.57
Skegness/Ingoldmells	Lincolnshire	.57
Long Sutton	Lincolnshire	.59
Loughborough	Leicestershire	.59
Boughton/Ollerton	Nottinghamshire	.60
Holbeach	Lincolnshire	.60
Bolsover	Derbyshire	.60
Alford	Lincolnshire	.60

Section 6 - Economic Activity and Connectivity

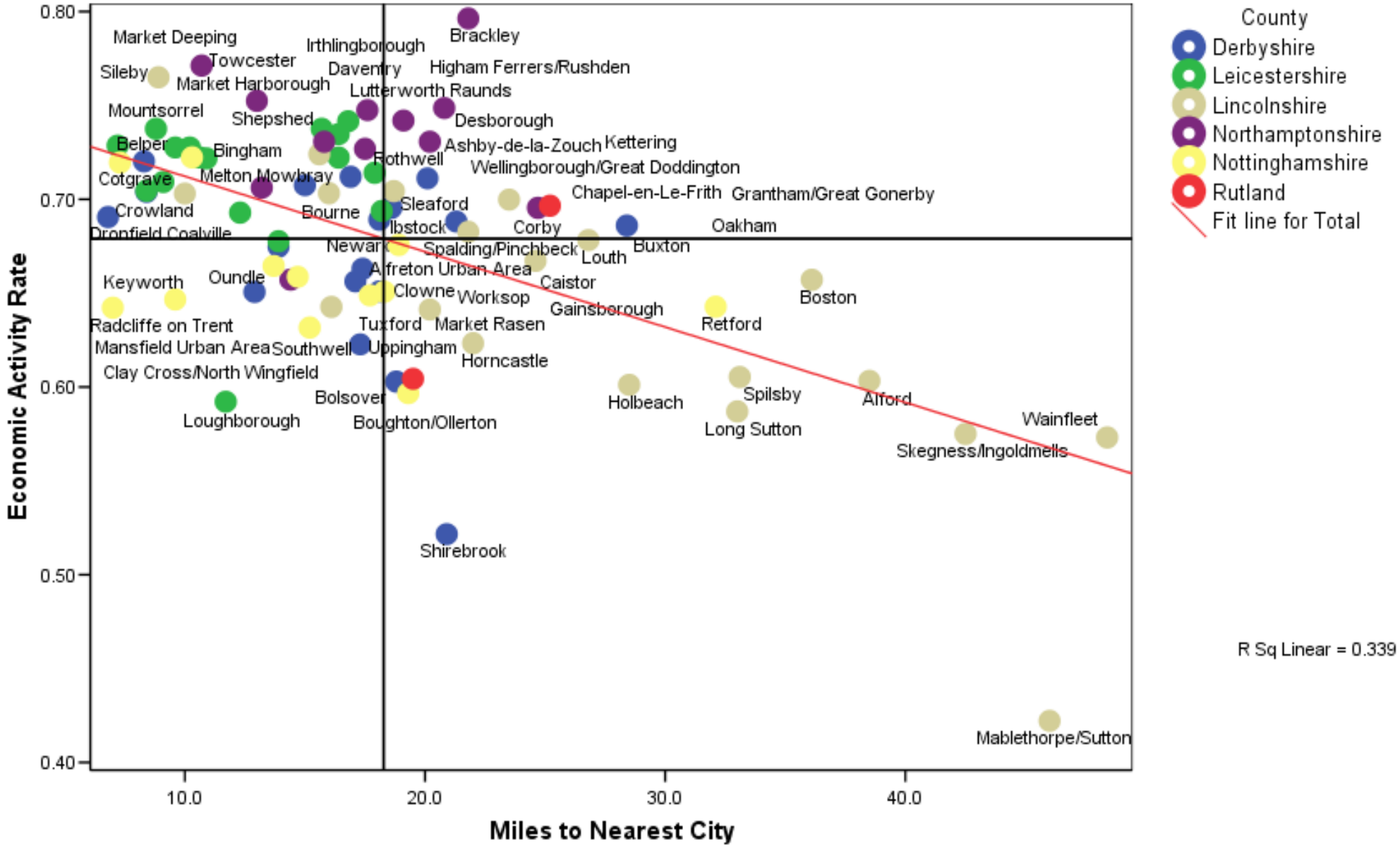
Distance to Nearest City and Economic Activity

6.1 Graph 6.1 shows the economic activity rate (% of the population aged over 16 in employment or actively seeking work) for all towns in the region compared with the distance in miles to the nearest large city.

6.2 The best fit line and R^2 of 0.34 suggests a weak/moderate relationship between proximity to the nearest city and participation in the labour market. The majority of centres close to large urban areas – particularly those in Nottinghamshire and Leicestershire – demonstrate higher than average economic activity rates. Conversely, centres that are more remote from large urban areas, such as Skegness, Horncastle and Mablethorpe in Lincolnshire show below average economic activity rates.

6.3 Although the graph demonstrates that there is a relationship between the variables, this may not necessarily be causal, i.e. other factors may affect rates of economic activity. For example, Skegness and Mablethorpe both have high retirement populations due to their coastal locations. However, the high economic activity rates in centres more proximate to large towns and cities may be indicative of the high number of jobs available in the principal urban areas, and may suggest that these may produce an employment magnet effect.

Graph 6.1 – Distance to Nearest City and Economic Activity Rate for all Secondary Centres *(Source: ONS Crown Copyright, Census 2001 and the AA, 2008)*



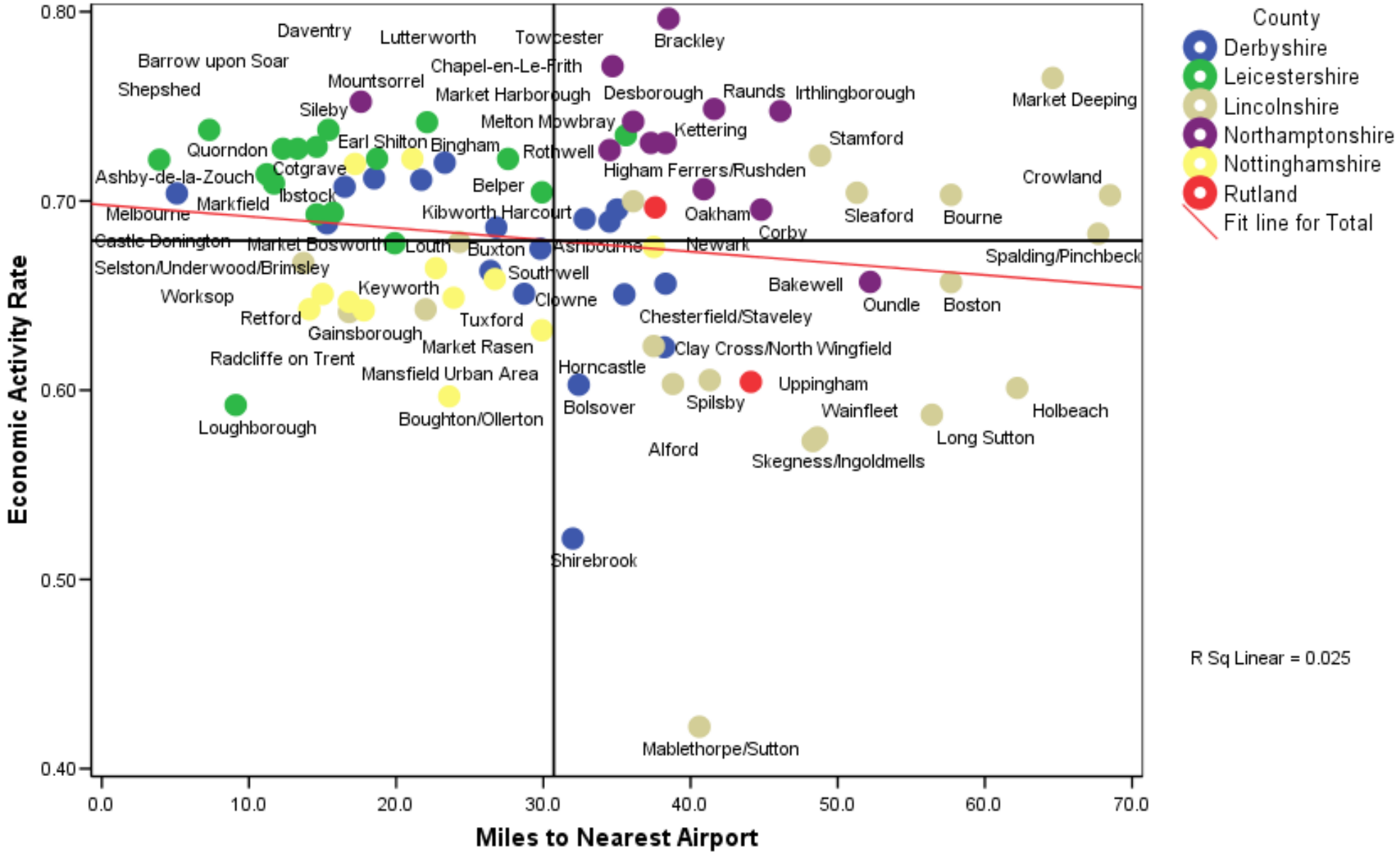
Distance to Nearest Airport and Economic Activity

6.4 Graph 6.2 shows the economic activity rate for all centres in the region compared with the distance in miles to the nearest airport.

6.5 The best fit line and R^2 suggest no apparent relationship between these variables at a regional level. In other words, proximity to an airport does not appear to have a discernible influence on the proportion of the population that is economically active.

6.6 This may suggest that airports in and around the East Midlands do not provide a significant source of employment at a regional level and do not act as employment 'magnets' for residents living outside the immediate area. This may be due to their relatively small size, particularly when compared with airports such as Heathrow and Gatwick in the South East, and the limited potential for local agglomeration effects.

Graph 6.2 – Distance to Nearest Airport and Economic Activity Rate for all Secondary Centres *(Source: ONS Crown Copyright, Census 2001 and the AA, 2008)*



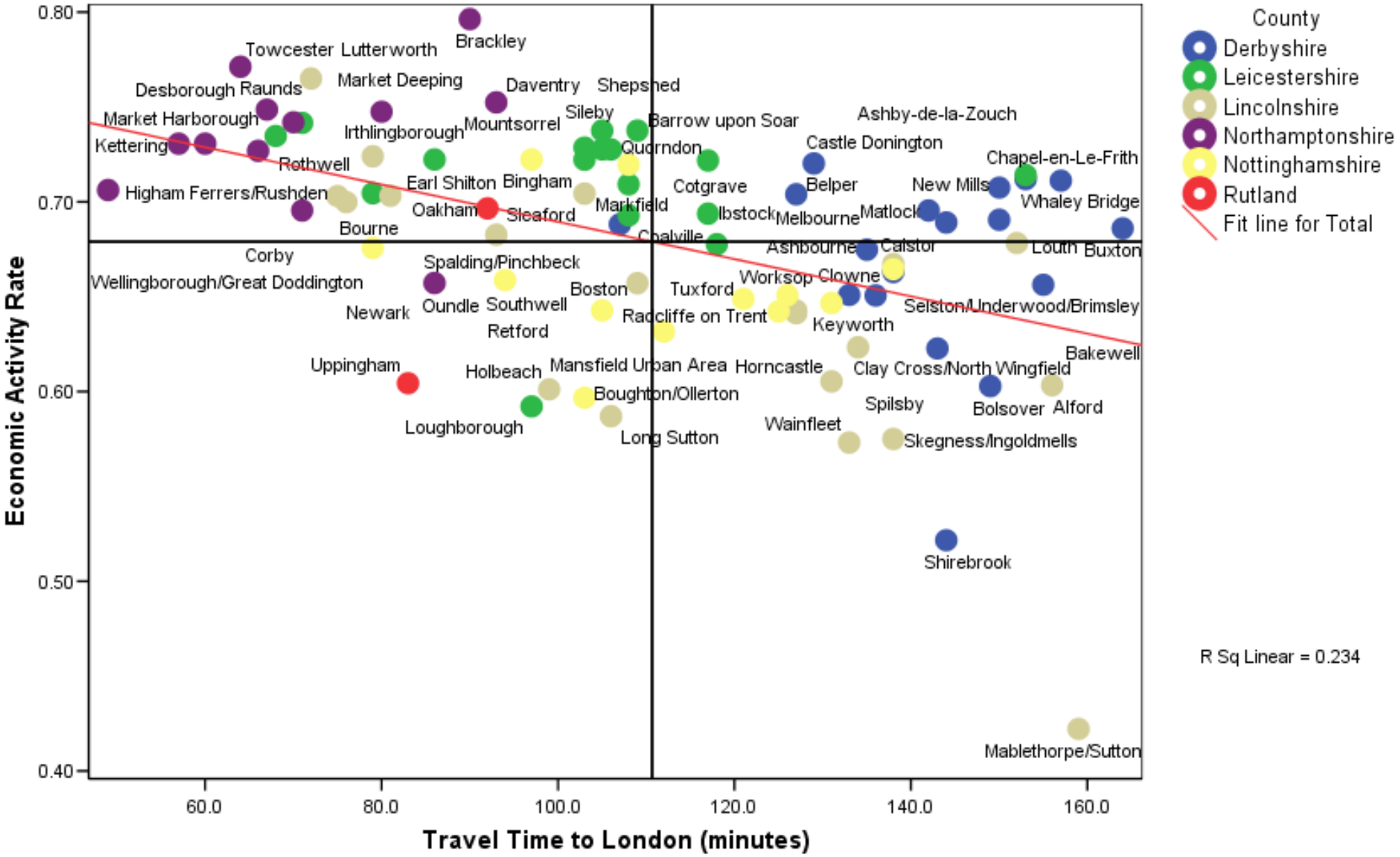
Travel Time to London and Economic Activity

6.7 Graph 6.3 shows the economic activity rate for all centres in the region compared with the travel time to London (the time taken to travel to the mainline station, if there is no mainline station within the centre, and the train journey time).

6.8 The best fit line and R^2 suggest a weak/moderate relationship between the journey time to London and participation in the labour market at a regional level. Almost all centres within 80 minutes of London demonstrate economic activity rates that are above the regional average. These include centres in Northamptonshire (such as Towcester, Kettering, Rushden), Leicestershire (Market Harborough and Lutterworth), and Lincolnshire (Bourne and Market Deeping). This may suggest that London provides a source of employment for those living in centres within an 80 minute journey time. It may also indicate a broader 'South East influence', i.e. that centres with shorter journey times to London are also more proximate to the South East and the employment opportunities in centres such as Milton Keynes, Bedford, and Oxford.

6.9 Many centres with long journey times to London – primarily those in Derbyshire and the east of Lincolnshire – demonstrate below average economic activity rates. These include Mablethorpe and Skegness in Lincolnshire, and Shirebrook and Bolsover in Derbyshire.

Graph 6.3 – Travel Time to London and Economic Activity Rate for all Secondary Centres *(Source: ONS Crown Copyright, Census 2001 and the AA, 2008)*



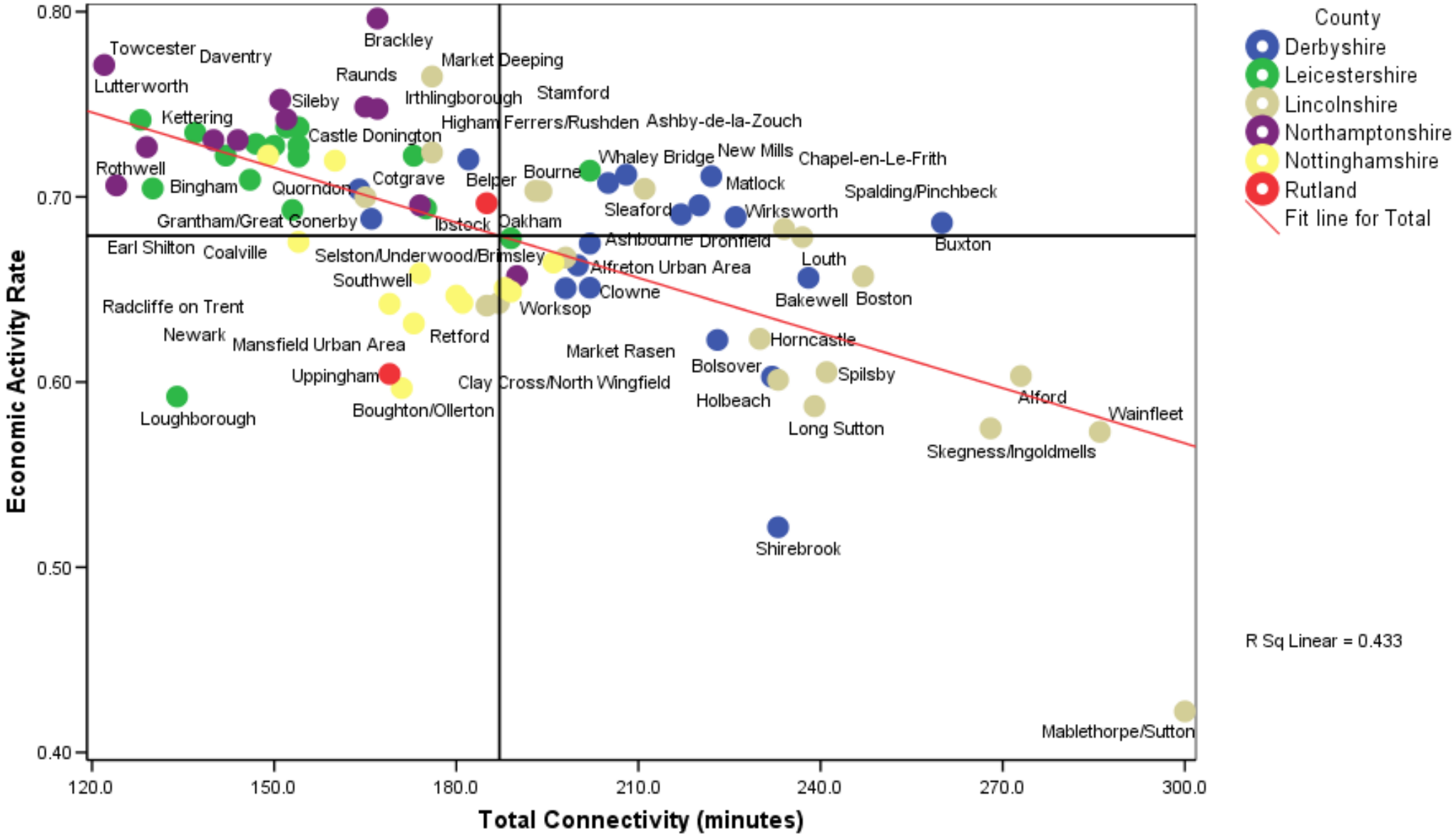
Total Connectivity and Economic Activity

6.10 Graph 6.4 shows the economic activity rate for all centres compared with a measure for total connectivity (calculated by adding minutes to nearest city + nearest airport + London).

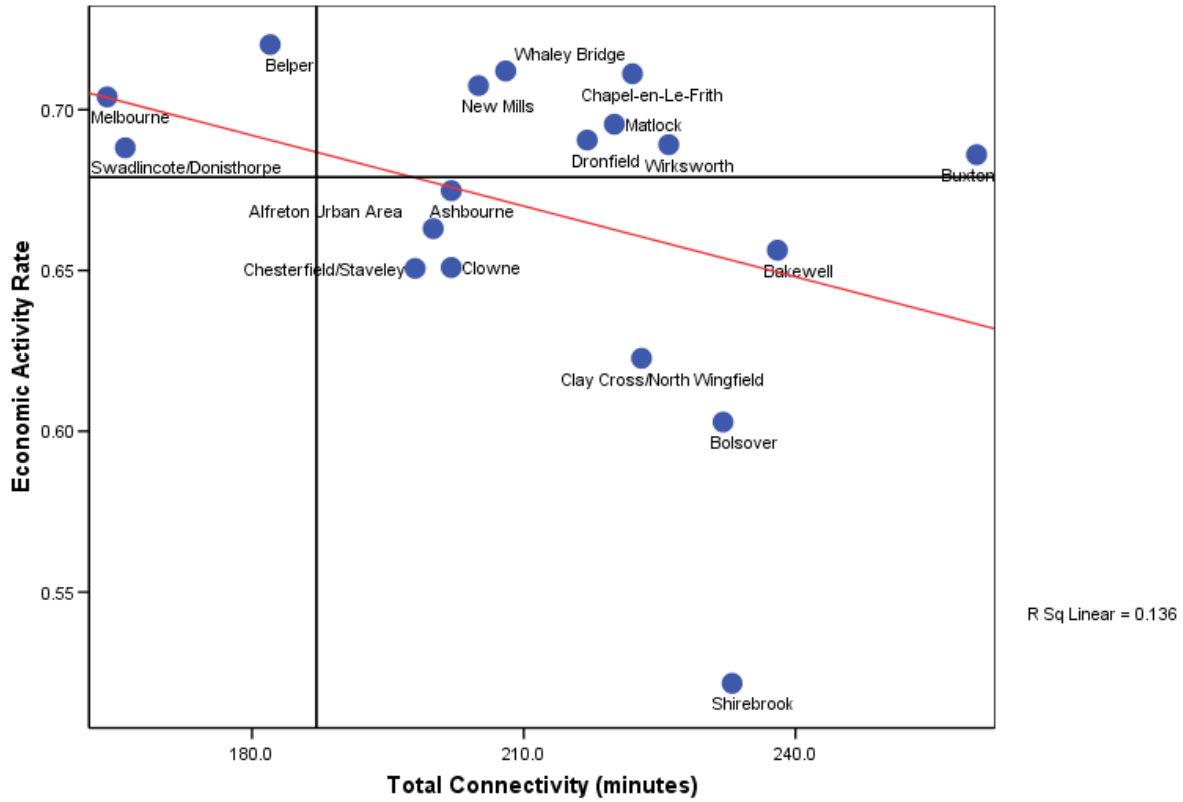
6.11 The best fit line and R^2 of 0.433 suggest a moderate/good relationship between these variables at a regional level. In other words, the centres that are most connected to the nearest city, airports and London also tend to have high levels of participation in the labour market. This suggests that it is being connected that is key, not necessarily where to or how.

6.12 Centres that are proximate to large urban centres and transport hubs, such as those in Northamptonshire and Leicestershire, are more likely to have access to employment opportunities. Remote locations such as northern Derbyshire and east Lincolnshire are associated with lower levels of participation in the labour market, although this may also be attributed to other factors such as ill health and retirement populations as well as poor connectivity.

Graph 6.4 – Total Connectivity (minutes to nearest city + airport + London) and Economic Activity Rate for all Secondary Centres *(Source: ONS Crown Copyright, Census 2001 and the AA, 2008)*



Graph 6.5 – Total Connectivity and Economic Activity Rate for Centres in Derbyshire *(Source: ONS Crown Copyright, Census 2001 and the AA, 2008)*



6.13 In Derbyshire, there is a weak relationship between total connectivity and participation in the labour market. As the best fit line on graph 6.5 shows, centres that are less well connected to cities, airports and London are slightly less likely to have lower levels of economic activity.

6.14 Centres in Derbyshire are, overall, less well connected than centres in other counties in the region. Only three centres – Melbourne, Swadlincote and Belper – demonstrate connectivity rates that are above the regional mean. Centres such as Buxton, Bakewell, and Chapel-en-le-Frith in the west of Derbyshire are more remote from large centres of population and transport hubs.

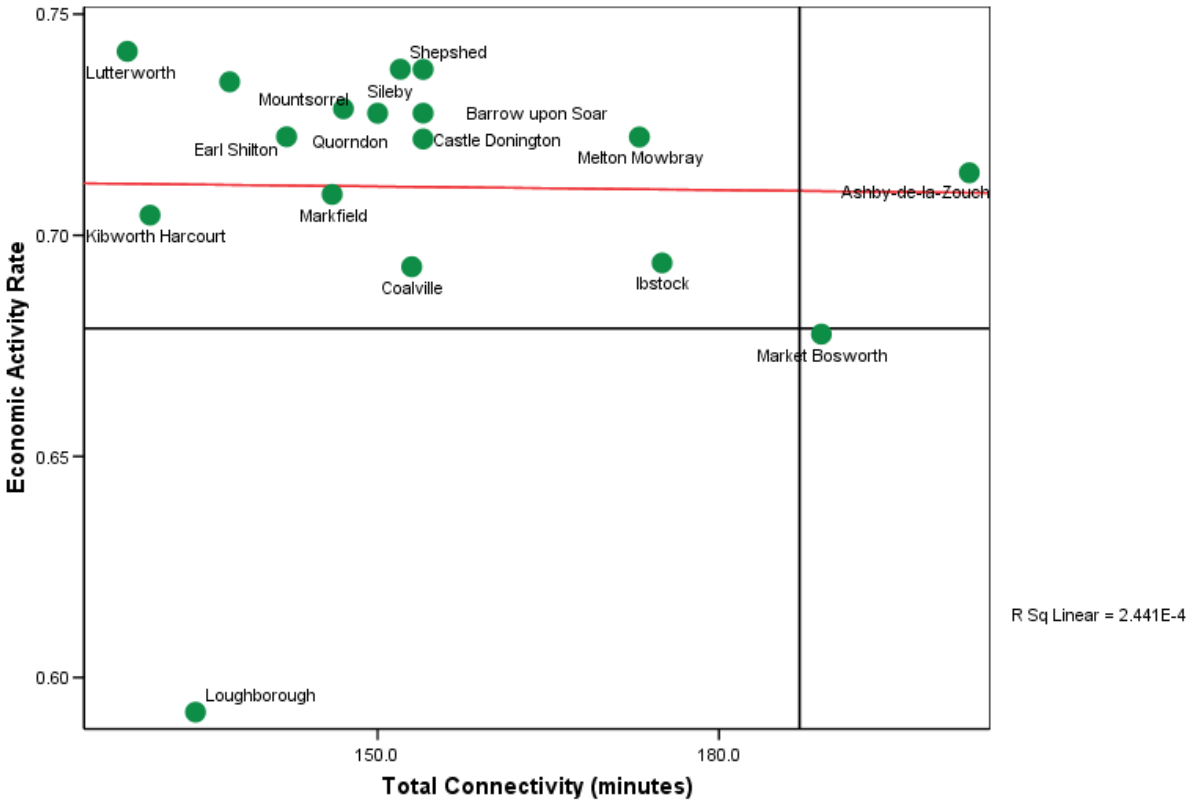
6.15 Across Derbyshire, there appears to be a distinction between centres to the south and west (those around Derby and in the Peak District), which demonstrate high levels of economic activity and those to the north and east (in the former coal mining area to the south and east of Chesterfield) which demonstrate below average levels of economic activity.

6.16 The three centres which sit above the mean for connectivity, Melbourne, Swadlincote and Belper, demonstrate higher than average levels of economic activity. These centres are all located within the three cities region. Melbourne and Belper, in particular, are both close to Derby and Nottingham and, therefore, within easy access of employment opportunities in these cities. Swadlincote lies in the south west of Derbyshire, close to the boundary with the West Midlands, and with easy access to Burton upon Trent and Tamworth, as well as Derby, Nottingham, and Leicester.

6.17 Several centres in the west of Derbyshire, particularly High Peak and Derbyshire Dales, demonstrate above average levels of economic activity despite lower than average connectivity. New Mills, Whaley Bridge, and Chapel-en-le-Frith all demonstrate high levels of economic activity, which may be partly explained by their proximity to Stockport and Manchester.

6.18 The largest centre in Derbyshire for firm and resident population, Chesterfield, demonstrates economic activity rates and connectivity rates that are slightly below the regional average. More detailed analysis reveals that 16% of the adult population suffer from a limiting long term illness and 15% are retired. The centres with the lowest rates of economic activity in Derbyshire, Shirebrook, Clay Cross and Bolsover, are also shown to be relatively poor connected. These centres within a former mining area in the north of Derbyshire are shown to have a high proportion of adults with ill-health compared with other centres.

Graph 6.6 – Total Connectivity and Economic Activity Rate for Centres in Leicestershire *(Source: ONS Crown Copyright, Census 2001 and the AA, 2008)*



6.19 There in no apparent relationship between connectivity and economic activity for centres in Leicestershire. In other words, centres that are better connected are not shown to be any more likely to demonstrate high levels of economic activity than those that are more remote.

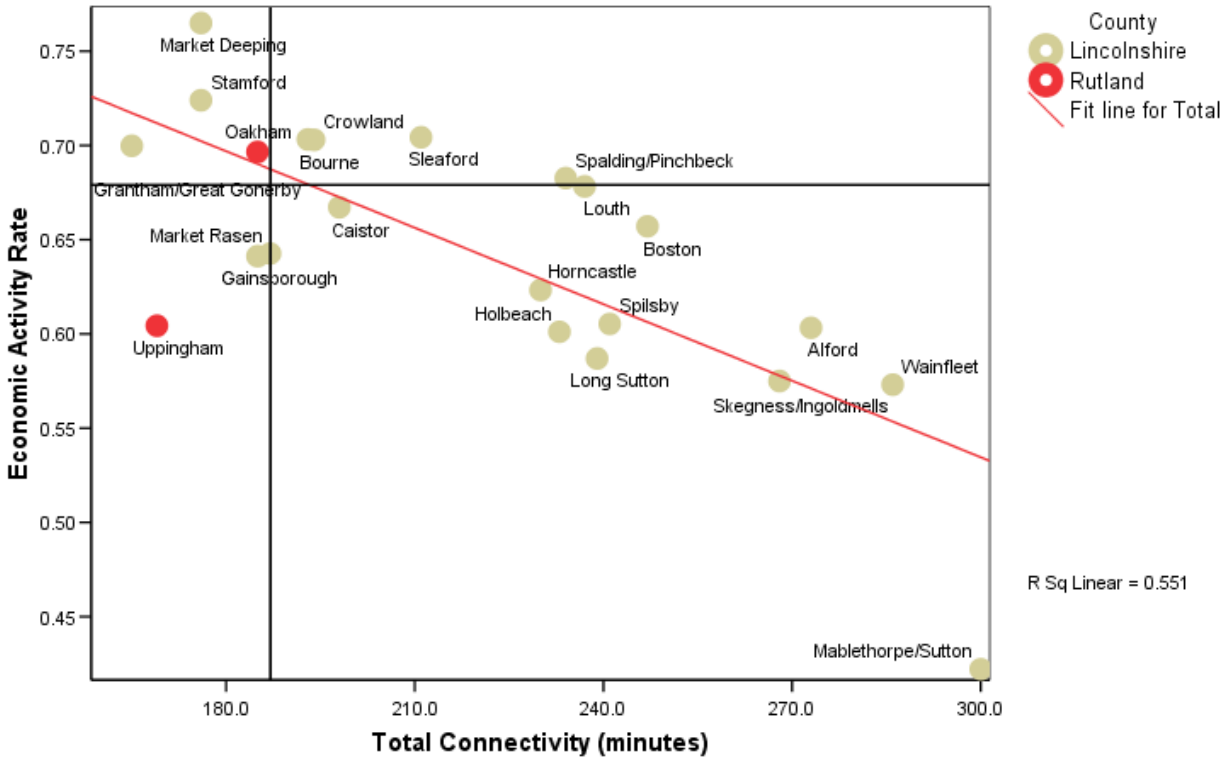
6.20 Overall, centres in Leicestershire are shown to be better connected than centres in other counties. Only two centres, Market Bosworth and Ashby-de-la-Zouch, demonstrate connectivity rates that are below the regional mean. Many centres, particularly those to the north of Leicester, are proximate to Leicester, Derby and Nottingham, to East Midlands Airport and to a number of mainline train stations.

6.21 Economic activity rates are shown to be above the regional average for almost all centres in Leicestershire. Lutterworth, Shepshed, Mountsorrel, and Sileby are centres that are well connected and have high rates of participation in the labour market. In Lutterworth, the presence of Magna Park logistics centre and good road connections via the M1 mean that that is good access to employment opportunities both locally and in nearby centres such as Rugby, Coventry and Northampton. Shepshed, Mountsorrel, and Sileby are located to the north of Leicester, and are well placed to access employment opportunities in Leicester and Loughborough.

6.22 The exceptions are Market Bosworth, where the economic activity rate is the same as the regional average, and Loughborough. As discussed in section 5, the low economic activity rate in Loughborough is due to the high student population and, with the students removed from the analysis, the actual economic activity rate is nearer 0.74. Job density data for Charnwood borough, which includes Loughborough and Shepshed, is relatively low at 0.64. This suggests that there is a limited availability of employment in Charnwood and residents are more likely to work outside the borough, in nearby Leicester, Nottingham or Derby, which have high densities of jobs.

6.23 Overall, centres in Leicestershire demonstrate high levels of participation in the labour market, and better than average connectivity to nearby cities, airports and London.

Graph 6.7 – Total Connectivity and Economic Activity Rate for Centres in Lincolnshire and Rutland *(Source: ONS Crown Copyright, Census 2001 and the AA, 2008)*



6.24 The relationship between connectivity and rates of economic activity is shown, in Graph 6.7, to be the strongest for centres in Lincolnshire and Rutland than for other counties in the region. The best fit line and R^2 of 0.55 suggests a moderate/strong relationship between these variables. In other words, centres that are most well connected are likely to have high levels of participation in the labour market.

6.25 The majority of centres in Lincolnshire are shown to be less well connected than the regional average. The most remote centres include the coastal towns of Skegness and Mablethorpe, as well as the rural market towns of Alford, Spilsby, Wainfleet, and Louth in the east of Lincolnshire. Those that are most well connected tend to be in the south and west of the area, including Grantham, Stamford, Uppingham and Oakham. These are more proximate to Nottingham and Leicester, and to mainline train services.

6.26 The economic activity rate is also shown to be lower than the regional average for more than half (13 out of 22) centres. Participation in the labour market is particularly low in Mablethorpe and Sutton, where fewer than half of adults are working or actively seeking work.

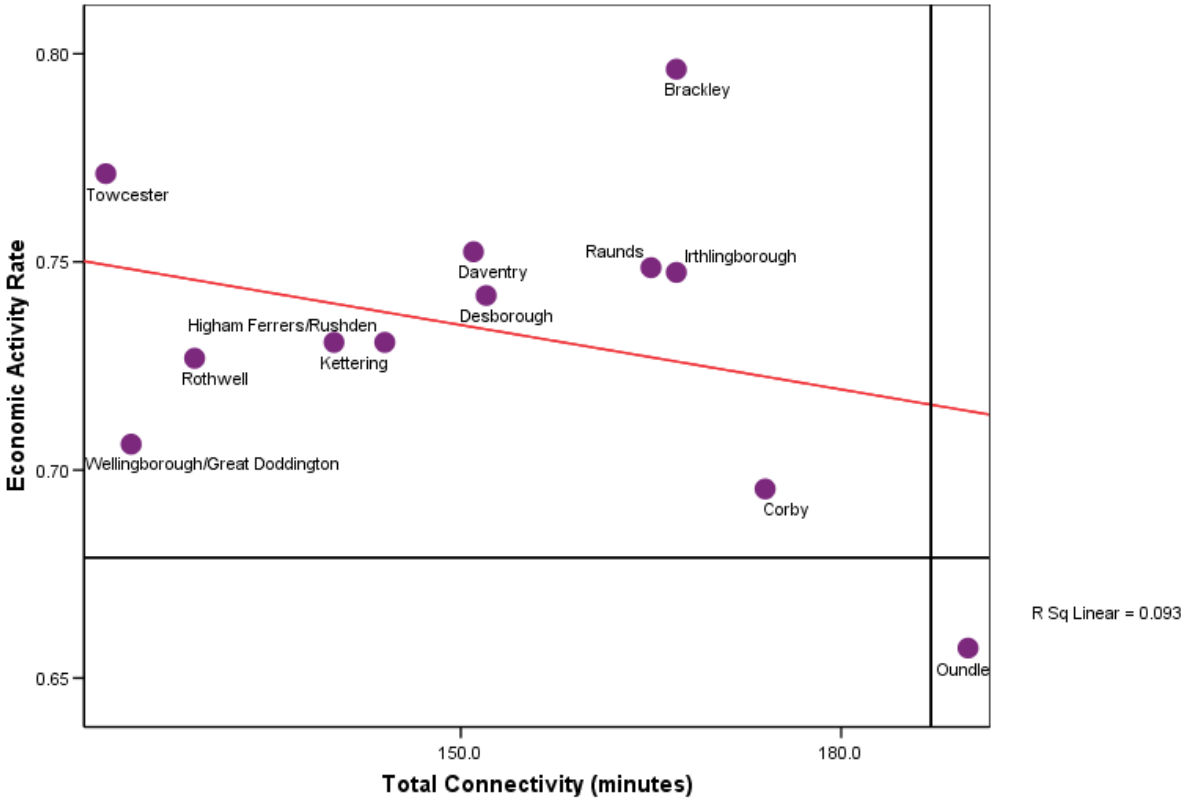
6.27 Centres that are well connected and demonstrate high rates of economic activity include Market Deeping, Grantham and Stamford in South Kesteven and Oakham in Rutland. These can be regarded as sub-regional service centres, and also as desirable residential locations for commuters to nearby Peterborough and Leicester as well as London. Uppingham demonstrates a low rate of economic activity despite being well connected to nearby cities. Further analysis reveals that almost a third (29%) of adults aged over 16 are students, which can be explained by the presence of Uppingham School which takes boarding pupils up to the age of 18.

6.28 Poorly connected areas which demonstrate below average rates of economic activity include small market towns such as Caistor, Horncastle and Spilsby. These are remote from Lincoln and other large centres of population, and may lack the concentrations of firms to attract active workforce to the area. Analysis of economic activity in Horncastle and Spilsby also reveals a high proportion of people with long term illnesses (22% for both towns) and those who are retired (22% for Spilsby, 21% for Horncastle).

6.29 As with all analysis, it cannot be assumed that the relationship between connectivity and economic rates is causal. In the case of Skegness and Mablethorpe, the low levels of economic activity are also due to high retirement populations and poor health within the resident population. However, remoteness from large cities and transport hubs may reduce access to employment opportunities, particularly for areas in the north and east of Lincolnshire, compared with more connected areas of the region.

Graph 6.8 – Total Connectivity and Economic Activity Rate for Centres in Northamptonshire

(Source: ONS Crown Copyright, Census 2001 and the AA, 2008)



6.30 In Northamptonshire, there is shown to be no clear relationship between total connectivity and participation in the labour market in its secondary centres at a county level. However, with the exception of Corby and Oundle as outliers, there appears to be a slightly positive relationship for economic activity and connectivity for other centres in Northamptonshire. Connectivity to nearby large towns and cities, as well as to those outside the region, could be regarded as an important enabler of labour market participation in Northamptonshire.

6.31 As discussed in section 5, centres in Northamptonshire demonstrate the highest rates of economic activity in the East Midlands. Graph 6.8 shows that all but one centre in Northamptonshire demonstrate above average rates of connectivity and economic activity. The distribution of centres on the graph is similar to that for Leicestershire, which also demonstrates high rates of economic activity and connectivity across most of its centres. This distribution suggests that employment rates are high and that all centres have easy access to nearby cities and transport hubs.

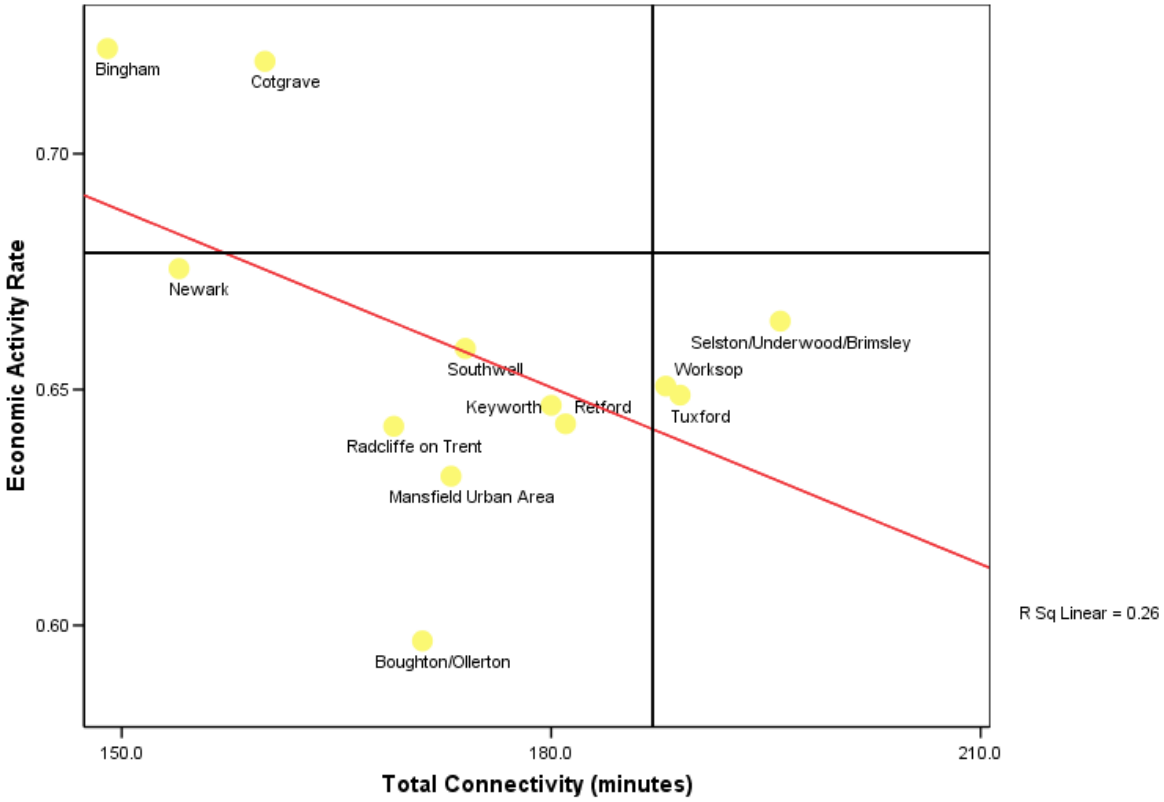
6.32 The economic activity in these centres could also be viewed in the context of connectivity to the South East. The centres that are most connected to the South East – Brackley, Towcester, Kettering and Wellingborough – are best placed to take advantage of its economic influence and the employment opportunities available in that region.

6.33 Daventry, close to the boundary with the West Midlands, shows high economic activity rates. This is in contrast to firm density rates which are below the regional average. This suggests that Daventry may play a commuter settlement role.

6.34 Despite demonstrating above average rates of economic activity, Corby is an outlier in the context of Northamptonshire. Its economic activity rate is lower than all other centres apart from Oundle. This is in contrast to jobs density data which suggests that Corby is a strong employment magnet. It suggests elements of inactivity within Corby's resident population, and more detailed analysis reveals that 14% suffer from long term health problems.

6.35 Another outlier, Oundle, has connectivity and economic activity rates which are slightly below the regional average. This is a small centre with just over 5,000 resident population, and economic activity data shows that it has a relatively high retirement population which accounts for 13% of the adults.

Graph 6.9 - Total Connectivity and Economic Activity Rate for Centres in Nottinghamshire *(Source: ONS Crown Copyright, Census 2001 and the AA, 2008)*



6.36 Graph 6.9 shows that there is a weak relationship between connectivity and economic activity for secondary centres in Nottinghamshire. The R^2 of 0.26 suggests the centres that are less well connected are slightly more likely to demonstrate low levels of economic activity.

6.37 Centres in Nottinghamshire are, overall, well connected. Most centres in Nottinghamshire benefit from close proximity to large cities such as Nottingham and there are a number of mainline rail stations in the county. Only three out of the twelve centres shown in the graph lie below the regional mean for connectivity. These include Worksop and Tuxford which lie in the north east of the county, and are more remote from Nottingham and mainline train services.

6.38 It is possible to identify three key groupings. The first includes Bingham and Cotgrave, both to the east of Nottingham, and Newark. These three centres are most connected to nearby cities, airports and London and also demonstrate the highest rates of economic activity. Bingham, Cotgrave and Newark are all in the less densely populated eastern side of the county, with good connections to Nottingham and access to mainline services via Newark, Grantham and Nottingham. They are well placed to take advantage of employment opportunities in Nottingham, Leicester and London. This is supported by jobs density data which, at 0.57 for Rushcliffe Borough, suggests that many residents of towns such as Bingham and Cotgrave work elsewhere.

6.39 Participation in the labour market is below average for all other secondary centres in Nottinghamshire and the second group comprises centres that are well connected but that demonstrate below average rates of economic activity. These include Southwell, Mansfield Urban Area, Retford and Boughton. Further analysis of these rates suggests that some centres may have older populations. In Southwell and Retford, the retired population accounts for 18% and 16% of all adults compared with 12% in Bingham. In Mansfield Urban Area (which includes Sutton and Kirkby in Ashfield) and Boughton, both former mining areas, high levels of ill health appear to affect the economic activity rate, with 18% of adults suffering long-term health problems in Mansfield and 20% in Boughton/Ollerton. Boughton/Ollerton lies in the bottom 10 of all secondary centres in the region, with an economic activity rate of just under 0.60.

6.41 Worksop, Tuxford and Selston lie below the mean for connectivity and economic activity, but above the best fit line which suggests that they have higher levels of economic activity than expected given their level of connectivity.

Section 7 – Firm Density and Connectivity

Distance to Nearest City and Firm Density

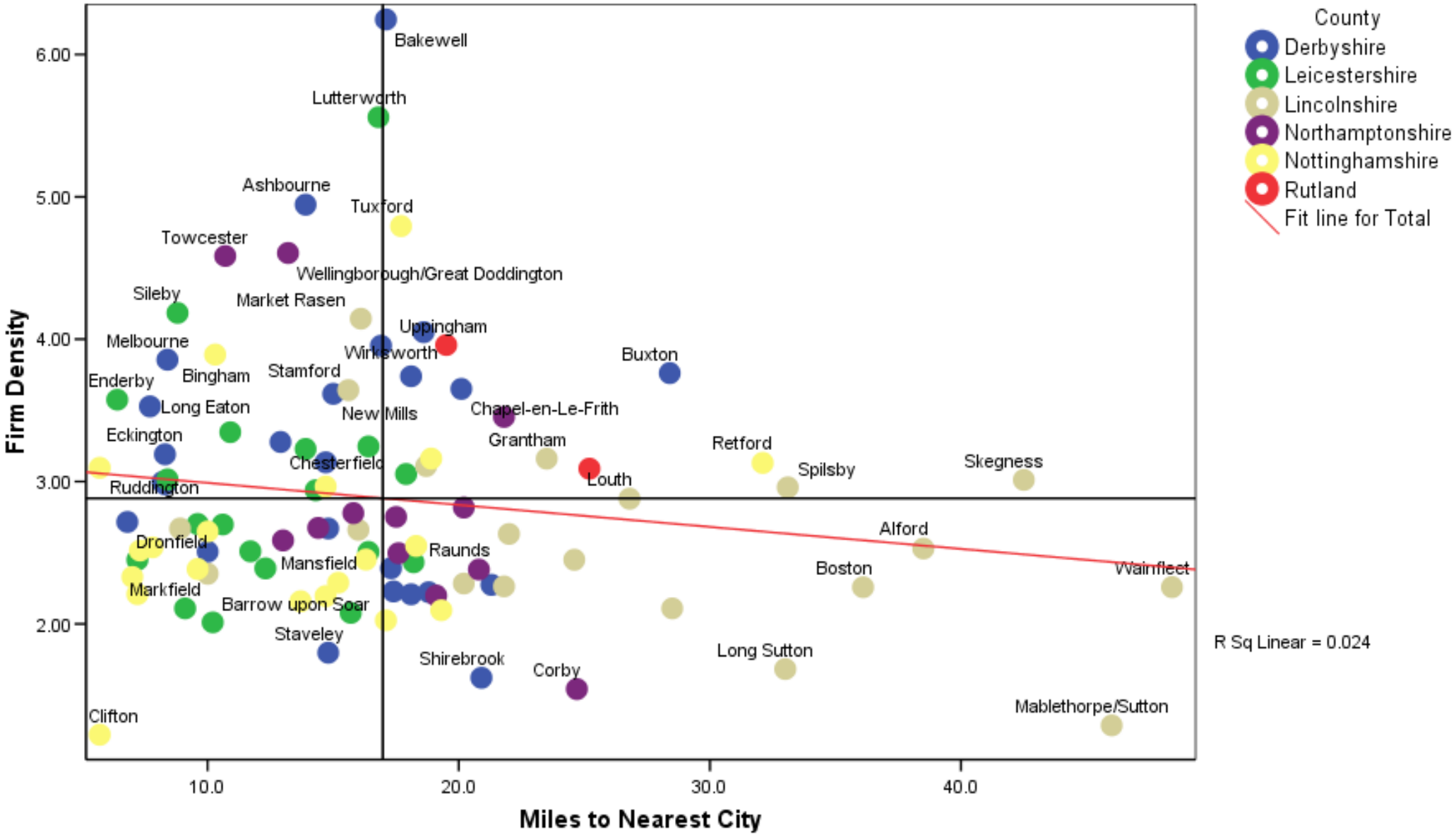
7.1 Graph 7.1 shows no clear relationship at a regional level between firm density and miles to the nearest city. In other words, the firm density in a centre does not appear to be strongly affected by its proximity to large urban areas at the regional level of analysis. However, further analysis undertaken at a county level suggests that proximity to nearby urban centres does play a role in business activity in some areas of the region.

7.2 The distribution on the graph shows a 'clumping' around the mean for proximity to nearest city and firm density. This suggests that the majority of centres are fairly well connected with firm densities of between 2 and 4 firms per hectare.

7.3 The outliers in the graph include centres with high firm densities and close proximity to cities such as towns in Derbyshire Dales and High Peak which, although proximate to the cities of Manchester and Sheffield, lie in rural and sparsely populated areas and are considered to be distinct communities that serve tourist and surrounding resident populations.

7.4 Other outliers include towns most remote from large centres of population – primarily those in the east of Lincolnshire – which generally have below average firm densities. Remoteness and sparsity of population in this area may be associated with limited population and markets to sustain high levels of business activities.

Graph 7.1 – Distance to Nearest City and Firm Density for all Secondary Centres *(Source: ONS Crown Copyright, IDBR 2007 and the AA, 2008)*

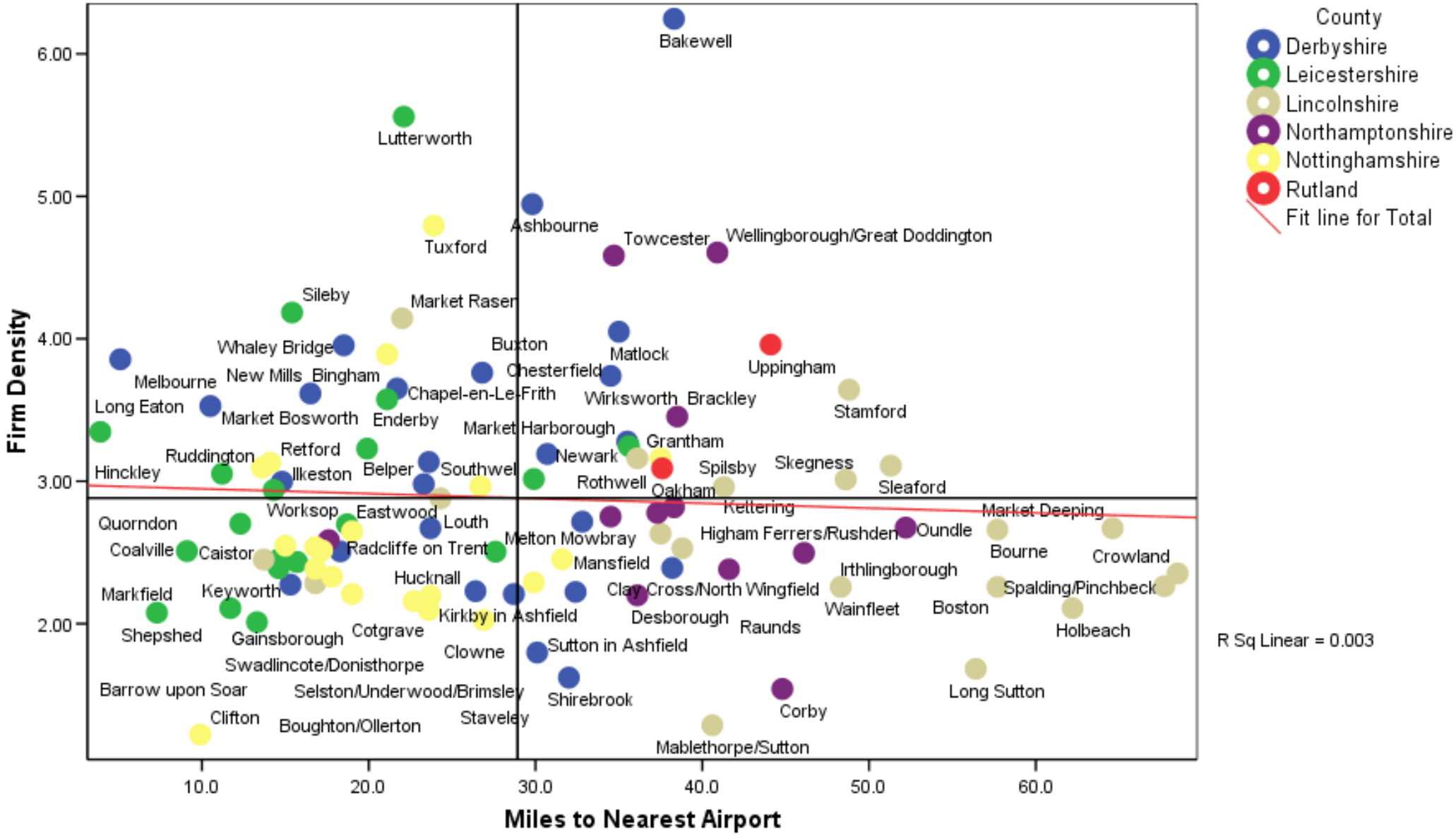


Distance to Nearest Airport and Firm Density for all Secondary Centres

7.5 Graph 7.2 shows distance to the nearest airport in miles and firm density. The best fit line and R^2 suggests that there is no discernible relationship between proximity to an airport and firm density at this level of analysis. In other words, at a regional level firm density is shown to be no greater for centres close to an airport than for those that are further away. This picture varies at a sub-regional level, particularly for centres most proximate to East Midlands Airport.

7.6 This may suggest that airports in and around the region have a limited direct influence on business growth outside their immediate vicinities, and there is little evidence of airports producing an agglomeration effect beyond the centres that are located most closely to them. It may also suggest that proximity to an airport may not be a key concern for businesses in the region.

Graph 7.2 – Distance to Nearest Airport and Firm Density for all Secondary Centres *(Source: ONS Crown Copyright, IDBR 2007 and the AA, 2008)*

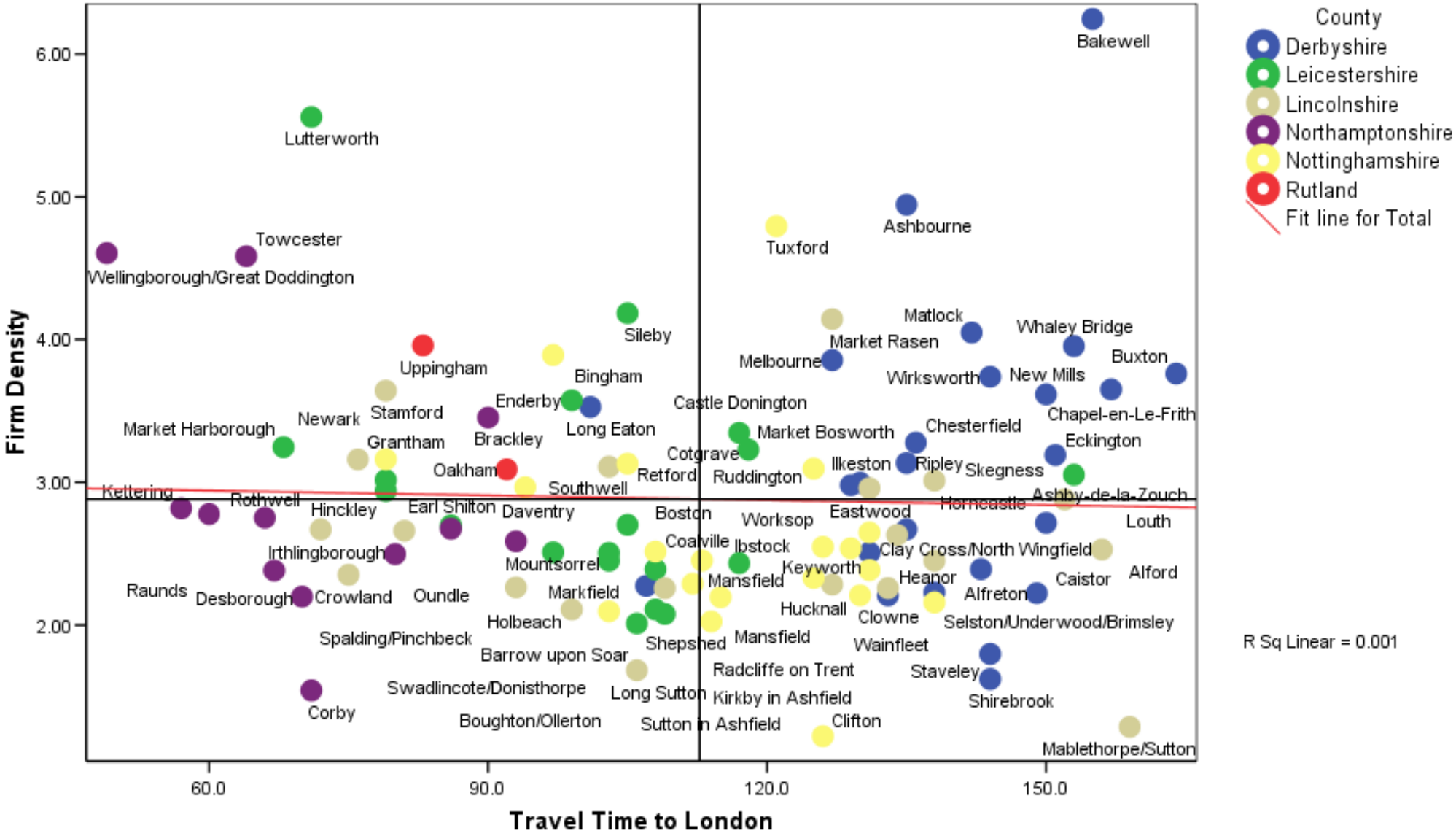


Travel Time to London and Firm Density for all Secondary Centres

7.7 Graph 7.3 shows the journey time to London and firm density for all centres. The best fit line and R^2 suggest no apparent relationship between the two variables. At a regional level, secondary centres with the shortest journey times to London are not shown to have any greater firm densities than those that have the longest journeys in the region. Further analysis suggests that this picture varies by county/sub-region and that connectivity to London may be a more important factor for areas to the south and west of the region.

7.8 The lack of a clear relationship between these variables is in contrast to the analysis of economic activity and travel time to London (graph 6.3) which demonstrates a moderate relationship. A conclusion of this is that London may play a role in attracting employment from some centres in the region, but it does not appear to influence the agglomeration of firms in these centres. While some centres close to cities and large towns in the region have lower firm densities and appear to be affected by the 'reach' of these large urban areas, connectivity to London does not have a similar effect.

Graph 7.3 – Travel Time to London and Firm Density for all Secondary Centres *(Source: ONS Crown Copyright, IDBR 2007 and the AA, 2008)*

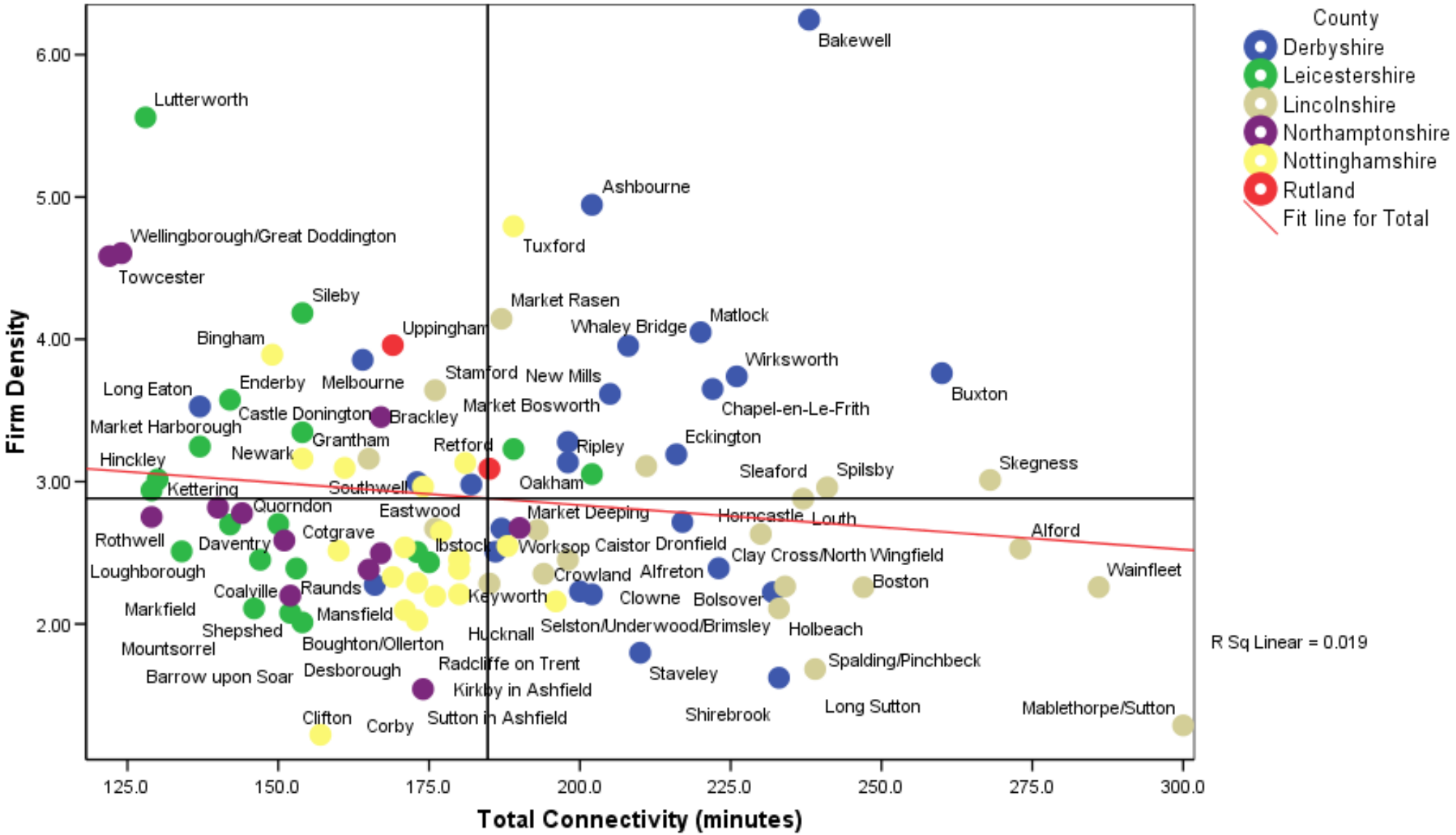


Total Connectivity (minutes to nearest city + airport + London) and Firm Density for all Secondary Centres

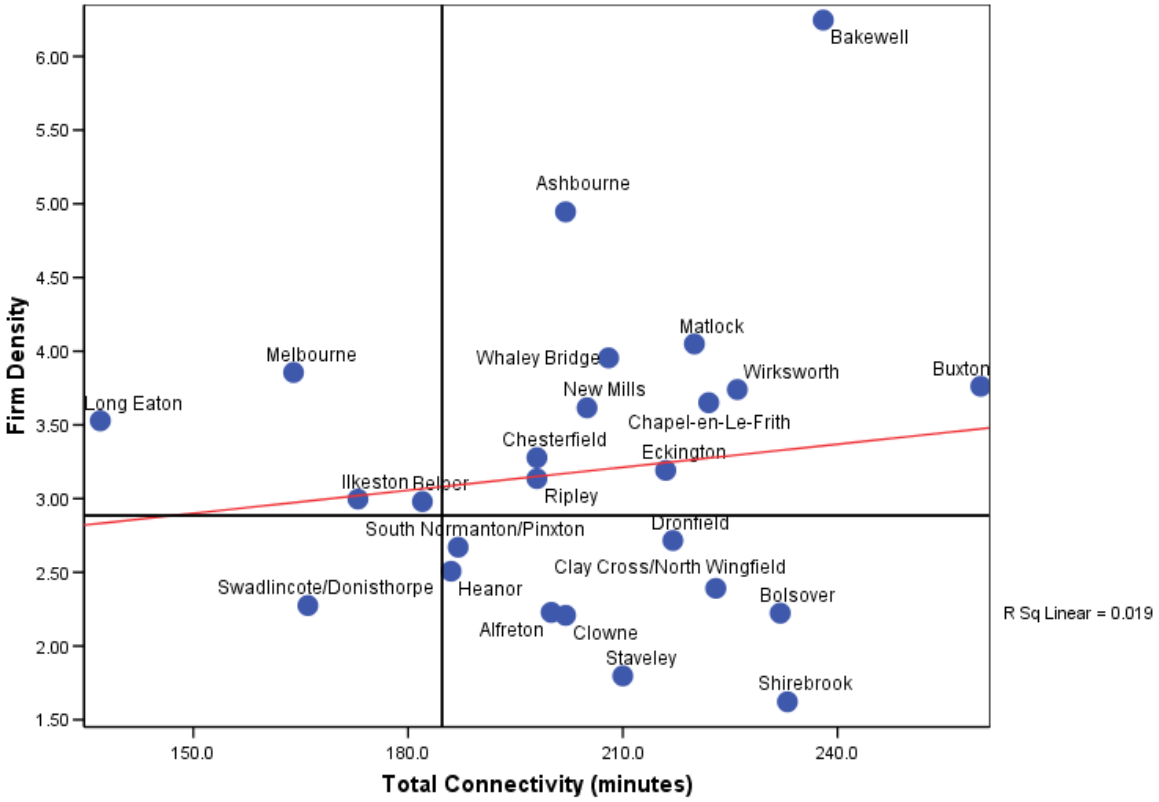
7.9 Graph 7.4 shows that there is no discernible relationship between connectivity across all three measures discussed above (nearest city, airport and London) at a regional level.

7.10 The following graphs show the relationship between these variables at a county level.

Graph 7.4 – Total Connectivity (minutes to nearest city + airport + London) and Firm Density for all Secondary Centres *(Source: ONS Crown Copyright, IDBR 2007 and the AA, 2008)*



Graph 7.5 - Total Connectivity and Firm Density for Derbyshire Secondary Centres *(Source: ONS Crown Copyright, IDBR 2007 and the AA, 2008)*



7.11 Connectivity is not shown to have a discernible influence on firm density within Derbyshire centres. The distribution of centres on Graph 7.5 and an R^2 of 0.02 suggest that there is no apparent relationship between firm density and total connectivity for secondary centres in Derbyshire.

7.12 However, Derbyshire is in contrast to most other counties and the region as a whole, in that many centres that are remote have high firm densities. Indeed, the centres with the highest firm densities in Derbyshire – Bakewell, Ashbourne and Matlock – are also less well connected than the regional average.

7.13 Looking at graph 7.5, there are clear geographical groupings. Centres close to Derby and Nottingham, such as Long Eaton, Ilkeston, Belper and Melbourne, demonstrate above average firm densities. These centres – particularly Long Eaton, Ilkeston and Belper - are very close to Derby and Nottingham and may benefit from the agglomeration effects of those cities.

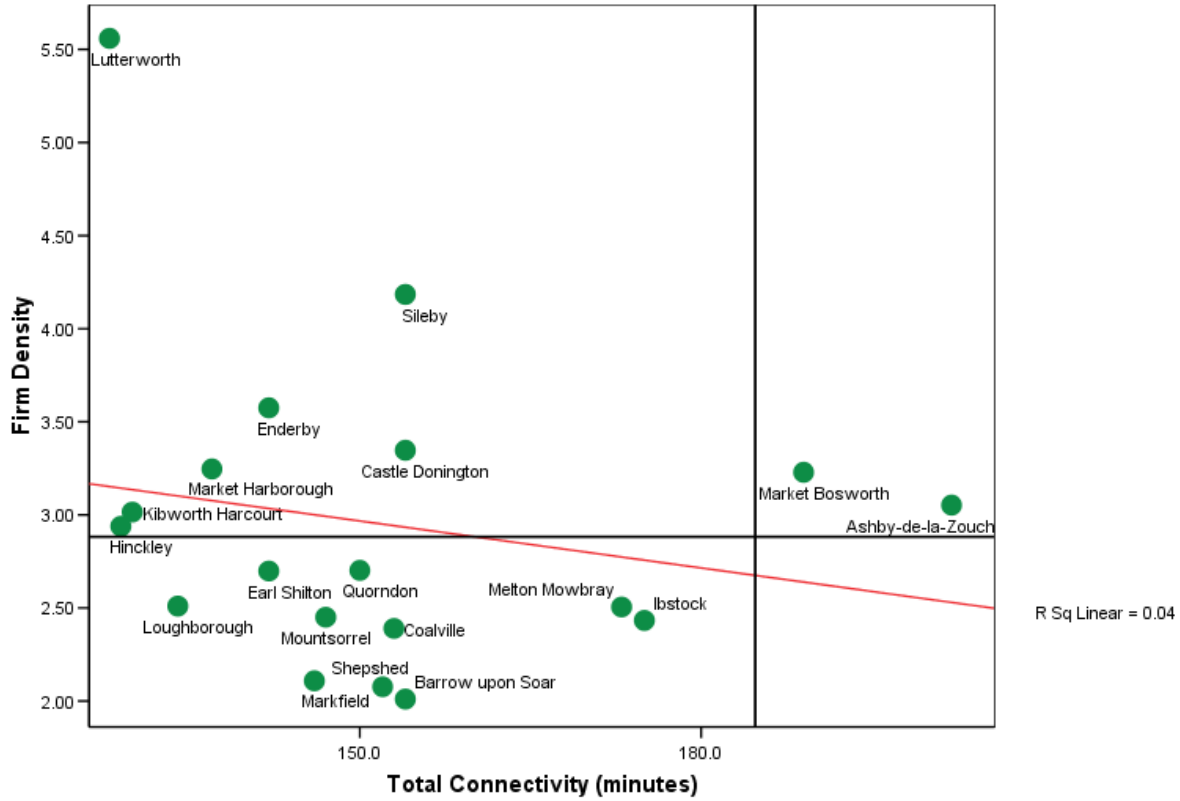
7.14 Swadlincote, located in the south west of Derbyshire, is the only centre with below average firm densities that is well connected. This supports initial conclusions from graph 3.2 that Swadlincote serves as a commuter settlement for Derby and centres in the West Midlands, and is supported by jobs density data which suggests that South Derbyshire, which includes Swadlincote, offers a low volume of employment.

7.15 Less well connected centres to the east of Chesterfield occupy the bottom right quadrant. These have relatively low concentrations of firms and can be divided into two groups: (i) former mining areas that have experienced industrial decline/change such as Bolsover, Shirebrook and Clowne and; (ii) commuter settlements for larger urban areas (Staveley and Dronfield).

7.16 Centres in the west of Derbyshire, particularly in the Peak District, tend to be less well connected than the regional average but demonstrate high firm densities. This suggests that these are vibrant, rural towns which serve a wide hinterland. This is supported by data on jobs densities which, at 0.9, shows that centres in Derbyshire Dales – Matlock, Ashbourne and Bakewell – offer a high volume of employment.

7.17 Chesterfield, as the largest secondary centre in Derbyshire, demonstrates above average firm density despite lying below the regional mean for connectivity. Again this suggests a strong centre that provides services and employment opportunities for the surrounding area. This is supported by data on jobs density, which is the third highest in the region, and the high proportion (13%) of businesses employing more than 20 people.

Graph 7.6 - Total Connectivity and Firm Density for Leicestershire Secondary Centres *(Source: ONS Crown Copyright, IDBR 2007 and the AA, 2008)*



7.18 Most centres in Leicestershire lie above the mean for connectivity. However, connectivity is not shown to have a strong influence on firm density in secondary centres in the county; centres that are more remote are not shown to have a lower level of firm density. The distribution of centres in Graph 7.6 and R^2 suggests that there is no clear relationship between firm density and connectivity for centres in Leicestershire.

7.19 Graph 7.6 is in contrast to graph 6.6, which shows economic activity and connectivity for Leicestershire. More than half of centres lie below the regional mean for firm density, but almost all centres lie above the mean for levels of participation in the labour market. This suggests that many centres in Leicestershire may perform a commuter settlement or dormitory role for Leicester and other nearby urban areas.

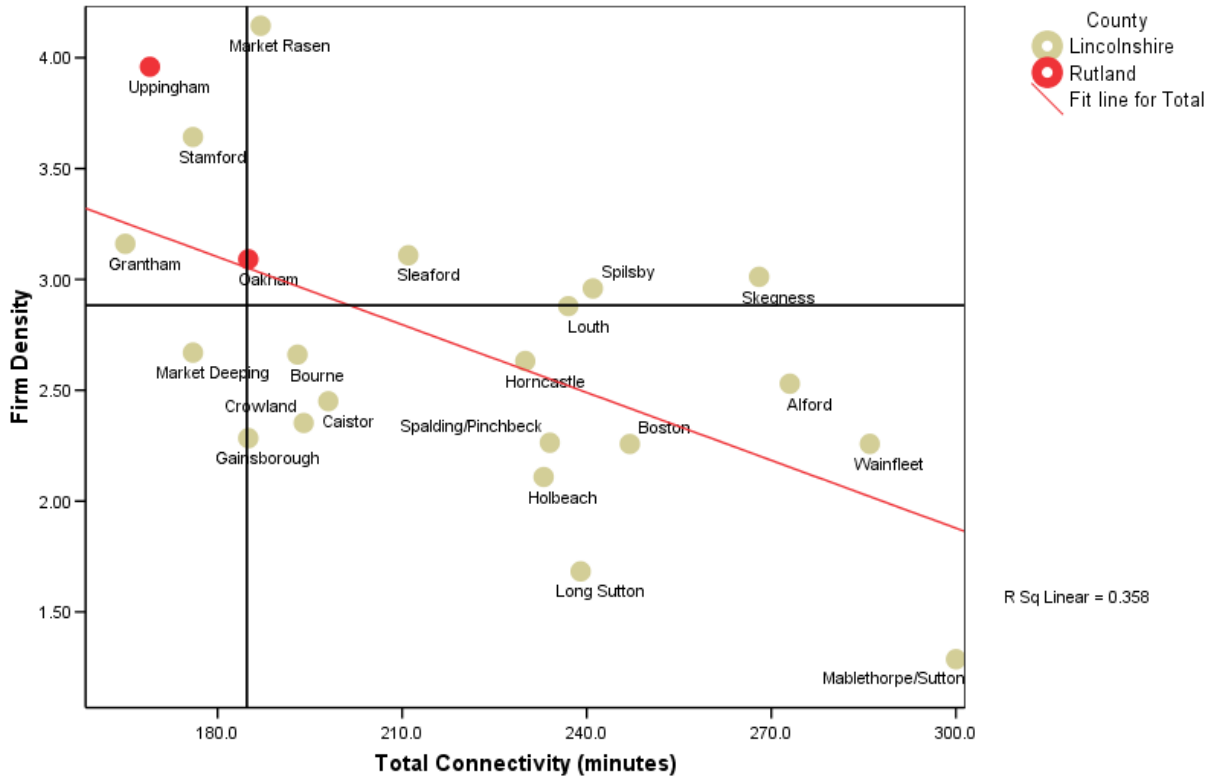
7.20 Lutterworth is an 'outlier', as a centre that demonstrates very high firm densities, high participation in the labour market and good connectivity. As discussed in section 3, this can be attributed to a nearby logistics and distribution centre. Harborough district, which covers Lutterworth and Market Harborough, has a relatively high jobs density rate at 0.78 which may suggest that Lutterworth acts as an employment 'magnet' for the surrounding area. Market Harborough, the third largest centre in Leicestershire, is also shown to have high firm densities. It is regarded as a dormitory settlement for high-earning commuters to London, and this population is thought to sustain a high level of service sector activity.

7.21 Castle Donington, with Coalville, Ashby and Ibstock, in North West Leicestershire together demonstrate the highest jobs densities in the county. This suggests that they are the centres most likely to act as employment 'magnets' for other areas of the county. The high firm density in Castle Donington, which is associated with the nearby airport, suggests that this is likely to be a focus for local employment activity.

7.22 Hinckley, the second largest secondary centre in the county, is also shown to be very well connected and demonstrates a firm density that is slightly above the regional mean. Hinckley is well connected to Leicester and Coventry, and is thought to serve as a commuter centre and a sub-regional service centre.

7.23 The smaller settlements of Markfield, Barrow on Soar, Mountsorrel and Earl Shilton are all well connected centres that demonstrate below average firm densities but higher than average rates of economic activity. As suggested in section 6, this may be indicative of their roles as commuter settlements for nearby Leicester and Loughborough. Market Bosworth and Ashby are situated to the west of Leicester and are both slightly more remote from large urban areas and mainline train services. Their high firm densities, however, suggest that they have vibrant economies, with Market Bosworth as rural market town and Ashby having a large number of employers.

Graph 7.7 - Total Connectivity and Firm Density for Lincolnshire and Rutland Secondary Centres
(Source: ONS Crown Copyright, IDBR 2007 and the AA, 2008)



7.24 Graph 7.7 suggests a moderate/weak relationship between firm density and total connectivity for secondary centres in Lincolnshire and Rutland. This suggests that remoteness from markets, suppliers and other businesses has a negative effect on business activity in Lincolnshire. The relationship between firm density and connectivity is similar to that for economic activity and firm density. In other words, areas that show high levels of participation in the labour market also tend to demonstrate high firm densities, and both are affected by how well connected the centre is. This suggests that labour markets in Lincolnshire may be slightly more contained than elsewhere, with fewer dormitory settlements than other counties.

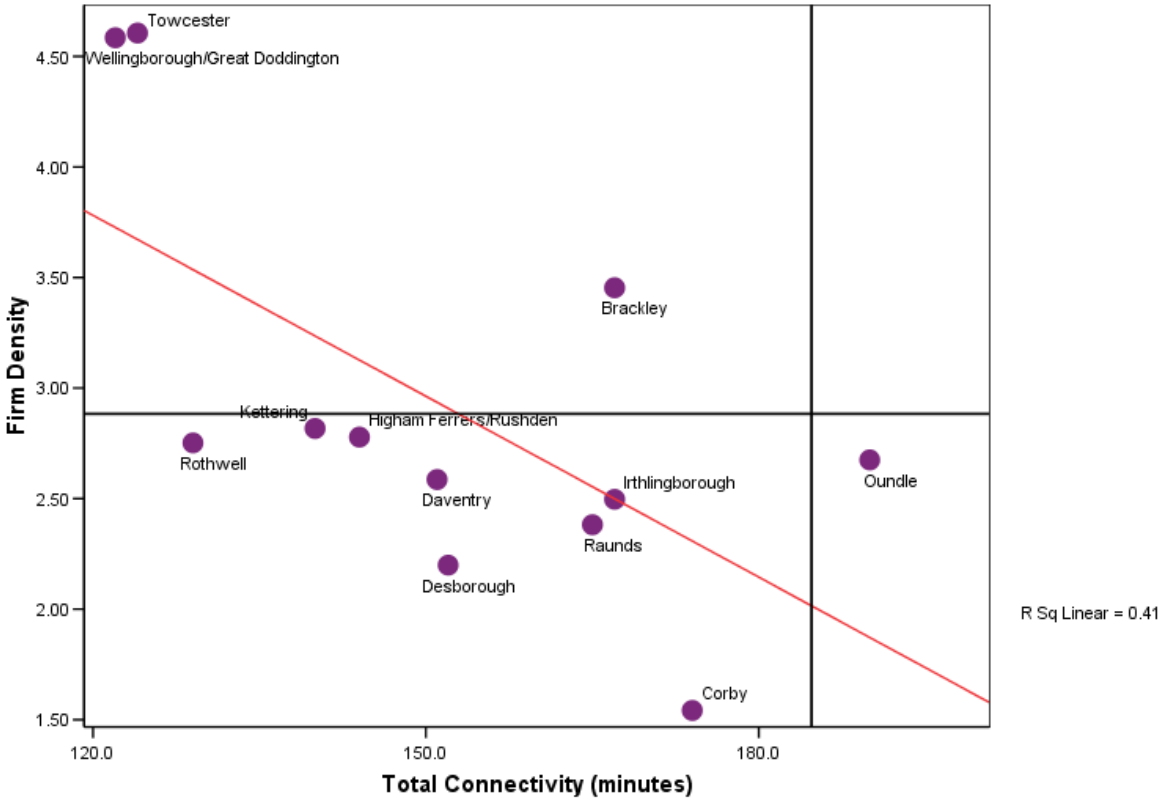
7.25 It is possible to identify three principal groups from the distribution on the graph: those that are firm and population dense and connected; and those that are less dense and less well connected. Centres that fall into the first group - Stamford, Grantham, and Oakham – also demonstrate high levels of economic activity and are the most connected in the area. These are vibrant economies that are thought to serve a commuter settlement and sub-regional service role. The exception is Market Deeping, which has low firm densities and this is further evidence of its commuter centre role for Peterborough. Uppingham is also shown to have high firm densities, in contrast to the low economic activity rates, which may suggest that it has a vibrant economy which serves its school and surrounding hinterland.

7.26 The second group includes centres that have firm densities that are close to the mean but are less well connected. This includes Sleaford, Louth and Skegness. These are likely to serve as service centres for surrounding rural communities for which they are likely to be their nearest centre for shops and services.

7.27 The third group includes centres from Horncastle and Louth to Wainfleet and Mablethorpe which demonstrate low firm densities and poor connectivity compared with the regional mean. The group includes small rural centres such as Alford and Horncastle, which may lack the critical mass for agglomeration effects to occur. It also includes larger economies such as Boston and Spalding. In the case of Boston and Spalding, low firm densities may be partly explained by a high proportion of large firms – particularly in process plant and machine operations – in both Boston and South Holland. In Boston Borough, 13% of firms employ more than 20 people. These two districts also demonstrate the highest job densities outside of Lincoln, at 0.81 for South Holland and 0.79 for Boston, which suggests that they offer a high volume of employment.

7.28 Gainsborough demonstrates a connectivity rate that is similar to the regional average, being fairly well connected to Lincoln and nearby airports. The firm density rate is shown to be below average, which could reflect industrial decline and restructuring, and also a high proportion of large manufacturing firms. In urban areas of West Lindsey district, which includes Gainsborough, 14.6% of firms employ more than 20 people, which is the second highest rate in the region.

Graph 7.8 - Total Connectivity and Firm Density for Northamptonshire Secondary Centres *(Source: ONS Crown Copyright, IDBR 2007 and the AA, 2008)*



7.29 The best fit line suggests that centres that are well connected are more likely to demonstrate high firm densities. The correlation between firm density and connectivity in Northamptonshire centres is the strongest, at 0.41, of any county in the region. Many centres in Northamptonshire are well connected to London and to other centres in the South East and West Midlands. Connectivity to markets, suppliers and other businesses in these areas may, therefore, assist business activity in Northamptonshire.

7.30 As with comparisons of economic activity and connectivity, the distribution shown on graph 7.8 is similar to that for Leicestershire. Most centres fall below the mean for firm density but above the mean for economic activity. Participation in the labour market is high, but the number of firms is below what might be expected for many centres. This suggests many towns act as commuter centres, with a number of employment 'magnets', including Northampton, Corby, Wellingborough, Milton Keynes and London.

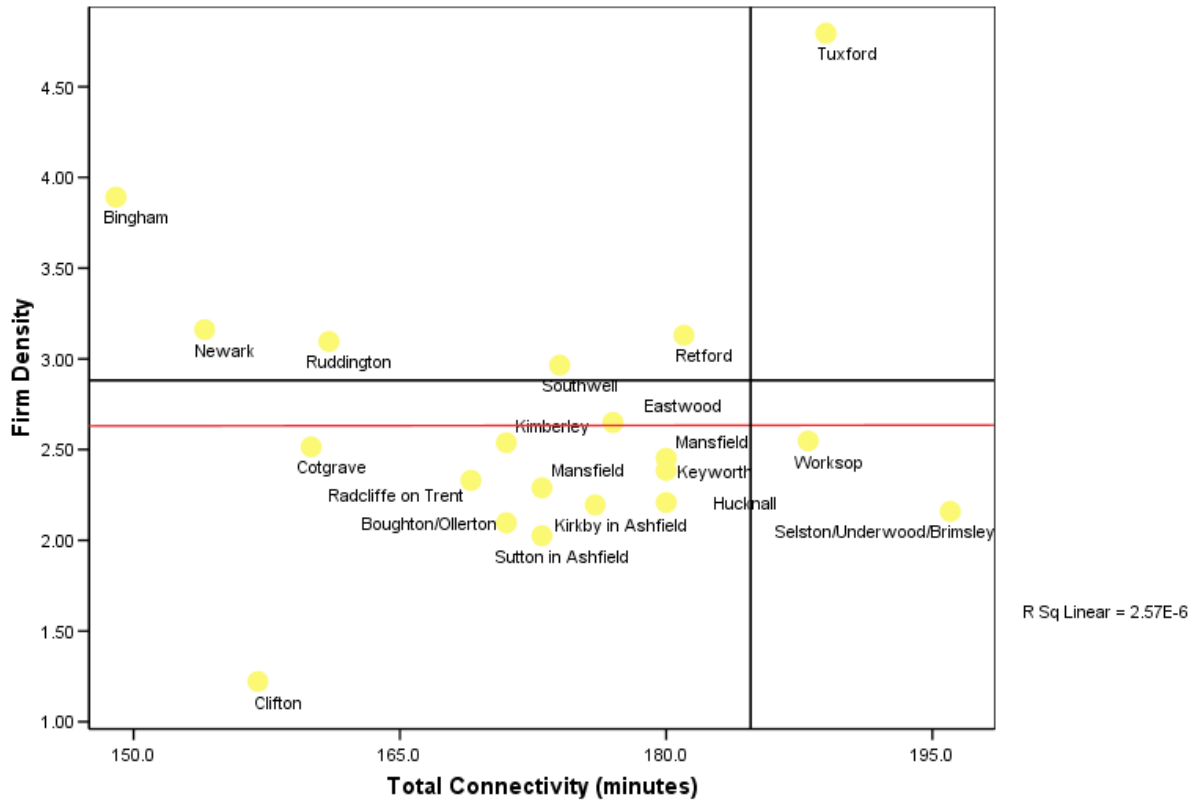
7.31 The three centres with the highest firm densities lie above the regional average for connectivity. The two 'outliers' of Towcester and Wellingborough are among the best connected in the region and have good links to London and other centres in the South East. Wellingborough, the largest economy in Northamptonshire outside Northampton, also demonstrates a high jobs density (0.85), which suggests that it may play an employment 'magnet' role for the surrounding area.

7.32 Corby demonstrates low firm densities and is not as well connected as other centres in the county, although this will change with the forthcoming introduction of a direct train service to London. However, as noted in section 3, Corby has a high proportion of large employers, and jobs density data suggests it provides a high volume of employment. Kettering demonstrates good connectivity but a firm density slightly below the regional average. It has a lower jobs density than neighbouring Wellingborough and Corby, which suggests that it is less likely to attract labour from elsewhere.

7.33 Oundle, a remote rural centre, is the only centre with below average firm densities and connectivity. Oundle, Rushden and Irthlingborough in East Northamptonshire, have low jobs densities which suggest that many people living in the district work elsewhere. Other centres, such as Desborough, Rothwell and Raunds, demonstrate strong connectivity and low firm densities, which supports initial conclusions that these operate as commuter settlements for larger urban areas.

7.34 Overall, employment is relatively high across all centres but there are just a few centres that appear to act as the focus for services and employment. These are Towcester, Wellingborough, Brackley, Wellingborough, Kettering and Corby.

Graph 7.9 - Total Connectivity and Firm Density for Nottinghamshire Secondary Centres *(Source: ONS Crown Copyright, IDBR 2007 and the AA, 2008)*



7.35 As with Leicestershire and Northamptonshire, most centres in Nottinghamshire are shown to be well connected but demonstrate low firm densities. Graph 7.9 suggests that there is no apparent relationship between firm density and connectivity for secondary centres in Nottinghamshire. The majority lie in the bottom left quadrant of the graph which illustrates that close proximity to large cities and transport hubs is not shown to have assisted business activity in most Nottinghamshire centres.

7.36 Unlike Leicestershire, which also has a high proportion of secondary centres with below average firm densities, many centres in Nottinghamshire also have low rates of participation in the labour market. This suggests that these centres may be under performing, both in terms of business activity and the number of people that are actively working or seeking work.

7.37 Mansfield, the third largest centre in terms of firm population in the East Midlands, demonstrates low firm densities despite being relatively well connected. Analysis of other data on Mansfield suggests that it may be 'under performing' compared with what might be expected for its size and location. Mansfield is shown to have a high proportion of firms that employ more than 20 people (14%) but economic activity rates are below the regional average. The number of jobs available per head of population, at 0.65, is lower than the similar sized centres of Wellingborough (0.85) and Chesterfield (0.95).

7.38 Worksop is also shown to have similar firm and population densities to Mansfield, yet is not as well connected to nearby cities and mainline train services. Again, this may suggest under performance in Worksop's economy and labour market.

7.39 Nottinghamshire has a small number of distinct vibrant economies. These are Bingham, Tuxford, Newark, Ruddington, Southwell and Retford. Bingham is the only centre which demonstrates firm densities and participation in the labour market that are above the mean. Newark, Retford and Rudington, and Southwell demonstrate firm densities and economic activity levels which are close to the mean, which suggests fairly strong economies.

7.40 Centres such as Kimberley and Eastwood have below average rates of firm density and economic activity, and are also shown to offer low numbers of jobs per head of working population. These areas are very close to Nottingham and this may reflect the 'reach' of this large city in terms of services and employment, on Kimberley and Eastwood, and other centres such as Selston, Hucknall and Keyworth.

Section 8 – Jobs Densities

8.1 Tables 8.1 and 8.2 set out the local authority districts with the highest and low jobs densities in the East Midlands, outside the principal urban areas. As this data is at district level, the same figure applies to all settlements within the district. Care has been taken to ensure that references to jobs densities are made in the context of the local authority district. Jobs density refers to the number of jobs per person working in a district.

8.2 Table 8.1 sets out the districts with the highest jobs densities, i.e. those with the highest number of jobs available per head of the labour force. These are areas that are most likely to attract in-commuters from surrounding areas. Nottingham, the largest city in the East Midlands, has the largest jobs density in the region. As Clifton falls within Nottingham City Unitary Authority area, it is also shown to have a high jobs density.

8.3 Outside the principal urban areas, Corby is shown to offer the highest number of jobs per head of working population. This is supported by data on size of firms (table 9.1) which shows that Corby has the highest proportion of large firms of any centre in the region.

8.4 Chesterfield also demonstrates a high number of jobs per head of working population. Chesterfield, a town traditionally associated with mining and manufacturing, now offers a high number of jobs in the service sector and public administration. Data on firm size (table 9.1) also suggests that it is the location of a number of large employers.

8.5 Jobs densities are shown to be high in North West Leicestershire, which includes Coalville, Ibstock and Castle Donington. This area is the location of East Midlands Airport and a number of business parks, including Bardon Industrial Estate.

8.6 Derbyshire Dales is the exception in this list, in that the centres in this area are generally smaller than centres such as Chesterfield and Corby, and are not associated with traditional industry or the dominance of large employers. Previous analysis has shown these to be vibrant local economies that serve as service centres for the local and tourist population.

Table 8.1 – Local Authority Districts (and Secondary Centres) with Highest Jobs Densities
(Source: ONS Crown Copyright, Jobs Densities for District and Unitary Authorities, 2001)

LAD	Urban Centres	County	Jobs density
Nottingham	Clifton	Nottinghamshire	1.13
Corby	Corby	Northamptonshire	.93
Chesterfield	Staveley Clay Cross/North Wingfield Chesterfield	Derbyshire	.91
North West Leicestershire	Coalville Ibstock Castle Donington	Leicestershire	.90
Derbyshire Dales	Wirksworth Matlock Ashbourne Bakewell	Derbyshire	.90

8.7 Areas with the lowest number of jobs per working population (Table 8.2) are mainly concentrated in Derbyshire and Nottinghamshire. The lowest rate is in South Derbyshire, which includes Swadlincote and Melbourne. Analysis earlier in this report suggests that this area has low firm densities but high participation in the labour market, and good connectivity to Derby and the West Midlands

8.8 Bolsover district, which includes the centres of Bolsover, Clowne, Shirebrook and South Normanton, is also shown to offer low numbers of jobs. This is a former mining area which is associated with high levels of deprivation, and low levels of business activity and new job creation.

8.9 North East Derbyshire and Broxtowe, both lie in close proximity to the cities of Sheffield and Nottingham respectively and the low numbers of jobs in these areas may suggest the dominance or reach of employers in these large cities.

Table 8.2 – Local Authority Districts (and Secondary Centres) with Lowest Jobs Densities
(Source: ONS Crown Copyright, Jobs Densities for District and Unitary Authorities, 2001)

LAD	Name	County	Jobs density
South Derbyshire	Swadlincote/Donisthorpe Melbourne	Derbyshire	.49
Bolsover	Shirebrook Clowne Bolsover South Normanton/Pinxton	Derbyshire	.51
North East Derbyshire	Dronfield Eckington	Derbyshire	.53 .
Broxtowe	Kimberley Eastwood	Nottinghamshire	.54 .

Section 9 - Proportion of Large Employers

9.1 Tables 9.1 and 9.2 set out the local authority districts with the highest and lowest proportions of firms that employ more than 20 people. This measure provides an indication of the proportion of large firms within a district. As the data is only available across all urban areas at district level, care has been taken to ensure that references to this indicator are made in the context of the local authority district.

9.2 The centres with the highest proportion of large firms tend to be large, former industrial towns. Corby, a former centre for steel manufacturing, has the highest proportion of large firms in the region. It has a number of companies that employ over 500 people, including RS Components, Corus and Avon Cosmetics.

9.3 West Lindsey, and perhaps more specifically Gainsborough, and Boston in Lincolnshire are shown to have high proportions of large firms. Gainsborough has traditionally been associated with manufacture of agricultural machinery, as well as food and food packaging. Boston is associated agriculture and horticulture, as well as food processing and packaging.

9.4 In Mansfield and Chesterfield, towns previously associated with coal mining and manufacturing, nearly 14% of firms employ more than 20 people. The converse of this analysis is that centres with a high proportion of large firms have a small proportion of small to medium sized firms. This may indicate a history and culture of 'dependence' on large employers, a lack of an enterprising culture and low levels of new business start-up.

Table 9.1 – Local Authority Districts (and Secondary Centres) with Highest Proportion of Employers that employ more than 20 people *(Source: ONS Crown Copyright, IDBR, 2008)*

LAD	Urban Centres	County	% of businesses that employ more than 20 (for urban areas in LAD)
Corby	Corby	Northamptonshire	15.30
West Lindsey	Gainsborough Caistor Market Rasen	Lincolnshire	14.60
Mansfield	Mansfield Mansfield Woodhouse	Nottinghamshire	13.70
Boston	Boston	Lincolnshire	13.20
Chesterfield	Staveley Clay Cross/North Wingfield Chesterfield	Derbyshire	12.60

9.5 As Table 9.2 shows, the centres with a lowest proportion of large firms are concentrated in Northamptonshire and Leicestershire. These areas are likely to have the highest representation of SMEs.

9.6 Overall, these centres are shown to be located in mainly rural areas, but also areas that are among the best connected as they are situated in the south and west of the region, with good connections to nearby cities as well as the West Midlands and the South East.

9.7 A number of centres shown in table 9.2 demonstrate high firm densities, including Market Harborough, Lutterworth, Brackley, Towcester and Hinckley. This suggests that this business activity is more likely to be focused on small and medium sized businesses in these centres rather than large firms.

9.8 The majority of centres listed on table 9.2 have been identified as commuter or dependent settlements, which may suggest that business activity in these areas is focused on provision of services for the local resident and commuter populations.

Table 9.2 – Local Authority Districts (and Secondary Centres) with Lowest Proportion of Employers that employ more than 20 people *(Source: ONS Crown Copyright, IDBR, 2008)*

LAD	Urban Centres	County	% of businesses that employ more than 20 (for urban areas in LAD)
Harborough	Kibworth Harcourt Market Harborough Lutterworth	Leicestershire	6.60
South Northamptonshire	Brackley Towcester	Northamptonshire	7.20
Hinckley and Bosworth	Markfield Earl Shilton Hinckley Market Bosworth	Leicestershire	7.50
East Northamptonshire	Raunds Irthlingborough Oundle Higham Ferrers/Rushden	Northamptonshire	8.00

Section 10 – Towards a Typology of Secondary Centres

Developing the Typology

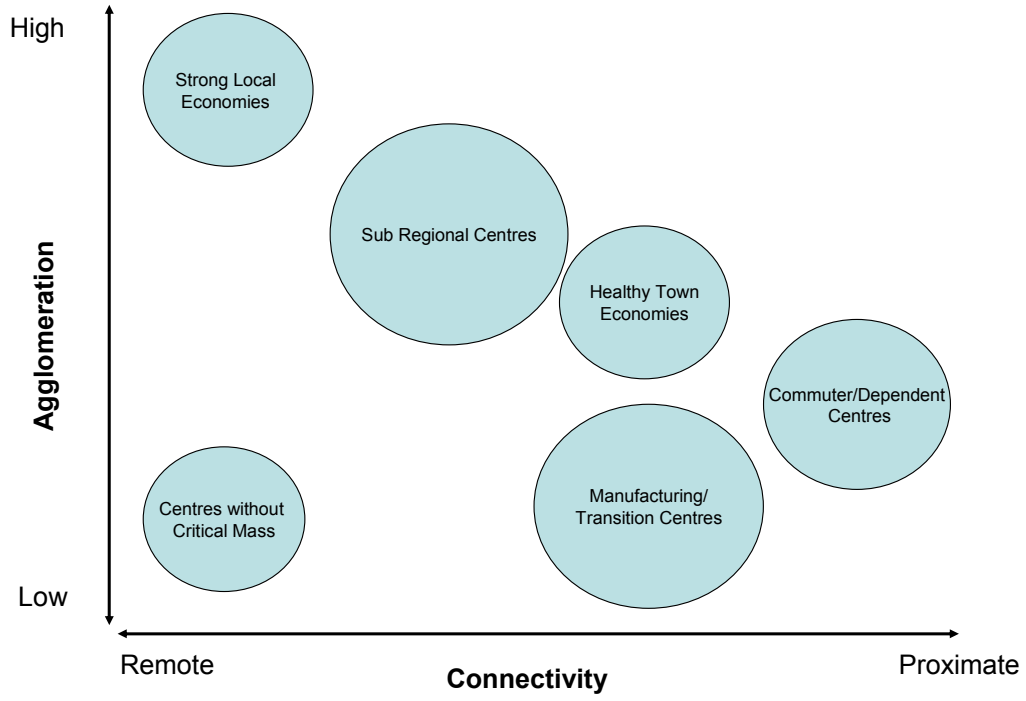
10.1 Sections three to eight explore the potential for agglomeration effects to occur in each secondary centre, and the connectivity and flow effects between secondary centres and potential markets and employment sites. In this section, we seek to take the analysis one step further by developing a broad typology of secondary centres. The typology has been formulated partly from indicators that have been developed by indexing the data for firm density, population density, economic activity and connectivity around the mean for each secondary centre. The table in appendix 1 to this report, sets out the data for each centre as a proportion of the mean for all centres, where the mean equals 1. The table has been colour coded, so that blue indicates where the centre lies below the mean, and orange indicates where it lies above the mean.

10.2 The indicator table has been used as the basis for a broad typology of centres based on the economic roles that they play in the region. The typology has been subject to consultation via interviews with stakeholders at a regional and local level, and further refined to reflect interview feedback. The final typology comprises six groups of secondary centres:

1. **Sub Regional Centres:** large centres with a diverse economic base; the key secondary centres in the East Midlands
2. **Manufacturing/Transition Economies:** centres traditionally associated with manufacturing or mining and that still have a strong manufacturing sector
3. **Strong Local Economies:** small centres with a high number of firms, and that serve a wide hinterland
4. **Healthy Town Economies:** centres that are well served, with services for the town and its immediate surrounding population
5. **Dependent/Commuter Centres:** well connected centres with high numbers in employment, but with few employment sites and, sometimes, services
6. **Centres without Critical Mass:** centres primarily in remote rural or former mining areas with insufficient numbers of residents or firms to bring about agglomeration effects

10.3 Diagram 10.1 shows the potential for agglomeration effects and overall connectivity for each group in the typology. Each group is discussed in more detail, together with case studies, in the following section.

Diagram 10.1 – A Typology of Secondary Centres in the East Midlands



Group 1 – Sub Regional Centres

10.4 Table 10.1 sets out the secondary centres that can be defined as sub regional centres. These are large centres that have high densities of firms and high levels of participation in the labour market. They are in areas of relatively high jobs densities and, therefore, act as foci for employment as well services for the sub-region. As large centres with a diverse economic base, these can be considered to be the key secondary economies of the East Midlands.

Table 10.1 – Sub Regional Centres

Buxton	**Grantham**	**Long Eaton**	
Belper	**Hinckley**	**Market Harborough**	**Wellingborough**
Chesterfield	**Ilkeston**	**Newark**	

10.5 The sub regional economies are centres that are shown to perform well across the indicators that are analysed here. These centres are shown to have a high number of firms, an active workforce, and a high volume of employment for the immediate and surrounding population. The centres range from Buxton as the smallest in the group, with 20,800 population, to Chesterfield as the largest with a population of 70,260.

10.6 Although many of these centres are shown to be well connected, few are within very close proximity to large conurbations and are, as such, outside the immediate economic 'reach' of the principal urban areas. They can, therefore, be considered distinct economies. Buxton is the least connected, at 50 minutes drive from the nearest city of Manchester. The most connected are Long Eaton, Ilkeston and Belper. Long Eaton and Ilkeston are shown to be vibrant economies, but this may be because of their location close to, or within, the Nottingham conurbation. Belper is located 6 miles north of Derby, although is considered to be more self-contained and distinct.

10.7 The potential for continued growth among these sub-regional centres may vary depending on their location. Grantham, discussed below, has been designated as a Growth Point by the Government and its location on the A1 and East Coast Mainline means it is an attractive location for new housing and business development. Towns such as Buxton and, to some extent, Chesterfield are constrained by the Peak District National Park and planning restrictions in this area may limit the physical growth of these towns.

GRANTHAM
Sub Regional Centre

Grantham is a medium-sized town in Lincolnshire. It has an estimated population of over 38,000. It is located on the A1 and A52, 25 miles from Lincoln and 24 miles from Nottingham. It has a direct train service to London via the East Coast mainline, which takes 1 hour and 15 minutes.

The town has a number of large employers, including Northern Foods, Moy Park and the Woodland Trust. The town centre has two supermarkets, a range of shops, and a large weekly market. Grantham's location on the East Coast mainline means that it is within commuting distance of London, and it has attracted a growing commuter population. The town hopes to attract more people to the area from the South East but the perception of Grantham as being a long way from London is felt to be a barrier to this.

Grantham is characterised by diversity in its character and population. Areas such as Manthorpe, on the north side of town, have high levels of employment and average earnings that are well above the regional average. Earlesfield and St Annes are among the most deprived wards in Lincolnshire, and are characterised by high unemployment and low aspirations. However, the town has a high rate of business start-up and this is highest in its most deprived areas.

Grantham has been designated a growth point area and has secured £5m of government funding over three years from 2008. Proposed developments in the town include further retail and industrial development, and housing. It is estimated that this will bring about a 12-15% increase in housing in the town. A new relief road to the south west of the town is also expected to release new land for housing and employment sites. The long term vision for Grantham is for it to remain a diverse economy, with a mixture of employment opportunities, services, and range of available and affordable housing.

Group 2 – Manufacturing/Transition Economies

10.8 Table 10.2 sets out the secondary centres that can be defined as manufacturing and/or in transition. These are centres that have traditionally been associated with manufacturing or mining, and still have a strong manufacturing base. They have low firm densities and low population densities, which can be associated with industrial decline, but also low density development and the presence of large employers.

Table 10.2 – Manufacturing/Transition Economies

Alfreton	**Coalville**	**Gainsborough**	**Sutton in Ashfield**
Boston Corb	**y**	**Mansfield**	**Worksop**
Clay Cross	**Daventry**	**Spalding**	

10.9 Corby, Daventry and Gainsborough are all 'expanded' towns, which experienced significant influxes of population in the 1960s. During the middle of the last century, these centres were transformed from small market towns and villages to industrial towns. They have low density housing and business development typical of the style of building in the 1950s and 1960s, and are characterised by the presence of a high proportion of large employers.

10.10 Mansfield, Sutton-in-Ashfield, Alfreton, Coalville, Worksop and Clay Cross are located in former mining areas, and have a history of mining and manufacturing. For example, Worksop was formerly associated with textiles manufacturing and was surrounded by collieries until the early 1990s. Mansfield is also located in a former coal mining area and has seen the demise of its engineering and textiles industries.

10.11 Decline in manufacturing and mining across the country has meant that a significant source of employment has been lost from these centres, often leaving a "legacy of decay and inner city scale deprivation"[16].

10.12 Boston and Spalding in Lincolnshire are not associated with 'traditional' manufacturing but with agricultural/horticultural production and food processing and distribution. These two centres have high jobs densities, participation in the labour market is around the regional average, and unemployment is low. The high volume of employment offered by the food sector in these centres is illustrated by the large influx of migrant workers from new accession countries of the European Union to the south of Lincolnshire. This has placed increased pressure on government services, such as education and health, in these centres and raised concerns about integration of migrants and community cohesion.

10.13 There is a distinction between centres in this group that have high rates of employment and act as employment magnets for the surrounding area, and centres that are experiencing longer term effects of industrial decline. The first sub-set, which we have defined as 'large employer centres' includes Corby, Daventry, Spalding, Boston and Coalville. The second sub-set, which we have defined as 'under performing post industrial centres', includes Worksop, Mansfield, Alfreton, Clay Cross and Gainsborough These demonstrate low levels of labour market participation, which reflects high levels of unemployment and health problems within the adult population. Mansfield in particular has a low job s density which suggests that it offers a low volume of employment compared with other centres in this group.

10.14 For many manufacturing centres and centres in transition, the challenge is to attract high value, high skilled employment and to encourage new business development and growth. In centres where there has been one or a small number of dominant employers, there may be a culture of reliance on large companies and a lack of an enterprising culture. This may be compounded by low aspirations among the resident population, and low levels of educational attainment and skills.

10.15 A number of centres in this group are undergoing significant transformation and growth. In Corby, for example, projections suggest a 100% increase in the population by 2030, and investment in business sites and retail centres is expected to help create 30,000 new jobs. New housing development in Gainsborough may increase its population from 20,000 to 28,000 by 2026 and the development of new employment sites may increase the number of jobs by 5,000 [17]. Coalville is likely to be the location of 9,600 new homes by 2026 and its retail centre is to be revitalised[18]. Mansfield is undergoing significant regeneration, including provision of employment land on its former brewery site and a new transport interchange.

[16] West Lindsey District Council (2007) *Gainsborough Regained: the Masterplan*

[18] North West Leicestershire District Council (2009) Local Development Framework

CORBY
Manufacturing/Transition Centre

Corby is a large town in Northamptonshire. It is estimated to have a population of 57,700, having grown by 5000 since the 2001 census. It is located 9 miles north of Kettering, around a 30 minute drive from Northampton and 40 minutes from Leicester and Peterborough.

Corby is an expanded town that experienced significant population growth during the 1950s. It is associated with the steel industry which, during the 1980s, employed 12,000 people. In the 1990s, steel manufacturing operations were consolidated across the country. Steel is now no longer manufactured in Corby, but it retains a steel rolling mill that is operated by Corus. The steel closures resulted in the loss of 11,000 jobs. The 1990s saw an increase in unemployment, along with rising social and health problems among the resident population. There was also decline in the town's services.

Corby is currently in a period of significant regeneration and growth. Corby lies in the Milton Keynes and South Midlands Growth Area. New housing on two sites in the town is expected to double the size of the population by 2030. A new direct train service to London will also make Corby within commuter distance of the capital. A marketing campaign has been launched to attract people to Corby from the surrounding area and from London.

The town still has a high proportion of large employers. The largest, RS Components, employs around 1,500 people. Corus employs 800-900 people and Avon Cosmetics has a distribution site that employs over 500. There are a number of food companies based in the town, including Roquette, Solway Foods and Weetabix. These firms employ people from Corby and from the surrounding area.

Like many industrial/transforming centres, Corby has a low proportion of SMEs and a low level of new business start up. This is thought to be related to the legacy of a small number of dominant employers. One action being undertaken to address this is the development of Corby Enterprise Centre, which will include 40 units for small and emerging businesses that will be available at reduced rates.

Group 3 – Strong Local Economies

10.16 Table 10.3 sets out the secondary centres that can be defined as strong local economies. These are small towns that have significantly higher numbers of firms compared with their resident populations. As such, they can be regarded as having an influence that extends far beyond their immediate settlement boundaries.

Table 10.3 – Strong Local Economies

Ashbourne	**Castle Donington**	**Louth**	**Market Rasen**	**Ruddington**	**Skegness**
Ashby de la Zouche	**Enderby**	**Lutterworth**	**Oakham**	**Sleaford**	**Tuxford**
Bakewell	**Kibworth Harcourt**	**Market Bosworth**	**Retford**	**South Wellow**	**Whaley Bridge**

10.17 Many of these centres are established, vibrant market towns which are located in sparsely populated areas and have traditionally served a wide rural hinterland. This sub-set includes Ashbourne, Bakewell, Market Bosworth, Market Rasen, Louth, Retford, Sleaford and Oakham. Generally, these centres have below average levels of connectivity. Their relatively remote locations mean that they lie outside the immediate hinterlands of large urban areas, and are less likely to be competing with services offered at large towns and cities.

10.18 Some centres have strong firm densities due to their proximity to large business sites, rather than because of factors that are endogenous to these settlements. This sub-set, which we have defined as 'firm attractor centres', includes Lutterworth and Tuxford, small towns that lie close to business parks, and Castle Donington which is close to East Midlands Airport. While proximity to these sites brings a source of employment to these centres, reflected in high levels of economic activity, it may also conceal decline in the town centres and may be associated with increased traffic passing through the centre.

10.19 Tourism and agriculture play a role in supporting business activity in centres in Derbyshire and Lincolnshire in particular. This is the case in Ashbourne, Bakewell, Whaley Bridge, Louth and Skegness. However, employment offered by these sectors is generally low skilled and low wage. In Skegness, for example, there are low levels of economic activity due to the high retirement population, and also problems of seasonal unemployment.

10.20 Common issues facing these centres include an ageing population, availability and affordability of housing, remoteness and public transport provision, and loss of or consolidation of key services in larger centres. For centres in attractive areas, such as Bakewell and Ashbourne, affordability and availability of housing for local people is a concern. Few young people may be able to buy homes and move to or remain in these towns, which further emphasises the older age structure. The remote location of these centres may make public transport a priority, for those seeking to travel to larger urban areas and also for residents of surrounding villages to access these centres. As in Louth, discussed in the case study below, the loss of government services, such as healthcare provision, to other larger centres is a concern. Changes in agricultural practices may have implications for the role of these towns as agricultural trading centres and the survival of livestock markets.

10.21 A key priority for these centres is retaining their role as strong local economies, and ensuring that essential services continue to be provided for the population of the settlement and its hinterland. These centres need to be able to adapt quickly to changes in the agricultural practices and tourism patterns. One way to achieve this will be to retain and attract businesses that together comprise a diverse economic base. Relatively poor transport infrastructure between these centres and large urban areas, and limited provision of employment sites, may restrict this. However, improvements in broadband infrastructure may provide an opportunity for these centres, and entrepreneurs who are able to operate their businesses from home may be attracted to these centres as desirable residential locations, and also by relatively cheap house prices when compared with large urban areas.

LOUTH
Strong Local Economy

Louth is a market town in Lincolnshire with an estimated population of just over 16,000. It is located in the east of the county and is around 50 minutes drive from Lincoln and 20 minutes from Grimsby.

Historically, the town developed around the wool trade and, during the 17th century, became a port for export of wool via the Louth canal. Louth has retained a role as a centre for agricultural trade, and is the location of the last surviving livestock market in Lincolnshire.

The economy of the town is quite vibrant. Louth acts as a service centre for a wide hinterland, including a number of other nearby market towns such as Alford and Spilsby, which are smaller towns with fewer services. There is a mixture of independent shops in the town centre, a general market three times a week, and a range of larger firms on Fairfield Industrial Estate on the outskirts of the town. Linpac, a large plastics and packaging firm, started in Louth and there is now a cluster of packaging firms in the area.

Problems cited for the town include poor transport communications. The town lost its railway service in the middle of the 20th century, and buses are reported to be infrequent. Louth is around 20 minutes drive from the nearest motorway, the M180, but is relatively remote from large centres of population.

Despite a growing population, there has been some decline of government services, such as the police station, hospital services and magistrates court. The livestock market continues to be held weekly but the site may be at risk of being sold, which would mean that farmers would need to take their livestock to markets at Newark or Selby.

Future plans for Louth include the possible formation of a small development agency to raise funding and promote the town along themes such as walking, food and eco tourism. A town centre manager may also be appointed. Unlike other towns discussed in this section, Louth is not likely to be the focus of significant change or population growth.

Group 4 – Healthy Town Economies

10.22 Table 10.4 sets out the secondary centres that can be defined as healthy town economies. These are centres that have equilibrium of firm and population densities. They have businesses that serve the immediate population of the centre and perhaps a small hinterland.

Table 10.4 – Healthy Town Economies

Bingham	**Eckington**	**New Mills**	**Stamford**	
Brackley	**Matlock**	**Ripley**	**Towcester**	**Wirksworth**
Chapel-en-le-Frith	**Melbourne**	**Sileby**	**Uppingham**	

10.23 Unlike the strong local economies set out in group 3 above, healthy town economies are more likely to be well connected to nearby large urban areas. These are towns that may act as commuter centres but are also well served by local services and retain a distinct community identity. Participation in the labour market is high, which suggests that these centres have low levels of unemployment and deprivation.

10.24 Centres such as Bingham, Brackley, Towcester, Sileby, Stamford and Uppingham are located within a 30 minute drive of their nearest large urban area and are therefore within easy reach of services and employment within these centres. However, they also retain a number of employers, a range of services, and a retail heart with a mix of independent shops.

10.25 Although these centres retain a balance of good connectivity and services, and can be perceived as attractive residential areas, this balance may be threatened by a number of factors. Centres very well connected to urban areas, such as Towcester and Sileby, may face competition from large retail centres. Demand for housing in these centres may result in large developments on the towns' outskirts which may not be well integrated into the fabric of the urban area nor well connected to its retail centre. Retention of employment sites, particularly in areas where land is sought for housing development, is also a priority.

TOWCESTER
Healthy Town Economy

Towcester is a small town in the south of Northamptonshire. It has a population of just over 8,000. It is located on the A5 within 10 miles of Milton Keynes to the south and Northampton to the north.

Towcester and the surrounding area have a high level of employment. Many people are employed in highly skilled occupations, and average earnings are well above the regional average. Towcester has a number of electronics firms, including GEC and Radstones, as well as many small firms based on two industrial estates in the town. Porsche has a site in the town, and other motor companies are based at nearby Silverstone and Brackley.

Towcester also has a high level of out commuting, to Milton Keynes, Northampton and London. Its population is described as younger than the regional average, with young families being attracted to the area because of its good quality of life and good transport links.

Towcester is defined as a rural service centre, and it attracts shoppers from the villages immediately surrounding the town. There are many independent shops in the town centre, but this is thought to be partly because there is insufficient footfall to attract larger chains. The current routing of the A5 through Towcester's High Street means that the town centre is not an attractive or convenient destination for shoppers. Proximity to larger centres is also shown to have an effect, and studies have shown that 97% of residents out commute for shopping despite the presence of 3 supermarkets in Towcester.

Substantial growth is planned for Towcester. It is within the Milton Keynes and South Midlands Growth Area, and 3,000 new homes are planned for two sites in the town, together with new employment land. It is expected that the housing growth will double Towcester's population. There will also be development of additional retail offer in the town and the aim is to create a 'café culture' atmosphere. A proposed bypass will also improve the town centre environment.

Group 5 – Dependent/Commuter Centres

10.26 Table 10.5 sets out the secondary centres that can be defined as commuter/dependent. These are centres that are dependent for employment on other, larger urban areas. They are settlements that have lower firm densities than would be expected for the size of the resident population. They have high levels of economic activity, and therefore have an active workforce and high levels of participation in the labour market. Many are situated in local authority districts that have low jobs densities, which suggests many people who live in the area work elsewhere. There are 24 centres in this group, which makes it the largest.

Table 10.5 – Dependent/Commuter Centres

Boughton/Ollerton	**Earl Shilton**	**Irthlingborough**	**Melton Mowbray**	**Rushden/Higham Ferrers**
Clifton East	**wood**	**Kettering**	**Market Deeping**	**Shepshed**
Cotgrave	**Heanor**	**Kirkby in Ashfield**	**Mountsorrel**	**Staveley**
Desborough Huck	**nall**	**Loughborough**	**Raunds**	**Swadlincote**
Dronfield Ibstoc	**k**	**Mansfield Woodhouse**	**Rothwell**	

10.27 The group includes two subsets. The first sub set, which we have termed 'centres absorbed within conurbation', comprises centres around or within the principal urban areas, such as Clifton and Hucknall near Nottingham, Mountsorrel near Leicester, Dronfield near Sheffield, and Market Deeping near Peterborough. These centres are within close proximity of these large urban areas and effectively operate as residential suburbs of these conurbations. Centres in the second sub-set, described as 'well connected commuter towns' are more distinct and less proximate, but still well connected, to large urban centres. These include Cotgrave near Nottingham, Earl Shilton and Swadlincote near Leicester, Heanor near Derby and Nottingham, and a number of small towns in Northamptonshire such as Raunds, Rothwell, Irthlingborough and Desborough.

10.28 It is interesting to note that the 'well connected commuter towns' group comprises seven centres from Nottinghamshire, six from Northamptonshire, and five from Leicestershire. There are three centres of this type in Derbyshire and just one in Lincolnshire. These centres tend to be in central and well connected areas of the region, and are clustered around large urban centres, such as Nottingham, Leicester, Northampton and Sheffield.

10.29 This group includes a number of large centres, such as Loughborough, Melton Mowbray, Kettering and Rushden. These are towns that may arguably be defined as sub-regional service centres, and this is how they are defined in the Regional Spatial Strategy and local development frameworks. However, the indicators analysed in this report suggest that they have a lower density of firms than expected for their populations. They lie in areas that have relatively low jobs densities, areas that - in other words - offer a low number of jobs per head of working population. They are relatively large centres that have high levels of participation in the labour market and so provide a residential base for a large economically active population.

10.30 All these towns are well connected and within commutable distances of at least one large urban area. Loughborough is a 20 minute drive from Leicester, and 30 minutes from both Nottingham and Derby. Melton Mowbray is 30 minutes drive from Nottingham and Leicester. Kettering is a round half an hour's drive from Northampton and Leicester, and within an hour of London by train.

10.31 It is clear that these centres may perform a number of economic roles. Loughborough, for example, has a number of large employers, such as Loughborough University, AstraZeneca, Brush and 3M Healthcare, which attract people from the surrounding area. However, its location in the heart of the region and good transport connections, mean that it is within commuting distance of a number of cities as well as 1.5 hours from London.

10.32 For some centres in this group – such as Clifton and Hucknall – the commuter settlement role is long established and the towns effectively operate as part of the economy of the conurbation. For other centres, the commuter settlement role has developed more recently. Shepshed, discussed below, has transformed from a town with a number of factories and a retail centre, to a town that is effectively dependent on larger centres nearby for employment opportunities and retail services.

10.33 The growth of commuter settlements has been brought about by factors such as improvements in transport and communications, and redevelopment of employment sites into housing. This may be the result of Government targets for new housing on brownfield land, and also because large-scale employment sites are not always needed in today's economy. Housing may, therefore, be a more appropriate use of this land and may contribute more to the economic development of these towns. Commuter settlements generally have high levels of employment and low levels of deprivation, and are not regarded as 'under performing' in a traditional sense. However, commuter centres in rural areas raises a number of sustainability issues, including: increasing the need of and use of cars; decline in local services which may be a particular problem for the non-working or elderly populations; and erosion of community engagement and identity.

SHEPSHED
Commuter Centre

Shepshed is a medium sized town in Leicestershire. It is near to the M1 motorway, north of Leicester and south of Nottingham and Derby, which places it in the centre of the Three Cities sub area. It lies 5 miles west of Loughborough.

Shepshed is formerly associated with the wool and textiles industries, which first developed during the 19th century. The town's textiles and hosiery factories were still in operation during the 20th century, but had all closed by 1996. The land occupied by factories was developed into housing. Most people who live in the town now work at larger centres nearby, such as Loughborough, Coalville and Derby. Shepshed's population has increased significantly, from 6,500 in 1963 to over 14,000 now, and the town has taken on a dormitory settlement role.

The town is well served by government services such as healthcare provision and schools. However, as fewer people work in the town, there is less demand for retail services. The centre used to have four banks, which have now closed, and a number of pubs are vacant. There is a small supermarket in the town centre and a weekly market, but residents tend to travel to Loughborough or Coalville for their food shopping.

Loss of employment from the town has raised concerns for community identity and cohesion. With many people working and shopping elsewhere, there is reduced use of local services and limited engagement in community activities. New housing developments in the south of Shepshed are not well connected to the town centre, which has narrow roads and limited car parking. Further housing is planned on two sites in the town and there are no proposals for additional employment sites.

Group 6 – Centres without Critical Mass

10.34 Table 10.2 sets out the secondary centres in the region that lack critical mass. These are centres that tend to have small populations and low firm and low population densities. They have below average levels of economic activity, which suggests that there may be a high proportion of people who are unemployed, suffering from a long term illness, or retired. They are also likely to be less well connected or more remote from large centres of population.

Table 10.6 – Centres without Critical Mass

Alford	**Clowne**	**Kimberley**	**Quorndon**	**Spilsby**
Barrow on Soar	**Crowland**	**Long Sutton**	**Radcliffe on Trent**	**Wainfleet**
Bolsover	**Holbeach**	**Mablethorpe/Sutton**	**Selston/Underwood/Brimley**	
Bourne	**Hornc astle**	**Markfield**	**Shirebrook**	
Caistor	**Keyworth**	**Oundle**	**South Normanton/Pinxton**	

10.35 This group includes 'small rural centres' that lie in rural, sparsely populated areas and are remote from large centres of population. Ten of the centres, which account for half of the group, are located in the east of Lincolnshire. These comprise mainly small market towns, such as Alford and Spilsby, which would have traditionally been the focus of livestock and agricultural markets for a wide rural hinterland. Although many still run weekly or bi-weekly markets, the towns have suffered from a decline in the agricultural workforce and consolidation of services in larger centres such as Louth and Skegness.

10.36 Like many areas of Lincolnshire, population growth in this area has been relatively high at 1% per year for the last 20 years[19]. This is expected to continue, with a more than 100% increase in residents of pensionable age expected by 2029 in East Lindsey district[20]. However, this growth is occurring unevenly, and is concentrated on the coast in particular, and less in the rural market towns. The ageing population of these towns is a key concern for policymakers, with a 'brain drain' of young people from these areas and a shortage of available housing. Resistance to change within communities is cited as a barrier to provision of new housing and employment sites. The remote location of these settlements from large urban areas and mainline train services is also thought to restrict business growth and new business development.

10.37 The second sub-set of this group comprises 'former mining towns and villages' such as Bolsover, discussed in the case study below, Clowne, Shirebrook, and South Normanton in Derbyshire. Since the closure of nearby coal mines in the 1990s, these centres have experienced a decline in the number of available jobs and an increase in unemployment. The jobs density for Bolsover district, at 0.51, suggests that a high proportion of people who live in the district work elsewhere. These centres are also shown to be slightly less well connected than other centres in Derbyshire. Access to training and employment opportunities is considered to pose a problem for centres in this area[21].

10.38 Although very different in their history, character and the nature of their populations, the centres in this group face some similar challenges. Rural or industrial decline has affected the viability of these small centres, as services that used to be available for the agricultural or mining workforce have diminished. There are issues associated with low aspirations, low skills, and poor access to employment opportunities. Unlike other types of town, these centres do not have the same demand and pressure for housing development and growth, and new housing development would perhaps help to improve the vitality of the settlement and increase demand for local services.

BOLSOVER
Centre without Critical Mass

Bolsover is a small town in the east of Derbyshire. It has a population of 11,400. It is situated close to the M1, around 6 miles east of Chesterfield and 8 miles north of Mansfield.

Bolsover, and the nearby towns of Clowne, Shirebrook and South Normanton, lie in an area that is formerly associated with coal mining. The last collieries closed in the early 1990s. Bolsover is still experiencing the effects of these closures, and has a relatively high level of unemployment. Worklessness is a problem, and there are cases of up to three generations of unemployment within the same family, and high levels of claims for incapacity benefits.

The District Council has been successful in securing funding for a number of initiatives to help raise aspirations and improve employability within the resident population. These include the Family Employment Initiative, which engages families in workshops and formal training to improve confidence, prepare for employment, and includes funding for suits to be bought for interviews. Another initiative is the Enterprise Academy, which involves workshops within schools in Bolsover to raise awareness of employment, and encourage children to perceive employment as an option.

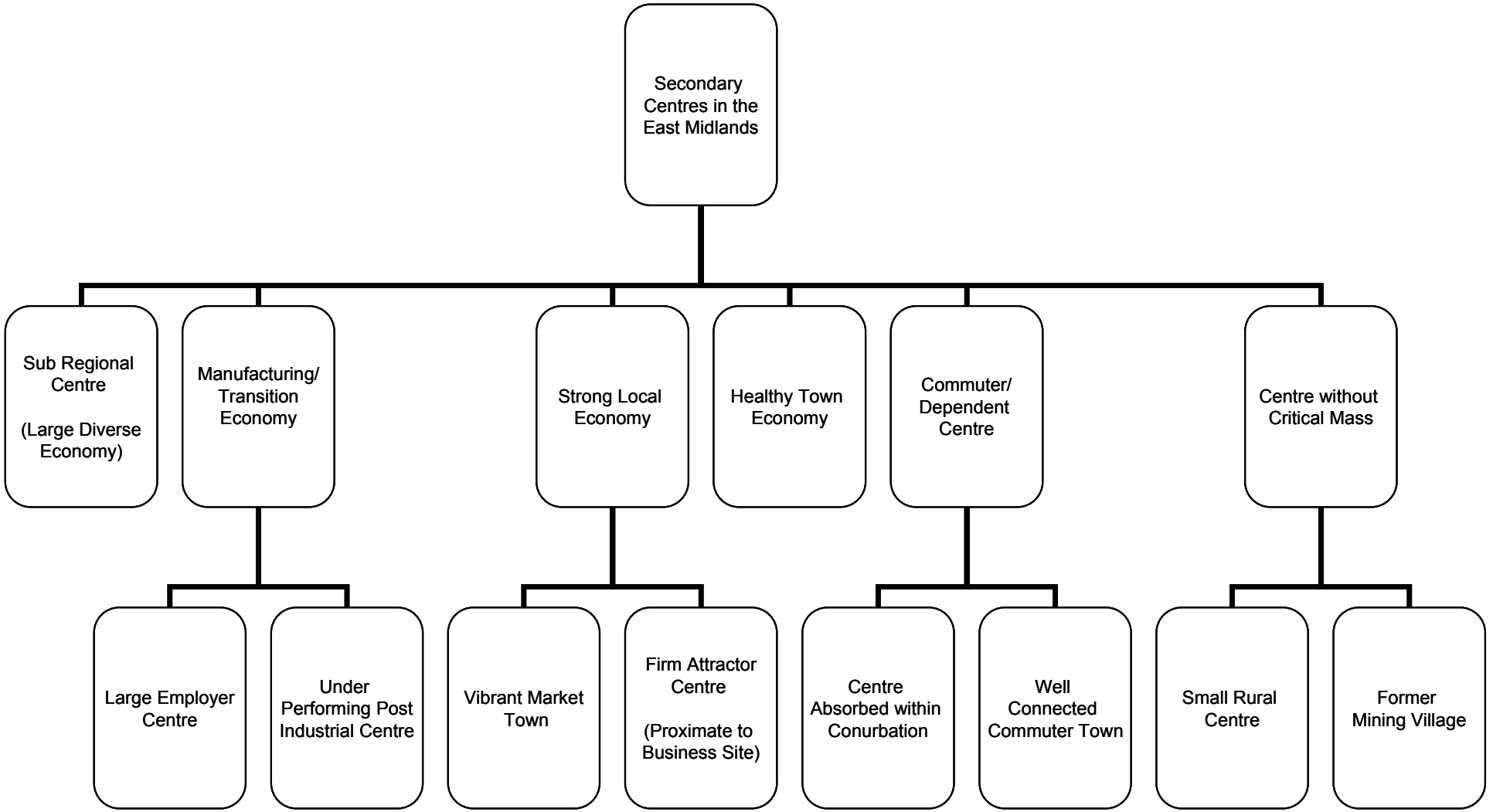
The town acts as a service centre for its resident population, with a number of independent retailers and two small supermarkets. Many people in the town work in nearby Chesterfield where there are more employment opportunities. Bolsover currently has a relatively low number of employers. Four employment sites are being developed near the town, including Markham Vale on the M1, Castlewood and Brook Park. The intention is to attract creative and knowledge-intensive industries to the area. Markham Vale, which has its own exit on the M1, is expected to attract primarily logistics and distribution firms.

Detailed Categorisation of Secondary Centres

10.39 Diagram 10.2 sets out the typology of secondary centres, together with the sub-groups discussed above.

[19] East Lindsey District Council (2007) Local Development Framework – Core Strategy
[20] *emda*, on behalf of Lincolnshire Enterprise (2007) Lincolnshire Sub-Regional Profile
[21] Bolsover District Council (2006) Sustainable Community Strategy

Diagram 10.2 – Typology of Secondary Centres in the East Midlands



Section 11 – Conclusions and Implications

Agglomeration of Firms and Population

11.1 **A small number of large economies.** Secondary centres in the East Midlands are characterised by a clear hierarchy of a small number of large economies, and a large number of small economies. Chesterfield, Wellingborough, and Mansfield have the largest concentrations of firms and together account for 14% of firms in the sample.

11.2 **A high degree of heterogeneity among secondary centres in the region.** Analysis of firm and population densities shows that there is a high degree of variation between centres, and no clear relationship between the variables. In other words, the presence of firms is not necessarily shown to be related to or determined by concentrations of population/workforce and, conversely, concentrations of population may occur without the presence of firms. This suggests a high level of variation in the economic roles of these secondary centres.

11.3 **A 'tipping point' for agglomeration effects.** Only secondary centres with more than 2,000 firms demonstrate an equilibrium of firm and population densities, which suggests that agglomeration effects are mostly like to occur in the large secondary centres.

Connectivity and Flow Effects

11.4 **Few truly remote secondary centres in the East Midlands.** The vast majority of secondary centres are within 20 miles of their nearest large urban area, 50 miles of an airport, and 2 hours from London. Those with longer distances are primarily in the east of Lincolnshire and west of Derbyshire.

11.5 **Least efficient journey times for secondary centres closest to Nottingham, Derby and Leicester.** The high density of settlements around these large urban areas may be associated with road congestion, reduced speed of traffic flows and less reliable journey times. This implies that there may be increased costs associated with flows of goods and services for firms operating in these centres.

11.6 **Few secondary centres that are both remote and with inefficient journey times**. A small number of centres have below average connectivity to their nearest large urban areas *and* below average speeds of travel. These include Buxton, Spalding, Louth and Chapel-en-le-Frith, and can be regarded as some of the most poorly connected centres in the region.

Economic Activity – Participation in the Labour Market

11.7 **A south-west/north-east divide in labour market participation.** Centres in the south and west of the region are shown to have the highest levels of participation in the labour market (Brackley, Towcester, Market Deeping, Daventry). Those in the north and east of the region have the lowest levels of labour market participation (Mablethorpe/Sutton, Shirebrook, Wainfleet, Skegness).

11.8 **High labour market participation in secondary centres closest to large cities.** Travel time to large urban areas is shown to be related to economic activity levels in secondary centres. This suggests that well connected secondary centres may benefit from access to employment opportunities within nearby large cities. The most remote secondary centres (Mablethorpe, Wainfleet and Skegness) demonstrate low levels of labour market participation, although this may also be related to high retirement populations.

11.9 **High participation in labour market for secondary centres within 80 minutes of London.** Almost all centres within 80 minutes of London demonstrate economic activity rates above the regional average. This may suggest that London provides a source of employment for these centres. It may also suggest a broader 'South East' influence, i.e. centres with short journey times to London are also more proximate to the South East and employment opportunities in Milton Keynes, Bedford and Oxford.

11.10 **No discernible 'airport effect'.** Proximity to airports is not shown to have an effect on labour market participation, beyond the secondary centres located immediately outside the airports.

Firm Density

11.11 **Proximity to cities has a limited influence on agglomeration at a regional level.** At a regional level, connectivity to cities is not shown to have a strong effect on firm densities. In other words, agglomeration of firms does not appear to be driven or influenced by proximity of large urban areas. However, the centres most remote from large urban areas have below average firm densities. Remoteness and sparsity of population may be associated with limited markets to sustain high levels of business activity.

11.12 **Limited 'London effect'.** While centres within an 80 minute journey to London demonstrate high levels of participation in the labour market, proximity to London is not shown to have the same effect on firm density. In other words, London may play a role in attracting employment from some centres in the region, but it does not appear to influence the agglomeration of firms in these centres.

11.13 **No discernible 'airport effect'.** Agglomeration of firms is shown to be no greater for centres close to airports in and around the region than those that are further away. The exception is East Midlands Airport, where centres such as Castle Donington and Melbourne demonstrate high firm densities. This may suggest that airports in and around the region have limited direct influence on new business growth outside their immediate vicinities. It may also suggest that very close proximity to an airport is not a key concern for businesses in the region.

The Sub-Regional Picture

11.14 **Derbyshire.** Derbyshire has a large number of centres with high firm and population densities, which suggests the presence of strong economies. The largest centres of firm population, Chesterfield and Long Eaton, also demonstrate high firm densities. There is, to some extent, an east/west divide in Derbyshire. Centres such as Bakewell, Ashbourne and Matlock demonstrate high densities of firms which suggest they serve a wide hinterland and tourist population. Centres around Derby and in the north and east of the county demonstrate low firm densities, which reflects the economic 'reach' of Nottingham and Derby and suggests a more dependent role for these centres. Centres are, overall, less well connected than other counties, with Buxton, Bakewell, Shirebrook and Bolsover among the most poorly connected in the region.

11.15 **Leicestershire.** Almost all centres in Leicestershire have high levels of participation in the labour market, although at least half demonstrate below average firm densities, which suggest that many centres play a commuter settlement role. It has a number of strong economies, such as Market Harborough and Hinckley, as well as Lutterworth and Castle Donington which are proximate to large business sites at Magna Park distributions centre and East Midlands Airport respectively. Centres are generally well connected, and Market Harborough and Loughborough are within commuting distance of London.

11.16 **Lincolnshire and Rutland.** The majority of centres in this area have low firm densities and low levels of participation in the labour market. Connectivity appears to matter, with firm densities and labour market participation at their lowest in the least connected centres. This suggests that remoteness from markets, suppliers and other businesses may have a negative effect on economic activity. Centres in this area are more likely to be self-contained and Market Deeping is the only commuter settlement. There are a small number of strong economies, including Grantham, Stamford, Oakham, and Sleaford. The majority of centres – particularly those in the north and east of Lincolnshire - are poorly connected. Grantham, Market Deeping, Stamford and Uppingham are relatively well connected to nearby cities and London.

11.17 **Northamptonshire.** Most centres in Northamptonshire fall below the mean for firm density, but above the mean for participation in the labour market. This suggests that many centres act as commuter centres, with a high level of commuting to Northampton, Milton Keynes, and London. Connectivity appears to matter in Northamptonshire, with those most connected to cities and London demonstrating the highest levels of labour market participation and concentrations of firms. It may also indicate a broader 'South East' influence. There are a number of centres that provide a high level of employment, such as Wellingborough, Corby and Daventry. Almost all centres are well connected to nearby urban areas and many, such as Wellingborough, Kettering and Corby, are within commuting distance of London.

11.18 **Nottinghamshire.** Centres in Nottinghamshire are characterised by relatively low firm densities and, for many centres, low levels of labour market participation. This reflects the mining and industrial heritage in some areas of the county, and also the 'reach' of Nottingham and the dependence of a number of settlements on this large conurbation for employment and services. There are a number of strong economies, which include Newark, Bingham, Tuxford, Cotgrave and Southwell, which are mostly situated in the less densely populated east of the county. Centres in Nottingham are, overall, well connected. Those in the north of Nottinghamshire, such as Worksop and Tuxford, are slightly more remote from large urban centres and transport connections.

The Regional Picture

11.19 **Few strong, diverse economies.** Our research has shown that within the sample of secondary centres analysed here, there is a small number of large, diverse economies. These are economies with a large firm population that play a sub-regional service role, and that also have a high number of employers and available jobs, with an economically active population. This suggests that few centres have the optimum number and composition of firms, together with the transport and communications infrastructure, to enable agglomeration effects to occur.

11.20 **Almost half of centres are dependent or lack critical mass.** 46 of the 98 centres analysed here are shown to be dependent on other centres for employment and, often, services or lack a sufficient mass of firms for agglomeration effects to occur. This, again, emphasises the finding outlined above that business activity and agglomeration is focused in a relatively small number of urban centres.

11.21 **Dominance and 'reach' of Nottingham and Leicester**. Analysis of connectivity data suggests that Nottingham and Leicester are the closest large urban areas for almost half, 43, of the secondary centres analysed here. The typology of secondary centres shows that the majority of commuter and dependent settlements are in the well connected and central areas of the region, including the areas around and between Nottingham, Derby and Leicester.

11.22 **South East influence.** Analysis of economic activity data suggests that participation in the labour market is higher in centres in the south of the region – primarily Northamptonshire and Leicestershire – than elsewhere. This suggests a significant employment 'pull' from London and other centres in the South East, such as Milton Keynes, Bedford and Oxford. Proximity to London and the South East is also shown to have some effect on business agglomeration in the south of the region.

11.23 **Unprecedented growth.** Current targets for new homes across the country, together with planning policy that advocates concentration of new housing and employment land development in towns and large villages, means that secondary centre are the focus of substantial housing and population growth. This appears to bring some opportunities for secondary centres, in that population growth can support existing infrastructure, and improve demand for services. However, where new housing growth is not well integrated into the existing fabric of the town, and housing developments are not well connected to town centres, there may be little change in the demand and support for local services.

11.24 **Growth primarily housing led.** Our research has suggested that more than half of towns in the East Midlands are commuter settlements or lack a sufficient mass of firms to create agglomeration effects. Allocations of housing in many towns without appropriate investment in employment land and new business development initiatives may further emphasise the current trend for commuting, and continue to 'tip the balance' of secondary centres in the region towards commuter or dependent settlements.

A Typology of Secondary Centres in the East Midlands

11.25 The analysis undertaken in this report has been used to develop a broad typology of secondary centres in the East Midlands. The typology comprises six groups of secondary centres that reflect the roles that they play in the regional economy.

1. **Sub Regional Centres:** large centres with a diverse economic base; the key secondary centres in the East Midlands, e.g. Chesterfield, Newark, Wellingborough

2. **Manufacturing/Transition Economies:** centres traditionally associated with manufacturing or mining and that still have a strong manufacturing sector, e.g. Corby, Mansfield, Worksop

3. **Strong Local Economies:** small centres with a high number of firms, and that serve a wide hinterland, e.g. Bakewell, Louth, Retford

4. **Healthy Town Economies:** centres that are well served, with services for the town and its immediate surrounding population, e.g. Towcester, Bingham

5. **Dependent/Commuter Centres:** well connected centres with high numbers in employment, but with few employment sites and sometimes services, e.g. Shepshed, Clifton, Rushden

6. **Centres without Critical Mass:** centres primarily in remote rural or former mining areas with insufficient numbers of residents or firms to bring about agglomeration effects, e.g. Shirebrook, Alford

Implications

11.26 A key finding of this study is that the regional economy extends beyond the five Principal Urban Areas to incorporate a well-populated, dynamic and diverse range of settlements. These contribute to the local and regional economy and so are important to wealth and regional development. There is scope therefore to focus on these settlements within regional economic development policy and a case made that this should be explicit in the future development of regional strategy, given their important socio-economic and community as well as economic contributions.

11.27 There is no 'one size fits all' approach for the settlements. However, the typology developed in section 10 of the report provides a clear basis for 'grouping' interventions, as well as understanding specific local needs and context. This approach, of targeting strategies at specific types of community, provides a basis for intervention.

11.28 Feedback from the interviews with local community representatives suggests that the 'non-economic' and socio-economic role of these communities is significant. These centres play important identity roles in local and sub-regional economies, and so have a cohesion and economic structuring dimension that - although less obvious - is potentially of major importance to the region. This is apparent in some settlements that are dependent or lack critical mass, where loss of economic vitality has led to erosion of community identity and sense of belonging. Avoiding this in centres elsewhere and seeking to develop vibrant local and 'micro'-economies will generate local wealth creation effects that, although individually small, will together account for a major contribution to regional wealth and economic activity.

Challenges and Potential Policy Interventions

11.29 Table 11.1 sets out the key challenges that are typical for each group of secondary centres. Potential policy responses are proposed for each group, i.e. the interventions that could be applied to improve and support business growth and participation in the labour market, as well as the cohesiveness and vitality of these centres.

Table 11.1 – Secondary Centres: Challenges and Potential Policy Responses

Group	Characteristics	Common Challenges	Potential Policy Response
Sub Regional Centres	Large centres with a diverse economic base; the key secondary centres in the East Midlands	• Retaining a mixed and diverse economy • Ensuring continued provision of employment sites • Congestion and the costs of transport	• Tailored development strategies to build on existing strengths in the economy • Strategies to minimise congestion in order to remain attractive for business and maximise agglomeration effects
Manufacturing/ Transition Economies	Centres traditionally associated with manufacturing or mining and that still have a strong manufacturing sector	• Decline in manufacturing and mining • Low levels of labour market participation • High levels of deprivation • Low skills and aspirations, lack of enterprise culture • Low number of small and medium enterprises (SMEs)	• Foster enterprising culture through tailored training, workshops and initiative such as Young Enterprise • Provision of incubator centres to support early stage businesses • Attraction of high skilled, high wage employment
Strong Local Economies	Centres with a high number of firms, and that serve a wide rural hinterland	• Changing agricultural and tourism patterns • Remoteness and poor transport infrastructure • Ageing population and resistance to change • Lack of available or affordable housing • Limited employment sites • Loss of/consolidation of government services • Limited private and public sector business support	• Support initiatives to encourage innovation within agriculture and tourism related businesses • Support mid-life and early retiree entrepreneurship • Support for home based businesses and home working • Explore innovative ways to deliver business support to businesses in remote centres
Healthy Town Economies	Centres that are well served, with services for the town and its immediate surrounding population	• Competition from or 'leakage' to nearby retail centres • Demand for housing, and its effective integration • Provision and retention of employment sites • Retaining a balanced and mixed economy	• Tailored and specific strategies to support business development and retention • Ensure town integrated and embedded into wider economy via good transport links • Dedicated resource for town centres to ensure relevance/vitality
Commuter/ Dependent Centres	Well connected centres with high numbers in employment, but with few employment sites and sometimes services	• Loss of employment sites to housing • New housing not always integrated into urban fabric • Decline in retail and government services • Loss of community engagement and identity • Reliance on cars, and problems of congestion	• Ensure new housing developments are planned appropriately to give access to and support local services • Dedicated resource for town centres and ensuring their relevance and vitality. • Ensure access to government services for those without access to public transport
Centres without Critical Mass	Centres primarily in remote rural or former mining areas with insufficient numbers of residents or firms to bring about agglomeration effects	• Decline in agricultural and mining workforce • Remoteness and/or poor access • Low levels of labour market participation • High levels of ill-health • Loss of services to larger centres	• Growth in ho using to 'con solidate' the fabric of the centre an d improve demand for and viability of services • Promotion of broadband to increase accessibility of services and promote remote and home working

APPENDICES

1. Secondary Centres Data Table: Indexes for all Indicators

2. List of Consultees

Appendix 1 – Secondary Centres Data Table: Indexes for all Indicators

Name Cou	nty	ResPop Index	PopDen Index	LabDen Index	Pop Agglom	FirmPop Index	FirmDen Index	JobsDen Index	Firm Agglom	time city	time air port	time lond	city index	airport index	lond index	Connect Index (reverse)	%emp 20+ index	Prem Vac Index	EcoAc Index
Alford Lincolnshire		0.19	0.87	0.73	0.60	0.2	0.87	0.97	0.68	57	60	156	2.02	1.36	1.38	0.41	0.97	0.45	0.83
Alfreton Derb	yshire	1.3	0.81	.	1.06	1.29	0.77	1.17	1.08	27	35	138	0.96	0.79	1.22	1.01	1.05	1.36	.
Alfreton Urban Area	Derbyshire	2.4	0.90	0.89	1.40	2.31	0.83	1.17	1.44	27	35	138	0.96	0.79	1.22	1.01	1.05	1.36	0.98
Ashbourne Derb	yshire	0.29	0.94	0.91	0.71	0.56	1.71	1.28	1.18	21	46	135	0.74	1.04	1.20	1.01	1.00	0.91	0.96
Ashby-de-la-Zouch Leicestershire		0.66	0.86	0.91	0.81	0.85	1.05	0.91	0.94	32	17	153	1.13	0.38	1.36	1.04	1.04	1.06	1.05
Bakewell Der	byshire	0.21	0.79	0.72	0.57	0.61	2.16	1.28	1.35	32	51	155	1.13	1.15	1.38	0.78	1.00	0.91	0.9
Barrow upon Soar	Leicestershire	0.3	0.75	0.83	0.63	0.29	0.69	0.91	0.63	22	26	106	0.78	0.59	0.94	1.23	1.04	1.06	1.1
Belper Derb	yshire	1.28	1.11	1.2	1.20	1.24	1.03	1.17	1.15	15	38	129	0.53	0.86	1.15	1.15	1.05	1.36	1.07
Bingham Nottinghamshire		0.51	1.16	1.25	0.97	0.61	1.34	0.81	0.92	16	36	97	0.57	0.81	0.86	1.25	0.95	1.21	1.06
Bolsover Derb	yshire	0.67	0.92	0.83	0.81	0.58	0.77	0.73	0.69	30	53	149	1.06	1.20	1.32	0.81	1.07	1.51	0.89
Boston Lincolnshire		2.04	0.81	0.79	1.21	2.05	0.78	1.13	1.32	52	86	109	1.84	1.94	0.97	0.42	1.28	1.66	0.96
Boughton/Ollerton Nottinghamshire		0.58	1.08	0.94	0.87	0.4	0.72	0.93	0.68	28	40	103	0.99	0.90	0.91	1.07	1.12	1.06	0.86
Bourne Lincolnshire		0.67	0.93	0.95	0.85	0.69	0.92	1.03	0.88	26	86	81	0.92	1.94	0.72	0.81	0.89	0.75	1.01
Brackley Northampt	onshire	0.78	1.16	1.34	1.09	0.83	1.19	0.87	0.96	29	48	90	1.03	1.08	0.80	1.03	0.70	1.06	1.14
Buxton Derb	yshire	1.21	1.15	1.16	1.17	1.42	1.30	1.03	1.25	50	46	164	1.77	1.04	1.46	0.58	0.77	0.75	1
Caistor Lincolnshire		0.14	0.72	0.72	0.53	0.17	0.85	0.88	0.63	37	23	138	1.31	0.52	1.22	0.98	1.41	1.36	0.99
Castle Donington	Leicestershire	0.35	0.83	0.91	0.70	0.51	1.16	1.28	0.98	24	13	117	0.85	0.29	1.04	1.27	0.94	0.91	1.09
Chapel-en-Le-Frith Derb	yshire	0.38	1.06	1.11	0.85	0.48	1.26	1.03	0.92	36	29	157	1.27	0.66	1.39	0.89	0.77	0.75	1.04
Chesterfield Derb	yshire	4.09	0.91	.	2.50	5.32	1.13	1.30	2.58	18	44	136	0.64	0.99	1.21	1.05	1.22	1.21	.
Chesterfield/Staveley Derb	yshire	5.87	0.97	0.94	2.59	6.38	1.01	1.30	2.90	18	44	136	0.64	0.99	1.21	1.05	1.22	1.21	0.96
Clay Cross/North Wingfield	Derbyshire	1.21	0.93	0.86	1.00	1.12	0.83	1.30	1.08	24	56	143	0.85	1.27	1.27	0.87	1.22	1.21	0.92
Clifton Nottinghamshire		1.3	1.53	.	1.41	0.37	0.42	1.61	0.80	13	18	126	0.46	0.41	1.12	1.34	.	1.51	.
Clowne Derb	yshire	0.43	1.03	1.02	0.83	0.34	0.76	0.73	0.61	25	44	133	0.89	0.99	1.18	0.98	1.07	1.51	0.98
Coalville Leicester	shire	1.87	0.97	1.01	1.28	1.65	0.83	1.28	1.25	23	22	108	0.81	0.50	0.96	1.24	0.94	0.91	1.02
Corby Northampt	onshire	2.86	0.75	0.78	1.46	2.11	0.53	1.33	1.32	41	62	71	1.45	1.40	0.63	0.86	1.48	1.51	1.02
Cotgrave Nottinghamshire		0.43	1.50	1.58	1.17	0.26	0.87	0.81	0.65	17	35	108	0.60	0.79	0.96	1.22	0.95	1.21	1.04
Crowland Lincolnshire		0.19	0.84	0.88	0.64	0.19	0.81	1.15	0.72	21	98	75	0.74	2.21	0.67	0.79	1.08	0.91	1.04
Daventry Northampt	onshire	1.26	0.84	0.94	1.01	1.4	0.89	1.03	1.11	23	35	93	0.81	0.79	0.83	1.19	1.14	1.06	1.1
Desborough Northampt	onshire	0.47	1.09	1.2	0.92	0.34	0.76	1.01	0.70	31	51	70	1.10	1.15	0.62	1.04	1.09	1.51	1.09
Dronfield Derb	yshire	1.23	1.05	1.13	1.14	1.15	0.94	0.76	0.95	11	56	150	0.39	1.27	1.33	1.00	0.94	1.51	1.06
Earl Shilton	Leicestershire	1.07	1.19	1.29	1.18	0.88	0.93	1.01	0.94	22	34	86	0.78	0.77	0.76	1.23	0.73	0.91	1.07
Eastwood Nottinghamshire		1.08	1.17	.	1.12	0.88	0.91	0.77	0.85	18	28	131	0.64	0.63	1.16	1.19	0.92	1.06	.
Eckington Derb	yshire	0.43	1.29	.	0.86	0.39	1.10	0.76	0.75	17	48	151	0.60	1.08	1.34	0.99	0.94	1.51	.
Enderby Leicestershire		0.46	0.85	.	0.66	0.7	1.23	0.98	0.97	14	29	99	0.50	0.66	0.88	0.32	1.07	0.75	.

Name Cou	nty	ResPop Index	PopDen Index	LabDen Index	Pop Agglom	FirmPop Index	FirmDen Index	JobsDen Index	Firm Agglom	time city	time air port	time lond	city index	airport index	lond index	Connect Index (reverse)	%emp 20+ index	Prem Vac Index	EcoAc Index
Gainsborough Lincolnshire		1.11	0.98	0.91	1.00	0.94	0.79	0.88	0.87	30	28	127	1.06	0.63	1.13	1.06	1.41	1.36	0.92
Grantham Lincolnshire		2.01	0.98	.	1.50	2.34	1.09	1.03	1.49	35	54	76	1.24	1.22	0.67	0.96	0.89	0.75	.
Grantham/Great Gonerby	Lincolnshire	2.34	0.97	1	1.44	2.54	1.01	1.03	1.53	35	54	76	1.24	1.22	0.67	0.96	0.89	0.75	1.01
Heanor Derb	yshire	1.32	1.01	.	1.16	1.18	0.87	1.17	1.07	22	33	131	0.78	0.75	1.16	1.10	1.05	1.36	.
Higham Ferrers/Rushden	Northamptonshire	1.83	1.10	1.18	1.37	1.66	0.96	0.81	1.14	25	59	60	0.89	1.33	0.53	1.08	0.77	0.91	1.06
Hinckley Leicestershire		2.52	1.01	.	1.77	2.63	1.01	1.01	1.55	25	25	79	0.89	0.57	0.70	1.28	0.73	0.91	.
Holbeach Lincolnshire		0.42	0.80	0.71	0.64	0.4	0.73	1.15	0.76	44	90	99	1.56	2.03	0.88	0.51	1.08	0.91	0.88
Horncastle Lincolnshire		0.35	0.75	0.69	0.60	0.45	0.91	0.97	0.78	33	63	134	1.17	1.42	1.19	0.74	0.97	0.45	0.9
Hucknall Nottinghamshire		1.7	1.07	.	1.39	1.26	0.76	0.97	1.00	17	33	130	0.60	0.75	1.15	1.17	1.15	1.36	.
Ibstock Leicester	shire	0.32	1.18	1.2	0.90	0.24	0.84	1.28	0.79	32	26	117	1.13	0.59	1.04	1.08	0.94	0.91	1
Ilkeston Derb	yshire	2.17	1.11	.	1.64	2.11	1.03	0.90	1.35	17	26	130	0.60	0.59	1.15	1.22	1.02	0.45	.
Irthlingborough Northampt	onshire	0.36	1.08	1.21	0.88	0.3	0.86	0.81	0.66	27	60	80	0.96	1.36	0.71	0.99	0.77	0.91	1.1
Kettering Northampt	onshire	2.97	1.07	1.32	1.79	2.81	0.97	1.01	1.60	31	52	57	1.10	1.18	0.51	1.07	1.09	1.51	1.21
Keyworth Nottinghamshire		0.4	0.92	0.91	0.74	0.38	0.82	0.81	0.67	18	31	131	0.64	0.70	1.16	1.17	0.95	1.21	0.98
Kibworth Harcourt	Leicestershire	0.28	0.99	1	0.76	0.3	1.04	1.11	0.82	13	38	79	0.46	0.86	0.70	1.33	0.64	0.6	1
Kimberley Nottinghamshire		0.64	0.98	.	0.81	0.6	0.88	0.77	0.75	16	26	129	0.57	0.59	1.15	1.12	0.92	1.06	.
Kirkby in Ashfield	Nottinghamshire	1.57	1.02	.	1.29	1.22	0.76	0.97	0.98	26	35	115	0.92	0.79	1.02	1.08	1.15	1.36	.
Long Eaton	Derbyshire	2.7	1.28	.	1.99	2.7	1.22	0.90	1.61	16	20	101	0.57	0.45	0.90	1.36	1.02	0.45	.
Long Sutton	Lincolnshire	0.26	0.66	0.57	0.50	0.24	0.58	1.15	0.66	51	82	106	1.81	1.85	0.94	0.47	1.08	0.91	0.85
Loughborough Leicestershire		3.21	1.09	1.02	1.77	2.67	0.87	0.91	1.48	22	15	97	0.78	0.34	0.86	1.34	1.04	1.06	0.92
Louth Lincolnshire		0.93	0.90	0.89	0.91	1.07	0.99	0.97	1.01	49	36	152	1.74	0.81	1.35	0.70	0.97	0.45	0.98
Lutterworth Leicestershire		0.51	0.91	0.99	0.80	1.12	1.92	1.11	1.38	26	31	71	0.92	0.70	0.63	1.25	0.64	0.6	1.08
Mablethorpe/Sutton Lincolnshire		0.69	0.63	0.39	0.57	0.51	0.44	0.97	0.64	72	69	159	2.55	1.56	1.41	0.16	0.97	0.45	0.6
Mansfield Nottinghamshire		4.07	0.87	.	2.47	3.85	0.79	0.93	1.86	23	38	112	0.81	0.86	0.99	1.11	1.33	1.06	.
Mansfield Urban Area	Nottinghamshire	9.2	0.95	0.9	3.68	7.72	0.77	0.93	3.14	23	38	112	0.81	0.86	0.99	1.11	1.33	1.06	0.93
Mansfield Woodhouse	Nottinghamshire	1.04	1.23	.	1.13	0.75	0.85	0.93	0.84	25	42	113	0.89	0.95	1.00	1.05	1.33	1.06	.
Market Bosworth	Leicestershire	0.11	0.74	0.75	0.53	0.17	1.11	1.01	0.76	33	38	118	1.17	0.86	1.05	0.97	0.73	0.91	0.99
Market Deeping	Lincolnshire	0.79	1.11	1.29	1.06	0.69	0.92	1.03	0.88	17	87	72	0.60	1.97	0.64	0.93	0.89	0.75	1.15
Market Harborough	Leicestershire	1.17	0.89	0.97	1.01	1.54	1.12	1.11	1.26	25	44	68	0.89	0.99	0.60	1.17	0.64	0.6	1.08
Market Rasen	Lincolnshire	0.2	0.81	0.75	0.59	0.38	1.43	0.88	0.90	25	35	127	0.89	0.79	1.13	1.06	1.41	1.36	0.92
Markfield Leicestershire		0.29	0.98	1.03	0.77	0.22	0.73	1.01	0.65	18	20	108	0.64	0.45	0.96	1.32	0.73	0.91	1.04
Matlock Der	byshire	0.66	1.01	1.06	0.91	0.95	1.40	1.28	1.21	28	50	142	0.99	1.13	1.26	0.87	1.00	0.91	1.04
Melbourne Derb	yshire	0.25	1.13	1.17	0.85	0.31	1.33	0.70	0.78	20	17	127	0.71	0.38	1.13	1.26	0.80	0.91	1.03
Melton Mowbray	Leicestershire	1.49	1.06	1.14	1.23	1.27	0.87	1.00	1.05	28	42	103	0.99	0.95	0.91	1.05	1.01	0.6	1.06
Mountsorrel Leicestershire		0.66	1.02	1.12	0.93	0.57	0.85	0.91	0.78	18	26	103	0.64	0.59	0.91	1.29	1.04	1.06	1.09
New Mills	Derbyshire	0.52	1.28	1.34	1.05	0.53	1.25	1.03	0.94	29	26	150	1.03	0.59	1.33	1.02	0.77	0.75	1.04

Name Cou	nty	ResPop Index	PopDen Index	LabDen Index	Pop Agglom	FirmPop Index	FirmDen Index	JobsDen Index	Firm Agglom	time city	time air port	time lond	city index	airport index	lond index	Connect Index (reverse)	%emp 20+ index	Prem Vac Index	EcoAc Index
Newark Nottinghamshire		2.06	1.03	1.03	1.37	2.28	1.09	0.93	1.43	31	44	79	1.10	0.99	0.70	1.07	1.12	1.06	0.98
Oakham Rutland		0.56	0.88	0.91	0.78	0.71	1.07	1.13	0.97	37	56	92	1.31	1.27	0.82	0.87	.	0.3	1.03
Oundle Northampt	onshire	0.3	0.87	0.81	0.66	0.34	0.92	0.81	0.69	24	80	86	0.85	1.81	0.76	0.86	0.77	0.91	0.92
Quorndon Leicestershire		0.29	0.89	0.97	0.72	0.31	0.93	0.91	0.72	22	23	105	0.78	0.52	0.93	1.26	1.04	1.06	1.07
Radcliffe on Trent	Nottinghamshire	0.42	0.96	0.91	0.76	0.36	0.80	0.81	0.66	12	32	125	0.42	0.72	1.11	1.25	0.95	1.21	0.93
Raunds Northampt	onshire	0.48	1.13	1.26	0.96	0.37	0.82	0.81	0.67	32	66	67	1.13	1.49	0.59	0.93	0.77	0.91	1.1
Retford Nottinghamshire		1.24	0.96	0.91	1.04	1.46	1.08	1.04	1.19	47	29	105	1.66	0.66	0.93	0.92	1.04	0.75	0.94
Ripley Derb	yshire	1.08	1.10	.	1.09	1.11	1.08	1.17	1.12	24	39	135	0.85	0.88	1.20	1.02	1.05	1.36	.
Rothwell Northampt	onshire	0.41	1.41	1.52	1.11	0.29	0.95	1.01	0.75	26	37	66	0.92	0.84	0.59	1.22	1.09	1.51	1.07
Ruddington Nottinghamshire		0.36	0.91	.	0.63	0.45	1.07	0.81	0.78	12	24	125	0.42	0.54	1.11	1.31	0.95	1.21	.
Selston/Underwood/Brimsley	Nottinghamshire	0.67	0.99	1.01	0.89	0.52	0.75	0.97	0.75	25	33	138	0.89	0.75	1.22	1.05	1.15	1.36	1
Shepshed Leicestershire		0.75	1.04	1.17	0.99	0.54	0.72	0.91	0.72	29	14	109	1.03	0.32	0.97	1.23	1.04	1.06	1.12
Shirebrook Derb	yshire	0.61	1.01	0.76	0.79	0.35	0.56	0.73	0.55	34	55	144	1.20	1.24	1.28	0.96	1.07	1.51	0.74
Sileby Leicestershire		0.41	1.08	1.19	0.89	0.58	1.44	0.91	0.98	20	29	105	0.71	0.66	0.93	1.23	1.04	1.06	1.09
Skegness Lincolnshire		0.98	0.89	.	0.94	1.19	1.04	0.97	1.07	60	70	138	2.12	1.58	1.22	0.36	0.97	0.45	.
Skegness/Ingoldmells Lincolnshire		1.2	0.64	0.56	0.80	1.42	0.73	0.97	1.04	60	70	138	2.12	1.58	1.22	0.36	0.97	0.45	0.86
Sleaford Lincolnshire		0.89	1.07	1.13	1.03	0.93	1.07	0.98	0.99	29	79	103	1.03	1.79	0.91	0.76	1.14	0.75	1.04
South Normanton/Pinxton	Derbyshire	0.82	0.98	.	0.90	0.8	0.92	0.73	0.82	22	30	135	0.78	0.68	1.20	1.11	1.07	1.51	.
Southwell Nottinghamshire		0.37	0.86	0.83	0.69	0.46	1.02	0.93	0.80	29	51	94	1.03	1.15	0.83	1.00	1.12	1.06	0.96
Spalding/Pinchbeck Lincolnshire		1.51	0.73	0.75	1.00	1.68	0.78	1.15	1.20	38	103	93	1.35	2.33	0.83	0.50	1.08	0.91	1.01
Spilsby Lincolnshire		0.16	0.76	0.67	0.53	0.22	1.02	0.97	0.74	38	62	131	1.35	1.40	1.16	0.70	0.97	0.45	0.86
Stamford Lincolnshire		1.14	1.10	1.19	1.14	1.35	1.26	1.03	1.21	24	73	79	0.85	1.65	0.70	0.93	0.89	0.75	1.06
Staveley Derb	yshire	1.5	1.11	.	1.31	0.87	0.62	1.30	0.93	21	45	144	0.74	1.02	1.28	0.99	1.22	1.21	.
Sutton in Ashfield	Nottinghamshire	2.44	0.96	.	1.70	1.86	0.70	0.97	1.18	25	34	114	0.89	0.77	1.01	1.11	1.15	1.36	.
Swadlincote/Donisthorpe Derb	yshire	2.54	1.04	1.07	1.55	1.99	0.79	0.70	1.16	37	22	107	1.31	0.50	0.95	1.08	0.80	0.91	1.02
Towcester Northampt	onshire	0.47	1.43	1.61	1.17	0.54	1.58	0.87	1.00	16	42	64	0.57	0.95	0.57	1.30	0.70	0.91	1.12
Tuxford Nottinghamshire		0.15	0.94	0.91	0.67	0.27	1.66	1.04	0.99	28	40	121	0.99	0.90	1.07	1.01	1.04	0.75	0.96
Uppingham Rutland		0.23	1.10	0.95	0.76	0.3	1.37	1.13	0.93	28	58	83	0.99	1.31	0.74	0.99	.	0.3	0.86
Wainfleet Lincolnshire		0.11	0.86	0.7	0.56	0.11	0.78	0.97	0.62	70	83	133	2.48	1.88	1.18	0.15	0.97	0.45	0.8
Wellingborough/Great Doddington	Northamptonshire	2.79	1.00	1.03	1.61	4.63	1.59	1.21	2.48	21	54	49	0.74	1.22	0.43	0.20	1.19	1.06	1.02
Whaley Bridge	Derbyshire	0.27	0.97	1.02	0.75	0.4	1.37	1.03	0.93	31	24	153	1.10	0.54	1.36	1.00	0.77	0.75	1.04
Wirksworth Derb	yshire	0.29	1.14	1.18	0.87	0.34	1.29	1.28	0.97	30	52	144	1.06	1.18	1.28	0.83	1.00	0.91	1.02
Worksop Nottinghamshire		2.27	0.97	0.94	1.39	2.15	0.88	1.04	1.36	29	33	126	1.03	0.75	1.12	1.03	1.04	0.75	0.96

Appendix 2

Consultees

1. Anthony Payne, Land and Development Director, *emda*
2. Andrew Pritchard, Director of Planning and Transport, East Midlands Regional Assembly
3. Phil Hughes, Lincolnshire County Council
4. Alison Penn, East Lindsey District Council
5. Neil Cuttell, South Kesteven District Council
6. Laura Howe, Derbyshire County Council
7. David Gutteridge, Derbyshire County Council
8. Matthew Kempson, Leicestershire County Council
9. Heather Bell, Leicestershire County Council
10. Andrew Simmonds, Leicestershire County Council
11. Mark Chant, Northamptonshire County Council
12. Calvin Bell, South Northamptonshire District Council
13. Norman Stronach, Corby Borough Council
14. Tony Herrington, Charnwood Borough Council
15. Richard Schofield, Bassetlaw District Council
16. Councillor Bernard Burr, Shepshed West, Charnwood Borough Council
17. Neil Sharpley, Louth Chamber of Business
18. Matt Broughton, Bolsover District Council