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Collaboration between SMEs and universities – local population, growth and innovation metrics

Report to HEFCE by The Enterprise Research Centre (ERC)

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Executive Summary

1. This report provides a profile of small and medium-sized enterprises (SMEs) in the areas covered by the 39 Local Enterprise Partnerships (LEPs) in England. The profile covers:
    - The size and sectoral mix of SMEs in each LEP;
    - The concentration of SMEs in knowledge-intensive manufacturing, services and creative industries;
    - The recent performance and fast growth of SMEs in each LEP; and
    - A series of indicators of the extent of SME innovation in each LEP.

2. The aim of the report is to enable the Higher Education Funding Council for England (HEFCE) to understand more about the local geography of UK SMEs so that they can inform higher education institutions (HEIs) about the potential population of SMEs with which they might engage.

3. The analysis is based on two datasets: the Business Structures Database (BSD) which provides information on the size and sectoral composition of the SME population, and the UK Innovation Survey (UKIS) (2013) which provides information on the innovative activity of a sample of UK companies.

4. The metrics suggest there are significant variations in the population of SMEs across LEPs both in terms of their number, sectoral composition, productivity and technological intensity. The demand or potential for local SME engagement therefore also varies markedly between areas.

5. The size of the local SME population may provide an indication of the potential scale of engagement. The scope for related continuing professional development (CPD) activity may be greatest where SME productivity is higher or there are more medium-sized firms. Collaborative research or contract research is more likely where SMEs are clustered in high-technology sectors, knowledge-intensive business services or creative industries.

6. Start-up rates and SME growth also vary markedly between LEPs. Higher values on both measures suggest the vibrancy of local business providing new opportunities for HEI engagement and the potential for graduate employment. Fast growing, ambitious businesses may also be more likely to seek external support from HEIs and other support organisations.

7. Significant differences also exist in the propensity of SMEs to innovate across the LEPs. LEPs with higher product/service innovation also have higher process innovation. Innovation active SMEs are better able to identify and access HEI-based expertise as well as adapt and exploit knowledge gained. Indeed as this capability increases (absorptive capacity), the nature of HEI engagement is likely to move from being based on the uni-directional transfer of knowledge (e.g. consultancy) and towards more interactive forms of engagement such as collaborative research.

Section 1: Local SME metrics to inform HEIs

1.1 Introduction

This report contains a series of new metrics which provide a profile of small and medium-sized enterprises (SMEs) in the areas covered by the 39 Local Enterprise Partnerships (LEPs) in England. The aim of the report is to enable the Higher Education Funding Council for England (HEFCE) to understand more about the local geography of UK SMEs so that they can inform higher education institutions (HEIs) about the potential population of SMEs with which they might engage.

In particular we aim to provide an input into HEFCE's mapping activities by providing data and meta-data for a range of indicators profiling:

- The size and sectoral mix of SMEs in each LEP;
- The concentration of SMEs in knowledge-intensive manufacturing, services and creative industries;
- The recent performance and fast growth of SMEs in each LEP; and
- A series of indicators of the extent of SME innovation in each LEP.

For each indicator we also provide a brief note on the potential implications for the higher education sector.

1.2 Data sources

The metrics reported in subsequent sections are based on two main datasets both accessed via the Secure Data Service: the Business Structures Database (BSD) which provides information on the size and sectoral composition of the SME population, and the UK Innovation Survey (UKIS) which provides information on the innovative activity of a sample of UK companies. It is important to recognise the limitations of these data sources – particularly the UKIS – which (as the name implies) is a sample survey rather than covering all firms. This means metrics derived from these data are subject to potential sampling error, particularly as the original data sampling was structured by region rather than LEP area. We discuss each dataset in turn.

1.2.1 The Business Structure Database (BSD)

The BSD represents the business register for all firms registered for VAT and/or PAYE in the UK, and is essentially a collection of annual snapshots of the Inter-Departmental Business Register (IDBR), the administrative database of business records held by the Office of National Statistics (ONS). The BSD contains approximately two million records annually and represents the snapshot of the IDBR taken at a date in March. Data on the IDBR (and hence BSD) are sourced from the VAT and PAYE records of firms as well as from other ONS surveys and include mainly turnover and employment variables.

Two versions of the BSD are produced: one at firm level and one at local unit level. The firm-level version contains one record per firm and includes employment, turnover, birth, death, sector (Standard Industrial Classification (SIC) code), and postcode variables. Importantly, the postcode variable relates to the location of the firm's head office in the UK thus all of the firm's employment (and turnover) is recorded at this location in the database regardless of where the actual employment (or turnover) is located. This is not an issue for most firms in the UK as they are single-plant firms; however it becomes an issue for firms with multiple locations, particularly if they are spread throughout the country. In these cases analysis at a geographical level becomes difficult.

The local unit version of the BSD solves this issue, in that it contains one record per local unit of the firm (otherwise known as a plant, industrial site or office). The postcode for each local unit represents its actual location so firms with multiple sites are represented on the database at each of the locations. Geographical analysis is more accurate using this version of the database as employment is recorded at its exact location. The local unit version of the BSD contains almost exactly the same variables as the firm level version, with one key exception, that of turnover, which is excluded. As a result any geographical analysis containing turnover data must be done using the firm-level version.

The Enterprise Research Centre (ERC) have put together the annual snapshots of the BSD to produce a longitudinal dataset covering the 1997-2014 period. The dataset is restricted to the private sector and includes employer enterprises only, that is, firms with at least one employee. Birth and death variables have also been re-created, with birth regarded as the first year in which a firm records an employee. It is this dataset which is used to develop metrics relating to the size and structure of the SME population in each LEP area.

1.2.2 The UK Innovation Survey (UKIS)

The UKIS is the main source of information on innovation within UK businesses, covering areas such as the extent of product, process and wider innovation; expenditure on innovations, drivers and barriers to innovation; and co-operation partners. The survey is the UK contribution to the EU Community Innovation Survey, undertaken by the ONS, and is based on a stratified random sample of 28,000 firms with ten or more employees, with sampling based on sector. The 2013 UKIS achieved a sample of 14,000 firms and covers the three-year period 2010-2012.

The UKIS is a sample survey and observations are therefore weighted for any analysis. For the metrics derived here we developed a new set of weights by LEP area (and based on the 2010 BSD) to ensure that innovation metrics reflect as accurately as possible the characteristics of businesses in each LEP. Weights for each LEP were developed to reflect three broad sectors (production industries, business services and other sectors) and the standard four enterprise size bands. It remains the case, however, that for some metrics and some of the smaller LEPs issues of disclosure arise due to the small number of respondents. Where these do arise they are indicated with asterisks in the tables.

1.3 Introducing the metrics

We report three groups of metrics in later sections of this report.

1.3.1 SME Population Metrics

Specific metrics are produced for each local economic area (LEA) to provide a detailed profile of their SMEs. Sectoral categories are defined using two-digit SICs. The SIC data will also be used to group firms by knowledge intensity: manufacturing firms will be divided into those involved in high, medium and low tech activity, and service sector firms into knowledge-intensive business services versus others. For manufacturing, the Organisation for Economic Co-operation and Development (OECD) have developed a standardised way of classifying manufacturing sectors by their research and development (R&D) intensity (See http://www.oecd.org/sti/ind/48350231.pdf for details):

- **High-technology industries -** Aircraft and spacecraft; Pharmaceuticals; Office, accounting and computing machinery; Radio, TV and communications equipment; Medical, precision and optical instruments;
- **Medium-high-technology industries -** Electrical machinery and apparatus not elsewhere classified (n.e.c).; Motor vehicles, trailers and semi-trailers; Chemicals excluding pharmaceuticals; Railroad equipment and transport equipment n.e.c.; Machinery and equipment n.e.c.;
- **Medium-low-technology industries -** Building and repairing of ships and boats; Rubber and plastics products; Coke, refined petroleum products and nuclear fuel; Other non-metallic mineral products; Basic metals and fabricated metal products.;
- **Low-technology industries -** Manufacturing n.e.c.; Recycling; Wood, pulp, paper, paper products, printing and publishing; Food products, beverages and tobacco; Textiles, textile products, leather and footwear.

Definitions of knowledge-intensive business services vary somewhat but the most standard definition and those used here include: Post and tele-communications (SIC 64), Finance and insurance (SIC 65-67) and Business activities (SIC 71-74). See for example, the OECD Science, Technology and Industry Scoreboard (www.oecd- ilibrary.org/docserver/download/9211041ec055.pdf).

The size breakdown of SMEs within each LEP will be provided based on an employment size categorisation. Again the exact size-band categories will need to be broad enough to meet disclosure rules. Due to the fact that the number of SMEs reduces substantially at the top end of the SME definition the size-band categories at this level will need to be quite broad, covering 50-250 employees. We report four main metrics in this category:

- Size distribution of SMEs – size-band distribution of SMEs within each LEA;
- Broad sectoral disaggregation of SMEs for (a) manufacturing, (b) business services, (c) personal services, (d) public services;
- Proportion of manufacturing SMEs by technological intensity (a) high technological intensity, (b) medium technological intensity, (c) low technological intensity; and
- Proportion of services SMEs which are knowledge intensive.

1.3.2 SME Growth Metrics

The growth metrics proposed are again drawn from the BSD and will include measures for surviving firms as well as of start-ups. Both of these provide an indication of the scope of growth-oriented firms within the LEA; such firms are typically more open to business support and collaboration. As the ERC has constructed a longitudinal version of the BSD, this will be used to identify fast-growing firms over a specific period. For example, surviving firms' growth rates for the 2011-2014 period will be generated based on the OECD three-year definition using an employment measure. These growth categories then used to compute the scale of slow, medium and fast-growing business within each LEA.

The number of start-up SME businesses is compiled for each LEA, standardised by population, to produce an understanding of the extent of entrepreneurial activity within the area. Start-ups growing to a particular turnover level will also be provided, again to provide a measure of those focused on growth. This is provided over a three-year period. The metrics include:

- Proportion of fast-growing SMEs – the percentage of SMEs achieving more than 20 per cent growth on average each year from jobs (2011-2014);
- Net jobs growth by SMEs – the net addition to the total jobs provided by SMEs in each local area relative to the starting stock (2013-2014);

- Three-year survival rates of start-ups – the percentage of firms established in 2011 which remained in operation in 2014; and
- Start-up growth – the proportion of surviving start-ups that reach £1 million turnover by 2014.

1.3.3 SME Innovation Metrics

The metrics drawn from the UKIS will be used to gauge the extent of innovative activity within each of the LEAs along with the main barriers to innovation which HEIs may be able to help alleviate. The level of innovation activity within a local area is important as firms located within innovative areas are known to become more innovative themselves[1]. Metrics will relate to the 2010-2012 period and will be:

- The percentage of SMEs in the LEP engaged in product or service innovation, defined as the market introduction of a new good or service or a significantly improved good or service with respect to its capabilities;
- The percentage of SMEs engaged in new to the market innovation;
- The percentage of SMEs within the LEP engaged in process innovation, defined as the use of new or significantly improved methods for the production or supply of goods and services;
- The proportion of firms engaged in strategic or marketing innovation, defined as new or significantly amended forms of organisation, business structures or practices;
- The proportion of SMEs engaging in R&D;
- The proportion of SMEs engaging in intramural R&D; and
- The proportion of SMEs collaborating as part of their product, service or process innovation activity.

1.4 Using the metrics

Section 2 of this document provides meta-data, descriptive data and some commentary on each of the metrics reported in the Section 3 tables. This might provide a useful adjunct to the publication of metric data.

Attribution of the metrics should be: for the growth and population metrics: 'Source: Business Structures Database. Enterprise Research Centre Analysis'; and for the innovation metrics: 'Source UK Innovation Survey. Enterprise Research Centre Analysis'.

Note also that for both datasets there is a statutory declaration as follows:

> 'The statistical data used here is from the Office of National Statistics (ONS) and is Crown copyright and reproduced with the permission of the controller of HMSO and Queen's Printer for Scotland. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. The analysis upon which this paper is based uses research datasets which may not exactly reproduce National Statistics aggregates.'

[1] Roper, Stephen; Priit Vahter and James H. Love. 2013. "Externalities of Openness in Innovation." Research Policy, 42(9), 1544-54.

Section 2: SME Population Metrics

2.1 Numbers of SMEs

Metric **Number of SMEs in LEPs by Size-band**

Source **Table 1.1**

Definition Breakdown of number of SMEs in each LEP by size, with size-bands of 0-4, 5-9, 10-24, 25-49 and 50-249 employees.

Remarks Across all LEPs, micro-enterprises and specifically those with fewer than five employees dominate the population of enterprises. Around ten per cent of SME enterprises have ten or more employees. Despite this similarity across LEPs, significant variation is evident in the total number of enterprises. On average, LEPs have 55,062 SMEs, however this varies from the lowest population of SMEs in Tees Valley of 15,731 to the highest population in London of 430,577 SMEs which is over 27 times that of Tees Valley. London LEP and South East LEP with 149,522 SMEs are significant outliers in the population of SMEs with the next highest population being Leeds City Region LEP with 86,697 SMEs.

Metric **Employment of SMEs in LEPs by Size-band**

Source **Table 1.2**

Definition Breakdown of employment in SMEs for each LEP by size, with size-bands of 0-4, 5-9, 10-24, 25-49 and 50-249 employees.

Remarks The share of SME employment across the employee size-bands is markedly different to that for the number of enterprises by size-band (Table 1.1). While a very small proportion of SMEs have between 50-249 employees, these enterprises account for the majority of SME employees. For example, across England, SMEs in the size-band 50-249 employees account for 1.6 per cent of enterprises but 31.5 per cent of employment, equivalent to approximately 3.46 million.

On average, a third of employment is in micro enterprises with fewer than ten employees, an additional third is in enterprises with ten to 49 employees and the remaining third is in enterprises with 50-249 employees. This relative distribution of employment across size-bands is similar for all LEPs. The size-band with greatest variation is 50-249 with Yorkshire and Humberside LEP having the lowest share (24.5 per cent) of SMEs in this size-band while Tees Valley has the highest (35.4 per cent).

It is perhaps total employment in each LEP which is most significant with variation across LEPs ranging from 92,738 in Tees Valley LEP to 2,113,669 in London.

Metric	**Turnover of SMEs in LEPs by Size-band**
Source	**Table 1.3**
Definition	Breakdown of turnover in SMEs for each LEP by size, with size-bands of 0-4, 5-9, 10-24, 25-49 and 50-249 employees.
Remarks	The turnover from SMEs across LEPs reflects the distribution of enterprises by size-band and employment. Where there is a smaller stock of SMEs and these are predominantly micro-enterprises (fewer than ten employees), then total turnover is lower. SME turnover in London LEP is a distinct outlier to other LEPs being over eight times higher than the SME turnover in the next highest, South East LEP. Excluding London, average SME turnover per LEP is £38.5 billion. For some LEPs the share of turnover in larger SME size-bands is even more marked than that for employment. In Lancashire LEP and Swindon and Wiltshire LEPs turnover is even more concentrated in 50-249 employee enterprises than employment. For Lancashire LEP 30.9 per cent of total SME employment is in 50-249 employee enterprises, yet these enterprises account for 45.0 per cent of turnover. Similarly in Swindon and Wiltshire LEP enterprises with 50-249 employees account for 32.8 per cent of employment but 41.1 per cent of turnover. In such cases productivity (turnover per employee) is higher in these enterprises, most likely reflecting higher value added activities.

2.2 SMEs by Sector

Metric	**Number of SMEs in LEPs by Broad Sector**
Source	**Table 2.1**
Definition	Breakdown of the number of SMEs in each LEP by broad sector: manufacturing, business services, personal services and public services.
Remarks	Across all LEPs, business services account for the largest proportion of SMEs, averaging at 58.7 per cent. The remaining SMEs are then evenly split across the other broad sector groupings of manufacturing, personal services and public services. Variation is evidenced across the LEPs in this distribution by broad sector. As might be anticipated, London LEP records the lowest share of manufacturing at 5.6 per cent of SMEs and the highest share of business services SMEs at 69.8 per cent. The low share of manufacturing is not necessarily a city phenomenon as near average shares are recorded in Liverpool City LEP and above average shares in other city regions such as Leeds, Greater Birmingham and Solihull. and Greater Manchester LEPs. In contrast LEPs such as Thames Valley Berkshire, Enterprise M3, Coast to

Capital and Cheshire and Warrington LEPs all record manufacturing share of SMEs of less than nine per cent. In general where the share of manufacturing is low this is mirrored in an above average share of business services.

In general, the share of SMEs in personal services and public services is around 14 per cent each with most LEPs approximating this level. A notable exception to this is Northamptonshire LEP with the highest relative share of business services SMEs at 22.5 per cent (as compared to the next highest LEP of Cornwall and the Isles of Scilly at 17.1 per cent). It is likely that this reflects the proximity of Northamptonshire to London and the share of population commuting to work in London but requiring personal services from the LEP.

Metric **Employment in SMEs in LEPs by Broad Sector**

Source **Table 2.2**

Definition Breakdown of employment in SMEs in each LEP by broad sector: manufacturing, business services, personal services and public services.

Remarks Across all LEPs, comparing the number of SMEs by broad sector to the share of employment by sector produces three interesting observations. First, on average, business services still account for the largest share of employment at 36.6 per cent; however this is markedly lower than the share of total SMEs at 58.7 per cent (Table 2.1).

Second, across all LEPs, SMEs in the manufacturing sector account for a larger share of employment (average of 22.0 per cent) than number of SMEs which was noted at 13.3 per cent (Table 2.1).

Third, as for manufacturing SMEs, employment in public services SMEs is proportionately higher as compared to the share of enterprises in the sector. For example, on average public services SMEs account for 13.3 per cent of enterprises but this equates to 30.1 per cent of employment.

Metric **Turnover of SMEs in LEPs by Broad Sector**

Source **Table 2.3**

Definition Breakdown of the turnover of SMEs in each LEP by broad sector: manufacturing, business services, personal services and public services.

Remarks The distribution of turnover across the broad sectors provides additional insights into the sectoral composition of LEPs. Business services, on average, continue to account for the largest share of SME turnover (43.0 per cent).

It is in manufacturing however that the most significant increase in relative importance is found. While manufacturing SMEs accounted for 13.3 per cent of enterprises and 22.0 per cent of employment, their share of turnover is higher still at 33.9 per cent. In other words, output per employee is higher in manufacturing enterprises (at £131,093 per employee) than business services (£119,806). Further, manufacturing output per employee is twice as high as in personal services SMEs (at £66,635) and almost three times as high as in public services (at £45,205).

LEPs with higher shares of personal and public services SMEs will therefore have lower output (as measured by SME turnover) than LEPs with higher shares of manufacturing and business services SMEs.

2.3 SMEs by Technological Intensity

Metric **Number of SMEs in LEPs by Manufacturing Technological Intensity**

Source **Table 3.1**

Definition Breakdown of the number of manufacturing SMEs in each LEP by technological intensity: high, medium-high, medium-low and low.

Remarks As was evident in Table 2.1 on average, manufacturing accounts for a relatively small proportion (13.3 per cent) of total SMEs across the LEPs. In this table on the technological intensity of these manufacturing SMEs, we find that approximately 70 per cent are classified as medium-low tech or low tech, with just under a quarter (23.8 per cent) medium-high tech and a small proportion (5.5 per cent) classified as high tech. In other words, of the total stock of SMEs across English LEPs, on average, high tech manufacturing enterprises account for only 0.7 per cent of these enterprises. Combining high tech and medium-high tech brings the share of total SMEs to 3.9 per cent.

It is interesting that while London LEP has the highest share of low tech manufacturing SMEs, it has the lowest share of medium-high and medium-low tech.

The technological intensity of manufacturing SMEs in each LEP is mixed. For example, the Black Country has the lowest share of high tech manufacturing as well as the lowest share of low tech manufacturing SMEs, with this resulting in – technologically – a quite homogenous manufacturing sector. A similar picture is found in Thames Valley Berkshire LEP with relatively higher shares of high and medium-high tech manufacturing. In contrast LEPs such as Greater Manchester and Heart of the South West have a very heterogeneous technological mix of manufacturing SMEs.

Metric	**Employment in SMEs in LEPs by Manufacturing Technological Intensity**
Source	**Table 3.2**
Definition	Breakdown of the employment in manufacturing SMEs in each LEP by technological intensity: high, medium-high, medium-low and low.
Remarks	In general the share of employment in SMEs mirrors that of the number of SMEs across the categories of technological intensity. High tech manufacturing SMEs on average account for a slightly larger share of employment (6.9 per cent) relative to their share of number of enterprises (5.5 per cent); however this difference is small. The implication of employment mirroring the number of enterprises by technological intensity is that where an LEP has a high share of enterprises in a technological intensity category e.g. London with the highest share of enterprises in low tech manufacturing, then this is also evident in the share of employment, i.e. London has the highest share of employment in low tech manufacturing.

Metric	**Turnover in SMEs in LEPs by Manufacturing Technological Intensity**
Source	**Table 3.3**
Definition	Breakdown of the turnover of Manufacturing SMEs in each LEP by technological intensity: high, medium-high, medium-low and low.
Remarks	Similar to the distribution of manufacturing employment in LEPs by technological intensity, again the distribution of turnover by technological intensity closely reflects the distribution by the number of enterprises. It was noted previously (Table 2.3) that manufacturing SMEs account for a disproportionate share of total turnover relative to their share of total SMEs. This appears however to be a characteristic of manufacturing enterprises in general, as opposed to being related to technological intensity. In other words, for LEPs with a higher relative share of high-tech manufacturing SMEs these enterprises do not account for a disproportionately higher share of manufacturing-generated turnover. Further analysis of the data in terms of average turnover per employee by technological intensity highlights that medium-high tech enterprises have the highest levels (£154,900 per employee) followed by high tech manufacturing (£142,800 per employee). Medium-low and low-tech enterprises on average across the LEPs are recording lower levels of turnover per employee (£122,200 and £120,300 per employee respectively). The differential is not

substantial and therefore the overall profile of enterprises and employment by technological intensity is mirrored in the distribution of sales generated.

2.4 SMEs by Knowledge Intensity of Business Services

Metric **Number of SMEs in LEPs by Knowledge Intensity of Business Services**

Source **Table 4.1**

Definition Breakdown of the number of business services SMEs in each LEP by knowledge intensity: KIBS and Non-KIBS.

Knowledge Intensive Business Services (KIBS) which are based on OECD definitions and given as: Post and telecommunications; Finance and insurance; and Business activities (SIC2007 58-82). Any service sector enterprises not in the above categories are coded as Non-KIBS.

Remarks Across all LEPs business services enterprises were found to represent the largest share of SMEs (58.7 per cent) (Table 2.1). KIBS SMEs account for approximately 28.3 per cent of all enterprises while Non-KIBS SMEs account for 30.4 per cent of all SMEs.

Variation across LEPs from this even split between Non-KIBS and KIBS is quite small. The lowest share of KIBS enterprises is 36.2 per cent (as found in Cornwall and the Isles of Scilly LEP) whereas the highest share of KIBS is 61.6 per cent (in London LEP).

There is some indication from the data that those LEPs recording high shares of low technology manufacturing are also those recording higher shares of Non-KIBS. The implication of this is that the overall knowledge intensity of SMEs in certain LEPs may be relatively lower than for others with implications for HEI engagement.

Metric **Employment in SMEs in LEPs by Knowledge Intensity of Business Services**

Source **Table 4.2**

Definition Breakdown of employment in business services SMEs in each LEP by knowledge intensity: KIBS and Non-KIBS.

Knowledge Intensive Business Services (KIBS) which are based on OECD definitions and given as: Post and telecommunications; Finance and insurance; and Business Activities (SIC2007 58-82). Any service sector enterprises not in the above categories are coded as Non-KIBS.

Remarks Non-KIBs SMEs are more employee intensive than KIBS SMEs. For example, while on average 51.8 per cent of all business services SMEs across the LEPs are Non-KIBS, these account for 66.6 per cent of all employment in business services SMEs (i.e. including Non-KIBs and KIBS SME employment). In contrast, KIBS SMEs account for 48.2 per cent of all business services SMEs but only 33.4 per cent of business services SME employment. Disaggregating this in actual values suggests that on average a Non-KIBs SME employs 6.8 employees compared to 3.8 employees in a KIBS SME.

This pattern of Non-KIBS SMEs being more employee intensive than KIBS SMEs holds for every LEP and is accentuated in some. For example, Buckinghamshire Thames Valley LEP has 40.1 per cent of business services SMEs defined as Non-KIBS, but these account for 60.2 per cent of business services SME employment. Similarly in Cumbria LEP, 58.4 per cent of Non-KIBS SMEs account for 78.5 per cent of employment.

Metric **Turnover in SMEs in LEPs by Knowledge Intensity of Business Services**

Source **Table 4.3**

Definition Breakdown of turnover of business services SMEs in each LEP by knowledge intensity: KIBS and Non-KIBS.

Knowledge Intensive Business Services (KIBS) which are based on OECD definitions and given as: Post and telecommunications; Finance and insurance; and Business Activities (SIC2007 58-82). Any service sector enterprises not in the above categories are coded as Non-KIBS.

Remarks A similar pattern is found for turnover as that for employment as split between Non-KIBS and KIBS. Again, Non-KIBS SMEs account for a higher relative share of turnover from business services across all LEPs. This is true for all LEPs, with the exception of Gloucestershire LEP, Swindon and Wiltshire LEP and London LEP where Non-KIBs account for 36.2 per cent, 48.1 per cent and 43.3 per cent of business services SME turnover respectively.

What these figures mask is differences between Non-KIBS and KIBS SMEs in turnover per employee. On average, employees in Non-KIBS are generating £139,100 compared to £196,200 in KIBS SMEs. As with more technology intensive manufacturing SMEs, again knowledge intensity is associated with higher added value per employee.

2.5 SMEs by Creative Industries

Metric **Number of SMEs in LEPs by Creative Industries (CI)**

Source **Table 5.1**

Definition Breakdown of the number of SMEs in each LEP by creative industry: Non-CI and CI

Remarks Examining SMEs in terms of their creativity covers all SMEs in each LEP i.e. all SMEs across all the broad sectors (see Tables 1.1 - 2.3). Overall, SMEs across all LEPs are dominated by Non-CI enterprises. On average 91.3 per cent of all SMEs are Non-CI enterprises and therefore 8.7 per cent are CI enterprises.

Variation from these averages across the LEPs is relatively low. The lowest share of Non-CI SMEs is in London LEP (which by default has the highest share of CI SMEs at 18.8 per cent of SMEs). In contrast, Stoke-on-Trent LEP has the highest share of Non-CI SMEs at 97.2 per cent with the implication that only 2.8 per cent of SMEs here (or 4,578 out of 160,874 SMEs) are classified as CI SMEs.

Metric **Employment in SMEs in LEPs by Creative Industries**

Source **Table 5.2**

Definition Breakdown of employment in SMEs for each LEP by creative industry: Non-CI and CI

Remarks As found for Non-KIBS in comparison to KIBS SMEs, again Non-CI SMEs are slightly more employee intensive (5.0 employees per SME) than CI SMEs (3.0 employees per SME).

This means that average employment across LEPs is split between 94.9 per cent in Non-CI SMEs and only 5.1 per cent in CI SMEs. In the Black Country this share declines to 2.0 per cent of all SME employees in CI SMEs and a high in London of 13.0 per cent. Indeed, with the exception of London LEP and Thames Valley Berkshire LEP the share of employment in Non-CI SMEs is over 90 per cent.

Metric **Turnover in SMEs in LEPs by Creative Industries**

Source **Table 5.3**

Definition Breakdown of SMEs turnover in each LEP by Creative Industry: Non-CI and CI

Remarks The share of turnover in Non-CI SMEs further accentuates the dominance of these enterprises and employment shares. Here we find that 91.3 per cent of SMEs across the LEPs are Non-CI enterprises, employing 94.9 per cent of total SME employees and generating 96.1 per cent of SME turnover.

This increasing dominance of Non-CI enterprises reflects slightly higher turnover per employee values for these SMEs. On average, Non-CI SMEs generate £161,600 per employee as compared to £125,900 per employee in CI SMEs. However, these values are strongly affected by much higher turnover per employee for (both CI and Non-CI) SMEs in London. Excluding London from these averages generates lower average levels of turnover per employee for both Non-CI SMEs (at £101,300) and CI SMEs (at £61,700), however the differential between Non-CI and CI is maintained.

Notes: **Tables 5.1 – 5.3** The definition of CI was provided by HEFCE and includes: Advertising and Marketing; Architecture; Crafts; Design; Film, TV, Radio and Photography; IT, Software and Computer Services; Publishing; Museums, Galleries and Libraries; Music Performing and Visual Arts. Any firms not in the above categories are coded as Non-CI.

Section 3: Growth of SMEs by LEP

Metric **Fast Growth Firms by LEP 2011-14**

Source **Table 6.1**

Definition Breakdown of fast growth SMEs by LEP.

Fast growth is defined as those enterprises with average annual employment growth of at least 20 per cent per annum over the three year period 2011-2014.

Remarks Over the period 2011 to 2014 labour market statistics point to a growth in employment, three-quarters of which was driven by a decline in economic inactivity, rather than lower unemployment[2]. This was also a period when the previous declines in annual GDP growth rates in 2008 (-0.77 per cent) and 2009 (-5.17 per cent) were reversed and annual growth rates were recorded in 2011 (1.12 per cent), 2012 (0.28 per cent) and 2013 (1.74 per cent).

Reflecting this broader macroeconomic growth, SMEs across the LEPs were also experiencing growth with on average 16.6 per cent of all SMEs experiencing annual employment growth equal to or greater than 20 per cent.

In general, the proportion of fast growth SMEs was similar across all LEPs, ranging from a low of 14.3 per cent of SMEs in Cheshire and Warrington LEP to a high of 18.7 per cent of SMEs in London. This suggests that all LEPs benefited from national economic growth over this period with only small differences evident in how this was manifest across the LEPs.

Metric **Net Jobs Growth by LEP**

Source **Table 6.2**

Definition Breakdown of employment in SMEs in 2013 and 2014 for LEPs, associated net jobs growth and net job creation rate.

Net jobs creation rate is equal to net jobs created/employment in 2013.

Remarks In this metric we look beyond growth in existing firms (Table 6.1) to wider job creation in the LEPs between 2013 and 2014. On average, job growth increased by 4.45 per cent. Again this was a period of job growth in the UK economy with the employment rate

[2] http://www.policyexchange.org.uk/media-centre/blogs/category/item/with-working-age-economic-inactivity-lower-than-during-the-boom-years-could-we-see-unemployment-start-falling-faster

(for people aged 16 to 64) rising from 71.5 per cent at the end of 2012, and to 72.3 per cent in January 2014. ONS states that much of this increase in employment was due to an increase in self-employment as opposed to increases in the number of employees.

Data presented here suggests an average increase in the percentage of new jobs created between 2013 and 2014 across the LEPs. Yet, this percentage increase varied across the LEPs from a low in Enterprise M3 LEP of 2.5 per cent of new job creation to 10.5 per cent in Stoke-on-Trent LEP.

Correlation statistics between the percentage of fast growth firms over the 2011 to 2014 period (Table 6.1) and net jobs growth between 2013 and 2014 do not support the presence of a positive relationship. In other words, this supports the ONS suggestion that a large proportion of new jobs created over this period were among the self-employed rather than employees.

Metric **Three-Year Survivor Rate of New Start-Ups by LEP (2011-2014)**

Source **Table 6.3**

Definition Breakdown of the three-year survivor rate, which is the number of start-ups in 2011 (enterprises born); the number (and percentage share) of those start-ups that survive to 2014; and of those the number (and percentage share) that have turnover of at least £1 million in 2014.

Remarks In this table we consider both the probability of start-up enterprises surviving (calculated over a three-year period post start-up) across each of the LEPs.

On average, 58.0 per cent of start-up enterprises survive for three years post start-up, however this varies across the LEPs from a low of 52.0 per cent in Liverpool City Region LEP to a high of 63.0 per cent in Cornwall and the Isles of Scilly LEP.

This points to differences in the probability of survival of start-ups across the LEPs. This could be attributed to a range of factors including the characteristics of the start-up enterprises formed i.e. sector, investment, entrepreneurial factors as well as wider environmental factors i.e. availability of business support, strength of social capital availability of appropriately qualified labour etc.

Data relating to the share of high growth start-up enterprises in each LEP similarly point to variation across the LEPs. On average 2.4 per cent of start-ups reach sales of £1 million or greater in a three-year period; however this varies from 2.4 per cent in Derby, Derbyshire, Nottingham and Nottinghamshire LEP to a high of 8.0 in London.

Of note is the presence of a negative relationship between the proportions of start-up enterprises surviving three years and the proportion of high growth enterprises in an LEP. This suggests that conditions in an LEP favouring enterprise survival are different to conditions fostering high growth (R^2=-.467, p=.003). Indeed further analysis points to a positive correlation between the proportion of fast growth enterprises in an LEP (Table 6.1) and the proportion of high growth start-ups (Table 6.3) (R^2=.409, p=.010).

Section 4: Innovation Activity of SMEs by LEP

Metric **Product/Service Innovation Activity of SMEs by LEP (Percentage)**

Source **Table 7.1**

Definition Breakdown of the percentage of enterprises undertaking product innovation.

This is based on Questions 6a and 6b in the UKIS: During the three-year period 2010-2012 did this business introduce new or significantly improved goods or services?

Remarks On average, 19.0 per cent of enterprises introduced new or significantly improved goods or services over the period 2010 to 2012. This product innovation rate varied across the LEPs from a low in York and North Yorkshire LEP (at 11.8 per cent) to Oxfordshire LEP (at 27.4 per cent).

Local product/service innovation activity is of particular importance as an indicator of added value, competitiveness and sustainability. Empirical evidence consistently demonstrates that innovating firms experience higher performance and that innovation activity is a key driver of economic growth. As a result, LEPs with lower product/service innovation have fewer enterprises introducing novelty and have potentially lower economic growth than LEPs with higher product/service innovation rates.

Metric **New to Market Innovation of SMEs by LEP (Percentage) (for those who do product/service innovation)**

Source **Table 7.2**

Definition Breakdown of the percentage of enterprises undertaking new to market innovation.

This is based on Question 8a in the UKIS: During the three-year period 2010-2012 did this business introduce a new good or service to the market before competitors?

Remarks This metric is a refinement of product/service innovation (Table 7.1). Here the focus is on the proportion of enterprises in each LEP introducing products/services that have not previously been available on the market. Enterprises introducing these products/services are undertaking activities that are at the forefront of the market and superior to those provided by competitors. As a result these enterprises may increase their market share, have higher value added and achieve return on investment levels above that of their competitors.

On average across LEPs, 46.6 per cent of product/service innovators were engaged in introducing new to market products/services. However, again this varied markedly from a low of only 26.3 per cent of innovators in New Anglia LEP to a high of 62.1 per cent in Dorset LEP. Recalculating these proportions based on the total number of enterprises sampled in each LEP a similar pattern is found; however, two observations are noteworthy:

- The actual proportion of new to market innovators is more stark with New Anglia LEP having only 3.6 per cent of SME enterprises engaged in new to market innovation and this rising to a high in Oxfordshire of 15.1 per cent of SMEs.
- With 15.1 per cent of SMEs engaged in new to the market innovation, Oxfordshire LEP has a higher absolute share of new to the market innovators than Dorset LEP (at 13.4 per cent of SMEs). Similarly, Enterprise M3 (14.3 per cent), also records a higher absolute share of new to the market innovators than Dorset LEP.

In addition, a weak significant relationship exists between the proportion of SMEs in each LEP engaging in product/service innovation and the proportion undertaking new to market innovation (R^2=.305, p=.095).

Metric **Process Innovation Activity of SMEs by LEP (Percentage)**

Source **Table 7.3**

Definition Breakdown of the percentage of enterprises undertaking process innovation.

This is based on Question 10 in the UKIS: During the three-year period 2010-2012 did this business introduce any new or significantly improved processes for producing or supplying goods or services?

Remarks Across the LEPs, process innovation over the period 2010 to 2012 was undertaken less than product/service innovation. On average, 19.0 per cent of SMEs reported undertaking product/service innovation, however this declined to only 11.9 per cent of enterprises undertaking process innovation.

A strong positive correlation is found between LEPs' product/service innovation activity rates and rates of process innovation (R^2=.670, p=.000). In contrast, no significant relationship is found between rates of new to market innovation (Table 7.2) and process innovation rates (Table 7.3) (R^2=.098, p=.600).

The implication of this is that those LEPs with lower innovation activity have also lower process innovation e.g. York and North Yorkshire LEP. Similarly LEPs such as Oxfordshire and Swindon and Wiltshire had higher rates of both product/service and process innovation.

This suggests that SMEs in each LEP have a propensity to engage in innovation irrespective of whether this is product/service or process innovation. In addition, while there is a weak positive relationship between product/service innovation activity rates and the proportion of SMEs introducing new to market innovations, no such association is found between the novelty of product/service innovation and process innovation.

Metric **Strategic and Marketing Innovation Activity of SMEs by LEP (Percentage)**

Source **Table 7.4**

Definition Breakdown of the percentage of enterprises undertaking strategic or marketing innovation.

This is based on Questions 3b and 3d in the UKIS: During the three-year period 2010-2012 did this business introduce any new methods of organising work responsibilities and decision making?; or implement changes to marketing concepts or strategies?

Remarks The average rate of strategic and marketing innovation activity is higher at 26.7 per cent than that for product/service or process innovation. It should be noted, however, that this definition is relatively broad, including both changes in internal organisation as well as competitive positioning in external markets. Variation is found across the LEPs from a low in Cumbria (19.0 per cent of SMEs) to a high in Greater Cambridge LEP (32.0 per cent).

Positive correlations are found between the proportion of SMEs in LEPs undertaking strategic and marketing innovation with each of the other innovation activity rate measures (with Product/service innovation, R^2=.476, p=.002; New to market innovators R^2=.361, p=.046; Process innovators R^2=.353, p=.038).

Metric **R&D Activity of SMEs by LEP (Percentage)**

Source **Table 7.5**

Definition Breakdown of the percentage of enterprises undertaking R&D activity.

This is based on Questions 4a and 4b in the UKIS: During the three-year period 2010-2012 did this business invest in internal R&D?; or in the acquisition of R&D?

Remarks On average, 16.4 per cent of SMEs across LEPs are engaged in R&D activity, whether this is undertaken internally or acquired from external sources. This rate of R&D activity among SMEs varies markedly across the LEPs from a low of 7.3 per cent in Greater Lincolnshire to a high of 25.4 per cent in Greater Cambridgeshire and 28.1 per cent in Oxfordshire LEP.

Correlation coefficients demonstrate a strong positive association between the LEP's innovation rate and R&D activity rates. For example, significant positive correlations are evident between rates of product/service innovation and R&D activity (R^2=.751, p=.000), process innovation and R&D activity (R^2=.593, p=.000) and strategic and marketing innovation with R&D activity (R^2=.574, p=.000). Perhaps surprisingly, rates of new to market innovation by LEP (Table 7.2) were not positively correlated with R&D activity rates (R^2=.243, p=.87).

Metric **Intramural R&D Activity of SMEs by LEP (Percentage)**

Source **Table 7.6**

Definition Breakdown of the percentage of enterprises undertaking intramural R&D activity.

This is based on Question 4a in the UKIS: During the three-year period 2010-2012 did this business invest in internal R&D?

Remarks Intramural R&D activity rates closely reflect those for R&D activity rates (Table 7.5). Average R&D activity rates of 16.4 per cent of SMEs across the LEPs is matched with 16.0 per cent of SMEs undertaking intramural R&D.

These rates suggest that where SMEs are acquiring external R&D, this is likely to be accompanied by internal R&D.

R&D activity rates are strongly correlated with product/service (R^2=.760, p=.000) and process innovation (R^2=.547, p=.001). Again, it is somewhat surprising to find no significant association between intramural R&D activity rates and rates of SMEs introducing new to market innovations (R^2=.289, p=.115).

Metric **Innovation Collaboration by SMEs and LEP (Percentage)**

Source **Table 7.7**

Definition Breakdown of the percentage of enterprises undertaking innovation activities in co-operation with other collaborators.

This is based on Question 16 in the UKIS: During the three-year period 2010-2012 did your business co-operate on any innovation activities with any of the following: other businesses, suppliers, clients, competitors, consultants, universities, government?

Remarks External knowledge sourcing by SMEs is important in complementing internal knowledge and leading to innovation activity. This is evident with significant positive correlations between the proportion of SMEs investing in intramural R&D and external knowledge sourcing (R^2=.615, p=.000) and rates of external knowledge sourcing and product/service innovation (R^2=.582, p=.000).

On average, 19.6 per cent of SMEs across the LEPs reported that they engaged in collaborative links with external organisations as part of their innovation activities. The lowest rate of external collaboration was for SMEs in Cumbria LEP (14.0 per cent) and highest in Oxfordshire LEP (31.5 per cent). These findings suggest that strong associations between R&D investment and innovation activity that are reported at an organisation level, also exist at the LEP level.

Metric **New Business Practices for Organising Procedures and External Relationships for SMEs by LEP (Percentage)**

Source **Table 7.8**

Definition Breakdown of the percentage of enterprises undertaking new business practices for organising procedures and external relationships.

This is based on Questions 3a and 3c in the UKIS: During the three-year period 2010-2012 did your business undertake new business practices for organising procedures or new methods of organising external relationships?

Remarks On average 25.6 per cent of SMEs engage in the introduction of new business practices. This ranged from 18.0 per cent of SMEs in Cumbria to 32.4 per cent in Leicester and Leicestershire LEP and 37.2 per cent in Tees Valley LEP.

In general, the proportion of enterprises undertaking this activity was slightly higher than the LEP's share of enterprises undertaking product or process innovation, or indeed investing in R&D activity.

While strong, significant correlations were found between LEPs' innovation indicators, these are not found here. The proportion of enterprises undertaking new business practices was not associated with product/service, process innovation or R&D activity.

Notes UKIS is based on enterprises with ten or more employees. On average, micro-enterprises i.e. those with fewer than ten employees, account for over three-quarters of all enterprises.

Section 5: Implications for HEIs

5.1 Introduction

In this section we comment briefly on some of the potential implications of the geographic distribution and characteristics of the SME population which emerges from the metrics.

5.2 Size, Employment and Turnover

Significant variations in the populations of SMEs across LEPs suggest that for HEIs the opportunities to engage with local SMEs do vary. For example, HEIs in London, the South East and areas such as Leeds City Region LEP etc. have a much larger local pool of SMEs with which to engage than HEIs in smaller and more rural LEPs such as Tees Valley, Cornwall and the Isles of Scilly and Cumbria.

Total employment is one indicator of the potential local demand from HEIs for education and training associated with continuing professional development (CPD). Where total employment is higher e.g. London, South East, Leeds City Region and Greater Manchester LEPs, this is likely to translate into higher total demand for CPD-related activities.

Similarly, where a LEP's SME turnover is higher, the scale of business activity in the LEP is higher and so too is the potential for local HEI-business engagement. Almost all forms of HEI-business engagement require financial commitment by the enterprise, for employee CPD activities, contract research etc., therefore, for HEIs located in more prosperous LEPs (as measured by SME turnover) the potential scale of local engagement is higher.

The dominance of micro-enterprises, and in particular those with fewer than five employees, means that for the majority of SMEs in all LEPs, capability to engage with HEIs is constrained. In other words, the proportion of SMEs with which HEIs are likely to engage over any given period is relatively small.

Where CPD activities are the basis for HEI-business engagement, the nature of these may vary depending on the size-band distribution of enterprises and employees. For example, employees in larger SMEs, i.e. with 50-249 employees, may require functional or skill-specific training (e.g. design, marketing, engineering, personnel development) whereas employees in smaller enterprises may seek more generic CPD involving general technical and business skills development. Similarly, where turnover is more concentrated in larger SMEs, greater financial resources in these enterprises may enable both larger and longer-term engagement with HEIs.

5.3 SME Sector

HEIs have a role to play in LEPs irrespective of the breakdown of SMEs by sector. At the same time, the demands and subsequent opportunities for HEI-business engagement are likely to vary across the sectors. HEIs have traditionally followed a technology transfer model with this shaped by the needs of manufacturing sectors. This has led to an emphasis on issues surrounding the identification and protection of intellectual property, the negotiation of research contracts and the use of HEI facilities for testing. The difficulty with this approach is the relatively low share of manufacturing SMEs across the LEPs. This suggests the need for HEIs to adopt broader knowledge transfer models of engagement, particularly in targeting service-oriented enterprises. Of course, this is more applicable in relation to business services than for personal or public services SMEs. Business services SMEs have relatively high output per employee (or added value) and therefore the financial resource to invest in employee development as well as research and development activities.

Although the data suggests that the greatest potential for HEI-business engagement is in manufacturing and business services – due to their share of employment and turnover – local public services SMEs may be an important partner with which to engage. For example, employment in public services SMEs accounted for a disproportionate share, relative to the number of SMEs. The development of CPD activities with this group is likely to be significant.

5.4 SMEs by Technological Intensity

Manufacturing SMEs account for a relatively small share of all SMEs across most LEPs (13.3 per cent). If this is disaggregated further we find that only 0.7 per cent of all SMEs across the LEPs are engaged in high technology intensive activities. Extending this to include medium-high tech brings the share of total SMEs to 3.9 per cent. HEIs have traditionally looked to more technology intensive manufacturing enterprises as the most appropriate organisations with which to engage in technology transfer related activities. Indeed, there is extensive empirical evidence to support this focus, with these enterprises identified as being most capable of engaging with HEIs for research and technology development activities. However, what these data demonstrate is that, by adopting such a focus, the potential for HEI-business engagement is severely restricted.

Unique challenges also exist for HEIs across the different LEPs. Where manufacturing SMEs are relatively homogenous in terms of their technological intensity then the breadth of engagement mechanisms used by HEIs is likely to be narrower. In contrast, where the population of manufacturing SMEs is heterogeneous in technological intensity then a greater breadth of HEI engagement channels may be needed.

Business services SMEs represent the largest group (58.7 per cent) of SMEs across LEPs. As for higher technological intensity manufacturing enterprises, HEIs are more likely to focus on nurturing links with KIBS than with Non-KIBS as these enterprises tend to have more highly educated employees.

5.5 SMEs in Creative Industries

There has been a growing recognition of the importance of the creative industries (CI) to the economy. Simultaneously HEIs have sought to determine how best enterprises in CI can be supported. However, these SMEs account for a relatively small proportion of total SMEs, an even smaller proportion of employees and have lower levels of turnover per employee than in Non-CI SMEs.

At the same time, as CI are likely to employ a higher proportion of graduates than non-CI enterprises this suggests that HEIs have a key role as a source of highly educated and skilled graduates not only with subject-specific skills but with generic and transferable skills. In turn, these SMEs have the capability to engage with HEIs and identifying appropriate ways to increase turnover per employee may be a priority.

Employees in CI enterprises are also characterised as being very entrepreneurial in their CPD and application of knowledge. HEIs may have a role to play in developing entrepreneurial skills, either during the period of accredited study, or through CPD. In addition CI enterprises operate in technologically dynamic sectors and therefore HEIs may have a role in assisting with the exploration and exploitation of new technologies in the business context.

5.6 Growth of SMEs

Where businesses are growing this creates demand for graduates. For HEIs, meeting the needs of local enterprises means that graduates need to have the appropriate education and skills for businesses. The implication of this is that HEIs and businesses need to have strong communication and accurate information on changing labour market demands.

Across the LEPs a similar proportion of enterprises had experienced fast growth between 2011 and 2014. This suggests that the demand for graduates will be concentrated on a proportion (16.6 per cent) of enterprises. Building strong relationships with these enterprises is particularly important both in curriculum design, in supporting the delivery of programmes and in graduate recruitment.

Job growth as measured through net jobs created and the job creation rate (Table 6.2) was less evenly distributed across the LEPs. Instead, job creation over 2013 to 2014 was higher in some LEPs (e.g. Stoke-on-Trent LEP) than others (e.g. Enterprise M3 LEP). For HEIs low job creation rates may present problems where there is no new local demand for graduates (this of course assumes limited inter-LEP labour mobility). This not only creates difficulties for graduates, but it also may lead to a disconnect between HEIs and local enterprises as there is limited reason for engagement in the delivery of graduate education.

Data on the survival rate of start-up enterprises (Table 6.3) and the proportion of start-ups achieving high growth (Table 6.3) again highlight variations across the LEPs. Where start-up rates are higher (e.g. London LEP as compared to Cumbria LEP with the lowest start-up rate) this reflects a creative local environment with new enterprises being formed often based on innovative business concepts. Of course, during this period national data highlights that much of the employment growth during this period was self-employment with an accompanying decline in economic inactivity rates.

For HEIs start-up rates provide a good indication of the entrepreneurial capacity and potential of a LEP. These enterprises stimulate employment and associated demand for education and skills. Higher rates therefore reflect a more vibrant LEP and the potential for graduates to enter self-employment. HEIs can actively nurture entrepreneurial skills among all graduates and provide CPD training to those entering self-employment for the first time. In a vibrant local entrepreneurial environment this may also stimulate university spin-out activity, especially as most of these businesses in the early period following formation remain close to the HEI.

5.7 Innovation Activity of SMEs

The empirical evidence suggests that significant differences exist in the propensity of SMEs to innovate across the LEPs. In other words, LEPs with higher product/service innovation also have higher process innovation. The implication of this for HEIs is that engagement with SMEs is likely to be higher in those LEPs with higher innovation rates. Innovation-active SMEs are better able to identify and access HEI-based expertise as well as adapt and exploit knowledge gained. Indeed as this capability increases (absorptive capacity), the nature of HEI engagement is likely to move from being based on the uni-directional transfer of knowledge as with consultancy and to a lesser extent contract research, and instead move towards more interactive forms of engagement such as collaborative research.

In lower innovation-active LEPs, the potential to form interactive local HEI-business engagement will be lower than for more innovation-active LEPs.

These innovation capability indicators are a good indicator of the potential for HEI-enterprise engagement in a LEP.

Significant positive correlations between R&D activity and rates of external knowledge sourcing are found across the LEPs. It is likely that these LEPs also record higher rates of HEI-enterprise engagement. Empirical research has found that for small enterprises in particular, where a strategic decision is made to collaborate with a HEI for innovation, then assuming there is a local HEI providing the necessary expertise, then this relationship will remain local. For larger enterprises, again if the HEI expertise is available locally then these enterprises will engage with local HEIs, however these larger enterprises are more likely to search beyond the confines of the LEP.

Section 6: Data tables

Table 1.1: Number of firms by employment size-band

	size					
	0-4	5-9	10-24	25-49	50-249	Total
LEP	No.	No.	No.	No.	No.	No.
Black Country	21,900	3,598	2,580	822	661	29,561
Buckinghamshire Thames Valley	23,442	2,649	1,601	466	413	28,571
Cheshire and Warrington	33,852	4,100	2,517	803	605	41,877
Coast to Capital	62,895	7,814	4,577	1,463	1,018	77,767
Cornwall and the Isles of Scilly	17,808	2,740	1,676	464	280	22,968
Coventry and Warwickshire	26,405	3,364	2,223	684	507	33,183
Cumbria	18,365	2,332	1,517	460	313	22,987
Derby, Derbyshire, Nottingham and Nottinghamshire,	43,306	6,300	4,217	1,383	1,031	56,237
Dorset	23,732	3,526	2,087	647	428	30,420
Enterprise M3	56,449	6,753	4,101	1,226	1,052	69,581
Gloucestershire	21,483	3,015	1,871	550	436	27,355
Greater Birmingham and Solihull	39,525	5,671	3,658	1,177	951	50,982
Greater Cambridge & Greater Peterborough	37,496	5,207	3,221	1,044	822	47,790
Greater Lincolnshire	25,258	3,719	2,260	741	519	32,497
Greater Manchester	65,977	9,524	6,438	2,057	1,570	85,566
Heart of the South West	54,343	7,566	4,644	1,417	929	68,899
Hertfordshire	33,826	4,121	2,401	789	625	41,762
Humber	18,232	2,909	1,901	567	407	24,016
Lancashire	37,412	5,716	3,619	1,250	830	48,827
Leeds City Region	66,430	9,942	6,549	2,104	1,672	86,697
Leicester and Leicestershire	28,464	4,249	2,666	855	620	36,854
Liverpool City Region	27,588	4,455	2,925	971	728	36,667
London	348,652	41,023	25,601	8,367	6,934	430,577
New Anglia	44,243	6,706	4,052	1,310	869	57,180
North Eastern	36,477	5,961	3,889	1,212	910	48,449
Northamptonshire	24,078	2,888	1,839	619	465	29,889
Oxfordshire LEP	23,272	3,243	1,961	620	487	29,583
Sheffield City Region	29,851	4,808	3,235	1,045	826	39,765
Solent	33,725	5,077	3,250	938	696	43,686
South East	118,573	16,032	9,788	2,957	2,172	149,522
South East Midlands	56,340	6,881	4,420	1,478	1,119	70,238
Stoke-on-Trent and Staffordshire	24,497	3,680	2,262	715	470	31,624
Swindon and Wiltshire	22,317	2,767	1,758	541	439	27,822
Tees Valley	12,147	1,646	1,240	373	325	15,731
Thames Valley Berkshire	32,662	3,614	2,398	895	716	40,285
The Marches	23,741	3,205	1,834	554	437	29,771
West of England	32,109	4,504	2,902	937	610	41,062
Worcestershire	18,548	2,544	1,595	498	391	23,576
York and North Yorkshire	29,854	4,134	2,519	671	420	37,598

Table 1.2: Employment in LEPs by employment size-band

LEP	size 0-4	5-9	10-24	25-49	50-249	Total
Black Country	32,839	23,386	38,368	28,345	65,240	188,178
Buckinghamshire Thames Valley	31,616	17,297	23,765	15,955	41,258	129,891
Cheshire and Warrington	45,673	26,579	37,616	27,528	60,627	198,023
Coast to Capital	88,564	50,880	67,957	49,745	100,109	357,255
Cornwall and the Isles of Scilly	21,950	17,798	24,862	15,565	26,871	107,046
Coventry and Warwickshire	36,489	21,855	32,806	23,218	50,899	165,267
Cumbria	22,970	15,207	22,440	15,436	31,455	107,508
Derby, Derbyshire, Nottingham and Nottinghamshire,	61,834	41,048	62,958	47,537	104,059	317,436
Dorset	33,727	23,005	30,759	22,119	42,231	151,841
Enterprise M3	77,311	43,852	60,639	41,914	108,080	331,796
Gloucestershire	29,196	19,513	27,800	18,545	43,005	138,059
Greater Birmingham and Solihull	57,287	36,949	54,070	40,275	95,678	284,259
Greater Cambridge & Greater Peterborough	50,930	33,755	48,016	35,489	82,949	251,139
Greater Lincolnshire	34,090	24,127	33,730	24,887	51,824	168,658
Greater Manchester	95,002	62,053	95,544	70,189	157,773	480,561
Heart of the South West	68,526	49,232	68,875	48,245	90,314	325,192
Hertfordshire	46,834	26,644	35,448	26,833	64,674	200,433
Humber	26,222	18,827	28,304	19,362	39,311	132,026
Lancashire	53,538	37,305	53,800	42,736	83,846	271,225
Leeds City Region	94,046	64,671	97,503	71,582	165,336	493,138
Leicester and Leicestershire	39,057	27,630	40,185	29,144	61,778	197,794
Liverpool City Region	41,665	29,216	43,677	33,209	70,946	218,713
London	483,093	267,034	379,496	286,483	697,563	2,113,669
New Anglia	61,042	43,629	60,300	44,909	84,409	294,289
North Eastern	53,272	38,745	57,825	41,435	90,365	281,642
Northamptonshire	30,869	18,805	27,441	21,085	47,384	145,584
Oxfordshire LEP	31,607	21,332	28,916	20,925	50,968	153,748
Sheffield City Region	43,639	31,277	48,465	35,945	81,889	241,215
Solent	48,209	33,105	48,279	31,969	68,609	230,171
South East	168,571	104,205	144,785	101,218	213,421	732,200
South East Midlands	76,772	44,800	66,044	50,531	111,239	349,386
Stoke-on-Trent and Staffordshire	34,385	23,892	33,440	24,068	45,089	160,874
Swindon and Wiltshire	30,115	17,832	25,779	18,327	44,864	136,917
Tees Valley	17,550	10,718	18,829	12,793	32,848	92,738
Thames Valley Berkshire	45,561	23,537	35,733	30,571	71,086	206,488
The Marches	29,484	20,859	27,001	19,125	45,034	141,503
West of England	44,107	29,335	42,904	32,318	59,808	208,472
Worcestershire	25,070	16,478	23,433	17,132	38,748	120,861
York and North Yorkshire	38,601	26,843	37,436	22,809	40,732	166,421

Table 1.3: Turnover in LEPs by employment size-band

LEP	0-4	5-9	10-24	25-49	50-249	Total
Black Country	4,036,546	2,416,271	4,108,221	3,890,400	7,785,337	22,236,775
Buckinghamshire Thames Valley	4,065,386	2,442,463	3,460,109	2,041,178	6,701,694	18,710,830
Cheshire and Warrington	5,916,412	3,395,793	4,290,827	3,278,873	10,930,911	27,812,816
Coast to Capital	11,076,317	5,927,405	7,046,224	6,165,114	15,663,720	45,878,780
Cornwall and the Isles of Scilly	2,505,902	1,227,388	1,639,846	1,012,646	2,686,214	9,071,996
Coventry and Warwickshire	4,686,152	2,146,558	3,779,823	3,040,151	6,910,461	20,563,145
Cumbria	2,590,233	1,118,606	1,688,446	1,312,770	2,760,673	9,470,728
Derby, Derbyshire, Nottingham and Nottinghamshire,	6,793,320	6,342,194	5,945,557	8,473,126	12,051,221	39,605,418
Dorset	3,795,762	1,932,463	2,716,954	2,065,045	3,868,880	14,379,104
Enterprise M3	15,032,817	5,507,919	7,874,296	5,343,698	20,405,966	54,164,696
Gloucestershire	3,557,186	2,033,078	2,645,613	8,550,199	4,440,571	21,226,647
Greater Birmingham and Solihull	6,885,666	4,099,445	6,374,980	5,291,665	9,912,287	32,564,043
Greater Cambridge & Greater Peterborough	6,597,164	3,338,378	6,031,440	4,730,770	10,110,834	30,808,586
Greater Lincolnshire	4,168,992	2,170,683	3,041,583	2,422,740	6,396,073	18,200,071
Greater Manchester	11,755,198	6,106,063	10,165,877	8,045,912	20,924,109	56,997,159
Heart of the South West	8,379,246	3,930,290	5,337,769	3,880,994	8,492,154	30,020,453
Hertfordshire	10,188,004	3,265,658	5,327,029	3,958,357	15,599,953	38,339,001
Humber	3,204,387	1,704,922	3,249,016	3,018,025	6,049,967	17,226,317
Lancashire	6,240,578	3,418,536	4,751,594	4,491,968	15,471,858	34,374,534
Leeds City Region	11,570,453	6,258,468	9,742,087	8,816,609	23,614,495	60,002,112
Leicester and Leicestershire	4,873,193	2,541,657	4,192,258	3,604,303	6,467,552	21,678,963
Liverpool City Region	4,805,852	2,403,153	4,301,290	4,854,217	9,480,301	25,844,813
London	122,631,541	100,937,796	95,731,091	104,511,271	240,460,659	664,272,358
New Anglia	7,237,193	3,948,528	6,218,045	4,614,614	10,311,853	32,330,233
North Eastern	6,048,596	3,015,748	4,848,363	3,715,663	10,552,578	28,180,948
Northamptonshire	3,621,426	1,932,331	3,027,055	2,417,320	5,152,200	16,150,332
Oxfordshire LEP	4,084,124	2,260,621	3,300,929	3,016,607	7,476,110	20,138,391
Sheffield City Region	4,973,113	2,735,513	4,626,782	3,645,928	10,216,780	26,198,116
Solent	6,426,478	3,110,585	4,697,464	3,562,284	9,890,011	27,686,822
South East	21,377,029	11,173,873	15,210,963	11,632,830	22,648,835	82,043,530
South East Midlands	9,944,884	5,202,917	7,298,905	6,551,508	15,055,941	44,054,155
Stoke-on-Trent and Staffordshire	7,016,866	2,462,611	3,321,106	2,520,260	4,805,873	20,126,716
Swindon and Wiltshire	3,787,995	2,096,690	2,622,092	2,186,018	7,465,213	18,158,008
Tees Valley	1,977,915	1,225,142	1,582,255	1,097,798	3,819,329	9,702,439
Thames Valley Berkshire	7,242,000	3,386,992	6,099,566	4,494,412	14,403,923	35,626,893
The Marches	3,906,833	1,970,525	2,569,323	2,075,485	4,944,930	15,467,096
West of England	5,611,844	2,546,894	3,975,398	2,851,425	7,130,569	22,116,130
Worcestershire	3,045,758	1,617,420	2,470,146	1,896,409	3,836,770	12,866,503
York and North Yorkshire	7,014,146	2,749,806	3,853,348	3,118,679	5,936,815	22,672,794

Table 2.1: Number of firms by Broad Sector

LEP	Manufacturing No.	Business Services No.	Personal Services No.	Public Services No.	Total No.
Black Country	3,403	6,261	1,909	1,940	13,513
Buckinghamshire Thames Valley	1,349	9,961	2,061	1,540	14,911
Cheshire and Warrington	1,993	15,487	2,578	2,352	22,410
Coast to Capital	3,487	24,919	5,682	4,920	39,008
Cornwall and the Isles of Scilly	1,164	4,258	1,385	1,278	8,085
Coventry and Warwickshire	2,213	10,047	2,147	1,913	16,320
Cumbria	1,082	5,016	1,325	1,288	8,711
Derby, Derbyshire, Nottingham and Nottinghamshire,	4,278	14,482	3,651	3,840	26,251
Dorset	1,930	7,683	2,096	1,825	13,534
Enterprise M3	3,160	24,130	4,883	3,663	35,836
Gloucestershire	1,609	7,828	1,784	1,668	12,889
Greater Birmingham and Solihull	3,550	14,864	3,269	3,858	25,541
Greater Cambridge & Greater Peterborough	2,866	13,634	3,236	2,955	22,691
Greater Lincolnshire	1,867	6,818	1,870	1,922	12,477
Greater Manchester	5,639	25,314	5,788	5,520	42,261
Heart of the South West	3,738	14,893	4,182	4,224	27,037
Hertfordshire	2,107	13,338	2,644	2,229	20,318
Humber	1,742	5,256	1,572	1,533	10,103
Lancashire	3,542	11,467	3,331	3,106	21,446
Leeds City Region	6,419	22,318	5,693	5,422	39,852
Leicester and Leicestershire	3,241	9,320	2,251	2,459	17,271
Liverpool City Region	2,254	10,534	3,032	2,763	18,583
London	13,076	162,378	32,467	24,724	232,645
New Anglia	3,576	13,732	3,870	3,608	24,786
North Eastern	3,069	11,835	3,602	3,146	21,652
Northamptonshire	1,912	7,738	3,327	1,787	14,764
Oxfordshire LEP	1,385	9,566	2,303	1,904	15,158
Sheffield City Region	3,227	8,969	2,683	2,717	17,596
Solent	2,790	12,162	3,171	2,761	20,884
South East	8,544	41,328	9,501	9,325	68,698
South East Midlands	4,057	20,558	4,456	4,349	33,420
Stoke-on-Trent and Staffordshire	2,530	7,032	2,130	1,887	13,579
Swindon and Wiltshire	1,438	7,999	1,910	1,739	13,086
Tees Valley	1,014	5,096	1,144	1,048	8,302
Thames Valley Berkshire	1,677	13,646	2,656	2,083	20,062
The Marches	1,770	6,658	1,703	1,651	11,782
West of England	2,052	12,687	2,796	2,605	20,140
Worcestershire	1,686	6,522	1,490	1,373	11,071
York and North Yorkshire	1,945	8,611	2,293	2,052	14,901

Table 2.2: Employment in LEPs by broad sector

	Manufacturi ng	Business Services	Personal Services	Public Services	Total
Black Country	47,073	28,562	8,569	28,812	113,016
Buckinghamshire Thames Valley	11,228	29,951	8,604	22,210	71,993
Cheshire and Warrington	19,743	52,078	12,053	28,000	111,874
Coast to Capital	26,445	83,600	24,636	64,474	199,155
Cornwall and the Isles of Scilly	8,767	15,486	6,977	17,417	48,647
Coventry and Warwickshire	23,087	34,757	10,847	26,287	94,978
Cumbria	9,390	15,203	6,284	18,848	49,725
Derby, Derbyshire, Nottingham and Nottinghamshire,	51,215	58,047	18,284	55,578	183,124
Dorset	18,166	27,392	10,137	24,664	80,359
Enterprise M3	25,241	83,761	23,500	51,693	184,195
Gloucestershire	17,513	28,926	8,141	23,628	78,208
Greater Birmingham and Solihull	37,383	59,763	17,902	51,368	166,416
Greater Cambridge & Greater Peterborough	32,118	53,762	14,937	40,914	141,731
Greater Lincolnshire	19,053	27,986	8,874	27,088	83,001
Greater Manchester	65,404	110,921	27,913	70,201	274,439
Heart of the South West	34,203	54,650	20,051	59,163	168,067
Hertfordshire	18,346	48,257	12,925	28,778	108,306
Humber	21,561	20,260	7,080	19,484	68,385
Lancashire	40,299	48,613	15,543	41,184	145,639
Leeds City Region	80,264	97,678	27,213	76,002	281,157
Leicester and Leicestershire	36,476	34,099	12,471	32,544	115,590
Liverpool City Region	25,556	44,710	14,858	42,549	127,673
London	81,399	650,947	143,382	293,067	1,168,795
New Anglia	36,302	52,523	18,812	44,241	151,878
North Eastern	40,646	49,665	19,083	47,109	156,503
Northamptonshire	23,079	29,088	9,778	25,430	87,375
Oxfordshire LEP	13,776	36,705	10,136	27,273	87,890
Sheffield City Region	39,900	40,541	12,913	43,022	136,376
Solent	24,081	45,083	16,406	42,461	128,031
South East	73,051	150,229	44,596	135,033	402,909
South East Midlands	44,851	75,782	21,524	60,723	202,880
Stoke-on-Trent and Staffordshire	26,578	28,733	9,586	25,907	90,804
Swindon and Wiltshire	13,194	29,163	8,108	25,365	75,830
Tees Valley	10,261	19,822	6,057	17,748	53,888
Thames Valley Berkshire	13,626	54,163	13,285	29,409	110,483
The Marches	19,846	23,954	7,908	23,779	75,487
West of England	17,048	49,722	13,970	34,383	115,123
Worcestershire	16,742	23,885	7,651	19,967	68,245
York and North Yorkshire	18,004	27,028	10,151	22,140	77,323

Table 2.3: Turnover in LEPs by broad sector

LEP	Manufacturing	Business Services	Personal Services	Public Services	Total
Black Country	5,536,655	2,693,130	460,147	1,228,935	9,918,867
Buckinghamshire Thames Valley	1,390,236	3,564,497	581,159	911,825	6,447,717
Cheshire and Warrington	3,869,288	6,898,019	702,353	1,191,575	12,661,235
Coast to Capital	3,874,192	9,750,439	1,563,438	3,130,275	18,318,344
Cornwall and the Isles of Scilly	889,003	1,034,006	283,818	814,524	3,021,351
Coventry and Warwickshire	2,963,392	3,897,222	706,542	1,095,338	8,662,494
Cumbria	1,043,026	1,282,897	306,282	805,520	3,437,725
Derby, Derbyshire, Nottingham and Nottinghamshire,	6,323,144	5,029,982	786,105	2,512,065	14,651,296
Dorset	1,873,718	2,653,525	516,852	1,132,524	6,176,619
Enterprise M3	3,919,360	12,098,797	1,652,300	2,242,515	19,912,972
Gloucestershire	2,112,486	2,639,388	397,040	1,087,686	6,236,600
Greater Birmingham and Solihull	4,440,302	5,446,802	1,070,368	2,230,303	13,187,775
Greater Cambridge & Greater Peterborough	4,319,045	5,477,351	852,230	1,849,931	12,498,557
Greater Lincolnshire	2,815,599	1,831,200	419,896	1,144,728	6,211,423
Greater Manchester	8,238,473	11,408,695	1,740,475	3,311,711	24,699,354
Heart of the South West	4,099,448	4,407,031	872,550	2,565,687	11,944,716
Hertfordshire	2,678,410	5,103,222	781,472	1,345,023	9,908,127
Humber	3,253,909	2,164,806	351,343	840,472	6,610,530
Lancashire	4,706,192	4,059,615	988,113	1,743,807	11,497,727
Leeds City Region	9,731,793	10,512,697	1,391,838	3,294,706	24,931,034
Leicester and Leicestershire	3,904,840	3,837,317	635,811	1,383,419	9,761,387
Liverpool City Region	5,302,390	4,466,905	755,605	1,841,118	12,366,018
London	11,551,645	108,900,048	15,579,293	14,474,807	150,505,793
New Anglia	4,511,741	5,024,820	916,593	2,152,219	12,605,373
North Eastern	4,818,802	4,209,706	890,838	2,124,032	12,043,378
Northamptonshire	3,272,731	2,643,243	562,586	1,048,103	7,526,663
Oxfordshire LEP	2,003,126	4,297,168	777,841	1,183,605	8,261,740
Sheffield City Region	4,837,088	3,538,580	586,377	1,858,046	10,820,091
Solent	2,661,371	4,331,480	819,716	1,829,605	9,642,172
South East	8,836,289	14,622,333	2,391,894	6,042,590	31,893,106
South East Midlands	6,879,088	8,407,259	1,378,950	2,675,570	19,340,867
Stoke-on-Trent and Staffordshire	3,213,326	2,469,202	554,348	1,073,397	7,310,273
Swindon and Wiltshire	1,431,757	2,935,911	451,255	1,064,270	5,883,193
Tees Valley	1,979,109	1,823,609	254,492	825,036	4,882,246
Thames Valley Berkshire	2,153,801	7,188,849	1,052,094	1,420,812	11,815,556
The Marches	2,909,233	2,103,694	373,331	1,046,401	6,432,659
West of England	1,940,032	4,897,103	687,763	1,553,694	9,078,592
Worcestershire	2,077,780	2,150,502	419,918	846,931	5,495,131
York and North Yorkshire	2,448,321	3,184,908	541,753	997,779	7,172,761

Table 3.1: Number of manufacturing firms by technological intensity

	Tech Intensity				
LEP	**High**	**Med-high**	**Med-low**	**Low**	**Total**
	No.	No.	No.	No.	No.
Black Country	64	709	1,621	1,009	3,403
Buckinghamshire Thames Valley	118	296	348	587	1,349
Cheshire and Warrington	126	507	587	773	1,993
Coast to Capital	298	749	869	1,571	3,487
Cornwall and the Isles of Scilly	45	261	318	540	1,164
Coventry and Warwickshire	107	612	817	677	2,213
Cumbria	40	214	360	468	1,082
Derby, Derbyshire, Nottingham and Nottinghamshire,	176	1,055	1,289	1,758	4,278
Dorset	127	435	613	755	1,930
Enterprise M3	298	836	805	1,221	3,160
Gloucestershire	84	356	571	598	1,609
Greater Birmingham and Solihull	125	841	1,237	1,347	3,550
Greater Cambridge & Greater Peterborough	312	653	774	1,127	2,866
Greater Lincolnshire	52	522	571	722	1,867
Greater Manchester	273	1,315	1,629	2,422	5,639
Heart of the South West	169	814	1,056	1,699	3,738
Hertfordshire	194	466	540	907	2,107
Humber	45	461	571	665	1,742
Lancashire	101	813	1,075	1,553	3,542
Leeds City Region	225	1,420	1,878	2,896	6,419
Leicester and Leicestershire	122	654	815	1,650	3,241
Liverpool City Region	89	551	709	905	2,254
London	724	2,433	2,168	7,751	13,076
New Anglia	180	866	1,022	1,508	3,576
North Eastern	124	767	981	1,197	3,069
Northamptonshire	96	520	532	764	1,912
Oxfordshire LEP	138	322	311	614	1,385
Sheffield City Region	137	767	1,270	1,053	3,227
Solent	204	791	949	846	2,790
South East	478	1,980	2,392	3,694	8,544
South East Midlands	278	1,099	1,161	1,519	4,057
Stoke-on-Trent and Staffordshire	99	656	902	873	2,530
Swindon and Wiltshire	103	349	375	611	1,438
Tees Valley	49	219	410	336	1,014
Thames Valley Berkshire	196	421	426	634	1,677
The Marches	69	385	590	726	1,770
West of England	107	534	614	797	2,052
Worcestershire	93	433	570	590	1,686
York and North Yorkshire	79	453	508	905	1,945

Table 3.2: Employment in LEPs by manufacturing technological intensity

	Tech Intensity				
LEP	**High**	**Med-high**	**Med-low**	**Low**	**Total**
Black Country	490	10,632	25,471	10,480	47,073
Buckinghamshire Thames Valley	1,391	2,388	3,101	4,348	11,228
Cheshire and Warrington	1,168	5,706	5,680	7,189	19,743
Coast to Capital	4,419	6,489	6,129	9,408	26,445
Cornwall and the Isles of Scilly	466	1,743	2,436	4,122	8,767
Coventry and Warwickshire	1,117	8,856	8,579	4,535	23,087
Cumbria	661	1,365	2,903	4,461	9,390
Derby, Derbyshire, Nottingham and Nottinghamshire,	2,327	12,663	18,744	17,481	51,215
Dorset	1,374	4,533	6,386	5,873	18,166
Enterprise M3	2,898	8,375	6,972	6,996	25,241
Gloucestershire	1,144	4,474	6,723	5,172	17,513
Greater Birmingham and Solihull	895	11,079	14,865	10,544	37,383
Greater Cambridge & Greater Peterborough	4,508	8,582	8,614	10,414	32,118
Greater Lincolnshire	688	5,765	5,460	7,140	19,053
Greater Manchester	3,415	17,182	20,183	24,624	65,404
Heart of the South West	1,738	7,392	10,130	14,943	34,203
Hertfordshire	2,828	4,769	4,334	6,415	18,346
Humber	482	5,958	7,556	7,565	21,561
Lancashire	771	10,068	12,569	16,891	40,299
Leeds City Region	2,249	17,969	24,487	35,559	80,264
Leicester and Leicestershire	1,928	8,421	9,173	16,954	36,476
Liverpool City Region	1,233	6,966	9,134	8,223	25,556
London	5,340	14,863	14,659	46,537	81,399
New Anglia	1,731	10,539	10,539	13,493	36,302
North Eastern	2,270	10,633	14,694	13,049	40,646
Northamptonshire	1,523	5,506	5,820	10,230	23,079
Oxfordshire LEP	1,678	3,880	3,256	4,962	13,776
Sheffield City Region	2,048	7,431	20,225	10,196	39,900
Solent	2,379	7,488	8,373	5,841	24,081
South East	5,209	18,428	22,732	26,682	73,051
South East Midlands	4,254	12,903	13,370	14,324	44,851
Stoke-on-Trent and Staffordshire	1,236	6,653	11,800	6,889	26,578
Swindon and Wiltshire	1,288	3,466	3,562	4,878	13,194
Tees Valley	497	3,027	3,674	3,063	10,261
Thames Valley Berkshire	2,115	4,148	3,654	3,709	13,626
The Marches	738	4,451	7,681	6,976	19,846
West of England	1,280	4,983	4,692	6,093	17,048
Worcestershire	1,033	5,232	5,778	4,699	16,742
York and North Yorkshire	787	5,121	4,293	7,803	18,004

Table 3.3: Turnover in LEPs by manufacturing technological intensity

	Tech Intensity				
LEP	**High**	**Med-high**	**Med-low**	**Low**	**Total**
Black Country	50,823	1,285,945	3,096,593	1,103,294	5,536,655
Buckinghamshire Thames Valley	234,602	262,188	430,621	462,825	1,390,236
Cheshire and Warrington	167,801	1,304,287	1,022,428	1,374,772	3,869,288
Coast to Capital	680,725	1,330,019	962,309	901,139	3,874,192
Cornwall and the Isles of Scilly	38,861	208,289	229,886	411,967	889,003
Coventry and Warwickshire	104,707	1,311,138	1,086,671	460,876	2,963,392
Cumbria	55,136	183,785	317,219	486,886	1,043,026
Derby, Derbyshire, Nottingham and Nottinghamshire,	300,911	1,938,465	2,386,994	1,696,774	6,323,144
Dorset	163,754	513,504	624,573	571,887	1,873,718
Enterprise M3	447,774	2,084,528	671,966	715,092	3,919,360
Gloucestershire	182,255	591,900	761,854	576,477	2,112,486
Greater Birmingham and Solihull	86,800	1,400,579	1,824,590	1,128,333	4,440,302
Greater Cambridge & Greater Peterborough	674,177	1,590,817	907,667	1,146,384	4,319,045
Greater Lincolnshire	124,699	959,149	779,713	952,038	2,815,599
Greater Manchester	398,750	3,047,496	2,147,069	2,645,158	8,238,473
Heart of the South West	208,633	840,272	933,422	2,117,121	4,099,448
Hertfordshire	481,269	957,899	437,397	801,845	2,678,410
Humber	75,134	929,761	1,031,717	1,217,297	3,253,909
Lancashire	76,718	1,424,057	1,357,080	1,848,337	4,706,192
Leeds City Region	334,542	2,590,181	2,917,392	3,889,678	9,731,793
Leicester and Leicestershire	208,801	1,179,805	918,567	1,597,667	3,904,840
Liverpool City Region	198,354	1,541,358	2,226,582	1,336,096	5,302,390
London	1,135,231	2,119,245	2,083,326	6,213,843	11,551,645
New Anglia	218,551	1,271,170	1,144,301	1,877,719	4,511,741
North Eastern	289,211	1,522,348	1,581,686	1,425,557	4,818,802
Northamptonshire	208,840	756,565	790,476	1,516,850	3,272,731
Oxfordshire LEP	272,338	636,956	366,707	727,125	2,003,126
Sheffield City Region	191,810	1,002,451	2,552,650	1,090,177	4,837,088
Solent	284,594	973,232	868,902	534,643	2,661,371
South East	723,996	2,318,814	2,927,117	2,866,362	8,836,289
South East Midlands	619,458	2,344,367	1,690,100	2,225,163	6,879,088
Stoke-on-Trent and Staffordshire	185,344	963,023	1,202,154	862,805	3,213,326
Swindon and Wiltshire	139,570	408,533	392,856	490,798	1,431,757
Tees Valley	40,228	1,191,395	390,535	356,951	1,979,109
Thames Valley Berkshire	469,341	832,562	462,101	389,797	2,153,801
The Marches	67,966	579,635	1,125,986	1,135,646	2,909,233
West of England	171,768	650,980	468,138	649,146	1,940,032
Worcestershire	125,421	754,527	607,194	590,638	2,077,780
York and North Yorkshire	73,268	695,258	512,006	1,167,789	2,448,321

Table 4.1: Number of firms by Knowledge Intensity of Business Services

LEP	Non-KIBS	KIBS	Total
Black Country	13,979	8,171	22,150
Buckinghamshire Thames Valley	9,149	13,644	22,793
Cheshire and Warrington	13,769	19,424	33,193
Coast to Capital	27,557	34,946	62,503
Cornwall and the Isles of Scilly	9,215	5,226	14,441
Coventry and Warwickshire	12,721	13,242	25,963
Cumbria	8,349	5,954	14,303
Derby, Derbyshire, Nottingham and Nottinghamshire,	22,956	19,084	42,040
Dorset	11,557	10,241	21,798
Enterprise M3	22,458	34,172	56,630
Gloucestershire	9,641	10,521	20,162
Greater Birmingham and Solihull	21,193	19,617	40,810
Greater Cambridge & Greater Peterborough	17,088	18,639	35,727
Greater Lincolnshire	13,718	8,314	22,032
Greater Manchester	35,548	33,909	69,457
Heart of the South West	25,726	18,893	44,619
Hertfordshire	14,107	18,877	32,984
Humber	10,055	6,423	16,478
Lancashire	21,311	14,798	36,109
Leeds City Region	37,065	29,262	66,327
Leicester and Leicestershire	14,968	12,769	27,737
Liverpool City Region	16,171	13,333	29,504
London	144,784	232,367	377,151
New Anglia	22,734	17,403	40,137
North Eastern	21,110	14,718	35,828
Northamptonshire	12,809	10,006	22,815
Oxfordshire LEP	10,298	12,760	23,058
Sheffield City Region	17,777	11,778	29,555
Solent	16,788	16,199	32,987
South East	55,709	54,757	110,466
South East Midlands	25,708	28,287	53,995
Stoke-on-Trent and Staffordshire	13,096	8,988	22,084
Swindon and Wiltshire	9,657	11,065	20,722
Tees Valley	6,302	5,887	12,189
Thames Valley Berkshire	12,809	21,041	33,850
The Marches	10,485	8,349	18,834
West of England	14,882	17,715	32,597
Worcestershire	8,762	8,410	17,172
York and North Yorkshire	13,730	10,551	24,281

Table 4.2: Employment in LEPs by Knowledge Intensity of Business Services

LEP1	**Non-KIBS**	**KIBS**	**Total**
Black Country	90,236	34,052	124,288
Buckinghamshire Thames Valley	63,871	42,169	106,040
Cheshire and Warrington	93,410	64,803	158,213
Coast to Capital	181,963	113,406	295,369
Cornwall and the Isles of Scilly	65,627	18,514	84,141
Coventry and Warwickshire	82,730	44,524	127,254
Cumbria	64,618	17,749	82,367
Derby, Derbyshire, Nottingham and Nottinghamshire,	160,650	73,085	233,735
Dorset	79,832	35,450	115,282
Enterprise M3	157,869	118,269	276,138
Gloucestershire	67,175	37,260	104,435
Greater Birmingham and Solihull	148,312	76,282	224,594
Greater Cambridge & Greater Peterborough	117,462	73,558	191,020
Greater Lincolnshire	88,731	33,205	121,936
Greater Manchester	230,650	141,545	372,195
Heart of the South West	181,516	66,264	247,780
Hertfordshire	94,489	66,182	160,671
Humber	67,003	23,974	90,977
Lancashire	143,359	58,850	202,209
Leeds City Region	245,035	121,474	366,509
Leicester and Leicestershire	101,505	42,620	144,125
Liverpool City Region	118,363	52,848	171,211
London	964,471	938,803	1,903,274
New Anglia	152,008	64,697	216,705
North Eastern	149,560	59,506	209,066
Northamptonshire	73,088	35,411	108,499
Oxfordshire LEP	76,003	47,923	123,926
Sheffield City Region	125,311	51,366	176,677
Solent	125,060	57,517	182,577
South East	376,374	188,435	564,809
South East Midlands	173,229	98,305	271,534
Stoke-on-Trent and Staffordshire	81,265	35,216	116,481
Swindon and Wiltshire	68,588	38,139	106,727
Tees Valley	49,881	22,412	72,293
Thames Valley Berkshire	94,373	83,705	178,078
The Marches	70,999	28,849	99,848
West of England	103,113	67,147	170,260
Worcestershire	61,403	29,929	91,332
York and North Yorkshire	89,006	33,716	122,722

Table 4.3: Turnover in LEPs by Knowledge Intensity of Business Services

LEP	Non-KIBS	KIBS	Total
Black Country	10,608,959	3,490,493	14,099,452
Buckinghamshire Thames Valley	9,913,963	5,122,256	15,036,219
Cheshire and Warrington	12,212,215	8,217,680	20,429,895
Coast to Capital	18,743,579	17,178,920	35,922,499
Cornwall and the Isles of Scilly	4,587,539	1,914,899	6,502,438
Coventry and Warwickshire	8,950,761	6,236,337	15,187,098
Cumbria	4,862,416	1,451,747	6,314,163
Derby, Derbyshire, Nottingham and Nottinghamshire,	18,046,030	10,720,282	28,766,312
Dorset	6,445,017	3,565,032	10,010,049
Enterprise M3	27,107,541	17,712,645	44,820,186
Gloucestershire	6,123,066	10,802,443	16,925,509
Greater Birmingham and Solihull	17,051,106	7,641,098	24,692,204
Greater Cambridge & Greater Peterborough	13,665,563	8,021,690	21,687,253
Greater Lincolnshire	8,943,625	2,239,319	11,182,944
Greater Manchester	26,161,235	14,709,428	40,870,663
Heart of the South West	14,400,394	5,679,057	20,079,451
Hertfordshire	15,860,623	14,800,244	30,660,867
Humber	7,915,654	2,529,388	10,445,042
Lancashire	14,147,323	11,705,445	25,852,768
Leeds City Region	26,363,698	14,482,475	40,846,173
Leicester and Leicestershire	10,519,439	4,560,766	15,080,205
Liverpool City Region	12,314,780	5,377,035	17,691,815
London	265,836,187	347,932,547	613,768,734
New Anglia	15,541,154	6,493,474	22,034,628
North Eastern	13,798,468	5,295,987	19,094,455
Northamptonshire	7,424,515	3,259,572	10,684,087
Oxfordshire LEP	9,633,349	5,743,641	15,376,990
Sheffield City Region	11,599,136	6,062,643	17,661,779
Solent	16,107,667	5,585,734	21,693,401
South East	39,047,047	20,026,011	59,073,058
South East Midlands	20,398,057	11,252,087	31,650,144
Stoke-on-Trent and Staffordshire	8,910,481	5,649,096	14,559,577
Swindon and Wiltshire	6,443,759	6,964,106	13,407,865
Tees Valley	4,217,462	2,016,552	6,234,014
Thames Valley Berkshire	15,337,676	14,872,781	30,210,457
The Marches	6,883,923	2,544,097	9,428,020
West of England	10,063,313	6,750,394	16,813,707
Worcestershire	6,485,342	2,674,844	9,160,186
York and North Yorkshire	9,447,976	4,013,452	13,461,428

Table 5.1: LEPs by Creative Industries

	Creative Industries		
LEP	Non-CI	CI	Total
Black Country	28,021	1,540	29,561
Buckinghamshire Thames Valley	24,574	3,997	28,571
Cheshire and Warrington	38,298	3,579	41,877
Coast to Capital	66,989	10,778	77,767
Cornwall and the Isles of Scilly	21,736	1,232	22,968
Coventry and Warwickshire	30,061	3,122	33,183
Cumbria	22,098	889	22,987
Derby, Derbyshire, Nottingham and Nottinghamshire,	52,042	4,195	56,237
Dorset	27,857	2,563	30,420
Enterprise M3	59,329	10,252	69,581
Gloucestershire	24,666	2,689	27,355
Greater Birmingham and Solihull	46,584	4,398	50,982
Greater Cambridge & Greater Peterborough	42,712	5,078	47,790
Greater Lincolnshire	31,021	1,476	32,497
Greater Manchester	78,277	7,289	85,566
Heart of the South West	64,630	4,269	68,899
Hertfordshire	36,200	5,562	41,762
Humber	22,972	1,044	24,016
Lancashire	46,000	2,827	48,827
Leeds City Region	80,002	6,695	86,697
Leicester and Leicestershire	34,352	2,502	36,854
Liverpool City Region	34,089	2,578	36,667
London	349,680	80,897	430,577
New Anglia	53,236	3,944	57,180
North Eastern	45,438	3,011	48,449
Northamptonshire	27,642	2,247	29,889
Oxfordshire LEP	25,885	3,698	29,583
Sheffield City Region	37,008	2,757	39,765
Solent	39,786	3,900	43,686
South East	135,703	13,819	149,522
South East Midlands	62,796	7,442	70,238
Stoke-on-Trent and Staffordshire	156,296	4,578	160,874
Swindon and Wiltshire	24,824	2,998	27,822
Tees Valley	14,886	845	15,731
Thames Valley Berkshire	33,292	6,993	40,285
The Marches	28,055	1,716	29,771
West of England	35,923	5,139	41,062
Worcestershire	21,792	1,784	23,576
York and North Yorkshire	35,636	1,962	37,598

Table 5.2: Employment in LEPs by Creative Industries

	Creative Industries		
LEP1	**Non-CI**	**CI**	**Total**
Black Country	184,387	3,791	188,178
Buckinghamshire Thames Valley	118,283	11,608	129,891
Cheshire and Warrington	187,343	10,680	198,023
Coast to Capital	333,130	24,125	357,255
Cornwall and the Isles of Scilly	103,618	3,428	107,046
Coventry and Warwickshire	156,474	8,793	165,267
Cumbria	104,733	2,775	107,508
Derby, Derbyshire, Nottingham and Nottinghamshire,	303,937	13,499	317,436
Dorset	144,532	7,309	151,841
Enterprise M3	301,754	30,042	331,796
Gloucestershire	130,614	7,445	138,059
Greater Birmingham and Solihull	269,181	15,078	284,259
Greater Cambridge & Greater Peterborough	234,879	16,260	251,139
Greater Lincolnshire	164,380	4,278	168,658
Greater Manchester	454,805	25,756	480,561
Heart of the South West	314,627	10,565	325,192
Hertfordshire	185,984	14,449	200,433
Humber	128,670	3,356	132,026
Lancashire	263,292	7,933	271,225
Leeds City Region	470,553	22,585	493,138
Leicester and Leicestershire	190,147	7,647	197,794
Liverpool City Region	211,675	7,038	218,713
London	1,839,068	274,601	2,113,669
New Anglia	283,342	10,947	294,289
North Eastern	271,980	9,662	281,642
Northamptonshire	139,898	5,686	145,584
Oxfordshire LEP	141,577	12,171	153,748
Sheffield City Region	231,940	9,275	241,215
Solent	219,738	10,433	230,171
South East	698,492	33,708	732,200
South East Midlands	329,792	19,594	349,386
Stoke-on-Trent and Staffordshire	131,156	4,248	135,404
Swindon and Wiltshire	129,731	7,186	136,917
Tees Valley	90,521	2,217	92,738
Thames Valley Berkshire	181,907	24,581	206,488
The Marches	137,013	4,490	141,503
West of England	191,923	16,549	208,472
Worcestershire	115,480	5,381	120,861
York and North Yorkshire	160,411	6,010	166,421

Table 5.3: Turnover in LEPs by Creative Industries

LEP	Creative Industries Non-CI	CI	Total
Black Country	21,792,045	444,730	22,236,775
Buckinghamshire Thames Valley	17,396,926	1,313,904	18,710,830
Cheshire and Warrington	26,906,967	905,849	27,812,816
Coast to Capital	43,443,682	2,435,098	45,878,780
Cornwall and the Isles of Scilly	8,852,461	219,535	9,071,996
Coventry and Warwickshire	19,706,608	856,537	20,563,145
Cumbria	9,293,721	177,007	9,470,728
Derby, Derbyshire, Nottingham and Nottinghamshire,	38,474,609	1,130,809	39,605,418
Dorset	13,718,101	661,003	14,379,104
Enterprise M3	50,293,078	3,871,618	54,164,696
Gloucestershire	20,475,278	751,369	21,226,647
Greater Birmingham and Solihull	31,107,728	1,456,315	32,564,043
Greater Cambridge & Greater Peterborough	29,248,871	1,559,715	30,808,586
Greater Lincolnshire	17,865,135	334,936	18,200,071
Greater Manchester	54,236,656	2,760,503	56,997,159
Heart of the South West	29,154,189	866,264	30,020,453
Hertfordshire	36,875,000	1,464,001	38,339,001
Humber	16,917,123	309,194	17,226,317
Lancashire	33,711,366	663,168	34,374,534
Leeds City Region	57,727,490	2,274,622	60,002,112
Leicester and Leicestershire	21,009,530	669,433	21,678,963
Liverpool City Region	25,317,147	527,666	25,844,813
London	618,377,990	45,894,368	664,272,358
New Anglia	31,420,681	909,552	32,330,233
North Eastern	27,520,133	660,815	28,180,948
Northamptonshire	15,668,870	481,462	16,150,332
Oxfordshire LEP	18,665,563	1,472,828	20,138,391
Sheffield City Region	25,395,320	802,796	26,198,116
Solent	26,818,945	867,877	27,686,822
South East	78,608,163	3,435,367	82,043,530
South East Midlands	42,121,628	1,932,527	44,054,155
Stoke-on-Trent and Staffordshire	19,773,703	353,013	20,126,716
Swindon and Wiltshire	17,407,132	750,876	18,158,008
Tees Valley	9,548,617	153,822	9,702,439
Thames Valley Berkshire	32,404,634	3,222,259	35,626,893
The Marches	15,098,030	369,066	15,467,096
West of England	20,581,499	1,534,631	22,116,130
Worcestershire	12,445,018	421,485	12,866,503
York and North Yorkshire	21,548,765	1,124,029	22,672,794

Table 6.1: Fast Growth Firms by LEP 2011-14

LEP	Fast Growth		Total
	No.	**%**	**No.**
Black Country	3,245	17.8	18,236
Buckinghamshire Thames Valley	2,757	16.0	17,238
Cheshire and Warrington	3,753	14.3	26,164
Coast to Capital	7,733	16.9	45,775
Cornwall and the Isles of Scilly	1,921	17.5	10,947
Coventry and Warwickshire	3,063	15.9	19,257
Cumbria	1,696	14.7	11,511
Derby, Derbyshire, Nottingham and Nottinghamshire,	5,342	16.1	33,097
Dorset	2,837	16.1	17,639
Enterprise M3	6,680	16.0	41,838
Gloucestershire	2,517	16.5	15,296
Greater Birmingham and Solihull	5,292	17.7	29,820
Greater Cambridge & Greater Peterborough	4,316	15.9	27,077
Greater Lincolnshire	2,620	15.7	16,697
Greater Manchester	8,830	17.7	49,981
Heart of the South West	5,428	15.9	34,238
Hertfordshire	4,035	16.3	24,748
Humber	2,197	16.3	13,458
Lancashire	4,711	16.4	28,709
Leeds City Region	8,703	17.6	49,486
Leicester and Leicestershire	3,628	17.9	20,235
Liverpool City Region	3,820	18.2	21,011
London	44,608	18.7	239,070
New Anglia	4,843	15.3	31,575
North Eastern	4,696	17.5	26,838
Northamptonshire	2,703	17.1	15,827
Oxfordshire LEP	2,883	16.6	17,325
Sheffield City Region	3,912	16.9	23,153
Solent	4,344	16.4	26,451
South East	14,629	16.9	86,528
South East Midlands	6,592	16.5	39,890
Stoke-on-Trent and Staffordshire	3,075	16.7	18,374
Swindon and Wiltshire	2,495	16.1	15,502
Tees Valley	1,554	17.5	8,904
Thames Valley Berkshire	4,128	17.1	24,199
The Marches	2,417	16.9	14,330
West of England	4,065	17.3	23,553
Worcestershire	2,183	16.0	13,657
York and North Yorkshire	2,989	15.9	18,842

Table 6.2: Net Jobs Growth by LEP

LEP	Employees 2013 No.	Employees 2014 No.	Net job creation No.	Net job creation rate %
Black Country	157,342	167,486	10,144	6.4
Buckinghamshire Thames Valley	102,260	107,220	4,960	4.9
Cheshire and Warrington	156,586	162,408	5,822	3.7
Coast to Capital	270,919	281,939	11,020	4.1
Cornwall and the Isles of Scilly	80,019	83,368	3,349	4.2
Coventry and Warwickshire	129,852	137,055	7,203	5.5
Cumbria	79,598	82,834	3,236	4.1
Derby, Derbyshire, Nottingham and Nottinghamshire,	249,194	260,544	11,350	4.6
Dorset	116,714	120,358	3,644	3.1
Enterprise M3	264,234	270,808	6,574	2.5
Gloucestershire	102,936	105,882	2,946	2.9
Greater Birmingham and Solihull	218,410	229,564	11,154	5.1
Greater Cambridge & Greater Peterborough	187,885	194,488	6,603	3.5
Greater Lincolnshire	120,574	125,470	4,896	4.1
Greater Manchester	385,300	401,157	15,857	4.1
Heart of the South West	240,259	247,134	6,875	2.9
Hertfordshire	158,410	172,362	13,952	8.8
Humber	100,531	104,165	3,634	3.6
Lancashire	213,037	222,053	9,016	4.2
Leeds City Region	391,259	406,712	15,453	3.9
Leicester and Leicestershire	152,466	159,719	7,253	4.8
Liverpool City Region	167,526	171,968	4,442	2.7
London	1,705,761	1,780,817	75,056	4.4
New Anglia	222,351	236,349	13,998	6.3
North Eastern	217,889	226,125	8,236	3.8
Northamptonshire	113,291	116,873	3,582	3.2
Oxfordshire LEP	117,120	121,690	4,570	3.9
Sheffield City Region	189,898	196,527	6,629	3.5
Solent	177,980	185,153	7,173	4.0
South East	546,611	565,205	18,594	3.4
South East Midlands	271,185	281,548	10,363	3.8
Stoke-on-Trent and Staffordshire	126,202	139,498	13,296	10.5
Swindon and Wiltshire	100,598	103,407	2,809	2.8
Tees Valley	69,046	72,180	3,134	4.5
Thames Valley Berkshire	167,131	173,954	6,823	4.1
The Marches	101,318	111,268	9,950	9.8
West of England	165,585	171,447	5,862	3.5
Worcestershire	92,050	95,222	3,172	3.4
York and North Yorkshire	123,294	129,724	6,430	5.2

Table 6.3: Three-Year Survivor Rate by LEP (2011-14)

LEP	Start-ups	Start-ups surviving 3 years		3-year survivors reaching £1million turnover	
	No.	No.	%	No.	%
Black Country	2,167	1,188	55	68	5.7
Buckinghamshire Thames Valley	2,101	1,293	62	74	5.7
Cheshire and Warrington	2,718	1,616	59	102	6.3
Coast to Capital	5,986	3,504	59	172	4.9
Cornwall and the Isles of Scilly	1,043	659	63	37	5.6
Coventry and Warwickshire	2,375	1,398	59	89	6.4
Cumbria	984	575	58	14	2.4
Derby, Derbyshire, Nottingham and Nottinghamshire,	3,738	2,147	57	122	5.7
Dorset	1,988	1,137	57	66	5.8
Enterprise M3	5,533	3,321	60	175	5.3
Gloucestershire	1,688	1,041	62	52	5.0
Greater Birmingham and Solihull	3,933	2,146	55	146	6.8
Greater Cambridge & Greater Peterborough	3,028	1,782	59	120	6.7
Greater Lincolnshire	1,730	982	57	65	6.6
Greater Manchester	6,804	3,716	55	258	6.9
Heart of the South West	3,275	1,929	59	104	5.4
Hertfordshire	3,265	1,890	58	105	5.6
Humber	1,402	774	55	53	6.8
Lancashire	3,264	1,768	54	117	6.6
Leeds City Region	6,495	3,661	56	247	6.7
Leicester and Leicestershire	2,404	1,394	58	73	5.2
Liverpool City Region	2,779	1,452	52	93	6.4
London	41,590	22,840	55	1,836	8.0
New Anglia	3,145	1,908	61	107	5.6
North Eastern	3,201	1,801	56	130	7.2
Northamptonshire	2,019	1,139	56	70	6.1
Oxfordshire LEP	1,991	1,219	61	64	5.3
Sheffield City Region	2,760	1,564	57	109	7.0
Solent	3,072	1,772	58	91	5.1
South East	10,815	6,336	59	371	5.9
South East Midlands	5,062	2,959	58	169	5.7
Stoke-on-Trent and Staffordshire	2,014	1,152	57	64	5.6
Swindon and Wiltshire	1,843	1,144	62	54	4.7
Tees Valley	1,120	608	54	33	5.4
Thames Valley Berkshire	3,452	2,097	61	122	5.8
The Marches	1,470	854	58	40	4.7
West of England	3,039	1,858	61	91	4.9
Worcestershire	1,542	919	60	48	5.2
York and North Yorkshire	1,934	1,148	59	56	4.9

Table 7.1: Product Innovation by LEP

LEP	Total No.	Innovating %
Black Country	203	20
Buckinghamshire Thames Valley	112	16
Cheshire and Warrington	170	20
Coast to Capital	303	19
Cornwall and the Isles of Scilly	100	19
Coventry and Warwickshire	154	18
Cumbria	100	14
Derby, Derbyshire, Nottingham and Nottinghamshire,	307	19
Dorset	134	22
Enterprise M3	293	24
Gloucestershire	123	25
Greater Birmingham and Solihull	240	18
Greater Cambridge & Greater Peterborough	225	23
Greater Lincolnshire	151	17
Greater Manchester	457	18
Heart of the South West	294	19
Hertfordshire	206	15
Humber	131	12
Lancashire	258	24
Leeds City Region	479	18
Leicester and Leicestershire	185	21
Liverpool City Region	201	20
London	1724	17
New Anglia	278	14
North Eastern	271	19
Northamptonshire	133	23
Oxfordshire LEP	146	27
Sheffield City Region	236	18
Solent	203	17
South East	626	18
South East Midlands	310	25
Stoke-on-Trent and Staffordshire	163	17
Swindon and Wiltshire	116	23
Tees Valley	86	24
Thames Valley Berkshire	183	20
The Marches	119	14
West of England	197	17
Worcestershire	110	15
York and North Yorkshire	153	12

Table 7.2: New to Market Innovation by LEP (for those who do product innovation)

LEP	Total No.	Innovating %
Black Country	41	37
Buckinghamshire Thames Valley	18	*
Cheshire and Warrington	34	44
Coast to Capital	58	57
Cornwall and the Isles of Scilly	19	*
Coventry and Warwickshire	28	46
Cumbria	14	*
Derby, Derbyshire, Nottingham and Nottinghamshire,	58	36
Dorset	29	62
Enterprise M3	69	61
Gloucestershire	31	48
Greater Birmingham and Solihull	42	60
Greater Cambridge & Greater Peterborough	53	51
Greater Lincolnshire	26	*
Greater Manchester	83	48
Heart of the South West	57	47
Hertfordshire	31	55
Humber	16	*
Lancashire	61	34
Leeds City Region	87	40
Leicester and Leicestershire	39	31
Liverpool City Region	40	40
London	292	47
New Anglia	38	26
North Eastern	51	53
Northamptonshire	31	48
Oxfordshire LEP	40	55
Sheffield City Region	43	37
Solent	34	50
South East	114	46
South East Midlands	79	54
Stoke-on-Trent and Staffordshire	28	50
Swindon and Wiltshire	27	52
Tees Valley	21	48
Thames Valley Berkshire	36	50
The Marches	17	*
West of England	33	33
Worcestershire	16	*
York and North Yorkshire	18	*

Table 7.3: Process Innovation by LEP

LEP	Total	Innovating
	No.	%
Black Country	203	12
Buckinghamshire Thames Valley	112	*
Cheshire and Warrington	170	13
Coast to Capital	303	13
Cornwall and the Isles of Scilly	100	14
Coventry and Warwickshire	154	11
Cumbria	100	*
Derby, Derbyshire, Nottingham and Nottinghamshire,	307	8
Dorset	134	16
Enterprise M3	293	10
Gloucestershire	123	13
Greater Birmingham and Solihull	240	10
Greater Cambridge & Greater Peterborough	225	15
Greater Lincolnshire	151	7
Greater Manchester	457	12
Heart of the South West	294	9
Hertfordshire	206	10
Humber	131	*
Lancashire	258	13
Leeds City Region	479	11
Leicester and Leicestershire	185	14
Liverpool City Region	201	12
London	1724	11
New Anglia	278	11
North Eastern	271	10
Northamptonshire	133	15
Oxfordshire LEP	146	19
Sheffield City Region	236	13
Solent	203	9
South East	626	9
South East Midlands	310	14
Stoke-on-Trent and Staffordshire	163	11
Swindon and Wiltshire	116	15
Tees Valley	86	15
Thames Valley Berkshire	183	10
The Marches	119	*
West of England	197	14
Worcestershire	110	11
York and North Yorkshire	153	8

Table 7.4: Strategic & Marketing Innovation by LEP

LEP	Total No.	Innovating %
Black Country	203	23
Buckinghamshire Thames Valley	112	21
Cheshire and Warrington	170	28
Coast to Capital	303	31
Cornwall and the Isles of Scilly	100	30
Coventry and Warwickshire	154	28
Cumbria	100	19
Derby, Derbyshire, Nottingham and Nottinghamshire,	307	30
Dorset	134	30
Enterprise M3	293	29
Gloucestershire	123	31
Greater Birmingham and Solihull	240	26
Greater Cambridge & Greater Peterborough	225	32
Greater Lincolnshire	151	27
Greater Manchester	457	22
Heart of the South West	294	29
Hertfordshire	206	29
Humber	131	28
Lancashire	258	26
Leeds City Region	479	24
Leicester and Leicestershire	185	26
Liverpool City Region	201	30
London	1724	27
New Anglia	278	21
North Eastern	271	26
Northamptonshire	133	22
Oxfordshire LEP	146	31
Sheffield City Region	236	26
Solent	203	21
South East	626	27
South East Midlands	310	31
Stoke-on-Trent and Staffordshire	163	27
Swindon and Wiltshire	116	29
Tees Valley	86	29
Thames Valley Berkshire	183	22
The Marches	119	23
West of England	197	28
Worcestershire	110	30
York and North Yorkshire	153	23

Table 7.5: R&D Activity by LEP

LEP	Total	R&D Active
	No.	%
Black Country	203	20
Buckinghamshire Thames Valley	112	14
Cheshire and Warrington	170	18
Coast to Capital	303	17
Cornwall and the Isles of Scilly	100	13
Coventry and Warwickshire	154	19
Cumbria	100	12
Derby, Derbyshire, Nottingham and Nottinghamshire,	307	17
Dorset	134	18
Enterprise M3	293	19
Gloucestershire	123	19
Greater Birmingham and Solihull	240	14
Greater Cambridge & Greater Peterborough	225	26
Greater Lincolnshire	151	7
Greater Manchester	457	15
Heart of the South West	294	18
Hertfordshire	206	16
Humber	131	12
Lancashire	258	18
Leeds City Region	479	17
Leicester and Leicestershire	185	21
Liverpool City Region	201	19
London	1724	16
New Anglia	278	11
North Eastern	271	16
Northamptonshire	133	21
Oxfordshire LEP	146	28
Sheffield City Region	236	17
Solent	203	15
South East	626	15
South East Midlands	310	19
Stoke-on-Trent and Staffordshire	163	12
Swindon and Wiltshire	116	20
Tees Valley	86	17
Thames Valley Berkshire	183	17
The Marches	119	13
West of England	197	9
Worcestershire	110	14
York and North Yorkshire	153	13

Table 7.6: Intramural R&D Activity by LEP

LEP	Total	R&D Active
	No.	%
Black Country	203	17
Buckinghamshire Thames Valley	112	14
Cheshire and Warrington	170	18
Coast to Capital	303	17
Cornwall and the Isles of Scilly	100	13
Coventry and Warwickshire	154	17
Cumbria	100	12
Derby, Derbyshire, Nottingham and Nottinghamshire,	307	16
Dorset	134	18
Enterprise M3	293	18
Gloucestershire	123	19
Greater Birmingham and Solihull	240	14
Greater Cambridge & Greater Peterborough	225	25
Greater Lincolnshire	151	*
Greater Manchester	457	15
Heart of the South West	294	17
Hertfordshire	206	15
Humber	131	12
Lancashire	258	18
Leeds City Region	479	16
Leicester and Leicestershire	185	21
Liverpool City Region	201	17
London	1724	16
New Anglia	278	10
North Eastern	271	15
Northamptonshire	133	17
Oxfordshire LEP	146	28
Sheffield City Region	236	16
Solent	203	15
South East	626	14
South East Midlands	310	16
Stoke-on-Trent and Staffordshire	163	12
Swindon and Wiltshire	116	20
Tees Valley	86	17
Thames Valley Berkshire	183	17
The Marches	119	13
West of England	197	8
Worcestershire	110	14
York and North Yorkshire	153	12

Table 7.7: Innovation Collaboration by LEP

LEP	Total	Collaborating
	No.	%
Black Country	203	24
Buckinghamshire Thames Valley	112	17
Cheshire and Warrington	170	19
Coast to Capital	303	21
Cornwall and the Isles of Scilly	100	23
Coventry and Warwickshire	154	21
Cumbria	100	14
Derby, Derbyshire, Nottingham and Nottinghamshire,	307	19
Dorset	134	19
Enterprise M3	293	24
Gloucestershire	123	26
Greater Birmingham and Solihull	240	18
Greater Cambridge & Greater Peterborough	225	27
Greater Lincolnshire	151	14
Greater Manchester	457	21
Heart of the South West	294	17
Hertfordshire	206	18
Humber	131	19
Lancashire	258	20
Leeds City Region	479	20
Leicester and Leicestershire	185	17
Liverpool City Region	201	20
London	1724	19
New Anglia	278	15
North Eastern	271	19
Northamptonshire	133	18
Oxfordshire LEP	146	31
Sheffield City Region	236	18
Solent	203	20
South East	626	18
South East Midlands	310	24
Stoke-on-Trent and Staffordshire	163	15
Swindon and Wiltshire	116	14
Tees Valley	86	19
Thames Valley Berkshire	183	21
The Marches	119	20
West of England	197	18
Worcestershire	110	21
York and North Yorkshire	153	15

Table 7.8: New Business Practices for Organising Procedures and External relationships by LEP

LEP	Total	New Practices
	No.	%
Black Country	203	30
Buckinghamshire Thames Valley	112	20
Cheshire and Warrington	170	23
Coast to Capital	303	26
Cornwall and the Isles of Scilly	100	29
Coventry and Warwickshire	154	26
Cumbria	100	18
Derby, Derbyshire, Nottingham and Nottinghamshire,	307	24
Dorset	134	26
Enterprise M3	293	26
Gloucestershire	123	24
Greater Birmingham and Solihull	240	23
Greater Cambridge & Greater Peterborough	225	25
Greater Lincolnshire	151	26
Greater Manchester	457	22
Heart of the South West	294	26
Hertfordshire	206	29
Humber	131	29
Lancashire	258	25
Leeds City Region	479	23
Leicester and Leicestershire	185	33
Liverpool City Region	201	28
London	1724	22
New Anglia	278	22
North Eastern	271	25
Northamptonshire	133	27
Oxfordshire LEP	146	23
Sheffield City Region	236	26
Solent	203	22
South East	626	28
South East Midlands	310	26
Stoke-on-Trent and Staffordshire	163	22
Swindon and Wiltshire	116	33
Tees Valley	86	38
Thames Valley Berkshire	183	24
The Marches	119	23
West of England	197	26
Worcestershire	110	24
York and North Yorkshire	153	26