A Toolkit for Assessing Local Skills Demand and Supply

A report prepared by *emda*

Chris Lawton – Research Manager, Demography and Skills

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A Toolkit for Assessing Local Skills Demand and Supply

This toolkit has been designed to help local partners interpret Labour Market Statistics to identify local skills priorities.   Local Enterprise Partnerships (LEPs) will be working to identify economic objectives for their functional areas. In doing this, it will be important to understand current and future skills requirements.   In the Government's Skills Strategy, '*Skills for Sustainable Growth*',[1] it is suggested that Further Education (FE) and Higher Education (HE) providers could also work together locally to understand the relationship between skills demand and supply, in order to engage with LEPs to identify any necessary shifts in provision. The Skills Strategy also tasks the Skills Funding Agency (SFA) to provide LEPs with data on the capacity of the skills system to inform this dialogue.

Context
In September 2010, the East Midlands Development Agency (*emda*) submitted the '*The East Midlands Skills Priorities Statement*' (EMPSPS) to the Department for Business, Innovation and Skills (BIS). This presented skills priorities for the academic year 2011-2012 and outlined the shifts in investment required to meet employer demand. All nine Regional Development Agencies were required to submit these documents, in order to inform the Government's National Skills Strategy.

emda consulted widely on the priority statement with local partners. During this process, partners expressed interest in receiving guidance that would enable them to replicate the approach locally.   In direct response to this request, and having carried out the groundwork for this exercise, *emda*, wishes to share this work as it may be of benefit to Local Authorities, providers and other organizations.

Audience and Objectives
There are four potential audiences or applications for this guidance:

- To help providers and LEPs identify skills policy priorities that respond to "the real demand demonstrated by employers and individuals"[2] and identify local market opportunities;
- To support providers to successfully exercise their new freedoms and flexibilities to meet the current and future needs of the local economy;
- To assist the development of evidence needed by local partners to engage with Jobcentre Plus, in order to ensure that support for the unemployed delivered through the Work Programme reflects local skills priorities; and
- To supply Information, Advice and Guidance (IAG) services with high quality local Labour Market Intelligence in an accessible format, to better align individual aspirations with local opportunities.

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[1] Department for Business, Innovation & Skills, '*Skills for Sustainable Growth*', Strategy Document – Full Report, November 2010.
[2] HM Government, '*Local growth: realising every place's potential*', 28 October, 2010.

Figure 1 presents a four section logic model, based on that developed by *emda* for the EMSPS. Each section includes a number of steps to analyse the demand and supply for skills, concluding with identification of priorities and market opportunities.[3] Guidance on recommended datasources is provided in Annex 1.

The level of detail in this toolkit is aimed at individuals who have a working familiarity with official statistics and economic development concepts. In particular, familiarity with interfaces such as the National Online Manpower Information System (NOMIS – www.nomisweb.com) is assumed. If partners have any queries, they are encouraged to contact *emda* (see page 14 for details).

Figure 1: Local Skills Priorities Logic Model
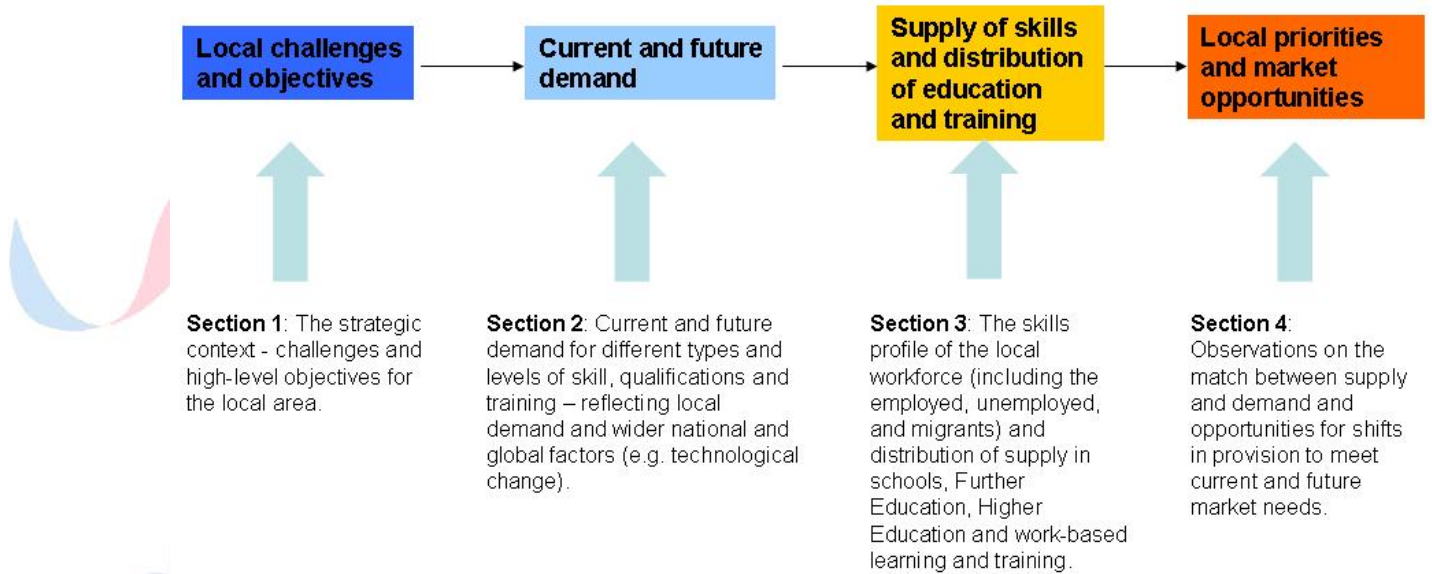
Guidance for populating each stage of the logic model shown in Figure 1 is as follows:

Section 1: Local challenges and objectives

It is recommended to first consider high level economic objectives for a local area as a starting point in establishing skills priorities. These objectives should address key employment and skills challenges or build on comparative economic advantages.

Step 1: Summary of local objectives and a consideration of national policy

The following documents could be referred to, in order to understand the parameters for intervention and any future opportunities:

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[3] This model was developed by *emda,* adapted from established best practice in skills analysis and policy development. Sources include: HM Treasury, '*Green Book: Appraisal and Evaluation in Central Government'*, August 2010. In particular, note the 'ROEMEF' cycle (Rationale, Objectives, Evaluation, Monitoring, Evaluation and Feedback) which recommends a staged approach to developing policy: firstly by establishing objectives and evidence; then appraising options for intervention; choosing the preferred intervention; and measuring and evaluating that intervention in order to provide learning for future policy development.

1. Emerging UK national employment, skills and education policy (see below for link);
2. Economic local development priorities, such as priority sectors in local Economic Strategies, Sustainable Communities Strategies, or LEP bids/MAA strategies; and
3. Agreed priorities in generic skills and job-specific/workforce development skills from Local Authorities' 14-19 Partnership Plans and Employment & Skills Boards.

Step 2: The local economic and labour market context and high level challenges

Many of these issues will be described in detail in documents already produced by local partners (such as Local Economic Assessments), so there should be little need to produce any new analysis in this section:

- A review of trends in economic activity, employment and unemployment rates – using the Annual Population Survey quarterly estimates (from NOMIS). This will provide an idea of the volume of resident labour supply and health of the labour market (including the labour market impacts of recession and extent of recovery);
- A review of the changing industrial structure of the local area, using the Annual Business Inquiry (from NOMIS);
- A snapshot of priority sectors based on comparative advantage, industrial clustering and any sectoral specialisms identified by supply chain analysis;
- An understanding of local performance across the five 'drivers of productivity' (skills, enterprise, innovation, competition and investment), particularly enterprise, measured by business birth rates (also from NOMIS);
- Reference to forecast data on likely prospects for the area by sector (sources available to Local Authorities in the East Midlands include the *emda*/Experian 'Scenario Impact Model'); and
- Challenges identified in the UK Commission for Employment and Skills (UKCES) National Skills Audit (link below) that are relevant to the local area, such as migration/population ageing, new regulation and technological change.

Recommended literature:
- **National policy/strategy:** Department for Business, Innovation and Skills (BIS), '*Skills for Sustainable Growth'* – Strategy Document, Full Report, November 2010: http://www.bis.gov.uk/assets/biscore/further-education-skills/docs/s/10-1273-skills-for-sustainable-growth-strategy-summary
- **Guidance on theory/concepts**: Lynn Gambin, Warwick Institute for Employment Research, on behalf of *emda*, '*Exploring the Links Between Skills and Productivity'*, March 2009: http://www.emda.org.uk/research/documents/research-studies/projects/skills-and-productivity.pdf
- **Analysis of national challenges and priorities**: UK Commission for Employment and Skills, '*Skills for Jobs: Today and Tomorrow: The National Strategic Skills Audit for England 2010*', March 2010: http://www.ukces.org.uk/reports/skills-for-jobs-today-and-tomorrow-the-national-strategic-skills-audit-for-england-2010-volume-1-key-findings

Section 2: Current and future demand

To identify skills priorities, local partners need to be able to identify the skills that contribute most in the workplace, resulting in increased employability, higher wages and, ultimately, improved productivity. These should be the skills that most closely match the current and future needs of employers and the local economy.

The demand for skills is based on the aims and interests of the individual learner, the requirements of the economy, and the product market strategies of employers. The relationships between these drivers are complex, so some consideration of the literature on skills demand is recommended (the IER study for *emda* in 2009 is a good introduction, link provided in Section 1).   A good picture of the factors that drive demand for skills can be developed through the following steps:

- **Step 1**: develop a detailed understanding of the local structure of **employment by sector** and the kind of skills needed by employers in key sectors;
- **Step 2**: profile the structure of **employment by occupation**, which indicates the kind of jobs that are most needed in an area and the levels of skill required;
- **Step 3**: use the National Employer Skills Survey to investigate any **recruitment issues, skills gaps and training activity** reported by employers;
- **Step 4**: identify those skills and occupations which are comparatively rewarded through higher **earnings**, indicating relative employer demand; and
- **Step 5**: understand possible **future skills needs, growth sectors** and the extent of **replacement demand**.

These steps are described in more detail as follows.

Step 1: Employment by sector

Employer demand for skills is a 'derived demand', based on the skills employers require to produce goods and services. Skills demand thus results from employers' product market strategies.   Therefore the sectoral structure of employment can provide a good initial indication of the sort of skills likely to be required by employers, which can be analysed as follows:

- Map the local area's employment structure, using the Annual Business Inquiry (ABI, from NOMIS) to identify sectors that are over or under-represented compared to the average % of employment regionally or nationally; and
- Refer to intelligence from Employment & Skills Boards and relevant Sector Skills Councils (SSC) to get a picture of likely high-level skill needs associated with these sectors.

For example: *analysis of the ABI for the East Midlands region demonstrated an above average employment in manufacturing, especially automotive, rail and aerospace engineering ('Transport Equipment'). Research published by the SEMTA SSC and intelligence from regional employers suggests that these sectors have particular demands for technician-level skills at Level 3 and above.*

Step 2: Employment by occupation

Another indicator of skills demand is the **occupational structure of employment.** 'Occupations' describe the jobs people do, and are represented in UK statistics by the Standard Occupational Classifications (SOCs). SOCs categorise jobs according to **level of skill** required and **skill specialisation.** This classification is **hierarchical**, from high to low skill content, e.g.:

- SOCs 1 and 2 jobs (Managers and Professionals) require the equivalent of a Level 4 qualification (degree etc); whilst
- SOCs 8 and 9 jobs (Process, plant and machine operatives and Elementary occupations) require the equivalent of Level 1 qualifications (the competence associated with compulsory, general education).

SOCs are therefore very useful for indicating how employers are deploying staff in the workforce. **Employer demand for skills can be indicated by the relative proportion of people in occupations requiring different levels of skill**. A local area, or sector, with a lower proportion of employment in occupations requiring higher levels of skill could reasonably be said to have a relatively low demand for skills. Occupations can be analysed as follows:

- Download the latest annual (January-December) Annual Population Survey data from NOMIS for your local area, and for the UK/East Midlands for comparison. It is important to **download the calendar year**, rather than the quarterly dataset in this case, as the sample size is usually larger.
- Compare proportions of employment by SOC major group (1 digit classifications) to national/regional averages to get an overall idea of the distribution of skills demand. If the sample size allows, more detail is available from NOMIS in the form of sub-major groups (2 digit classifications). However, small Local Authorities (such as Rutland) may have to aggregate SOC groups, such as: 1,2 and 3 (managers, professionals and associate professionals) grouped as 'upper tier occupations'; 4,5 and 6 (admin, skilled trades and personal services) grouped as 'intermediate occupations', and; 7 and 8 (process, plant and machine operatives and elementary occupations) grouped as 'lower tier occupations'.
- For analysis of skills within occupational groups, for larger Local Authorities it will be possible to request special outputs from the ONS of highest qualification level ('Levqual') by SOC major group. For smaller Local Authorities, the sample size is likely to be insufficient. To request a bespoke tabulation from the Annual Population Survey (note that is likely to be a small fee, c. £100), contact: LFS.dataservice@ons.gsi.gov.uk
- In all commentary, bear in mind that occupations refer to **residents** of a given area, as the Annual Population Survey is a household survey of individuals, not of employers. Workplace-based estimates of SOC groups are available, but only in the form of total numbers, and not as proportions – as it is not possible to produce a workplace-based denominator. This is an important distinction for highly urban or highly rural areas, as the skills profile of employees commuting to/from a local area may be quite different compared to the profile of residents.

As an example of findings in the East Midlands region: *employment in upper tier occupations is significantly lower than the national average, whilst employment in lower tier occupations (requiring limited skill levels) is higher than average. This could provide evidence of a low employer demand for skills in the region.*

Step 3: Recruitment issues, skills gaps and training activity

A further source of information on employer skills demand is based directly on employers' experiences of recruitment, skill gaps and training activity. The National Employer Skills Survey (NESS) is now available for 2009, and results are published for Local Authorities (County and Unitary) for the first time. The 2009 survey incorporates responses from just over 79,000 employers in England (7,300 in East Midlands). Employers drawn from a representative sample, based on the Annual Business Inquiry, were contacted between May and July 2009. The individual interviewed at each workplace was usually a HR manager, or an equivalent member of staff most able to answer detailed questions on recruitment and training. The survey is now managed by the UKCES, having previously been undertaken on behalf of the Learning and Skills Council.   The NESS 2009 is the latest in the series, which includes the NESS 2003, 2004, 2005 and 2007.

Key outputs include:

- **'Hard-to-Fill vacancies'**.   These are currently unfilled vacancies that have proved 'hard-to-fill' in the employer's opinion. They can be 'hard-to-fill' for a range of reasons, including issues related to the vacancy itself (poor terms and conditions, low pay etc) and issues related to the quality of candidates (lack of skills, experience, etc.).   Hard-to-fill vacancies are published in a number of ways: as a percentage of all vacancies; as a percentage of all employers with at least one hard-to-fill vacancy; grossed up to represent the total number of vacancies likely to be in the local economy (rather than just the number reported in the survey sample); and as a percentage of employment. This indicator reflects the extent or volume of total recruitment difficulties in the labour market.
- '**Skills-Shortage Vacancies'**.   These are a sub-set of hard-to-fill vacancies, specifically those that remain unfilled because of a lack of applicants with the required skills, qualifications and experience.   As in the case of hard-to-fill vacancies, they are published as a proportion of vacancies, as a proportion of employers reporting at least one, and as a grossed-up total. This indicator reflects the extent to which skills shortages in the external labour market affects employers' ability to meet their skills demands, and can be used to discuss 'mismatch' between employer demand and the supply of skilled workers in a local area.
- **'Skills Gaps'**. A further element of the NESS looks at the skills of employers' current staff.   Interviewees are asked: if they have staff who are 'not fully proficient' in their current jobs; to identify the occupations held by a number of these individuals; and to provide details on why they are 'not fully proficient'. Employers who have staff who are 'not fully proficient' are referred to as having 'skills gaps', which reflect the extent to which an employer's own workforce may not be meeting their skill requirements. Skills gaps need to be interpreted with care, as a large proportion tend to be attributed to high staff turnover (thus sectors with generally low skill requirements often report high numbers of skills gaps).   Skills gaps are reported in terms of the percentage of employers with at least one skills gap; a grossed up estimate of the total number of skills gaps (i.e. the number of employees in an area or sector who are 'not fully proficient'); and skills gaps as a percentage of total employment. Skills gaps can be used to identify specific sector skills issues, such as a lack of management skills, customer services etc.

- **Employer training activity and investment**. The final section of the NESS includes a more detailed follow-up questionnaire on training expenditure. This provides insight on the positioning of training within employers' wider business planning, whether employers formally assess training needs, the proportion of the workforce receiving training, training by occupation, training expenditure, types of training and training providers, and satisfaction with training funded or arranged by an employer. As many of these questions only relate to a subset of employers who say that they provide some training in the first place, sample sizes can be quite small. Discussion with Skills Funding Agency (SFA), Young Persons' Learning Agency (YPLA) or UKCES colleagues is recommended to identify how much information can be presented for a given local area.

Headline data from the NESS is available in the published main report, but only at a regional level. More detailed local data can be downloaded from a 'datasite' provided by the UKCES (this requires registration, but is free of charge).

Link to the NESS 2009 reports and datasite:
https://ness.ukces.org.uk/NESS09/default.aspx

However, an East Midlands report has been commissioned by the SFA/YPLA regional offices, which includes detailed tables for County and Unitary Authorities. This will be made available on the *emda* website in late autumn 2010.

An example of findings from the NESS in the East Midlands is as follows*: Skills shortage vacancies were well below average in the East Midlands in 2009, and had fallen compared to 2007. This may be driven by limited overall recruitment activity due to the recession. However, internal skills gaps have increased, and are close to the national average in the East Midlands (and particularly high in Nottingham City). However, the level of investment in training has remained very stable between 2007 and 2009.*

There are two interpretations for these observations:

1) Without being able to recruit, employers have become more 'skills aware' of issues amongst their current staff (thus the sustained investment in training); or
2) Due to limited recruitment and/or job losses, remaining staff may have become overworked, and thus 'less proficient' in their current jobs.

Step 4: Earnings

Earnings are an important proxy measure for the demand for skills, based on two assumptions from labour market theory:[4]

- Highly skilled workers are likely to be more productive, and more productive workers are **rewarded** through higher wages; and
- Employers who value/require skills will pay a relative premium to attract skilled staff, thus their **demand is indicated** through higher wages.

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[4] See various publications by Anna Vignoles and Andy Dickerson, including: '*Research Report 21: The distribution and returns to qualifications in the Sector Skills Councils'*, on behalf of the SSDA, 2007, http://www.ukces.org.uk/the-distribution-and-returns-to-qualifications-in-the-sector-skills-councils-research-report-21

The second of these two assumptions is particularly important for identifying local skills priorities, as it is possible to compare earnings in different local areas and across occupations, in order to see whether jobs at certain skill levels are relatively under or over-valued. This enables broader statements to be made on whether there is a high or low demand for skills compared to elsewhere. This can be done as follows:

- Download data from the **Annual Survey of Hours and Earnings (ASHE)** (an annual ONS release derived from a 1% sample of PAYE returns) for the local area in question along with national, regional or local comparators of your choice. Data is available by Local Authority District (LAD) as well as County or Unitary Authority from: http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15313
- **Residence** and **Workplace**-based (earnings on the basis of where people live/where they work) are available at LAD level, enabling broad statements to be made about the demand for skilled/higher paid workers. For example, if workplace based earnings in a local area significantly exceed residence based earnings, the labour market is likely to be drawing in better paid/skilled staff from elsewhere.
- **Earnings by Occupation** (1 and 2 digit SOC) for Government Office Regions can be downloaded. This is extremely important, as it reflects comparative pay for jobs at various skill levels, indicating the extent to which employers express their 'demand' for different skill levels through pay. This data is not published at a Local Authority level for sample size reasons, but aggregated data (such as by upper tier/intermediate/lower tier occupations) for Local Authorities can be requested from the ONS by contacting: Earnings@ons.gsi.gov.uk
- **Earnings by Industry** are also available at a regional level (and can thus be requested directly from the ONS for aggregated industries at a Local Authority level). This enables comparison of the earnings paid across different industries in a local area against national or regional averages, as a proxy of the level of skill/productivity of a given sector in a local area (on the assumption that highly skilled/more productive workers are paid higher wages).

As an example of the observations that can be made, in the East Midlands region: *median earnings for the East Midlands overall are considerably below the national average. However, analysis by occupation suggests that high skill occupations (such as Professionals) have disproportionately lower earnings compared to the national average, whilst the difference for low skill occupations (such as elementary occupations), is far less. This suggests that employers have a lower demand for skills in the region, as they appear to reward skilled staff significantly less than elsewhere.*

Step 5: Future Skills Needs - Growth Sectors and Replacement Demand

It is also recommended that future skills demands are considered, in order for local partners to discuss the extent to which current and projected skills supply could meet the requirements of the future.

Insight on future skills requirements can be gained from three sources:

- **Employer views** – business surveys carried out by Chambers of Commerce and Local Authorities may point to employer expectations for employment and skills in the short term (often expressed in terms of the next 3 months). This may provide a broad indication of the skills employers expect to become important in the future;
- **Industry-specific foresight documents** – future looking publications by industry groups, such as Sector Skills Councils, that provide indications of skill needs specific to given sectors; and

- **Forecasts or projections of sectoral and occupation change** - These provide indications of likely skill demands by presenting a picture of change in employment by sector and occupation, based on historic trends (projections) and sometimes adjusted by assumptions of future developments – such as public sector spending cuts (forecasts). *emda* has made the *emda*/Experian 'Scenario Impact Model' available to Local Authorities. This provides forecasts of sectoral and occupational employment and output at a Local Authority District level. By looking at the sectors/occupations that will be expanding or contracting in the future, judgments can be made on the kind of skills likely to be required, and the extent to which the current workforce – and current education and training activity – will meet these requirements.

For example: *In the East Midlands, high skill occupations are forecast to experience the greatest increase, meaning that demand for skills from employers will increase over time – in line with technological change and the changing structure of employment by industry. However, replacement demand (jobs required to replace people who retire etc) means that there will be a continuing significant positive requirement for low skilled jobs.*

Section 3: Supply of skills and distribution of education and training

After considering the factors that indicate the demand for skills, this section provides guidance for analysing the skills profile of **residents** in a local area (both employed and unemployed) along with the distribution of provision in schools, Further Education (FE) providers, Higher Education (HE) institutions and work-based learning.

The profile of skills supply can be broadly split into four areas:

- **Step 1**: the skills/qualifications of the employed workforce (including migrants);
- **Step 2**: the skills of the unemployed;
- **Step 3**: the skills of those studying in compulsory education; and
- **Step 4**: the skills of those in non-compulsory education.

Step 1: **The skills of the employed**

It is important to recognise that those currently engaged in education and training only represent a small proportion of the skills available in the regional workforce. The largest group is represented by those who are already in employment. The skills of this group can be profiled using the Labour Force Survey (LFS), which provides detailed tables on the level of highest qualification held, and information on vocational qualifications awarded.

There are two important caveats to note. Firstly, the LFS is a residence-based source, which only reflects where individuals live, not where they work. Secondly, qualifications are an imperfect measure of skill, but provide the most widely available proxy.

To use the LFS to profile the skills of the current resident workforce in a local area:

- Download the Annual Population Survey **calendar year** data from NOMIS (only the January-December dataset contains qualifications data) for the 'economically active working age population' for the local area in question and regional and national comparators;

- Compare the proportion of economically active residents in the local area at each qualification level (NQF/NVQ Levels 4+, 3, 2, and below Level 2/no qualifications) to the regional and national averages. This can demonstrate if there is a lower or higher proportion of residents at given skill levels, and can be compared to the demands of the economy suggested in Section 2, especially the occupational profile of employment (Section 2, Step 2); and
- As in Section 2, more detailed tables can be requested from the ONS, including highest qualification by occupation. Sample size may be an issue for many Local Authorities, but the ONS dataservice will be able to provide advice on: LFS.dataservice@ons.gsi.gov.uk

For example, in the East Midlands: *the region has a lower overall proportion of residents with higher level qualifications (at Level 4 and above) and a higher proportion of residents without a Level 2 qualification (the equivalent of 5 GCSE passes at grades A*-C). Looking at qualifications by occupation, higher skill occupations (such as Managers and Professionals) tend to be relatively under-qualified in the East Midlands compared to the national average, whilst low skill occupations (such as elementary occupations) tend to be relatively over-qualified. This indicates a low demand for skills in the region and a relative under-utilisation of skilled staff.*

In some areas, such as Lincolnshire or Leicester City, it may be important to also consider the skills and employment profiles of international migrants, as this population is often under-represented in surveys like the LFS, and may provide an important source of skill/labour for some sectors (e.g. agriculture, healthcare, IT). To investigate the skills profile of migrants in a local area:

- Access an initial estimate of the volume of the migrant population from the APS/LFS tables on country of birth (i.e. UK-born/non-UK born) by Upper Tier Local Authority, available from NOMIS.
- Management information from the Home Office and the Department of Work and Pensions enables more detailed analysis of the sectors and occupations in which migrants are employed.
- The Worker Registration Scheme provides publicly available tables for occupational and sectoral distribution of migrant workers from EU Accession countries by local area. This information is a good proxy to identify sections of the labour market where migrant workers tend to concentrate. However, the data has a number of important weaknesses to be aware of. It is only a partial record, does not enable de-registrations (so is a measure of flow, rather than stock) and explicitly only relates to A8 migrants. WRS data are not publicly available, but access to Local Authority data is open to LA officers and other Government staff through registration to the following site: http://www.lga.gov.uk/lga/core/page.do?pageId=1095225
- Registration for a National Insurance Number (NINo) is required for every migrant in employment in the UK, regardless of their county of origin. NINo registration data is available from the DWP by local area and sector but, like the WRS, it should be used with care. It does not include de-registrations (so again may include migrants who have since left the country) and only relates to the local area where the migrant's first employer was based, so will not capture migrants who have subsequently moved elsewhere to work for another employer. NINo data can be downloaded from: http://research.dwp.gov.uk/asd//asd1/niall/index.php?page=nino_allocation

For example: *In 2008, 202,700 non-UK-born working age employees worked in the East Midlands. This is 9.8% of regional employment. In Leicester the number of non-UK born working age employees exceeded 42,000 in 2008 (35.2% of Leicester's total employment). The proportion of non-UK born employees was the lowest in Derbyshire at 3.9% in 2008. In the East Midlands most Local Authorities experienced a decrease in the number of new NINO registrations in 2008/09 compared to the previous year - in line with national and regional trends. In 2008/09 the number of new adult NINO registrations decreased the most in Ashfield and Erewash districts, by 42.1% and 35.7% respectively. In contrast, the only local authority where the number of registrations increased was North East Derbyshire (by 18.2%).*

Step 2: The skills of the unemployed:

It is also important to understand the skills of those who are currently unemployed. This will provide a snapshot of potentially unused skills available to local employers. It will also identify the extent and types of re-skilling needed to support individuals back in to the workplace. To undertake this analysis:

- First download vacancy data for the local area from Jobcentre Plus. This will provide a profile of the types of jobs that are currently advertised through JC+ by occupation. Data on these notified vacancies (i.e. demand) are available via NOMIS.
- Then access the 'sought occupations' of Jobseekers' Allowance (JSA) claimants, also available from NOMIS. This will provide a profile of the jobs sought by the unemployed, and the sort of skills they are likely to have (i.e. supply).
- Both the demand and the supply indicators are available by SOC2000 classifications (1-4 digit details). Therefore comparisons can be made directly between the volume of vacancies in a given occupation, and the number of claimants seeking employment in that occupation, highlighting any mismatches in a local area.

For example: *In the East Midlands the majority of the long-term unemployed (JSA claimants for 12 months or more) were seeking low skilled elementary jobs in occupations associated with manufacturing, whilst vacancies were concentrated in Sales and Healthcare. This demonstrates that there is a need to re- and up-skill the long-term unemployed to enable them to take new labour market opportunities.*

Stage 3: Young people in <u>compulsory education</u>:

To understand how supply meets demand in the future, it is important to look at the likely skills of young people completing compulsory education, who may soon enter the labour market.

- Statistics published by the Department for Education (formally the DCSF) are available on the following themes: educational achievement of pupils, pupils' absence, and pupils with Special Education Needs, average class size, and children in Local Authority care, etc: http://www.dcsf.gov.uk/rsgateway/

For example: *Although the overall regional attainment of pupils aged 14 and 16 is largely similar to the English average, performance of students from an ethnic minority background is weaker in the East Midlands than in England, with an exception of pupils from an Asian background. In the East Midlands 49.9% of pupils achieved five or more GCSEs at A*-C, including English and Maths, during the 2008-2009 academic year. This is in line with the average for England. Sub-regionally, pupils who enrolled at the end of Key Stage 4 attending schools in Rutland, Lincolnshire and Leicestershire performed the best in the East Midlands, with 58.2%, 56.1% and 52.6% of them achieving five or more A*-C GCSEs including English and Maths respectively.*

Stage 4: The skills of those in training or <u>non-compulsory education</u>.

This stage provides guidance for analysing data from the SFA, YPLA, HE and other information on FE young people (aged 16-18); FE adult learners (aged 19+), Apprenticeships and Train to Gain provision. A series of published supplementary tables are available via the Further Education 'dataservice' website:
http://www.thedataservice.org.uk/statistics/statisticalfirstrelease/sfr_supplementary_tables/

To assess the extent to which sector-specific skills provision meets the demands of the local economy, special sectoral tables (which are currently not in the public domain) will be accessible to Local Authorities in the future from the SFA dataservice. Discussions are ongoing between BIS/SFA and Local Authority representatives on the timing of this provision – but the Government has confirmed that it intends the SFA to provide this data directly to LEPs in the Skills Strategy (Chapter 4, Para 18). Tables for starts, enrolments and achievements for FE and employer responsive learning will be available for Local Authorities and Local Enterprise Partnership areas. See:
 http://www.thedataservice.org.uk/NR/rdonlyres/100B073D-35BE-4E8E-BC9A-DB9C7A4E1270/0/SupplementaryTableslistNovSFRv3.xls

For bespoke tables, contact the SFA on: servicedesk@thedataservice.org.uk

HE is another segment of the non-compulsory education sector. UCAS and HESA data are the most straightforward sources to use.

- UCAS tables refer to applications for HE places and are available at various geographies and for individual institutions from:
  http://www.ucas.com/about_us/stat_services/
- HESA statistics refer to actual HE places, and are available for individual institutions. Tables for subjects studies etc can be requested on CD-Rom from:
  https://www.hesa.ac.uk/index.php?option=com_hesacart&task=viewcart&Itemid=276&msg=Special+offer+items+added

For example: *FE provision for young people by sector-subject area is fragmented, mirroring individual choices rather than employment opportunities. FE provision for adults was more in line with the structure of the regional economy and regional priority sectors. STEM subjects are well represented in HE provision. Therefore it could be concluded that adult FE and HE in the East Midlands are currently reasonably well aligned to measures of employer and economic demand. However, young people entering FE could benefit from access to Labour Market Intelligence through IAG services to inform their subject choices.*

Section 4: Local priorities and market opportunities

This section should provide recommendations for potential shifts in provision, based on mismatches identified between demand (Section 2) and supply (Section 3) and which supports the priorities identified in Section 1.

This section should be written in terms which are meaningful to providers. For example, recommendations should aim to identify potential market opportunities and demonstrate the extent to which providers are currently meeting local demand. Ideally, key sectors and occupations should be identified where there is a mismatch between demand and supply.

When considering the information collected so far, it is important to avoid trying to make like-for-like quantitative comparisons between supply and demand, because:

- Take-up of supply does not represent demand, but represents customer responses to investment and policy decisions;
- Employers meet demand in complex ways, through redeployment or training of existing staff or recruitment of those already in the workforce. Recruitment of those leaving full-time education accounts for a fairly small proportion of filled vacancies. Therefore output from education by sector-subject should not necessarily need to match the volume of vacancies in a given sector or occupation; and
- Individual motivations differ from economic demand (e.g. subject areas taken up by young people often reflect personal interests such as hairdressing, art and design, sports, etc, rather than the opportunities available in the labour market). Recognising this, it may be appropriate to enhance existing courses, such as building in employability elements across curricula.

However, sensible, **qualitative** statements can be made by triangulating intelligence gathered from a number of sources. In short, local skills priorities statements should seek to: identify the state of the local labour market, the kind of jobs available, the direction of travel of the local economy, the type and structure of skills available, and the capacity of the education and training system.

For example: *In the East Midlands as a whole, there is an existing demand for technician level skills in manufacturing – based on employment by occupation and sector and employer skills survey responses. This is forecast to continue (Section 2). However, an analysis of FE provision (Section 3) identifies a notable lack of relevant capacity for courses that support manufacturing, especially for young people. Therefore, it was recommended that regional providers increase technician-level training and prioritise Higher Level Apprenticeships relevant to manufacturing.*

Annex 1: Guide to Data Sources

Labour supply				
	Regional	*Sub-regional*	*Local authority*	*Source*
Economic activity rate	APS	APS	APS	Nomis
Employment rate	APS	APS	APS	Nomis
Employee jobs	ABI (SIC 2007)	ABI (SIC 2007)	ABI (SIC 2007) ! Confidentiality	Nomis
Unemployment rate	APS	APS	Model Based Estimates	Nomis
Claimant count	JCP statistics	JCP statistics	JCP statistics	Nomis
Migrant workers	APS	APS	NINO, WRS	Nomis, DWP, FOI
Structure of employment				
	Regional	*Sub-regional*	*Local authority*	*Source*
Employment status	APS	APS	APS	Nomis
	APS	APS	APS	Nomis
Occupational composition	Working Futures III	Working Futures III	Working Futures III	UKCES
Industrial composition	APS	APS	APS	Nomis
	ABI (SIC 2007)	ABI (SIC 2007)	ABI (SIC 2007)	Nomis
Labour demand				
	Regional	*Sub-regional*	*Local authority*	*Source*
	NESS 2009	NESS 2009		UKCES
	ONS Vacancy Statistics - national and industry level			http://www.statistics.gov.uk/'
Vacancies	Jobcentre vacancies	Jobcentre vacancies	Jobcentre vacancies	Nomis
Hard-to-fill vacancies	NESS 2009	NESS 2009		UKCES
Skill shortage vacancies	NESS 2009	NESS 2009		UKCES
Labour Market outcomes				
	Regional	*Sub-regional*	*Local authority*	*Source*
Earnings by Occupation	ASHE 2009			http://www.statistics.gov.uk/'
by Industry	ASHE 2009			http://www.statistics.gov.uk/'
by Workplace	ASHE 2009	ASHE 2009	ASHE 2009	Nomis
by Residence	ASHE 2009	ASHE 2009	ASHE 2009	Nomis

Supply of skills				
	Regional	*Sub-regional*	*Local authority*	*Source*
Qualification of the workforce	APS/LFS	APS/LFS	APS/LFS	http://www.thedataservice.org.uk/'
Qualification by age group	APS	APS	APS ! Disclosive	Nomis
Employment rate by qualification	APS/LFS	APS/LFS	APS/LFS	http://www.thedataservice.org.uk/'
Educational achievement of pupils	DCSF SFR	DCSF SFR	DCSF SFR	http://www.dcsf.gov.uk/rsgateway/DB/SFR/'
Demand for skills				
	Regional	*Sub-regional*	*Local authority*	*Source*
Skills gaps	NESS 2009	NESS 2009		LSC, UKCES in the future
Job related training of employees aged 16-59/64	APS/LFS	APS/LFS	APS/LFS	http://www.thedataservice.org.uk/'
	NESS 2009	NESS 2009		LSC, UKCES in the future
	Other Surveys	Other Surveys	Other Surveys	
Training provision	NESS 2009	NESS 2009		LSC, UKCES in the future
	APS/LFS (4w; 13w)	APS/LFS (4w; 13w)	APS/LFS (4w; 13w)	http://www.thedataservice.org.uk/'
Training participation	Surveys (12 months)			

emda Contact details

Website:
www.emda.org.uk

Research Documents:
http://www.emda.org.uk/research/default.asp?nav=04&snav=0403

Strategy, Research and Evaluation team contact:

Chris Lawton
Research Manager: Demography and Skills
Apex Court, City Link, Nottingham, NG2 4LA
Email: ChrisL@emd.org.uk
Direct Line: 0115 988 8326
Fax: 0115 853 3666