The Large Scale Labour Recruitment Study: Progress, Prospects and Insights
Ian Shuttleworth and Darren McKinstry Centre for Spatial Territorial Analysis and Research (C-STAR) School of Geography, Queen’s University, Belfast

The Large Scale Labour Recruitment Study was commissioned by the Agency’s Research and Evaluation Branch (REB) in 1997 to contribute to a research programme on labour availability. Its focus is efficiency - to assist government in identifying areas with appropriate supplies of labour for new employment - and equity - to advise on the distribution of employment to help meet Targeting Social Need (TSN) objectives. Here we report on how the Study has developed, firstly, by collecting more data on additional employment sectors in new phases of the Study, and, secondly, by analysing, in greater detail, the data that are currently held from Phase I of the research. Summaries of the preliminary and final results from Phase I of the research were published in articles in Volumes 12 and 13 of the Labour Market Bulletin respectively. In addition, in Spring 2000 a series of seven ‘roadshow’ presentations, in venues across NI, were made by members of the research team and REB to a wide audience in order to disseminate the findings of the research more widely. These were both well attended and received and useful feedback was obtained. Given their success a further series will be run in Spring 2001 in conjunction with the Employment Service (see end of this Bulletin for details). The findings of Phase I have been used by REB staff to provide advice by government to a wide variety of companies that have been making new employment start-ups or significant expansions in Northern Ireland.

The current expansion and refinement of the research contributes further to fulfilling the original efficiency and equity objectives of the Study but can also offer insights into the operation of local labour markets that might have wider significance beyond NI given renewed interest in the geography of social exclusion and on access to employment in national debates about jobs and employability (see, for example, Employability and J obs: Is There a J obs Gap? Education and Employment Committee, 4th Report, House of Commons, April 19th 2000). Areas considered in this article include recruitment in the Callcentre and Hospitality sectors, cross-border labour issues; and new ways of visualising recruitment data, and modelling labour flows.

EXPANDING THE SCOPE OF THE RESEARCH

The original research has been expanded by the inclusion of two companies, one from each of the Callcentre and Hospitality Sectors in the on-going Phase II of the Study. These sectors are important in their own right because of the forecast of rapid future jobs growth and the need for government to fully understand more about recruitment so it can provide better advice to new employers who are seeking labour. Phase II also complements and supports the work of the NI Skills Taskforce (see Chapter 7 in this Bulletin) - which has identified ‘hard-to-fill’ vacancies particularly in the Hospitality Sector - by providing detailed local-level data on recruitment experiences. Phase I of the Study saw information
collected on 14,000 employees and 12 employers, spread across 22 different sites. The addition of two additional companies in ‘evolving’ sectors will not only enable specific information on these sectors but will also allow greater flexibility in the analyses undertaken and enable a wider range of recruitment processes to be investigated.

This ‘expansion’ of the data source has been supplemented by an in-depth analysis being undertaken to answer questions raised about community, access to employment, and locality by Phase I of the study. Themes that are being explored include access to work by women, factors influencing the uptake of jobs by residents of urban disadvantaged communities in inner Belfast, and the significance of location and site in physically gaining access to work - for example, how important is public transport?

Initial findings from one of the Phase II employers (sited in Laganside) investigates the degree to which it has a local employee catchment and the extent to which it recruits from the unemployed. These bear on how far ‘local work’ is really ‘local’ and who actually gains jobs in a tight labour market. The results are presented in Map 1 and Table 1. Map 1 describes the home locations of any worker who was ever employed at the site in Laganside and shows that workers are drawn from throughout the Belfast Urban Area (BUA) and that overall, it has a widely
spread catchment (further work will consider differences by occupation, gender, sex and religion). An initial analysis at a local level shows that employees are also being drawn from communities in the immediate neighbourhood of the site. More work needs to be done to explore this issue thoroughly but the findings should be significant in understanding more about the success of measures to encourage the employment of local people by DHFETE, IDB, Laganside Corporation and other agencies or employers sited within Laganside developments.

Table 1 is perhaps interesting in light of the tightening of the labour market and the identification of certain economic sectors as having hard-to-fill vacancies. Some labour market theories would suggest, in these circumstances, that jobs would go to those at ‘the back of the queue’ (eg unemployed claimants or those who are otherwise jobless) because the most suitable potential employees had already been allocated jobs, and there is still a pressure for employers to fill vacancies from workers who might be perceived as being less suitable. In this respect, the 21.4% of jobs that have gone to those who classified themselves as previously unemployed is worthy of further examination. It is true that this proportion is far higher than the share of unemployed claimants in the population of NI overall, but it might also be expected that this rate could have been even higher given the shortage of workers to fill certain vacancies in the recent past.

A further expansion currently underway (Phase III) is a study examining the recruitment and employment change in the Meat Processing Industry. As with Phase II, this has been structured to add another ‘module’ to Phase I of the Labour Recruitment Study, thereby permitting greater flexibility of analysis and greater access to a range of recruitment experiences. However, it is also designed to provide special insights into employment in an economic sector that is experiencing rapid change both nationally and within NI. Specifically it seeks to address the theme of intervening opportunities and spatial competition in the labour market in further detail, developing themes that were also highlighted in Phase I.

### Table 1: Previous Economic Status of all Current and Previous Employees at Site B

<table>
<thead>
<tr>
<th>Status</th>
<th>Number of Workers</th>
<th>Percentage of Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>255</td>
<td>45.9</td>
</tr>
<tr>
<td>Unemployment</td>
<td>119</td>
<td>21.4</td>
</tr>
<tr>
<td>Education</td>
<td>171</td>
<td>30.8</td>
</tr>
<tr>
<td>Training</td>
<td>5</td>
<td>0.9</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>1.1</td>
</tr>
<tr>
<td>Total</td>
<td>556</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: The Labour Recruitment Study, Phase II
DATA ANALYSIS: USING CURRENT DATA MORE FULLY

At the same time as the scope of the Study has been extended, analysis of data already held from Phase I has been underway. In the articles in LMB nos 12 and 13, employment catchments were mapped as point patterns (see Map 2) and used to estimate the distances that employees in certain locations could be expected to travel to take work in certain occupations and sectors. A further refinement to our analysis now considers the relative density (clustering) of applicants (Map 3), an approach which is further enhanced by the utilisation of three-dimensional mapping (Map 4) as a new way to visualise employment catchment data.

At its most simple, visual inspection of maps of this type can give new insights because the importance of major roads (access) and population centres in shaping employment catchments becomes more
apparent than when using point maps. The 3-D representation of Map 4 gives a much stronger conception of the peaks and troughs in the catchment and can also be used to see the complexities within the data. One example is the importance of roads as illustrated by the concentration of workers reaching out from the central peak in Antrim (where the employer is based) toward Toome and Magherafelt. Importantly, the use of this approach can be extended beyond visualisation to analytical applications - the three-dimensional surface can be analysed in terms of relevant underlying characteristics of the population and labour market (for example, the availability of a stock of men in SOC 5 - skilled craft occupations) to define ‘hot’ and ‘cold’ areas of ‘over’ or ‘under’ supply.

This modelling approach has also been extended to provide better estimates of the likely supply of workers at any given site. The essence of the approach is summarised in Figures 1 and 2. Figure 1 shows the relationship between distance from a factory and the number of employees who come to work at the site - and, as might be expected, the number of employees coming to the factory falls off increasingly with distance. Figure 2 shows the relationship between employee numbers at the factory and the available stock of all workers resident in surrounding areas. In this case, generally speaking, more employees come from areas with high stocks of resident workers. Importantly, these two relationships can be combined to estimate the likely labour supply at new employment start-ups or expansions by looking at recruitment experiences across a variety of sites and occupations.
Additional uses are also viable - it is possible, for example, to identify areas from which fewer, or more, workers come than might be expected. This information can then be used to consider issues of labour supply, and to investigate further the causes of these differences from the ‘expected’. An example might be a case where an area sends fewer workers to a factory than might be estimated given its distance from the factory and its stock of available workers. This might be due to a number of labour supply factors such as transport difficulties (eg lack of public transport), childcare problems, lack of relationships between the employer and the area (eg a need for outreach measures in schools), or social factors such as ‘chill’ arising from the fear of working in an area or employment perceived as being of the ‘other’ religion. Further targeted locality-based research can explore these, and other similar, issues and could help employers to improve labour availability by attracting workers through targeted interventions in areas in which they under-recruit.

The importance of identifying these areas, and of understanding more about employment catchments, is likely to increase in the future because of the increasingly tight NI labour market, which now has low levels of registered unemployment with an increasing number of ‘skill shortages’ reported in a number of occupations and economic sectors. This company-based analysis of labour supply has also been extended by the use of travel-to-work data from the 1991 Census of Population. This enables comparisons to be made between information on travel-to-work behaviour from different perspectives - for example, how does an employer’s catchment compare with the overall pattern of worker inflow to the area in which that employer is located, as derived from the Census? Is the employer’s catchment more localised? Or is it more widely spread? This type of context also helps to provide better estimates of labour supply by describing and analysing observed travel-to-work patterns - thereby supplementing data collected in the Study - and by suggesting areas for employment growth that already seem to be able to access widely-drawn resources of available labour. In addition this analysis, by developing techniques and experience of travel-to-work behaviour, also prepares the ground for the receipt of data from the 2001 Census of Population enabling timely and rapid analysis of this new dataset.

**FUTURE WORK**

Future prospects can also be considered in the same terms as that used to describe the work undertaken in the past year - either as extending the scope of the research or as adding value to existing data.

Extending the Study, and still in prospect, is Phase IV of the research. This will deal with cross-border labour issues, including both commuting and migration. Its rationale is the need to understand more about how workers behave on or near state borders and how this might impinge on the quality and availability of labour.

Increased employment in the border counties of the Republic of Ireland might impact on NI in a number of ways, both positive and negative. A worst-case scenario is that employment growth in the Republic of Ireland, and increases in cross-border commuting, could mean that employers locating in NI border counties could face labour shortages. But equally, cross-border labour flows could be advantageous in some circumstances, particularly if they enable a pool of skilled labour to be ‘tapped’, growth pole areas to be established or reductions in registered unemployed to be achieved on both sides of the border.
At present it is difficult to judge the implications of cross-border labour flows because many questions remain unanswered. These include how many workers move/are prepared to move cross-border? What types of workers move cross-border? What are the obstacles to cross-border commuting? How do employers’ catchments evolve in border areas? In what circumstances is it reasonable for an employer to expect a cross-border labour supply? The purpose of Phase IV is therefore to provide quantitative and qualitative answers to these and other questions.

Adding value to the existing data comes with the planned recoding of all occupational data in the Study to a new National Standard - the SOC 2000 Standard Occupational Classification (see Chapter 9 in this Bulletin). This will replace the 1990 SOC occupational code that was used before and will not only enable comparisons to be made with the 2001 Census of Population but because of refinements to the coding framework - and how it relates to ‘emerging’ occupations and pay scales - should offer a more realistic and transparent ranking of occupations, thereby helping to refine the analysis of the data collected in the Study.

CONCLUSION

Over the past year the objective of the research programme has been to move from the ‘description’ of local labour markets toward a greater ‘understanding’ of their operation. The most significant developments, aiming to understand specific sectors, have been Phases II and III (which deal with the Hospitality, Callcentre and Meat Processing Sectors) and the planned Phase IV (dealing with a high tech, ROI cross-border employer). These are starting to provide insights into these key areas of the labour market which are either experiencing rapid growth or change, and they can directly complement the work of the NI Skills Taskforce by providing detailed analysis of recruitment experiences particularly in those sectors / occupations which have hard-to-fill vacancies. Clearly, given the long-term fall in unemployment in NI, there is a stronger need than ever to know more in detail about the ways in which people gain jobs, their background by occupation, and the geographical areas from which workers can be expected to come.

Research on cross-border labour markets will analyse the obstacles and opportunities for cross-border working with the intention of increasing the understanding of when, and in what circumstances, cross-border working is likely to occur. In addition to assisting local policy makers these insights will form part of more general international debate on the nature and operation of cross-border labour markets (eg at the Dutch - German border) in the community of policy makers in Ireland and, more widely, in Europe.

In terms of advancing our ‘understanding’ of labour market operation; much of the refined analysis, 3-D mapping and modelling has attempted to learn more about general employment catchment patterns and about overall travel-to-work behaviour. This quantitative approach adds value to the data at one level but also necessitates an increased emphasis on qualitative insights gained by means of interviews and in-depth work in localities to gain a more complex understanding of local conditions, constraints and mechanisms.

There are a number of issues that are particularly significant in this respect - the success and meaning of local employment schemes (eg those that aim to encourage the employment of local people), employment growth and urban regeneration.
schemes, access to employment (issues such as transport and ‘chill’), and how the geographical distribution of employment opportunities influences the shape of employment catchments and the uptake of jobs by local people. Greater understanding of these issues can contribute to policy debates about ‘bringing jobs to workers’ or ‘bringing workers to jobs’ both in NI and in the UK as a whole.

The encouraging news is that the model is proving very practical as it predicts 80% of actual labour supply.

ABOUT THE AUTHORS:

Ian Shuttleworth and Darren McKinstry are principal researchers within C-STAR (formerly SARU), based within the School of Geography at Queen’s University Belfast. They have research interests in social exclusion; territoriality; and the social and spatial accessibility of employment and education. A full list of references can be obtained from the authors. They can be contacted on Tel: 028 9027 3829 Fax: 028 9032 1280 or via http://www.qub.ac.uk/c-star/
Darren McKinstry Consulting

Further information:

www.darrenmckinstry.com

info@darrenmckinstry.com