Tyne & Wear City Region
Economic Review
Labour Market, Skills and Talent Study

The Final Executive Report
by Regeneris Consulting, with Manchester & Durham Universities
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Report Acronyms

- HMP – Higher Managerial and Professional
- LMP – Lower Managerial and Professional
- LSOA – Lower Super Output Area
- TWCR – Tyne & Wear City Region
- NESS – National Employers Skills Survey
- ONS – Office for National Statistics
- ABI – Annual Business Inquiry
- APS – Annual Population Survey
- LFS – Labour Force Survey
- KBI – Knowledge Based Industries
- HESA – Higher Education Statistics Agency
- SOC – Standard Occupational Classification
- SIC – Standard Industrial Classification
- LQ – Location Quotient
- RDA – Regional Development Agency
- R&D – Research and Development
- DWP – Department for Work & Pensions
- HMRC – Her Majesty’s Revenue and Customs
- HEI – Higher Education Institution
- STEM – Science Technology Engineering and Mathematics
- NHS – National Health Service
- GVA – Gross Value Added
Headline Messages

Study Purpose and Approach

i. This Executive Report, produced by Regeneris Consulting in collaboration with the University of Manchester and Durham University, provides evidence to support labour market actions in the Tyne & Wear City Region (TWCR) through an analysis of current performance, past trends and future prospects. At the very heart of this study is a need for a fuller understanding of the role of higher level skills in driving sectoral change, improved productivity and overall economic growth. The study has also explored the extent and manner in which worklessness constrains economic growth and how tackling these issues will enhance economic performance.

ii. Taken as a whole, the study has examined the complex issues and relationships between:

- Growth, nature and locational drivers of knowledge based sectors
- Scale, density and adequacy of available higher skilled workers
- Attraction and retention of graduates and highly skilled workers
- Role of quality of place in influencing the skills supply
- Role of these factors in driving labour market agglomeration benefits
- Economic constraints and persistence of worklessness.

iii. The assignment, together with the other studies that have been commissioned as part of a major Economic Review\(^1\), will create a powerful and insightful evidence base enabling local authorities and partners in the Tyne and Wear functional economic area to make informed decisions about future economic development strategy.

iv. The work involved a detailed review of the relationships between skills, sectors and economic geography, arising from the concentration of particular types of economic activity within the core of the conurbation, and comparisons with other city-regions. This included detailed sector and occupation case studies in order to more fully understand the role that skills play in securing investment and skills in these sectors.

v. The work also looked at the demographic effects on the labour market of migration into and out of the city region and assessed the importance of cultural, housing and learning assets and attributes in attracting and retaining highly skilled workers. As part of the work, forecasts and scenarios were developed to explore the potential for the city region to meet future skills needs and drive enhanced performance.

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\(^1\) We have worked closely with the team led by Adroit Economics that is carrying out a complementary Economic Geography, Linkages and Low Carbon Economy study, and the Nevin Leather Associates team undertaking a review of the relationship between housing and the economy in the city region.
Recent Labour Market and Skills Performance

Employment Growth

vi. TWCR underwent a period of prolonged economic expansion between 2000 and 2008. This led to strong jobs growth (a faster rate of growth in employment than all city region comparator areas with the exception of Glasgow and Sheffield). The city region’s workplaces provided employment for 693,000 employees in 2008, having increased by 58,000 jobs since 2000. Whilst all local authority districts have shared in this jobs growth, it has been concentrated (approximately three-quarters) in Newcastle, Sunderland, Gateshead and North Tyneside.

vii. This growth helped to increase the TWCR employment rate from 67% in 2000 to 71.5% in 2009, a narrowing of the gap with the UK from 6 percentage points to 3 percentage points. Whilst the recession has seen many jobs being lost in TWCR and a fall in the employment rate to 70%, the gap with the UK has not grown significantly.

Nature of Change in Demand

viii. The key trend has been a continuing shift away from manufacturing in favour of public and private sector services. Manufacturing fell by a total of 24,500 jobs between 2000 and 2008 while public sector services increased by 32,200 and professional, financial and business services by over 40,000 jobs. Between 2005 and 2009, the number of highly-skilled jobs in TWCR (SOC groups 1-3, namely senior managers, professional and associate professionals) increased by 32,000. The public sector accounts for over 45% of these highly skilled jobs in the city region.

ix. However, the greatest growth was in demand for SOC 3 (associate professional and technical occupations), as opposed to the top two occupational groups which have tended to grow faster in comparator areas and typically often account for a larger share of employment than they do in TWCR.

Meeting Skills Needs

x. TWCR’s working age population has grown steadily since 2000, increasing by 33,800 people or 3.3%. Whilst this is a fairly modest growth compared to the more dynamic English city regions, it has reversed the trend over the previous 20-30 years. The increase in population has been driven by an increase in student numbers, greater international migration and a modest reduction in out-migration of workers to other parts of the UK.

xi. Of particular interest is the trend in the prime age population (those aged 20-40). This is the age group which is the most mobile and highly qualified section of the workforce and is crucial to sustain a competitive economy. TWCR has seen its prime age population fall by 0.7%, although this is explained, in part, by the relocation outside the city region of graduates who to come to TWCR to attend university following the completion of their studies.

xii. By and large, the city region has so far been able to source the skills it requires through better utilisation of its existing workforce, with rates of economic participation and
employment rising by 2.7 and 2.5 percentage points respectively up to 2008, a faster rate of improvement than all other city regions.

xiii. Much of this increase in participation can be explained by the large falls in the numbers claiming Job Seekers Allowance (JSA), Incapacity Benefit (IB) and lone parent benefit claimants in TWCR (a reduction of around 30,000 between 2000 and 2008). The largest falls in worklessness have been in those areas close to centres of jobs growth. Nevertheless, the city region still has a higher share of its working age population claiming IB or JSA than comparators, with particularly high rates in Sunderland and South Tyneside. In addition, some of the gain up to 2008 has been lost since the onset of recession, with the fall in JSA actually being reversed in just eighteen months since the start of the recession in mid 2008.

xiv. TWCR was able to meet most skills needs during the pre-recession expansion period (although given the data available, we have only been able to provide a snapshot for 2006 and 2008). Employers reported fewer shortages at a higher skill levels, but comparatively higher shortages at craft, sales, administration and lower skill levels. However, these skills shortages are mostly modest in scale – the exception is for construction related skilled trades which was driven by the construction boom prior to the recession. The city region’s employers reported fewer hard-to-fill vacancies except at lower skill levels. Skills gaps among high-skilled staff are low (4% of staff are viewed by employers as not being fully proficient in their jobs, compared to 20% nationally). Overall, there is a good match between supply and demand for skills in TWCR.

**TWCR Labour Market for Higher Skilled Workers**

Concentrations of Highly Skill Workers

xv. Demand for higher-level skills is in general much greater in what have been defined as knowledge-based industries (KBIs) than in other sectors. TWCR has not experienced the strong growth in major clusters of private high-tech businesses that is evident in the most strongly performing city regions. Nevertheless, it has enjoyed strong growth in employment in KBIs (which accounted for 43% of all employment in the city region in 2008). However, this growth has been very heavily concentrated in the public sector and consequently employment in private sector KBIs (16.4%) is the lowest of the comparator city regions, except Sheffield.

xvi. Whilst there has been strong growth in the number of senior managers, professionals and associate professionals, TWCR stands out amongst the comparator city regions for the overall scale and relative growth of associate professional and technical occupations (SOC 3). Growth in this occupational group has been driven by the expansion of administrative and support staff in public sector health and education sectors, as well as support activities in financial and business services.

xvii. Overall, the proportion of employment in TWCR in SOCs 1-3 (38%) lags behind all comparator city regions, except Sheffield. TWCR has the lowest proportion of employment in senior management, second lowest for professionals and joint third lowest for associate professional (with Manchester). In short, TWCR is making progress, but it is not closing the gap with other city regions.
Concentrations of KBI Jobs

xviii. Growth in KBI employment has been relatively dispersed across TWCR, including several key out-of-town locations (Doxford, Newburn, Cobalt, Longbenton, etc), although Newcastle district and the city centre in particular remains by far the largest individual centre of KBI employment and the location for the largest share of this growth. However, the proportion of KBI employment in Newcastle is lower than the dominant centres of many of the other city regions. This partly reflects the dispersed nature of the city region economy, but also employment land policy and a greater emphasis on the development of out-of-town business parks than has been seen elsewhere.

xix. North Tyneside has emerged more recently as a key centre for KBI employment, driven mainly by growth in the public sector and, to a lesser extent, in business services. Sunderland has enjoyed strong growth in lower value financial and business services employment.

Higher Skilled Labour Market

xx. According to the methodology employed in this study, it is suggested that TWCR can draw upon a large pool of highly skilled workers (170,300 measured by travel-to-work patterns, rather than administrative boundaries) - more than most other comparator city regions, expect Leeds (286,100) and Manchester (391,700), both of which are considerably larger. Between 2001 and 2008, TWCR saw an increase in 37,000 higher-skilled workers living within the travel-to-work area (TTWA), a more rapid rate of growth (28% over seven years) than in any city region, expect Bristol.

xxi. Whilst this degree of catch-up is welcome, a lower density of highly-skilled workers persists in TWCR than elsewhere (25% of all workers in the TTWA are highly-skilled, slightly below the city region average). Drilling down further, there is a fairly thin labour market for specialist groups and senior managers and professionals.

Attraction of Highly-Skilled Workers

xxii. TWCR is good at attracting students (both those who previously lived in the city region and those who lived outside TWCR) and retaining 'local' students after graduation. However, it appears that many of these graduates are taking jobs for which they are over-qualified, as evidenced by the fact that nearly two-thirds of all graduates of TWCR universities in 2007/08 that subsequently found employment in TWCR took up jobs in the public sector, often in jobs well below the NVQ 4 equivalent level to which they were trained (that is, administrative jobs with no supervisory or managerial responsibilities – more evidence is presented later in the report).

xxiii. There has been little change in the scale of gross in-migration between 2001 and 2008, which accounts for less than 2% of the total population. Gross in-migration of higher managerial and professional (HMPs) workers is very low compared to other city regions, although TWCR has not had to attract large numbers of high-skilled workers from elsewhere to meet demand from the city region’s employers. Out-migration rates are also lower than other city regions, which suggests that TWCR has a more static, less dynamic labour market than its comparators.
Future Labour Market Prospects

Future Demand for Labour and Skills

xxiv. According to recent Cambridge Econometrics GVA and employment forecasts up to 2030, the economic recovery in the North East region is expected to be characterised by a period of jobless growth in the medium-term. A 3% fall in employment (32,000 workers) is forecast between 2009 and 2015 whilst GVA is expected to grow by 11% during the same period.

xxv. These forecasts have been applied to TWCR by sector and by occupation, and the resultant forecast for TWCR is for modest change in demand across most occupations arising from changes in the sectoral structure of the economy, with larger changes driven by ongoing occupational changes within the sectors themselves.

Skills and Replacement Demand

xxvi. Changes for demand within occupations are far more important drivers of demand for skills than sectoral change itself. Our modelling suggests that over the period 2009-15 there will be net growth of 8,000 professional and managerial workers in TWCR (an increase of 5%), and substantial falls in demand for administrative positions (a 13% reduction).

xxvii. Strong continuation of growth in replacement demand is expected. Typically, each occupational group in TWCR needs 3.5% to 4% of jobs to be filled every year by new entrants. This demand dominates the forecast net change across all occupations and equates to some 23,000 managers and senior officials (SOC 1) and just under 20,000 professionals (SOC 2).

Implications of Public Sector Job Cuts

xxviii. We have modelled a variety of scenarios examining the impact on demand for different occupations that could result from different scales of reductions in public sector spending and related job cuts. The North East baseline forecast is for a reduction of 9% in public administration and defence employment, a fall of 4% in jobs in education and a 3% loss of jobs in health and social work during the period 2009-15, an overall loss of 10,000 jobs in the public sector in TWCR by 2015.

xxix. In addition, a study by the Work Foundation predicts that the North East region will lose 33,000 public sector jobs over the same period, out of an anticipated 750,000 public sector job losses nationally. Applying the latest predicted spend figures from the Office for Budgetary Responsibility (OBR) to TWCR would translate into a loss of 20,000 public sector jobs in the city region, whilst a 25% cut across all elements of the public sector (except health) would result in a loss of 30,000 public sector jobs across the city region. The cuts are expected to most adversely affect professional (6,000-9,000 job losses), administrative and secretarial (5,000-8,000 reduction) and associate professional staff (5,000-7,000 fewer posts).

xxx. Clearly, the contraction in the public sector (and real cuts in benefit payments) will have additional knock on effects in the city region’s economy and labour market via reductions in disposable incomes and also the supply chain effects from reduced public sector procurement for capital and current projects. At a national level, the estimates suggest that these further employment impacts are of the same order of magnitude as the direct job losses.
cuts. In TWCR, the initial estimates suggest that there could be an additional economic knock-on effect of around 20% (combining supply chain and induced effects).

Potential Impact of Export Led Growth

Export led growth offers the potential to offset some of these job losses, subject to how well placed firms in TWCR are to grow existing markets and enter new ones. An assumed 1% per annum increase in the real value of exports every year from 2011 to 2030 would create an estimated additional 5,000 jobs (+0.6%) over and above the baseline for TWCR by 2015 and 10,000 jobs (+1.4%) by 2020. The analysis suggested that management, skilled trades and process operatives are likely to see the highest percentage growth (as would be expected given the importance of manufacturing).

Policy Implications

Strategic Priorities

The implications of the above analysis are that the following issues must be addressed if partners are to make the shift towards being a high skilled, knowledge based economy that can compete with better performing city regions. We have split these into two types of strategic priorities:

- Long-standing barriers to economic growth in TWCR that could continue to hold the city region back in the short term require decisive action
- Challenges that require longer-term solutions to raise the productive potential of the TWCR economy.

Short Term Issues

At a broad level, the supply of labour is expected to exceed net demand at most occupational levels over the next 2-3 years. Actions are required to smooth the process of labour market adjustment, and should focus on:

- Getting the short-term unemployed back into work
- Supporting redundant and vulnerable workers in the public and private sectors
- Retaining better skilled workers in the city region (whether they be recent graduates or existing workers recently made redundant or who are under threat of redundancy)
- Key labour market groups (eg young, disadvantaged groups).

Demand-side actions should focus on sectors and employers with large short-term expansion plans and/or replacement demand needs. The key challenge for all of the above in light of the planned abolition of One North East (as part of the wider closure of Regional Development Agencies) will be how to co-ordinate actions.

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2 PwC, Sectoral and Regional Impact of the Fiscal Squeeze, October 2010.
Tackling the skills deficit. Whilst improving, TWCR’s skill profile remains relatively weak compared to many comparable city regions, especially at higher levels and in terms of the number with no formal qualifications. This gap needs to be tackled as an urgent priority.

Tackling concentrations of worklessness. There remains a need to tackle the concentrations of worklessness in specific locations within the city region and amongst key disadvantaged groups, specifically older workers and NEETs.

Enabling local graduates to fulfil their potential and attracting high skilled in-migrants. TWCR needs to make better use of the skillsets of graduates who choose to stay and live and work in the city region and to attract more young graduates through promotion of enterprise, using supply side measures in order to drive the demand side of the economy and stimulate economic growth.

Developing employment hotspots. TWCR needs to create a critical mass of knowledge based businesses in the urban core to attract higher value investment, higher skilled workers and generate self-sustaining agglomeration benefits.

Responding to public cutbacks. High skilled public sector workers who lose their jobs as part of the Coalition Government’s austerity package should be supported to develop the skills they need to meet private sector demand and to consider self-employment as a route into the labour market in TWCR.

Promoting growth sectors. Partners should ensure that the skills supply meets the future needs of businesses in growth sectors, including through actions to ensure that the increase in demand for higher level skills resulting from increased investment in low carbon technologies and renewable energy can be met, and that large employers are able to access high quality local suppliers.

Meeting current and future employer needs. Work with key training providers to ensure that they develop training courses and programmes that are appropriate for the needs of employers, taking account of sectoral drivers, occupational change and replacement demand.

Raising demand for training. Stimulate greater demand for training among SMEs by working with them to enhance their appreciation of how they can articulate and procure the training needed to enhance productivity and innovation. This includes putting mechanisms in place to ensure that firms and individuals understand the importance of investing in level 3 and level 4 skills.

Medium and Long-Term Issues

Agglomeration and Density

xxxv. This study has established that the TWCR and its core employment areas draw on a reasonably large pool of higher managerial and professional people, giving it an overall pool of potential labour in these occupational groups which compares well to other medium sized cities. As such, the city region has a good skills proposition and partners need to ensure it clearly communicates this message to potential inward investment.

xxxvi. However, the higher skilled labour market is also dominated by the public sector and is ‘thin’ in terms of private sector knowledge based industries. It is also gets very thin for more specialist skill groups (e.g. software designers as opposed to accountants) and senior managers. Whilst there is no simple quick fix to the thinness of the labour market and these agglomeration issues, there are a range of challenges which need to be considered:

- Excellent accessibility of residential and employment locations within the city region is critical to the size of the higher skilled labour pool and agglomeration effects. There is some evidence that road congestion, especially north-south within the city region, is an issue and this will become a greater constraint upon economic competitiveness as the city region grows.
The fact that TWCR has fairly decentralised employment centres and major sites across the city region, with prime residential areas concentrated to the north, east and west of Newcastle, adds further weight to this argument. It also has agglomeration (and sustainability) implications for future decisions about the locations of employment sites.

Improved transport links from the periphery to the main employment centres can go only a small way to addressing this issue since much of the outlying area of the city region is sparsely populated.

There is scope for drawing more on the strengths and assets of TWCR’s economic core in order to drive economic growth across the area as a whole.

**Enterprise and Business Growth**

The evidence presented in this report points to the supply of higher level skills – the attraction and retention of workers with these skills – being largely a demand side issue in TWCR (although other factors are also important). The ability of the city region to increase its supply of highly skilled workers will be driven primarily by TWCR growing the overall size of its economy and in particular its knowledge based industries. We have highlighted a range of potential measures to stimulate enterprise and business growth below:

- Encouraging economic growth – whilst we tend to focus on knowledge based industries or niche sectors, the growth of the economy as a whole will drive up the demand for higher level skills. The policy to generate growth in the business base will be different to those policies required to stimulate niche sectors. Partners will need to bear this in mind in making their policy choices.

- Pursuing opportunities around niche sectors – the Adroit/Ekosgen economic linkages report for the city region highlights the potential to secure the growth of niche high value, high skills KBIs, including digital, software, media and creative. Renewable Energy (and other low carbon activities) also has the potential to grow, albeit the exact scale of development and the opportunities available remains unclear at present. Subject to the nature of the sector and development potential in the city region, there are opportunities to grow the higher skills base for these sectors and TWCR as a whole.

- Continuing inward investment opportunities – TWCR has a good proposition in terms of the size of its available higher skilled pool, as well as the pool of intermediate skills. There will continue to be inward investment opportunities (e.g. shared services centres), including from the public sector, and partners will need to continue to target these.

- Stimulating enterprise - initiatives to encourage enterprise formation in KBI industries are already well established across the city region, and have an important part to play in future growth. However, there is a need to expand and tailor this form of support to two main groups in order to counter the economic impact of public sector cuts in particular: namely highly skilled public sector workers who will be made redundant in the coming years; and recent graduates. It is important to retain both groups in the city region.
• Whilst all of these actions can make an important contribution to growing the demand for higher skills, the greatest contribution would be through the city region developing four or five stellar growth knowledge intensive employers.

**Improving Skills of Residents**

xxxviii. This study has pointed to the policy imperative of raising the skills profile of the working age population, as well as more specifically acquiring both higher level skills generally and the specialist skills required by knowledge based industries. The current challenge does not diminish this requirement. There are a number of actions points:

• There will be a continuing need for workers at all skill levels, especially at intermediate and higher level skills. Whilst this will not be driven by economic expansion, replacement demand and occupational shifts will be important factors. Partners will need to continue to plan for these requirements.

• There will also continue to be a need to raise the overall skills profile of the city region, working towards the achievement of the Leitch targets. The longer term skills trends will continue (in particular a shift in demand towards higher level skills) and there is the general need to push ahead in raising skills and to secure a more demand responsive system.

**Quality of Life and Related Assets**

xxxix. The role which prime housing areas and quality of life play in attracting and retaining high skilled workers has become a prominent policy issue in its own right in the last decade. The extent to which an under supply of high quality places hinders the growth of higher skills is less clear cut and much of the evidence appears to be anecdotal. The weight of evidence points to these being important, but not sufficient, factors in the attraction and retention of higher skilled workers. However, there are a number of policy implications, which should be considered as part of a package of measures to encourage the growth of knowledge based industries:

• There are few prime housing market areas in the main urban centres of TWCR, and this suggests there could be shortcomings in the quality and range of the offer, which acts as a constraint in attracting and retaining these workers from outside the region.

• The main urban centres within the city region have not been setting the pace for the quality of its housing developments aimed at higher skilled workers. If raising the quality of the TWCR housing offer is seen as a priority, action in this area is about making the case for how things should be done differently and working collectively to marshal the resources and the commitment to ensure that more future housing developments achieve higher standards.

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3 We anticipate that these targets will be reviewed by the Government and possibly revised. However, the aspiration of increasing the demand and supply of higher level skills will remain.

4 TWCR Housing and Economy Executive Report, July 2010, NLA.
• Although challenging in the current market-led climate, there is the potential to raise the profile of urban living for the families of higher skilled workers, a strategy which has been pursued in a number of city regions affected by the migration of these groups to more rural outlying areas. This activity should be aimed at two distinct audiences. First, TWCR needs to send clear signals to developers and investors about the type of urban residential development and supporting infrastructure it wants to see. Second, potential occupiers of new residential developments and existing residents of cities and towns, will need to be convinced of the merits of locating themselves and their families into inner urban locations.

Worklessness

xl. In addition to the points raised above under the short term actions, one additional dimension is the connectivity and accessibility of the major employment centres located in out of town locations. A number of these large employment sites have experienced strong jobs growth over the last decade, but have poor accessibility to some major concentrations of worklessness, which are themselves poorly connected to public transport hubs. The deprived areas, which are remote from the main employment centres, are another major challenge for the city region.
1. **Objectives of Study**

**Introduction**

1.1 This Executive Report provides detailed evidence to support labour market actions in the Tyne & Wear City Region (TWCR) through an analysis of current performance, past trends and future prospects. At the very heart of this study is a need for a fuller understanding of the role of higher level skills in driving sectoral change, improved productivity and overall economic growth. The study has also explored the extent and manner in which worklessness constrains economic growth and how tackling these issues will enhance economic performance. Taken as a whole, the study has examined the complex issues and relationships between:

- Growth, nature & locational drivers of knowledge based sectors
- Scale, density and adequacy of available higher skilled workers
- Attraction & retention of graduates & highly skilled workers
- Role of quality of place in influencing the skills supply
- Role of these factors in driving labour market agglomeration benefits
- Economic constraints and persistence of worklessness.

1.2 The assignment, together with the other studies that have been commissioned as part of the City Region’s Economic Review, will create a powerful and insightful evidence base enabling partners in Tyne and Wear to make informed decisions about future economic strategy.

**Purpose of this Report**

1.3 The Executive Report contains headline findings from the research undertaken, and conclusions and recommendations for each of the ten specific research questions that the study has been tasked with providing answers to:

**Labour Market and Skills Performance**

1) How does Tyne and Wear City Region compare with similar UK City Regions in terms of the concentration of highly skilled jobs and residents and change in the numbers of workless and poorly qualified residents?

2) Where do Tyne and Wear City Region’s highly skilled workforce travel from and how does the City Region compare with others in terms of the volume of highly skilled workers on which it can draw? How has this changed over time?

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5 We have worked closely with the team led by Adroit Economic that is carrying out a complementary Economic Geography, Linkages and Low Carbon Economy study, and the Nevin Leather Associates team undertaking a review of the relationship between housing and the economy in the city region.
3) How have the educational performance and occupational/skills level achieved by Tyne and Wear City Region residents changed over time and how do trends compare with similar City Regions?

Demography and Migration

4) Compared to similar City Regions, how effective is Tyne and Wear City Region in attracting young, aspirational and highly skilled people and where, within the City Region, do they typically gravitate to? How has the City Region’s attractiveness to migrants and the destinations favoured by new migrants changed over time?

5) Where does Tyne and Wear City Region lose its young, aspirational and highly skilled labour to? How have the destinations favoured by out-migrants changed over time? And is the City Region a consistent importer of people in these groups?

Labour Market and Skills Projects

6) How is the demand for skills at different occupational levels likely to change in the medium (5 years) and longer (10 years) term?

7) How is the supply and demand of labour that is equipped to take up employment at these different occupational levels likely to change in the same periods?

8) What is the current level of employer and business demand for higher levels skills? Is there latent demand for higher level skills in the economy? If so, how can this be stimulated?

Policy Implications and Priorities

9) What are the implications of potential changes in supply and demand for: in-migration at different occupation levels; workforce development, particularly in respect of higher level skills; worklessness amongst lower skilled groups; and demand for housing in terms of tenure and price range?

10) What options exist to balance occupational labour demand and supply more effectively and enable increases in the employment rate within the Tyne and Wear City Region?

1.4 More detailed analysis underpinning this work is contained in a series of Technical Reports.
2. **Approach to the Research**

**Overall Approach**

2.1 The work involved a detailed review of the relationships between skills, sectors and economic geography, arising from the concentration of particular types of economic activity within the core of the conurbation, and comparisons with other city regions. This included detailed sector and occupation case studies in order to more fully understand the role that skills play in securing investment and skills in these sectors.

2.2 The work also looked at the demographic effects on the labour market of migration into and out of the city region and assessed the importance of cultural, housing and learning assets and attributes in attracting and retaining highly skilled workers. As part of the work, forecasts and scenarios were developed to explore the potential for the city region to meet future skill needs and drive enhanced performance. The work was split into three phases, summarised in the table below and described in more detail subsequently.

<table>
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<tr>
<th>Phase</th>
<th>Work carried out</th>
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| Phase One: Inception and initial analysis | • Inception meeting  
• Scoping consultations with a range of key stakeholders and partners in the city region and at a regional level  
• A review of pre-existing work in order to understand the recent and current performance of the Tyne and Wear City Region’s economy and labour market, as well as a review of relevant policies and strategies  
• An initial analysis of economic, business and demographic datasets, primarily to update or fill gaps in the available reports and to inform the phase two analysis  
• Workshop to share early findings and preparation of the scoping report |
| Phase Two: Detailed analysis of TWCR labour markets, sectors and assets | • Review of relationships between skills, sectors and economic geography, arising from the concentration of particular types of economic activity within the core of the conurbation, relative to other UK city regions  
• Demographic analysis of migration effects of the TWCR labour market relative to other UK city regions  
• An assessment of the performance of key components of TWCR cultural, housing and learning assets and attributes in attracting and retaining highly skilled workers  
• Detailed sector and occupation case studies to understand the role that skills and other city region assets play in securing investment and skills in these sectors  
• Economic forecasts and scenarios to explore the potential for the city region to meet future skill needs and drive enhanced performance |
| Phase Three: Conclusions and Policy Messages | • Holding a workshop with key partners across TWCR to present and test the findings and have a detailed discussion of the policy implications  
• The results of Phases 1 and 2 and research findings were translated into clear policy conclusions and recommendations |

**City Region Comparators**

2.3 We have compared the performance of TWCR with a number of other areas including a selection of city regions\(^6\) and the England average. The comparators include a mix of city regions of similar scale as well as more aspirational comparators.

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\(^6\) The following city region comparators were used: Sheffield, Nottingham, Liverpool, Bristol, Manchester, Leeds and Glasgow.
2.4 For our Phase One analysis, we mainly used the political definitions. Where a political definition did not exist, we used a methodology based on local authority areas in which at least 15% of people in higher managerial and professional occupations travel to a defined urban core. Phase Two work looked at the functional economic geography of these city regions in more detail and required us to use more nuanced definitions in some cases.

**Phase One: Scoping Phase**

2.5 Key tasks undertaken were:

- **Scoping consultations.** A small number of initial scoping consultations with key partners across TWCR and wider North East region. The discussions covered a range of topics including: the availability of research and evaluation evidence at the regional and city region level; views on the current labour market, skills and employability strengths and weaknesses at a city region and local level; exploring the key sectors and occupations within the economy and the focus for detailed investigation; and consideration of the skill and employability challenges facing the city region as a whole, sectors, groups and locations both currently and over the next decade.

- **Review of policy, evidence and data.** Drawing upon pre-existing work to understand the recent and current performance of the TWCR economy and labour market. This included existing analysis held by partners, including other studies being undertaken as part of the evidence base for RDA regional strategy activity, existing or commissioned TWCR studies, research conducted as part of the Northern Way and other thematic strategies.

- **Initial economic and labour market analysis.** The review of policy and existing evidence was supplemented with initial analysis of economic, business and demographic datasets, primarily to update or fill gaps in the available reports. The emphasis was upon analysis and understanding of TWCR’s economic and labour market performance, the reasons for this and the key economic development issues. It also provided a good foundation for defining the detailed analysis which was the focus of Phase Two.

- **Workshop within TWCR Economic Leads.** Drawing on the initial investigation and analysis, a workshop was held with the TWCR Economic Leads Group (of local authority economic development and regeneration lead officers) to discuss headline findings and to shape and agree the basis for the detailed Phase Two analysis. This was a joint workshop session involving consultants leading on other commissioned TWCR studies.

- **Scoping report.** Phase One culminated in the completion of a scoping report drawing on an informed analysis and understanding of TWCR economic and labour market structure and performance, and setting out in detail the basis for the Phase Two analysis which formed the analytical backbone of the study.

**Phase Two: Analysis of Labour Markets, Sectors and Assets**

2.6 Key tasks undertaken were:

- **Analysis of skills dynamics and business geographies.** This task helped to address key questions 1, 2 and 3 in the ITT. It was made up of a number of elements including detailed analysis of: the change in the skills profile of the city region; the educational achievement, learning and the skills profile; travel to work patterns and the thickness of the labour
market in Tyne and Wear City Region; sectoral change and the demand for skills; and the pattern and nature of worklessness.

- **Review of demographic change and the skills profile.** A key question for the study was the extent to which migration influences population change and in turn the skills profile and economic performance of the city region. The task therefore addresses questions 4 and 5 of the ITT. The demographic analysis focused upon the movement of higher skilled workers between Tyne and Wear and other regions and within the city region, assessing how TWCR and other comparable UK city regions have experienced overall migration, as well as the balance between counter-urbanisation and re-urbanisation. The extent to which the net result appears to have been driven by economic factors was a key consideration for the analysis. The review was undertaken by the University of Manchester.

- **Assessment of city region assets and attributes.** Exploration of the role of city region assets and attributes in explaining the attraction and retention of more mobile investment, businesses and the highly skilled including: a review of the literature on the economic value of particular types of urban asset in order to establish a checklist against which the assets of the TWCR and its component parts can be measured; and a review of key aspects of the perceptions data provided by RDA/CBI business surveys about locational strengths and weaknesses. The review was undertaken by the University of Manchester.

- **Sector Case Studies.** Examining the actual role that the nature and availability of higher level skills (and particular types of skills) are playing in driving the growth of particular knowledge based sectors in the city region. Four case studies were selected (software consultancy, public sector, renewable energy and an occupational case study focusing on private sector managers and professionals). The selection of case studies was informed by their current importance to the city region (in terms of GVA and/or employment), their recent expansion and potential for future growth, or important sectors constrained by skill shortages.

- **Future Economic Prospects and Skill Needs.** Use of Cambridge Econometrics' regional forecasts and development of specific scenarios using Durham University's North East Economic Model (NEEM) to understand the likely impact of economic change over the next five to ten years on the skills requirement of the city region and the potential for policy interventions to stimulate the demand for higher level skills and to drive higher levels of economic growth and prosperity. This is the focus of questions 6, 7 and 8 within the study brief.

2.7 During Phase Two, we held three meetings with the TWCR client group and consultants working on related studies to discuss emerging messages and agree future lines of enquiry for the study. We also drew where appropriate on the work undertaken as part of these assignments, including a survey of 400 businesses conducted as part of the Economic Geographies & Low Carbon study.

**Phase Three: Conclusions and Policy Messages**

2.8 The research undertaken in Phases One and Two was drawn together into a final report that will translate the research findings into clear policy implications. Headline findings and policy implications were presented and tested at a second workshop with TWCR Economic Leads. Having a full and open discussion at this stage was critical to the development of a final set of recommendations that are relevant, appropriate and linked specifically to partners' agendas.
3. Overview of Economic & Skills Performance

Purpose of Chapter

3.1 This chapter contains an overview of the performance of TWCR since 2000. It provides the wider economic context within which the more detailed analysis of the labour market, skills and talent base across TWCR and within specific locations has been undertaken in order to answer research questions 1 to 5 and 8 and to inform analysis of longer-term change in demand and supply of skills in relation to questions 6 and 7.

Growth in GVA

3.2 Prior to the 2008-09 recession, TWCR had undergone a period of prolonged economic expansion since 2000, recording positive growth in GVA of at least 1.7% every year between 2000 and 2007 (note: the data is for Tyne and Wear and Northumberland). This performance occurred during a period in which strong growth at the national level created the favourable economic conditions for all comparator areas to enjoy a period of sustained expansion. Nevertheless, over the whole 2000-07 period, TWCR recorded stronger growth than any other comparator area (19.0% or 2.7% pa).

3.3 However, growth slowed as the decade progressed. Tyne and Wear started the 2000s as the fastest growing economy, but slowed after 2003. Growth in 2006-07 was only 1.7%, which was surpassed by all areas except the North East region itself.

Growth in Employment [Question 1a]

3.4 The sustained growth has driven an increase in demand for labour and skills: employment growth outpaced all other comparator city regions with the exception of Glasgow and Sheffield. Annual Business Inquiry (ABI) data for TWCR shows the city region’s workplaces provided employment for 693,000 employees in 2008, having increased by 58,000 jobs since 2000.

3.5 This growth has been driven by growth in local demand in large part driven by strong economic growth nationally, increased public sector spending, and particular success in attracting and expanding admin and back office functions (private and public sector). However, recent data from the Annual Population Survey (APS) shows a fall of just over 12,000 jobs between 2008 and 2009 (-1.6%). This is more than the national average (-0.9%) but in line with the average for city region comparator areas.
3.6 An important point to note is that part time employment has been growing at a faster rate (11.7%) than full time employment (7.9%). This is to be expected given the trend toward more flexible types of working and growth in key sectors such as retail, which is characterised by a high share of part time female employment. Part time employees account for 31.2% of employees which is exactly in line with the national average. However they account for a much larger share in certain districts including Tynedale (41.5%), Castle Morpeth (41.2%) and Wansbeck (40.2%).

**Sectoral and Occupational Change [Question 2]**

3.7 Like many other areas, the sectoral composition of employment in TWCR has undergone profound changes in the past ten years. The key trend has been a continuing shift away from manufacturing in favour of public and private sector services. Manufacturing fell by a total of 24,500 jobs between 2000 and 2008 while public sector services increased by 32,200 and professional, financial and business services by over 40,000 jobs. The public sector is a very significant source of employment in TWCR, accounting for nearly a third of employment. In this case the only area with a greater share was Liverpool.

In percentage terms, the broad trends occurring within the city region can also be observed for all other comparator areas. However a key difference is the magnitude of growth in professional and financial services which increased by just under 50% in TWCR compared to 33.8% in the city regions as a whole and only 17.8% in England. This high rate of growth reflects a period in which TWCR has been catching up with comparator areas, where this higher skilled sector has been established for some time.

3.9 It should also be noted that the overall fall in the manufacturing sector has not been as great as in other comparator areas. This is a point raised by several of the scoping consultees and in several other employment and skills studies in the North East. While overall employment has been falling, several important manufacturing sectors including automotive and pharmaceuticals have proved very resilient over the past ten years and have recorded increases in demand for labour. Technical Report 3: High Level Skills looks at the advanced manufacturing sector and the most successful sub-sectors in more detail.

3.10 Growth has been strongest in sectors such as public administration and call centres while TWCR remains under-represented in the more highly skilled sectors such as banking, insurance and

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7 Data here refers to number of employees from the Annual Business Inquiry. This may differ from Annual Population Survey data, which includes those people who are self employed.

8 North East 2008 Labour Market Review, Paul Braiford and Ian Stone, Durham University,
The Labour Market Challenge 2009, Stuart Dawley and Ian Jones, The Smith Institute,
professional services. This partly reflects the functional role of activity in TWCR within sectors which tend to be lower skilled 'back office' functions relative to elsewhere. Much of the growth in financial services has been generated through sales and data processing (again through the growth in call centres). The combination of these two effects can be observed by looking at the overall occupational profiles of the public and financial/business services sectors.

3.11 In both cases, the percentage of employment in highly skilled occupations (SOC 1-3) is greater across all comparator areas (with the exception of the North East). In professional and financial services, the North East and TWCR actually have a higher proportion of employment in the lowest skilled occupations (SOC 7-9) than intermediate occupations (SOC 4-6). The public sector has become an even more important source of employment overall and employment of highly-skilled workers in particular, accounting for one in three jobs overall and over 45% of highly skilled jobs in the city region.

3.12 Whilst improving, TWCR’s skills profile is relatively weak compared to many comparable city regions, especially at the higher level (where the available pool is relatively small). TWCR’s occupational profile does not compare favourably to that of other city regions (in terms of the proportion of workers in the top occupational categories). This reflects the nature of demand for employment, as much of the growth in employment between 2000 and 2008 has been in back-office functions (administration, process and contact centres activities) that are characterised by a requirement for workers at NVQ Level 2 and 3. There has been more modest growth in demand for jobs requiring higher-level skills.

Demography

3.13 TWCR was home to approximately 1.68m people in 2008, of whom 1.05m were of working age. In working age population terms, TWCR is closest in size to the Sheffield (1.09m), Glasgow (1.12m) and Liverpool (0.91m) city regions, but is almost twice the size of Nottingham and only half the size of Manchester.

3.14 The TWCR working age population has grown by 3.7% between 2000 and 2008 (although this rate of growth is much slower than most other city region comparators), but the ‘prime age’ population (21-40 years of age) has declined slightly. This is the age group which is the most mobile and highly qualified section of the workforce and is crucial to sustain a competitive economy. Whilst the supporting evidence is not conclusive, this could reflect out-migration of highly skilled graduates and other workers with specialist skills for which there is low demand in TWCR.

3.15 Bristol saw a rise of 10.4% in this group between 2000 and 2008. While some of this rise can be attributed to natural growth in the population, such high rates of growth can generally be taken as a sign that it has attracted working age people from other areas to live and work in the city region – indicating a strong performing labour market.
Qualifications [Question 3]

3.16 The rate of improvements in the qualification levels of the workforce since 2000 has exceeded that of the city region average and England excluding the Greater South East. The proportion of adults with the lowest level or no qualifications has fallen by 8.9 percentage points to 33.9% (352,000 people).

3.17 Progress against this measure has been better than all other city regions and the percentage of people at this skill level is now less than the national average (35.4%). Despite strong progress, this still leaves over a third of people in TWCR lacking the most basic skills, and therefore highlights the need for sustained efforts to reduce the figure further.

3.18 TWCR continues to have a higher proportion of its workforce qualified to NVQ level 2 and level 3 than the national average. 22.8% of working age people are qualified to level 3 – more than all other city regions. TWCR still lags behind other comparators in terms of the highest level skills (NVQ4+). 24.7% of working age people have reached this level of attainment (256,000 people) compared to a national average of 28.7%.

3.19 Progress has been strong, with the rate increasing by 5.7 percentage points since 2000. While this is a greater rate of change than several other city regions, TWCR has still made little progress in closing the gap on the national average.

3.20 However the skills gap appears to be closing for younger age cohorts: over 25% of TWCR’s 20-30 year olds’ highest qualification is level 3 (more than all city region comparators). This may be an age cohort effect (as a higher proportion of young people leave school with qualifications), and also a reflection of the nature of demand for skills (i.e. strong demand for intermediate skilled work).
Participation and Worklessness [Question 1b]

3.21 TWCR’s economic activity rate and the employment rate have risen at a much faster rate than comparators and, in both cases, TWCR has substantially closed the gap on the national average. The economic activity rate (the proportion of the working age population in employment or actively seeking it) has increased by 2.7 percentage points since 2000 compared to only 0.4 percentage points in England as a whole. This is equivalent to bringing an additional 50,000 people into the active labour market and has clearly been a major source of labour on which employers can draw. It may therefore have been a significant factor in enabling the city region to source the skills it needs to sustain its high growth rate.

3.22 It is not possible to conclude, at this stage, without access to further data and analysis whether the rise in activity has been due to an expansion in demand. Labour market programmes are also likely to have been a contributing factor, however the fact that this occurred during a prolonged period of economic expansion would imply that people have become active in the labour market as a reaction to the increased number of employment opportunities.

3.23 Similarly, the employment rate has risen by 2.5 percentage points during a time when the national average has fallen slightly (by 0.3 percentage points). The employment rate in TWCR now stands at 71.2% compared to a city region average of 72.1% and a national average of 74.2%.

3.24 A key factor driving the overall improvement in TWCR’s economic activity rate has been the huge reduction in the number of people claiming incapacity benefit in the city region. The total number of claimants fell by 25,000 between 2000 and 2008, equivalent to a fall of nearly 20%.

3.25 Despite this strong performance, the city region still has a higher share of its working age population claiming IB or ESA than most other comparators. In 2009 there were just over 100,000 claimants representing 9.5% of the working age population compared to a city region average of 8.7% and a national average of 6.6%.

3.26 The recession has led to a rise in Claimant Count unemployment in TWCR during 2008 and 2009 in line with the rate of increase nationally, and can be seen across all age groups. The largest rise in
absolute terms was among skilled occupations, although there are concerns that the recession has deepened the challenges facing long term unemployed. The more recent reductions in the Claimant Count in TWCR appears (as it does nationally) to reflect both people returning to employment and leaving the labour market (i.e. rise in inactivity through registering as Disabled or claiming other benefits). Severe concentrations of worklessness remain in the large urban areas of TWCR.

**Graduate Attraction and Retention [Question 4 and 5]**

3.27 Higher Education Statistics Agency (HESA) data shows there has been a significant increase in the numbers qualifying at TWCR Higher Education Institutions (HEIs) between 2002/3 and 2007/8, with increases amongst the numbers of postgraduate, first degree and foundation degree qualifiers.

3.28 The number of TWCR domiciled students qualifying at the city region’s HEIs has also shown strong growth since 2002/3. TWCR domiciled postgraduates and first degree students accounted for just under 40% of qualifiers in 2007/08 – a proportion which has remained more or less consistent since 2002/3 and is greater than all other comparators except London. As one might expect, the figure for TWCR domiciled foundation degree qualifiers is much greater – accounting for 90% of qualifiers.

3.29 Around two-thirds of North East domiciled students attend a university in the city region: more than any other region. These ‘locals’ are far more likely to be retained in the region than outgoing or incoming students (90% vs. 37% and 28%). This is the highest rate of retention for domiciled students behind London and implies that the quality of FE/HE institutions in TWCR will be of critical importance for supporting skills development and overall economic growth in the city region. Roughly three-quarters of those graduates who enter high skilled positions in the TWCR labour market work in the public/community sector while the numbers entering manufacturing have fallen steeply.

3.30 On the other hand, TWCR attracts very few graduates with no previous ties to the city region. Less than 500 of the new graduates employed in the city region in 2008 had neither grown up nor studied there. This is a very low number and suggests that TWCR is not an attractive option for those without prior ties to the area. This is perhaps understandable given the relatively small employment base and the fact the city region is geographically remote which means it is less of an attractive option for graduates with family/social ties to other parts of England and Wales.

**Meeting Skills Needs [Question 8]**

3.31 The National Employer Skills Survey (NESS) is a survey of some 80,000 employers, 5,700 of whom are in the North East. It is the largest and most comprehensive survey to capture evidence of an imbalance between demand and supply, as indicated by skill shortage vacancies and skill gaps\(^9\). However, given that the survey is conducted at a regional level, the findings produced for the North East have been used to inform the analysis of skills issues for TWCR.

3.32 By and large, North East employers are not facing the same recruitment difficulties experienced nationally and even less since the economic downturn, which suggests that employers have been

\(^9\) Skill shortage vacancies are vacancies which employers have been unable to fill due to a lack of suitable skills amongst candidates. Skill gaps refer to existing staff that lack full proficiency in their jobs.
able to secure workers with the skills that they need (i.e. a good match between supply and demand).

3.33 The pressures, where they have arisen, appear to have been associated with specialist construction skills, good call centre and administrative operatives (where poaching of staff has been an issue) and elementary skills (though this could be in part related to poor working conditions). During a period of strong economic and employment growth, businesses have largely obtained the skills they need, but there has been a more modest increase in the demand for and utilisation of higher skills.  

3.34 The data for 2009 shows that skill shortage vacancies (SSVs) have become less of a problem for North East employers since 2007, a period which has included the worst of the economic downturn. The total number of SSVs reported by employers fell from 4,500 in 2007 to 2,100 in 2009. Relative to employment, this equates to a fall from 4.6 SSVs per 1,000 employees to just 2 SSVs per 1,000 employees. It also shows that in both 2007 and 2009, there were fewer SSVs relative to total employment than the national average and a lower percentage of hard to fill vacancies were due to skill shortages.

3.35 Prior to the recession, gaps for higher skilled occupations were growing, although they were not considered to be a major constraint on growth by businesses in the North East. Generally, skill gaps have been less of an issue since 2007 but may return if there is an upswing in the economy and if demand rises rapidly. TWCR does not tend to attract large numbers of high-skilled workers from elsewhere (either to live or to commute into key employment centres), although this reflects the scale and nature of demand for skills; employers appear to be meeting their skills needs mainly through recruiting those people who already resided in the city region.

3.36 The results of the TWCR business survey reflected similar messages generally: just 16% of respondents claimed to have encountered barriers when accessing higher level skills. The most common barrier was for financial reasons i.e. they could not afford the salaries necessary to attract high skilled people or they could not afford the cost of investing in existing staff to provide them with a level 4 qualification. Overall, it appears employers were satisfied with their ability to attract higher skilled staff. Over 50% of respondents cited the ability to access highly skilled people and graduates as a strength of TWCR as a business location. Given the low rates of migration into the TWCR noted above, this again may reflect the modest overall demand for higher level skills by TWCR firms.

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10 The National Employer Skills Survey is not able to capture evidence of latent demand or a lack of ambition among TWCR employers, but these issues are addressed in the main body of the report (Question 8).

11 A telephone and web survey of 466 SMEs across TWCR was undertaken by Adroit Economics between April and June 2010.
There is more evidence of job related training at level 4 (i.e. employers’ willingness to train workers to degree level equivalent) than in any other city region. This may reflect the dominance of the public sector, which has a strong commitment to workforce development and demand for specialist training related to regulatory requirements (e.g. health & safety in some manufacturing sectors). However, the Adroit business survey also points to a willingness of TWCR firms to upskill existing employees to meet skills needs.

**Earnings**

Wage inflation is an indicator of the tightness of the labour market. Data from the Annual Survey of Hours and Earnings (ASHE) shows that wage inflation in the North East between 2000 and 2009 does not appear to have been significantly above that for the UK. Wage increases have been at similar levels to the national average for intermediate and higher skilled occupations.

However the picture is very different for lower skilled occupations, especially elementary occupations, which have seen median annual wage increase by over 60% in the North East compared to only 34.1% in the UK as a whole. This is a strikingly large differential – and it is unlikely to be explained by large increases in demand for labour in these occupations as demand was flat over the period 2000-2008. This may therefore imply a shortage of supply of people in lower skilled occupations and therefore wage inflation. It also partly reflects the introduction of a national minimum wage in 1999.

This provided a larger initial boost to the wages of people working in lower skilled jobs in less prosperous regions than those working on equivalent jobs elsewhere (who would already have been on higher salaries). The increase in the minimum wage rate over time (often by a greater percentage than the growth in average earnings) has provided an ongoing upward push on earnings at the lower end of the labour market.

**Summary**

Tyne and Wear City Region has undergone a period of rapid growth in both GVA and demand for labour. All the evidence suggests that TWCR has been able to source the skills it needs to meet this demand. It has done so chiefly because the major growth in demand has been for lower and intermediate skilled labour, meaning the city region has been able to better utilise its existing workforce, reducing the number of economically inactive people and moving them into jobs.

The growth in demand for labour has not been matched by that for high level skills. This is partly a reflection of the sectoral mix of the TWCR economy. There has been some growth in higher skilled sectors, however within these those sub-sectors which stand out tend to be comparatively low skilled for example call centres and public administration. It is also partly a reflection of the types of activity within sectors which are located in the North East, which tend to be lower order.
administrative and manual activities. Higher order functions such as HQs and innovation/design are more likely to be located elsewhere.

3.43 TWCR also appears to be over-reliant on the public sector to provide employment opportunities for highly skilled people. The public sector accounts for 33% of employment but over 45% of highly skilled jobs. The data suggests that a very high percentage of retained graduates find work in the public sector following university, with less and less are looking to careers in STEM-related sectors. Much of this is likely to be due to the success the North East has had in attracting public sector investment (due to lower wages and rental values). It becomes particularly concerning with the prospect of large public sector spending cuts imminent.

3.44 The overall skills profile of TWCR is improving. It has yet to significantly close the gap on the national average. This may change as younger, better qualified cohorts work their way through the system. The improvements in the skills profile of TWCR appear to have occurred mainly by improving the progression of people who live/work in the city region.

3.45 There was some in-migration of highly skilled labour between 2000 and 2008 although there was a net loss of prime age people (16-40) who tend to be the highest qualified. Likewise, graduate retention data shows that the region is good at retaining those who grew up in the North East, but less so at attracting people from elsewhere. The performance of the TWCR is summarised below:

<table>
<thead>
<tr>
<th>Table 3.1: Summary of TWCR Skills Demand Performance, 2000-08</th>
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</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>GVA Growth (Tyne and Wear and Northumberland)</td>
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<tr>
<td>Employment Growth</td>
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<tr>
<td>Structural Composition</td>
</tr>
<tr>
<td>Occupational Composition</td>
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</tbody>
</table>

12 Science, Technology, Engineering and Mathematics.
Table 3.2: Summary of TWCR Skills Supply Performance, 2000-08

<table>
<thead>
<tr>
<th>Variable</th>
<th>Performance</th>
<th>Performance vs. Comparators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>Increase in working age population of 3.3% (38,000 people), but fall in prime age population (those aged 21-40) of 0.7% due to net out-migration of young people and managerial and professional staff</td>
<td>Working age population growth slower than in all city regions, except Liverpool and Glasgow, which are only other city regions to see fall in prime-age population. Rise in prime-age population of over 10% in Bristol</td>
</tr>
<tr>
<td>Participation</td>
<td>Demand for labour growing rapidly; employers able to source skills required through better utilisation of TWCR resident labour pool; reflected in reduction in economic inactivity and IB claimants (although JSA unemployment has increased since 2008)</td>
<td>Increase in the economic activity and employment rates were greater than all other city regions and brought TWCR in line with the city region average. Suggests a better match of supply and demand of labour in TWCR than elsewhere, but overall lower levels of demand for high-skilled workers</td>
</tr>
<tr>
<td>Qualifications</td>
<td>Overall improvement; decline in proportion of adults with no qualifications to 34%; increase in those qualified to levels 2 and 3 (23%); around one-quarter now have level 4+ skills (increase of just under 6 pp since 2000)</td>
<td>TWCR has proportionately fewer unskilled workers and more intermediate-skilled workers than city region average. Still lags city region average on higher-level skills and some 8 pp behind Bristol, although the gap for younger workers (20-29 years) qualified to level 4 is closing</td>
</tr>
</tbody>
</table>
4. Recent Labour Market & Skills Performance

4.1 This chapter contains detailed analysis of TWCR labour markets and sectors. It has been informed by a number of elements including analysis of:

- The change in the skills profile of the city region.
- The educational achievement, learning and the skills profile.
- Travel to work patterns and the thickness of the labour market in TWCR.
- Sectoral change and the demand for skills.
- The pattern and nature of worklessness.

4.2 The analysis highlights key labour demand and supply issues for TWCR, examines the relationships between the main employment centres, residential areas and travel to work patterns, and include an analysis of the size of the higher managerial and professional occupational skills pools available to the main employment centres in the TWCR. Chapter Four provides analysis and answers to research questions 1-3 plus 8, covering:

- Question 2: Travel to work patterns.
- Question 1a: Concentration of highly skilled workers and residents.
- Question 8: Demand for higher level skills.
- Question 3: Supply of skills and qualifications.
- Question 1b: Patterns and trends in worklessness.

Evidence Base Drawn Upon

4.3 The majority of the work carried out has been desk-based research; primarily quantitative analysis of a broad range of socio-economic datasets. Where possible, the study has looked at the dynamics of change over the period 2000-2008, and more recently where data allows. The research has also drawn upon a wide range of existing research looking at the North East’s labour market and economic geography.

Question 2: Where does Tyne and Wear City Region’s highly skilled workforce travel from and how does the City Region compare with others in terms of the volume of highly skilled workers on which it can draw? How has this changed over time?

4.4 The map in Figure 4-1 (based on census data) shows the reach of the City Region based on the percentage of workers in different areas who commute to the defined urban core (Newcastle, Gateshead and Sunderland). It is clear that the City Region’s reach extends much further to the north than it does to the south.
4.5 The main concentrations of highly skilled workers (SOCs 1-2) live in central and eastern suburbs of Newcastle, central Durham and parts of North Tyneside, and other pockets stand out in eastern areas of Tynedale and in Castle Morpeth. Data for the qualifications of residents show that Newcastle and North Tyneside both have the highest rates of people qualified to level four and above. North Tyneside has seen an 8.0 percentage point rise between 2000 and 2008, compared to a rise of 5.7 percentage points across the city region as a whole.

Figure 4-1: Tyne & Wear City Region Labour Catchment Area


4.6 Durham\(^{13}\) has a particularly high concentration of people qualified to level 3 and 4 (around 35.7% qualified to at least degree standard compared to the city region average of 24.7%). The figure is even higher in Tynedale (37.8% of the population qualified to level 4+, a 12.7 percentage point increase since 2000). The combination of good quality housing in a rural location but with good access to Newcastle continues to be a significant pull for highly skilled workers.

4.7 In terms of commuting, the economic geography literature (including the Adroit Economics/Ekosgen study) has identified four distinct travel to work areas within the city region, three of which are centres for highly skilled employment: Newcastle and the North, Central Sunderland, and Durham City. The fourth centre is Washington - whilst there is less highly skilled employment here, it is included in the analysis below.

4.8 **Newcastle and the North** is the largest and most successful economic geography in TWCR. As well as the urban core, it also contains a number of other strong locations at Cobalt, Morpeth, Killingworth, Blyth and Cramlington. The key locations attract highly skilled workers from a large footprint to the north of the city region and from eastern parts of Tynedale, while its influence beyond the conurbation to the south is less extensive. As noted by Adroit/Ekosgen, this geography benefits from a strong suburban housing market and a number of attractive rural locations in the north, which allows businesses to draw from a highly qualified workforce. As we might expect, the largest flows are from within Newcastle and Gateshead themselves but there are also large flows from coastal areas in North Tyneside including Tynemouth and Whitley Bay, and the A1 corridor toward the south to Washington and Chester-le-Street.

\(^{13}\) We refer here to the former LA district of City of Durham. All analysis is based on pre-2009 LA district boundaries.
4.9 The map for Central Sunderland shows a very different picture. In this case, the footprint is much smaller than Newcastle and the North and indicates just how self contained the district is in terms of the catchment of highly skilled workers. All of the significant inflows into the main employment wards are from within the district itself, with some small inflows from South Tyneside and prime housing markets in Newcastle, reflecting the much lower number of high skilled opportunities in Sunderland. This area also has a much weaker housing market than the Newcastle and the North which might make it harder to attract highly skilled workers.
4.10 **Washington** is home to Nissan Motor Manufacturing (UK) Ltd. The geography has a strong manufacturing base and while Nissan and its nearby supply chain are of vital importance, there is also a strong industrial presence in other manufacturing sectors. However the area is not a major employer of highly skilled labour, and as such, there are very few significant inflows from surrounding areas.

![Figure 4-4: Higher-level skilled Commuting to Key Employment Locations in Washington](image)

Source: Census, 2001

4.11 The Economic Geography and Linkages study describes **Durham City** as a key asset with a renowned visitor attraction in the Cathedral, a leading university and a strong administrative base. While certain private service sectors are growing in Durham, it still relies on the public sector for much of its high skilled employment. The high skilled commuter flows to Durham City highlight that the area is also relatively self contained, with the strongest flows all within the former Durham authority boundary.
The map in Figure 4-6 shows where the current concentrations of employment in knowledge based industries (i.e. those which are likely to be higher skilled) are located. The major employment nodes are in central Newcastle and nearby business parks in edge of town locations. There are also smaller nodes in central Durham and in business parks to the south of Sunderland. This echoes the census data presented above, which shows a dominant location for highly skilled employment in Newcastle attracting commuters from a large area to the north and west of the city. However, Sunderland and Durham also provide a modest number of high skilled opportunities meaning their labour market catchment areas are much smaller and more self contained - mainly providing jobs for local people.

The definition of Knowledge Based Industries, used in this study, includes ‘call centre activities’. This is a lower skilled sector than most KBIs and accounts for some of the concentrations on the map. It should be noted, however, that most call centre activity is classified under a SIC code which reflects the core function of the business e.g. a call centre of a bank would be classified as financial services, and would appear on the map anyway. These issues are addressed in more detail in Technical Report 2: Economic Geography.
Recent APS data suggests that the main commuting patterns at district level remained broadly the same in 2008. North Tyneside remains the major commuter location for managers and professionals. It has very strong transport links to the urban core and a good housing offer, making it a desirable area for wealthier families.

In answering the second part of this question (about the volume of highly skilled workers on which the city region can draw upon), revised boundaries for TWCR and comparators were established. This involved defining an employment core for each city region and including all local authority (or former local authority) districts in which at least 15% of resident high skilled workers commuted to the core at the time of the Census.

Based on these revised boundaries, TWCR could draw upon a pool of 133,300 people in managerial or professional positions in 2001. Assuming that commuting flows have remained constant since 2001, and the same boundaries applied in 2008, this pool has now increased to 170,000 HMPs, placing TWCR third behind the much larger city regions of Manchester and Leeds. The rate of change in the number of HMPs (27.8%) is also promising for TWCR, as it was exceeded only by Bristol (31.5%) which is the highest performing city region across a range of measures.

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15 These differ slightly to the political definitions of city regions used elsewhere in the report.

16 In the case of TWCR the revised boundaries exclude the former districts of Durham and Easington to the south, but includes Alnwick in the north.
In the table below we use the same boundaries for city regions but instead look at the overall supply of people with level 4+ qualifications. This may actually be a better measure as it considers the total supply of highly skilled workers while HMPs in employment is a function of both demand and supply. Against this measure, TWCR remains the third placed city region in terms of the supply of highly skilled people (behind Manchester and Leeds), with 229,000 people possessing a level 4+ qualification. This has increased by 59,000 or 34.3% since 2001, in line with most city regions but some way behind Sheffield (52.8%) which started from a low base.

**Table 4-2: Volume and Change in Number of People with Level 4+ Qualifications in TWCR Labour Market Catchment Area, 2001-2008**

<table>
<thead>
<tr>
<th></th>
<th>Level 4+ 2001 (Census)</th>
<th>Level 4+ 2008 (APS)</th>
<th>Change 01-08</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol CR</td>
<td>159,700</td>
<td>214,900</td>
<td>55,200</td>
<td>34.6%</td>
</tr>
<tr>
<td>Leeds CR</td>
<td>264,100</td>
<td>354,600</td>
<td>90,500</td>
<td>34.3%</td>
</tr>
<tr>
<td>Liverpool CR</td>
<td>132,200</td>
<td>173,200</td>
<td>41,000</td>
<td>31.0%</td>
</tr>
<tr>
<td>Manchester CR</td>
<td>383,700</td>
<td>511,900</td>
<td>128,200</td>
<td>33.4%</td>
</tr>
<tr>
<td>Nottingham CR</td>
<td>119,000</td>
<td>164,900</td>
<td>45,900</td>
<td>38.6%</td>
</tr>
<tr>
<td>Sheffield CR</td>
<td>101,700</td>
<td>155,400</td>
<td>53,700</td>
<td>52.8%</td>
</tr>
<tr>
<td>TWCR</td>
<td>170,700</td>
<td>229,300</td>
<td>58,600</td>
<td>34.3%</td>
</tr>
</tbody>
</table>

Source: Census 2001 and Annual Population Survey through Nomis (Crown copyright material is reproduced with the permission of the controller of the HMSO).

4.16 In the table below we use the same boundaries for city regions but instead look at the overall supply of people with level 4+ qualifications. This may actually be a better measure as it considers the total supply of highly skilled workers while HMPs in employment is a function of both demand and supply. Against this measure, TWCR remains the third placed city region in terms of the supply of highly skilled people (behind Manchester and Leeds), with 229,000 people possessing a level 4+ qualification. This has increased by 59,000 or 34.3% since 2001, in line with most city regions but some way behind Sheffield (52.8%) which started from a low base.

**Question 1a: How does Tyne and Wear City Region compare with similar UK City Regions in terms of the concentration of highly skilled jobs and residents?**

4.17 This question is, in effect, asking about both the demand and supply of high level skills as indicated by highly skilled jobs and highly skilled residents respectively. Table 4-3 compares the position for the political definition of city regions and the labour market catchment definition which we have used above, although the results are very similar for both.

4.18 TWCR appears to be one of the worst performing city regions (along with Sheffield and Liverpool) and falls some way behind the city regions and national average. For each of the measures, just under 25% of TWCR residents/workers are in highly skilled occupations or are qualified to level 4+ compared to a national average closer to 30%.
The data therefore suggests that while TWCR employers have a larger pool of highly skilled labour on which to draw than many other city regions, in proportionate terms, the workforce is, on average, lower skilled. APS workplace data shows that the results for HMPs (SOC1-2) are almost identical to the residence based data suggesting a self contained labour market catchment area. Again, TWCR emerges as the second worst performing city region – only slightly better than Sheffield.

A more fine grained analysis of ABI data shows that much of the growth has been in lower and intermediate skilled sectors. In professional and financial services, the sub-sectors showing the strongest growth include labour recruitment (7,500 jobs), industrial cleaning (5,600 jobs) and call centre activities (3,800 jobs) as opposed to the more highly skilled sub-sectors such as consultancy, accounting and legal services. The table also reveals the enormous growth, which has occurred in public sector administration. This sub-sector alone accounted for over 17,000 new jobs in TWCR between 2000 and 2008, meaning its share of total employment now accounts for more than twice the equivalent share of employment in Great Britain.
4.21 The strong growth in public sector employment is reflected in the percentage share of employment in knowledge based industries in TWCR. Overall KBIs account for 43.6% of employment, more or less in line with the city regions and national average (43.9% and 43.8% respectively). However, when we exclude public sector employment, this falls to just 16.4%, below the city region average of 19.7%, the national average of 22.4% and some ten percentage points behind the highest performing comparator (26.8%). This is at a time when severe public sector spending cuts are likely to lead to a significant contraction in demand.

4.22 The public sector accounts for a disproportionately large share of employment in TWCR (33.5% compared to the national average of 28%). This figure rises to 39.9% for managers and professionals (SOC1-2) and 45.0% if we include associate professionals (SOC 1-3) compared to 31.2% and 35.5% for the city regions as a whole. We can contrast this with professional and financial services, which provides 25% of the demand for high level skills at national level, but only 19% in TWCR. This represents a huge gap in the sector which we would expect to be the major driver of demand in the private sector.

4.23 In addition, the functional role of activity within sectors in TWCR tends to be lower skilled ‘back office’ functions relative to elsewhere. This can be observed in both public and private sub-sectors.
Dawley & Jones (2009) offer the example of financial services, where much of the growth in demand has been generated for positions in sales and data processing. In the public sector, DWP has a large presence in TWCR but activity is mainly confined to administrative functions. Figure 4-9 shows the percentage of employment in the civil service at the level of executive officer or above in different English regions. In the North East, less than 35% of employment is at Executive level or above, meaning 65% of employment is in administrative positions — considerably more than all other regions.

<table>
<thead>
<tr>
<th>Total Employment</th>
<th>HMPs</th>
<th>SOCI-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture &amp; fishing</td>
<td>1.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Energy &amp; water</td>
<td>1.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>12.2%</td>
<td>13.1%</td>
</tr>
<tr>
<td>Construction</td>
<td>8.0%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Distn, hotels &amp; rest</td>
<td>19.1%</td>
<td>18.6%</td>
</tr>
<tr>
<td>Transport &amp; Comms</td>
<td>7.0%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Banking finance &amp; ins etc.</td>
<td>17.1%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Public admin edu &amp; health</td>
<td>28.0%</td>
<td>33.5%</td>
</tr>
<tr>
<td>Other services</td>
<td>6.3%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

Source: Annual Population Survey through Nomis (Crown copyright material is reproduced with the permission of the controller of the HMSO).

4.24 There are therefore two separate trends at work which, when combined with each other, limit the growth in demand for high level skills in TWCR. One arises from the fact that the main areas of growth tend to be in lower and intermediate skilled sub-sectors, while a second trend shows employers are choosing to locate the lower order administrative functions within the city region.

4.25 It is important to note that this analysis takes a very broad view of the labour market as a whole and disguises certain sectors which have a high skilled content and have been growing rapidly in TWCR. Software consultancy is one such sector in which nearly 75% of employment is highly skilled. This sector has achieved an impressive growth rate since 2000, outpacing all comparator city regions, and it appears to have been able to source all of the skills required during this time. However, our detailed case studies have noted that while the sector in TWCR is able to attract local graduates and people in junior positions, the sector is not advanced or established enough yet to compete with larger locations such as London for the highest skilled positions.

4.26 There are also sectors which will be of increasing importance as a source of highly skilled employment in the future. Our case study of the low carbon manufacturing sector has highlighted a number of competitive advantages for TWCR in this sector. A report by Energy for Sustainable Development Ltd\(^\text{17}\) indicated that it was reasonable to expect that the North East could feasibly capture 50% of the total job creation implied by the growth in UK offshore wind power, although this might be challenging to achieve in practice. This represents in the region of 35,000 to 40,000 jobs by 2020 if 30% of electricity is supplied by renewables. Success in this sector will hinge on increasing the supply of graduates in STEM related subjects.

\(^\text{17}\) Offshore Wind, Onshore Jobs: A New Industry for Britain, a report by Energy for Sustainable Development (ESD) Ltd, for Greenpeace UK, October 2004
Question 8: What is the current level of employer and business demand for higher level skills? Is there latent demand for higher level skills in the economy? If so, how can this be stimulated?

4.27 One indicator of the demand for high level skills is the percentage of employers who have employed a graduate or trained members of their existing workforce toward a highly skilled qualification. Table 4-7 compares the performance of the North East and the UK against these indicators using the best available data from the National Employer Skills Survey (NESS).

4.28 On the whole it implies that employers in the North East display similar levels of demand to that nationally, however there is a striking difference between the voluntary/public sector and the private sector where employers are much less likely to recruit graduates or train their staff toward a level 4 qualification.

Table 4-7: Percentage of Establishments Recruiting Graduates or Training Staff toward a Level 4 Qualification, 2009

<table>
<thead>
<tr>
<th></th>
<th>% recruited a graduate in the last 12 months</th>
<th>% of establishments who have trained staff toward level 4 qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UK</td>
<td>North East</td>
</tr>
<tr>
<td>Seeking a profit</td>
<td>40.2%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Charity / voluntary sector</td>
<td>56.3%</td>
<td>56.9%</td>
</tr>
<tr>
<td>Local government body</td>
<td>68.5%</td>
<td>71.4%</td>
</tr>
<tr>
<td>Central government body</td>
<td>60.7%</td>
<td>56.4%</td>
</tr>
<tr>
<td>Total</td>
<td>42.8%</td>
<td>41.1%</td>
</tr>
</tbody>
</table>


4.29 Table 4-8 shows that in 2007/08, 55.5% of the graduates who found employment in TWCR worked in the public sector – with large shares in public administration, education and health. An examination of the percentage of graduates who entered employment in highly skilled positions (defined here as SOC1-3) reveals that the proportion working in the public sector rises to just under 65%.

4.30 This analysis illustrates the weaker level of demand among private sector businesses, and raises serious questions about the ability of the sector in TWCR to compensate for the contraction in demand from the public sector, which is anticipated over the next few years.

Table 4-8: Sector of Employment of TWCR Graduates Retained within the city region, 2003-2008

<table>
<thead>
<tr>
<th>Sector</th>
<th>2002/3</th>
<th>2007/8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Sector</td>
<td>55.6%</td>
<td>55.5%</td>
</tr>
<tr>
<td>Professional and Financial Services</td>
<td>16.0%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Wholesale and Retail Trade</td>
<td>7.7%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>6.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Information and Communication</td>
<td>2.3%</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

Source: Higher Education Statistics Agency
NESS data also shows that, on the whole, North East employers have been able to source the skills they need to a greater degree than the national average both at a time when demand was buoyant and, since the recession, when it has been weaker. However, the key difference between the North East and England lies in the skill shortages at different occupational levels. In the North East, a total of 62.3% of hard to fill vacancies are due to skill shortages compared to 73.5% in England as a whole, yet the gap is wider for higher skilled, intermediate and skilled craft occupations, while for lower level occupations, the reverse is true: 71.9% of vacancies at this level are due to skill shortages compared to 62.5% of vacancies in England as a whole.

This suggests that the imbalance between demand and supply of skills is more of a challenge for North East employers (including those in TWCR) at the lower end of the spectrum relative to England, where demand is clearly greater for higher and intermediate level skills. However, recent business survey evidence from TWCR, compiled by Adroit Economics, suggests that some companies are at least thinking about increasing their use of higher level skilled workers over the next 3 years (20% of the businesses surveyed).

The Adroit TWCR business survey generally reflects these messages: it found that just 16% of businesses faced some barriers accessing higher level skills. These barriers were mostly due to financial concerns - businesses stated they could not afford the higher salaries necessary to attract highly skilled people or they lacked the resources to invest in workforce development at level 4. Nonetheless, over half of employers cited the ability to attract high skilled people as a strength of TWCR as a business location. The story emerging from this analysis is that, during a prolonged period of strong growth in demand for labour, TWCR has largely been able to source the high level skills it needs. It appears that it has been able to do so because much of the employment opportunities have been at lower and intermediate skill levels, while demand for higher level skills has been weaker, especially in the private sector.

It should be noted, however, that this overall picture disguises skills issues in certain developing sectors, which display a high demand for high level skills. The case studies of the software consultancy and renewable energy manufacturing sectors in TWCR, which were undertaken as part of this research project, showed healthy levels of demand for high level skills but both experienced certain supply side issues. In the case of software consultancy, the relative size of the sector means that IT professionals choose more established markets (such as London or Manchester) where career progression opportunities are greater. In the renewable energy manufacturing sector, an ageing workforce and shortage of young people with STEM skills has led to a need for more tailored training and specialised degree courses to be provided in the region.

At a sector specific level, NESS 2009 data also highlights that the public sector has encountered very few difficulties in sourcing higher level skills (further details are contained in Technical Report 5).
On the evidence gathered so far on vacancies and workforce proficiency, there is little to suggest that there is a high level of latent demand for high level skills among TWCR businesses. Latent demand occurs where employers lack information about the benefits that high level skills could bring to their business and they therefore demand less than is optimal. This is a difficult issue to examine in the absence of a detailed specific survey of employers' perceptions. The TWCR business survey does not cover the level of detail required to investigate the issue of latent demand in full.

Therefore, other possible indicators have been explored. Based on the evidence so far, it appears many businesses do not seek to employ people with high level skills because they see no clear business case for doing so. There is, however, some evidence that the qualification levels held by people in managerial and professional positions is, on average, slightly lower in TWCR than the city regions' average.

Only 50.9% of HMPs in TWCR hold a level 4+ qualification compared to 52.3% across the city regions as a whole. While this data should be interpreted with some caution, it may imply that those people in senior positions elsewhere are better qualified to carry out the tasks required of managers and professionals than in TWCR, and that increasing the number of people with a level 4+ qualification could generate business benefits in TWCR. This may offer some evidence that there is latent demand for high level skills, but it should be considered in the context of other factors, such as the sectoral composition of TWCR's economy.

The data may reflect the fact that TWCR has a larger share of managers in lower skilled sectors such as retail, catering etc, in which case there may be few business benefits to increasing the skill levels of people in senior positions. It is therefore difficult to reach firm conclusions on the nature and level of latent demand in TWCR without further detailed research.

The evidence presented could equally point to a lack of ambition on the part of TWCR employers. This is a different issue to latent demand, in that it implies employers are conscious of the benefits of high skilled workers, but demand is limited as they do not wish to pursue a business strategy, which seeks to exploit these benefits, such as increased innovation, expanding market share and entering new markets.

Again, this issue is difficult to prove definitively and is hard to separate from other factors (such as the sectoral composition of the economy, mentioned above). However, a number of partners have identified this and latent demand as being a particular issue for TWCR, so while definitive evidence is hard to find, messages from the ground would suggest that it is a significant factor in the low demand for high level skills.

<table>
<thead>
<tr>
<th>Table 4-9: Percentage of HMPs qualified to different skill levels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CR Average</strong></td>
</tr>
<tr>
<td>NVQ Level 4 and above</td>
</tr>
<tr>
<td>NVQ Level 3</td>
</tr>
<tr>
<td>Trade Apprenticeships</td>
</tr>
<tr>
<td>NVQ Level 2</td>
</tr>
<tr>
<td>Below NVQ Level 2</td>
</tr>
<tr>
<td>Other qualifications</td>
</tr>
<tr>
<td>No qualifications</td>
</tr>
</tbody>
</table>

Source: Annual Population Survey through Nomis
Question 3: How have the educational performance and occupational/skills levels achieved by Tyne and Wear City Region residents changed over time and how do trends compare with similar City Regions?

4.41 An overview of economic performance in TWCR showed how the working age population had remained relatively stable over the past ten years, while the utilisation of its workforce improved significantly. The study has examined the skill levels of the workforce and how it has changed over a period of buoyant demand.

4.42 The qualifications of the workforce are often used as a proxy indicator of skill levels, and thus provide a useful indicator of the quantity and quality of the supply of skills in the city region. The overall message is a positive one, with improvements in the qualification levels of the workforce overall and a rate of change exceeding the city region average. Important points to note are:

- The proportion of adults with the lowest level or no qualifications has fallen by 8.9 percentage points to 33.9% (352,000 people). Progress in TWCR against this measure has been better than all other city regions and the percentage of people at this skill level is now less than the city regions average (35.4%).

- TWCR continues to have a higher proportion of its workforce qualified to NVQ level 2 and level 3. 22.8% of working age people are qualified to level 3 – more than all other city regions.

- TWCR still lags behind other comparators in terms of the highest level skills (NVQ4+). 24.7% of working age people have reached this level of attainment (256,000 people) compared to a national average of 27.0%. Progress has been strong, with the rate increasing by 5.7 percentage points since 2000. While this is a greater rate of change than several other comparators, TWCR has still made only minor progress in closing the gap on the city regions' average.

4.43 TWCR has been particularly successful in generating a large number of people with level 3 qualifications. Level 3+ qualifications are an indication of intermediate skill levels and there is strong evidence to suggest that these skill levels are key drivers of productivity. TWCR's strong performance against this measure implies the city region has been successful in increasing the number of people with higher/intermediate level skills, and may reflect the large number of opportunities which have been created in technical and associate professional occupations.

4.44 The high proportion of people with higher/intermediate skill levels also implies that attention should be directed at progressing people from level 3 to level 4 in order to compete with comparators at the higher skill level. This has clearly been taken on board by policymakers in TWCR who have been looking for means to increase progress via this route, through increasing the flexibility of workforce development programmes leading to a level 4 qualification, and allowing FE colleges to deliver HE modules. ¹⁹

¹⁹ The 2008 TWCR Multi Area Agreement contained two ‘Asks’ of Government relating to new freedoms and flexibilities in the delivery of higher level skills. The first Ask related to additional flexibility in what was the then Train to Gain programme. The second Ask sought a new mechanism to be introduced to enable FE colleges in TWCR to deliver unitised HE courses.
Table 4-10: Qualifications of Working Age People, 2008 and change since 2000

<table>
<thead>
<tr>
<th></th>
<th>NVQ4+</th>
<th></th>
<th>NVQ3</th>
<th></th>
<th>NVQ2</th>
<th></th>
<th>NVQ1 or below</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>% point change</td>
<td>2008</td>
<td>% point change</td>
<td>2008</td>
<td>% point change</td>
<td>2008</td>
<td>% point change</td>
</tr>
<tr>
<td>Bristol CR</td>
<td>31.9</td>
<td>3.2</td>
<td>21.3</td>
<td>0.2</td>
<td>15.7</td>
<td>0.6</td>
<td>31.1</td>
<td>-3.7</td>
</tr>
<tr>
<td>Glasgow CR</td>
<td>32.4</td>
<td>8.0</td>
<td>21.5</td>
<td>-0.9</td>
<td>13.1</td>
<td>1.9</td>
<td>33.0</td>
<td>-8.2</td>
</tr>
<tr>
<td>Leeds CR</td>
<td>26.1</td>
<td>4.2</td>
<td>21.6</td>
<td>-0.5</td>
<td>15.6</td>
<td>1.9</td>
<td>36.8</td>
<td>-4.8</td>
</tr>
<tr>
<td>Liverpool CR</td>
<td>23.4</td>
<td>4.7</td>
<td>20.0</td>
<td>-0.9</td>
<td>19.7</td>
<td>3.7</td>
<td>36.9</td>
<td>-6.8</td>
</tr>
<tr>
<td>Manchester CR</td>
<td>26.9</td>
<td>4.7</td>
<td>20.7</td>
<td>-1.1</td>
<td>16.9</td>
<td>2.5</td>
<td>35.5</td>
<td>-5.0</td>
</tr>
<tr>
<td>Nottingham CR</td>
<td>27.4</td>
<td>7.2</td>
<td>21.1</td>
<td>0.8</td>
<td>15.4</td>
<td>0.6</td>
<td>36.1</td>
<td>-7.5</td>
</tr>
<tr>
<td>Sheffield CR</td>
<td>24.5</td>
<td>6.6</td>
<td>20.3</td>
<td>-0.5</td>
<td>16.6</td>
<td>2.9</td>
<td>38.7</td>
<td>-8.0</td>
</tr>
<tr>
<td>TWCR</td>
<td>24.7</td>
<td>5.7</td>
<td>22.8</td>
<td>0.5</td>
<td>18.6</td>
<td>3.2</td>
<td>33.9</td>
<td>-8.9</td>
</tr>
<tr>
<td>Average</td>
<td>27.0</td>
<td>5.3</td>
<td>21.2</td>
<td>-0.5</td>
<td>16.4</td>
<td>2.3</td>
<td>35.4</td>
<td>-6.3</td>
</tr>
</tbody>
</table>

Source: Annual Population Survey and Labour Force Survey through Nomis (Crown copyright material is reproduced with the permission of the controller of the HMSO).

4.45 The level 4 qualifications gap between TWCR and the average for the comparator city regions has only narrowed slightly since 2000. A different picture emerges for younger age cohorts (20-30). For this age group, TWCR has closed the gap to within a single percentage point of the average for comparator city regions. Older workers in TWCR have also made substantial progress in terms of increasing the proportion with high level skills. The rate of change however has failed to match several comparators, and the percentage qualified to level 5 and above now lags behind the city region average by 2.1 percentage points.

4.46 These changes remain encouraging for the city region as the younger residents are increasingly becoming highly skilled. As these younger cohorts work through the system, this will help TWCR bring the overall average in line with other comparators.

Table 4-11: Qualifications of Different Age Groups, 2008 and change since 2000

<table>
<thead>
<tr>
<th></th>
<th>20-30</th>
<th>30+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% qualified to level 4+</td>
<td>Change since 2000</td>
</tr>
<tr>
<td>Bristol CR</td>
<td>32.6</td>
<td>-2.3</td>
</tr>
<tr>
<td>Glasgow CR</td>
<td>36.8</td>
<td>1.3</td>
</tr>
<tr>
<td>Leeds CR</td>
<td>27.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Liverpool CR</td>
<td>22.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Manchester CR</td>
<td>25.4</td>
<td>-1.5</td>
</tr>
<tr>
<td>Nottingham CR</td>
<td>30.4</td>
<td>7.2</td>
</tr>
<tr>
<td>Sheffield CR</td>
<td>22.9</td>
<td>4.8</td>
</tr>
<tr>
<td>TWCR</td>
<td>26.8</td>
<td>4.0</td>
</tr>
<tr>
<td>City Regions Average</td>
<td>27.6</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Source: Annual Population Survey and Labour Force Survey through Nomis (Crown copyright material is reproduced with the permission of the controller of the HMSO).
Question 1b: How does Tyne and Wear City Region compare with similar UK City Regions in terms of the scale, concentration and the change in the numbers of workless and poorly qualified residents?

4.47 TWCR experienced high levels of worklessness during the 1980s and 1990s. Since 2004, it has been closing the gap with the UK in terms of the employment rate. Nevertheless, the TWCR employment rate still remains 3 percentage points behind the UK average. During the recession, this gap has not widening significantly suggesting the impact of the recession thus far has not been particularly different to the UK as a whole.

4.48 Worklessness in TWCR is concentrated in particular geographical areas and disproportionately amongst specific groups. Predominantly an urban concern, Newcastle upon Tyne, South Tyneside and Sunderland have major concentrations of worklessness, although certain rural and semi rural districts have an above average proportion of residents claiming IB, most notably former coalmining areas such as Easington where over 16% of working age residents claim incapacity benefit.

4.49 The University of Glasgow study of the economic geography of worklessness in North East England identifies a typology on the basis of the major concentrations of worklessness. First, the most deprived, inner city areas in and around Newcastle upon Tyne, Gateshead and Sunderland which are typically close to the major centres of jobs growth.

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4.50 Second, the *deprived transitory urban areas*, which are benefiting from economic regeneration, often remain poorly connected to major centres of jobs growth in city centres or out of centre locations. Thirdly, *deprived former industrial and coalmining areas*, often in rural or semi-rural areas. Places such as Easington are distant from the major centres of jobs growth, have poor access to services, as well as an older and less skilled demographic profile.

4.51 All of the districts of TWCR achieved declines in the numbers of claimants of JSA, IB and Lone Parent benefits, with in most instances relatively modest increases in the claiming of other benefit types. The largest absolute falls have been in the larger urban districts which combine both larger concentrations of worklessness and also the main employment centres.

4.52 Underpinning the steady increase in the employment rate has been a decline in the number of claimants of out of work benefits. This fell by around 31,000 or 14% between 2000 and 2008, although it has subsequently risen by around 12,500 more recently due to the impact of the current recession. There are two distinct trends, which reflect this overall pattern. First, the gradual decline in JSA claimants up to 2008, which has subsequently been reversed by the sharp increase since mid-2008. Second, the sustained fall in Incapacity Benefit claimants (-23,700 between 2000 and 2009) and Lone Parent claimants (-6,700), as the benefit rules have been tightened (with many simply withdrawing from the labour market), but also to some extent the large numbers of entry level jobs that have been created in the economy.

4.53 The employment rate in TWCR has risen for most of the groups which typically face particularly low employment rates, with strong increases between 2000 and 2009 for older workers, ethnic minorities and DDA disabled in particular. This is a positive outcome, helping to close what are often very large gaps with the city region average rates. Whilst the employment rate has fallen for young...
people, and this partly reflects fewer job opportunities associated with the recession, it is also driven by wider factors such as increasing participation in education and training amongst the 16+ age group.

4.54 Looking across the city region comparators, the greatest absolute falls have been in the Glasgow, Liverpool and Tyne and Wear city regions (these city regions also secured the greatest percentage falls in claimants). Whilst the reduction in out of work claimants has been considerable it represents only around a third of new employment created over this period. In contrast to other city regions, this places TWCR behind Liverpool (49%) and slightly less than Sheffield (32%) but higher than all other city region comparators. TWCR’s performance is strong in this regard and reflects good absorptive capacity given the type of jobs being created and the skills of the pool of unemployed. But as with other city regions, the evidence points to many of the new jobs which might be accessible to the unemployed being accessed by other groups such as students and migrants.

4.55 Newcastle, Sunderland and Gateshead have been the most successful districts in reducing worklessness as the employment base has grown. The neighbouring districts to these main urban districts have mixed experiences. North Tyneside has in its own right been successful in creating employment locally but it also benefits from good access to Newcastle city centre. Whilst South Tyneside has been less successful in growing its local employment base (due in part to the narrow local employment base and the lack of major new sites coming forward that are comparable to places such as Cobalt in North Tyneside), its residents appear to have benefited from good accessibility (by both road and light rail) to the major employment centres in Gateshead, Newcastle and Sunderland.

4.56 There has been mixed progress in areas which are more remote from the main economic centres and employment growth locations. Those areas that have had modest jobs growth, such as Easington, have little scope to move the workless into jobs and close the employment rate gap with the region/UK average. Tynedale and Castle Morpeth have relatively poor absorptive capacity for lower skilled workers in spite of high employment rates. With similarly high employment rates, Blyth Valley and Chester le Street have been able to absorb a greater proportion of their claimants into the local labour market than both Tynedale and Castle Morpeth, which could be due to a combination of the jobs being created locally being more appropriate for the workless and the accessibility to a larger pool of jobs in the wider travel to work area.

More Recent Trends

4.57 The significant ground gained in job creation and out of work claimant reduction between 2000 and 2008 has been lost since the economic down turn impacted in the second quarter of 2008. The decrease of 31,160 claimants between 2000 and 2008 compares to an increase of 12,470 between
2008 and 2010. Moreover, claimant increases of 6.5% in TWCR are the lowest of all the comparator city regions. Information on the most recent occupations of the new JSA claimants highlights a number of important implications:

- Given the long running shift away from production sectors, the large number of workers from elementary occupations (c.5,000) will find it particularly challenging to gain work once the economy recovers.

- The scope that exists for the large numbers of workers made redundant from skilled trades (c.4,000) to regain work will depend critically on the growth of niche manufacturing sectors and the resurgence of construction and regeneration activity.

- There is greater scope for those previously working in sales and customer service occupations to regain work in related private sector employment (retail, contact centres, etc) once the economy recovers, although this is likely to be affected by the potential for large scale public sector redundancies.

**Summary**

4.58 There is significant variation within TWCR in terms of the residential location of highly skilled workers, although the greatest concentrations tend to be in the suburban areas of Newcastle, North Tyneside and Durham, and semi-rural and rural areas with good access to the employment core, such as in eastern areas of Tynedale.

4.59 The city region is dominated by the major employment geography of Newcastle and the North, which attracts highly skilled people from a wide area. However the smaller employment centres of Central Sunderland, Washington and Durham City also generate a number of highly skilled employment opportunities for local people. Based on certain data definitions, this study has found that TWCR can draw upon a large pool of highly skilled workers – more than most other comparator city regions. This leaves it well placed to secure productivity benefits, which derive from the access to dense labour markets.

4.60 TWCR has a low concentration of highly skilled jobs and highly skilled residents compared to other city regions. The only city region, which it outperforms, is Sheffield. This can be explained by the sectoral mix of the TWCR economy, which favours low and intermediate skilled sub-sectors. Within sectors, there is an additional trend that has seen organisations locating lower order activity in TWCR (such as administration and call centres), while higher skilled activity such as HQ functions is located elsewhere in the country.
4.61 The city region is over-dependent on the public sector to provide highly skilled employment opportunities. This should be a major concern for the city region as public sector employment is forecast to contract over the next few years and there is little evidence that the private sector is in a position to compensate for the highly skilled employment which will be lost from the public sector. Across a range of indicators, private sector demand for high level skills has shown to be growing, yet it is weaker when compared to the public sector. For example, well over half of the demand for recent graduates came from the public sector.

4.62 TWCR appears to have been able to source the higher level skills it needs during a period of economic expansion, and skill gaps and shortages appear to be more of a problem at lower skill levels than at higher skill levels. This reflects the nature of employment opportunities, which have been generated over the last ten years. This study has found limited evidence of latent demand existing amongst businesses in TWCR, although some data implies that higher managerial and professional workers tend to be lower skilled in TWCR than elsewhere. Further research would be required to examine the full extent of latent demand within the TWCR economy.

4.63 The qualifications profile of TWCR has been improving but there is little evidence that it is closing the gap on the national and city regions average. There are more encouraging messages for younger age cohorts, where there has been greater improvement in the skills profile compared to other areas. If TWCR can retain its younger cohorts, this will help bring the overall average in line with other comparators.

4.64 TWCR has a strong record of retaining graduates who grew up in the city region, implying certain cultural factors which act as a glue for those with links to TWCR. This stresses the importance of progressing the educational achievement levels of the under 16 population in TWCR, which will give them a greater chance of progressing to a university education.

4.65 Whilst TWCR enjoyed a period of sustained employment growth up until the middle of 2008, and successfully closed its employment gap compared to the UK, there remains a major employment gap, which is at the heart of the higher levels of worklessness experienced in the city region. Prior to the current recession, good progress was made in reducing worklessness overall, and in some urban locations and amongst some key disadvantaged groups. But worklessness continues to be heavily concentrated in these communities and groups, with some individuals unable to access these new jobs in any significant way.

4.66 The nature of relatively recent employment creation in TWCR has been an important consideration in reducing worklessness. However, many of the lower skilled jobs which provided entry level jobs have been lost in the recession (construction, financial services, etc) or are threatened by the reduction in public sector expenditure.
5. Population & Migration

5.1 There is substantial evidence that inward and outward migration of more mobile highly skilled workers can be a major driver or constraint upon the economic performance of city regions. Migration is a major driver of population change and given its highly selective nature has a significant influence on the skills profile of cities and, to a lesser extent, regions. People with particular characteristics and/or in certain circumstances are more likely to migrate than others. These differences can be interpreted in terms of life-stage and socio-economic experiences of the people. In the UK, processes of urbanisation and counter-urbanisation are simultaneously evident.

5.2 This chapter examines the extent to which migration influences population change and in turn the skills profile and economic performance of TWCR and comparator city regions. The task therefore addresses the following study research questions:

- Question 4: Attraction of highly-skilled workers
- Question 5: Retention and loss of the highly skilled.

5.3 Due to the interdependency between attraction and retention of high-skilled groups, the analysis contained in this chapter has attempted to answer both questions together, drawing out conclusions for each individual question.

Evidence Base Drawn Upon

5.4 This chapter provides demographic and migration analyses for TWCR and city region comparators across six themes: demographic change; age profile of migrants; skills profile of migrants; comparison of skills of migrants and population stock; geographies of highly skilled migrant flows; and student attraction and retention. The work has been informed by analysis of a variety of data sources:

- Census of Population 2001. The decennial census is the only UK data source that records migration transitions for the whole population. The census identifies whether a person has migrated in the year prior to census day.

- Estimates of net migration 1991-2001: by age for small areas in Britain produced by the Cathie Marsh Centre for Social Research (CCSR) at the University of Manchester.

- Patient Register Data: a summary of migration patterns by age using ONS Patient Register data 2005-2008, which provides annual counts of migrants moving between each local authority area of England and Wales.

- National Statistics Population Estimates: used to provide an overview of population change over the time period of interest.

- HESA graduate destinations data: survey analysis of first destinations of graduates post-completion.
Components of Demographic Change

5.5 During the 1990s, TWCR experienced a loss of population, due mainly to net out-migration but also due to natural decrease (i.e. deaths outnumbering births). Between 2001 and 2008, TWCR was one of only two city regions (along with Glasgow) to experience natural population decrease. Various related factors could be responsible including an ageing population, overall lower life expectancies, poorer economic situation, lower birth rates among the resident population and lower attraction for immigrants and thus a smaller proportion of ethnic minority groups that tend to have higher birth rates. Between 2001 and 2008, TWCR did, however, experience net in-migration, and this was responsible for the overall population growth. Nevertheless, the rate of population growth was below the average for the city regions.

5.6 Similar numbers of UK residents migrated into and out of the city region from the rest of the UK. This is actually a stronger performance than most comparators. Only Bristol and Sheffield experienced net in-migration from the rest of the UK. In terms of international migrants, TWCR has attracted more than Liverpool and similar numbers as Manchester, Sheffield and Glasgow, mainly due to the increase in the number of international students at TWCR universities, and (a probably more modest) increase in overseas workers in industries such as construction etc. Compared to TWCR, Bristol, Leeds and Nottingham appear to be significantly more attractive to recent immigrants.

Age Structure of Migration into TWCR

5.7 In 2001, TWCR’s population contained 28,020 people (1.70% of the total population of 1.65m) who had been living elsewhere in the UK one year earlier, and 27,625 (1.68%) had left the city region for other parts of the UK, resulting in an overall internal net in-migration of 395 people (0.02%). In 2008, 27,200 (1.62%) people who had been living elsewhere in the UK moved to the city region. Set against this are 27,040 out-migrants (1.61%), resulting in a net population gain of 160 people (0.01%) that year.

5.8 The overall net effect on the TWCR population is miniscule and there are large variations between different age groups. In both 2001 and 2008, there has been a large net gain of 16-19 year olds (the city region is a net importer of students) and large net loss of 20-24 year olds (mainly accounted for by graduates leaving the city region) and 25-29 year olds. The age profile of migrants also varies between local authority areas.
For example, in 2008 there was a very large net gain of 16-19 year olds in Durham and Newcastle, although this was partly offset by high rates of net out-migration of 20-24 and 25-29 year olds. These gains and losses reflect the dynamics of the student and graduate populations of Newcastle and Durham.

Among the city regions, TWCR and Liverpool have the highest rate of net loss of 20-24 year olds, whilst Sheffield and Glasgow also experience a net loss of this age group. Other city regions have been successful in increasing the numbers of 20-24 year old residents, and Nottingham and Bristol have enjoyed the largest net gains. This partly reflects the nature of employment growth: Bristol in particular has enjoyed a large growth in high-value financial and business services, a sector in which Nottingham also has some specialisms.

### Table 5-1: Migration between TWCR and Rest of England and Wales, 2007-08

<table>
<thead>
<tr>
<th>Age group</th>
<th>Migration with rest of England and Wales</th>
<th>Population (000s)</th>
<th>Net inflow rate (% of population)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inflow</td>
<td>Outflow</td>
<td>Net inflow</td>
</tr>
<tr>
<td>0-15</td>
<td>3,350</td>
<td>3,110</td>
<td>230</td>
</tr>
<tr>
<td>16-19</td>
<td>5,460</td>
<td>2,200</td>
<td>3260</td>
</tr>
<tr>
<td>20-24</td>
<td>6,020</td>
<td>8,230</td>
<td>-2,210</td>
</tr>
<tr>
<td>25-29</td>
<td>3,070</td>
<td>4,040</td>
<td>-960</td>
</tr>
<tr>
<td>30-44</td>
<td>5,090</td>
<td>5,200</td>
<td>-110</td>
</tr>
<tr>
<td>45-59</td>
<td>2,070</td>
<td>2,200</td>
<td>-130</td>
</tr>
<tr>
<td>60-74</td>
<td>980</td>
<td>860</td>
<td>120</td>
</tr>
<tr>
<td>75+</td>
<td>410</td>
<td>470</td>
<td>-50</td>
</tr>
<tr>
<td>All ages</td>
<td>27,200</td>
<td>27,040</td>
<td>160</td>
</tr>
</tbody>
</table>

Source: ONS Patient Register and Population Estimates.

For all age groups between 25 and 59, the TWCR had the lowest out-migration rates of any city region with the exception of the 25 to 29 age group in Glasgow. Over one in three out-migrants, aged 25 to 29, from TWCR moved to the South East of England. This was similar to the other city regions, apart from Bristol (44 percent of out-migrants moved to London and the South East).

**Skills Profile of Migrants into TWCR**

In the decade to 2001, TWCR lost population in all socio-economic groups, apart from students. The rate of loss was greatest for Higher Managers and Professionals. Of the inflows, a high proportion were students moving into Newcastle and Durham. Higher Managerial and Professionals (HMPs) made up the highest proportion of inflows to Castle Morpeth, Chester-le-Street, North Tyneside and Tynedale. However, if students are removed from the analysis, the highest proportions of HMP inflows were into Newcastle, Castle Morpeth, Durham and North Tyneside.

The contrast between student and HMP migration is not unique to TWCR. The direction of loss and gain for each group is generally the same across comparator areas. HMPs tend to migrate out of city regions on balance, although TWCR has the highest rate of net loss of HMPs. TWCR has a lower in-migration rate of all occupational groups (except students compared) than all comparator city regions. In-migration rates were highest for all groups in Bristol and Nottingham, reflecting an expansion of the workforce.
Table 5-2: Gross In-Migration from Rest of the UK to TWCR and Comparators, 2000-2001

<table>
<thead>
<tr>
<th>In-migration rate per 1,000 to CR</th>
<th>TWCR</th>
<th>Liverpool</th>
<th>Nottingham</th>
<th>Sheffield</th>
<th>Manchester</th>
<th>Leeds</th>
<th>Bristol</th>
<th>Glasgow</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMP</td>
<td>27.7</td>
<td>28.1</td>
<td>48.6</td>
<td>30.6</td>
<td>33.4</td>
<td>34.5</td>
<td>49.9</td>
<td>29.5</td>
</tr>
<tr>
<td>LMP</td>
<td>15.3</td>
<td>17.8</td>
<td>32.0</td>
<td>20.5</td>
<td>20.8</td>
<td>22.1</td>
<td>31.3</td>
<td>15.4</td>
</tr>
<tr>
<td>Intermediate</td>
<td>9.9</td>
<td>10.9</td>
<td>22.5</td>
<td>13.8</td>
<td>13.5</td>
<td>13.5</td>
<td>21.3</td>
<td>9.9</td>
</tr>
<tr>
<td>Low</td>
<td>7.5</td>
<td>8.5</td>
<td>16.0</td>
<td>9.9</td>
<td>8.9</td>
<td>9.9</td>
<td>15</td>
<td>7.7</td>
</tr>
<tr>
<td>Student</td>
<td>41.8</td>
<td>21.9</td>
<td>81.1</td>
<td>67.7</td>
<td>28.3</td>
<td>69</td>
<td>67.4</td>
<td>27.1</td>
</tr>
<tr>
<td>Other</td>
<td>5.8</td>
<td>5.7</td>
<td>10.8</td>
<td>7.7</td>
<td>7</td>
<td>8.1</td>
<td>9.5</td>
<td>4.9</td>
</tr>
<tr>
<td>All_groups</td>
<td>12.3</td>
<td>11.6</td>
<td>26.9</td>
<td>16.5</td>
<td>14.5</td>
<td>18.5</td>
<td>26.2</td>
<td>11.4</td>
</tr>
</tbody>
</table>

Source: 2001 Census Special Migration Statistics.

5.14 The outflow of managerial and professional groups was greatest in Nottingham and lowest for Manchester, Liverpool and Glasgow. TWCR had a higher out migration rate for HMPs and a lower out migration rate of Lower Managerial and Professionals (LMPs) compared to other city regions. The out migration rate of all managerial and professional groups, to the South East of England, was greatest from Nottingham and Bristol. This reflects the links between these economies and the interdependent flows of high-skilled workers.

Geographies of Highly-Skilled Migrant Inflows

5.15 The selective outflow of residents who have the financial wherewithal to exercise choice can leave behind communities in which social and economic problems become deeply entrenched. This can reinforce community segregation, with resulting negative effects on community cohesion. Reductions in population can also have a negative impact on the viability of local public services, which require a certain population threshold, as well as affecting the propensity of private investors to provide retail and leisure facilities.

5.16 There is a clear pattern in the origin regions of young adult and managerial and professional immigrants to TWCR and the TWCR core (defined in this study as the districts of Newcastle, Gateshead and Sunderland): they come primarily from the adjacent regions of Yorkshire and The Humber, the North West, the North East and Scotland. Of next importance are London and South East England.

5.17 The destinations of older adult out-migrants (age 25-44) from TWCR follows the same distance-decay pattern: they go primarily to neighbouring regions, followed by London and the South East. However, the destinations of highly skilled migrants (older adults and managers/professionals) from the TWCR core go primarily to London, followed by neighbouring districts. This outflow to London will tend to be graduates from TWCR universities rather than people who had managerial or professional jobs before leaving TWCR.

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21 The three major local authority employment locations in TWCR for Higher Managerial and Professional workers.
Table 5-3: Inflow and Outflow of Managers and Professionals to TWCR and TWCR Core

<table>
<thead>
<tr>
<th>Region</th>
<th>Inflow TWCR Core</th>
<th>Outflow TWCR</th>
<th>Inflow TWCR Core</th>
<th>Outflow TWCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yorkshire and The Humber</td>
<td>361</td>
<td>693</td>
<td>507</td>
<td>959</td>
</tr>
<tr>
<td>Scotland</td>
<td>303</td>
<td>610</td>
<td>293</td>
<td>570</td>
</tr>
<tr>
<td>North West</td>
<td>289</td>
<td>611</td>
<td>478</td>
<td>898</td>
</tr>
<tr>
<td>Rest of North East</td>
<td>235</td>
<td>701</td>
<td>299</td>
<td>789</td>
</tr>
<tr>
<td>London</td>
<td>232</td>
<td>473</td>
<td>823</td>
<td>1,542</td>
</tr>
<tr>
<td>South East</td>
<td>187</td>
<td>487</td>
<td>422</td>
<td>802</td>
</tr>
<tr>
<td>East Midlands</td>
<td>147</td>
<td>291</td>
<td>201</td>
<td>471</td>
</tr>
<tr>
<td>East</td>
<td>122</td>
<td>266</td>
<td>292</td>
<td>599</td>
</tr>
<tr>
<td>West Midlands</td>
<td>114</td>
<td>245</td>
<td>207</td>
<td>432</td>
</tr>
<tr>
<td>South West</td>
<td>111</td>
<td>213</td>
<td>137</td>
<td>287</td>
</tr>
<tr>
<td>Wales</td>
<td>39</td>
<td>114</td>
<td>72</td>
<td>123</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>21</td>
<td>33</td>
<td>30</td>
<td>51</td>
</tr>
<tr>
<td>Total</td>
<td>2,161</td>
<td>4,737</td>
<td>3,761</td>
<td>7,523</td>
</tr>
</tbody>
</table>

Source: 2001 Census Special Migration Statistics. Note: Ranked in order of magnitude of inflows.

5.18 In terms of the migration of managers and professionals between Newcastle, Gateshead and Sunderland (defined here is the 'core'), and each of the other districts in the city region, the core had a net gain of managers and professionals from most districts. In absolute terms, the core had the greatest net gains of managers and professionals who migrated from North Tyneside, Derwentside and Blyth Valley, reflecting the employment growth and possibly the improvement in quality of the core's housing and residential offer (at least for some segments of the market, namely younger professionals).

5.19 Historically, a high proportion of high-skilled people who worked in Newcastle lived outside the city, which partly reflected the ease of access to/from the city centre and also a limited supply of executive housing. The city’s housing offer is now stronger in terms of the city centre apartment offer, although other areas have emerged in North Tyneside in particular, which cater for the younger professional families.

5.20 There is evidence that some international migrants, particularly those from the European Union A8 Accession countries, have tended to work in low and intermediate skilled occupations (as is the case across the UK as a whole). Data from the workers registration scheme (2008) shows that less than 3% of these migrants found employment in the highest skilled occupations (SOC 1-3) while over 80% were working in the lowest skilled categories (process, plant and machine operatives and elementary occupations). LFS data shows that international migrants on balance tend to be higher skilled than the indigenous population - over 40% are qualified to degree level. This data would therefore imply that these migrants are being substantially under-employed.

Comparison of Skills of Migrant Population to Population Stock

5.21 Children under 15 years of age and adults over 30 years of age in TWCR are typically under-represented in migration flows (i.e. they contribute to a smaller proportion of net in and out-migration than they do to the overall population). Young adults aged 16-29 are over-represented in migration flows (in relation to their presence in the population): this age group includes students and recent graduates, which tend to be two of the most geographically mobile groups.
In terms of socio-economic groups, managers and professionals are over-represented in migration flows in relation to their population share, and this is particularly so for outflows from TWCR. Students are also over-represented, particularly for inflows. It is likely that there is a link between the outflow of managers and professionals (compared to inflow) and the inflow of students: some of the managerial and professional outflow will be people who were attracted to study in TWCR, and have since moved away into high-skilled jobs.

**Student Attraction and Retention and Post-Graduate Destinations**

The greatest motivation for student migration or retention post-graduation is, above all others, to obtain employment. The vast majority of graduates do not have dependent families, and they are characterised by their mobility and willingness to live where they receive the best job offer. This characteristic is common to graduates from all subject areas and across all industry sectors. Many RDAs have adopted strategies that have explicitly sought to retain graduates in their regions. However, there is little conclusive evidence on the impact of related initiatives, given that the major influence on graduate migration patterns is the availability of suitable jobs.

Some 9,848 students graduated from TWCR universities in 2007/08, up from 9,656 in 2002/03, of which 4,118 (43% of all graduates from TWCR universities) were domiciled in TWCR before attending university. In 2007/08, 68% of all TWCR domiciled students who graduated that year (6,060 students), did so from a TWCR university.

The most effective way of increasing the supply of highly skilled people to TWCR will be through the retention of graduates qualifying at a TWCR university or attracting them from elsewhere in the country. The graduate retention and attraction data for 2002/3 and 2007/8 is presented below. The key points to note are:

- **Across all measures of attraction and retention, TWCR’s performance has fallen since 2002/3.** The total number of graduates who found employment in TWCR fell from 5,200 to 4,700. The overall retention rate for graduates from TWCR universities was 42.2% in 2002/3 but has fallen to 37.4% in 2007/8, and is likely to have declined further since the onset of recession in 2008. The attraction rate for students who studied elsewhere fell slightly from 0.5% to 0.4%

- **There are clear differences in the attraction/retention rate of students who originated from TWCR to those from elsewhere.** Of those TWCR graduates who were domiciled in the city region, 65.8% found employment in TWCR compared to only 16.6% who came to study in TWCR from elsewhere. Likewise for graduates who studied outside TWCR, nearly a third chose to return to TWCR to find employment, while the numbers who found employment despite having no prior links with TWCR were very low. Graduate retention in TWCR is comparatively high for universities in relation to ‘home students’, but is considerably lower for those originally domiciled outside of the city region.

- **The number of people who find employment in TWCR with no previous ties to the city region is very low.** Less than 500 of the graduates who found employment in TWCR were neither domiciled or students in the city region - equivalent to 9% overall. Unfortunately the data does not enable a comparison to be made between this rate and other city regions, but
other studies imply that the rate is very low\(^\text{22}\). This is somewhat unsurprising given the much smaller employment base of the city region, and its geographically remote location, which may deter graduates with social or family ties to other parts of England and Wales from locating to TWCR.

5.26 The data points to the importance of raising the number and quality of ‘home grown’ HE students as these are by far the most likely to stay in the city region to seek employment. This may be explained in part by the large number of part time students in TWCR who continue to live at home while they study (45% of TWCR domiciled students in 2008 were part time students), or it may suggest a strong link to the area because of quality of life factors such as more affordable housing. In addition, survey evidence from Adroit suggests that TWCR employers are not as aware as they could be about the potential pool of high-skilled labour available to them: fewer than half of those SMEs surveyed identified the supply of graduates as a specific strength for the city region.

### Table 5-4 Student Attraction and Retention

<table>
<thead>
<tr>
<th>Location of Study</th>
<th>Domicile</th>
<th>Graduates</th>
<th>Employed in TWCR</th>
<th>Retention/Attraction Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2002/03</td>
<td>2007/08</td>
<td>2002/03</td>
<td>2007/08</td>
</tr>
<tr>
<td>Studied in TWCR</td>
<td>TWCR domicile</td>
<td>4,118</td>
<td>2,991</td>
<td>72.6%</td>
</tr>
<tr>
<td></td>
<td>Elsewhere in UK</td>
<td>5,538</td>
<td>1,088</td>
<td>19.6%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>9,656</td>
<td>4,079</td>
<td>42.2%</td>
</tr>
<tr>
<td></td>
<td>% from TWCR</td>
<td>42.6%</td>
<td>73.3%</td>
<td></td>
</tr>
<tr>
<td>Studied Elsewhere</td>
<td>TWCR domicile</td>
<td>1,976</td>
<td>704</td>
<td>35.6%</td>
</tr>
<tr>
<td></td>
<td>Elsewhere in UK</td>
<td>216,471</td>
<td>450</td>
<td>0.2%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>218,447</td>
<td>1,154</td>
<td>0.5%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5,233</td>
<td>4,687</td>
<td></td>
</tr>
</tbody>
</table>

Source: HESA.

5.27 HESA data also shows retention rates within city regions. Due to the limitations in the data available for comparator city regions, it is not possible to show the percentage of graduates who actually stay in the city regions to work following graduation. However, it is possible to calculate the percentage of graduates who stay to work in the Government Office Region in which the city region is located (although this of course does not necessarily mean that the graduate retains a job or home in the city region of study). On the basis of this analysis, TWCR appears to perform well: some 58% of graduates are retained within the North East region.

### Table 5-5: Graduate Retention, 2002/03 and 2007/08

<table>
<thead>
<tr>
<th>Location of Institution</th>
<th>Total Graduates (2002/03 and 2007/08)</th>
<th>% staying to work within Government Office Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manchester City Region</td>
<td>24,039</td>
<td>66.7%</td>
</tr>
<tr>
<td>Liverpool City Region</td>
<td>9,903</td>
<td>61.8%</td>
</tr>
<tr>
<td>TWCR</td>
<td>19,504</td>
<td>57.7%</td>
</tr>
<tr>
<td>Leeds City Region</td>
<td>26,403</td>
<td>56.9%</td>
</tr>
<tr>
<td>Bristol City Region</td>
<td>16,953</td>
<td>52.8%</td>
</tr>
<tr>
<td>Nottingham City Region</td>
<td>13,089</td>
<td>41.7%</td>
</tr>
<tr>
<td>Sheffield City Region</td>
<td>13,205</td>
<td>46.8%</td>
</tr>
</tbody>
</table>

Source: HESA.

In terms of graduate destinations, after TWCR (which retained some 40% of graduates across the two years examined) and the rest of the North East, the most popular destinations for TWCR graduates are London (nearly one in eleven graduates left the city region to work in the capital), Yorkshire & Humber and the North West. This is a similar pattern to the out-migration of HMPs.

<table>
<thead>
<tr>
<th>Location of Employment</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWCR</td>
<td>7,763</td>
<td>39.8%</td>
</tr>
<tr>
<td>Rest of North East</td>
<td>3,490</td>
<td>17.9%</td>
</tr>
<tr>
<td>London</td>
<td>1,702</td>
<td>8.7%</td>
</tr>
<tr>
<td>Yorkshire and The Humber</td>
<td>1,302</td>
<td>6.7%</td>
</tr>
<tr>
<td>North West</td>
<td>1,136</td>
<td>5.8%</td>
</tr>
<tr>
<td>Overseas</td>
<td>743</td>
<td>3.8%</td>
</tr>
<tr>
<td>South East</td>
<td>735</td>
<td>3.8%</td>
</tr>
<tr>
<td>England region unknown</td>
<td>529</td>
<td>2.7%</td>
</tr>
<tr>
<td>East of England</td>
<td>442</td>
<td>2.3%</td>
</tr>
<tr>
<td>East Midlands</td>
<td>391</td>
<td>2.0%</td>
</tr>
<tr>
<td>Scotland</td>
<td>340</td>
<td>1.7%</td>
</tr>
<tr>
<td>South West</td>
<td>323</td>
<td>1.7%</td>
</tr>
<tr>
<td>West Midlands</td>
<td>320</td>
<td>1.6%</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>149</td>
<td>0.8%</td>
</tr>
<tr>
<td>Wales</td>
<td>93</td>
<td>0.5%</td>
</tr>
<tr>
<td>Guernsey, Jersey and the Isle of Man</td>
<td>18</td>
<td>0.1%</td>
</tr>
<tr>
<td>UK region unknown</td>
<td>15</td>
<td>0.1%</td>
</tr>
<tr>
<td>Not Known</td>
<td>13</td>
<td>0.1%</td>
</tr>
<tr>
<td>Total</td>
<td>19,504</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: HESA.

The public sector is an important source of employment for new graduates in TWCR. This sector accounted for 64% of graduates entering SOC 1-3 occupations in 2007/08. In contrast, the number of graduates entering SOC 1-3 occupations in the manufacturing sector fell sharply between 2002/03 and 2007/08.

<table>
<thead>
<tr>
<th>Sector</th>
<th>% of all Graduates Entering SOC 1-3 Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Sector</td>
<td>64.2%</td>
</tr>
<tr>
<td>Professional and Financial Services</td>
<td>12.5%</td>
</tr>
<tr>
<td>Administrative and Support Service Activities</td>
<td>4.1%</td>
</tr>
<tr>
<td>Wholesale and Retail Trade</td>
<td>4.0%</td>
</tr>
<tr>
<td>Information and Communication</td>
<td>3.8%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3.8%</td>
</tr>
<tr>
<td>Arts, Entertainment and Recreation</td>
<td>2.4%</td>
</tr>
<tr>
<td>Construction</td>
<td>1.4%</td>
</tr>
<tr>
<td>Other Service Activities</td>
<td>1.3%</td>
</tr>
<tr>
<td>Accommodation and Food Service</td>
<td>1.0%</td>
</tr>
<tr>
<td>Other</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

Source: HESA.

Whatever the reason for the strong retention rate among TWCR domiciles, it demonstrates the importance of progressing the educational achievement levels of the under 18 population in TWCR, which will provide a greater chance of progressing to a university education. Current indicators
suggest that TWCR has made significant progress since 2000 in this respect, with the percentage achieving 5 or more GCSEs at grade A*-C increasing from 44.4% in 2001 to 74.3% in 2008. The city region now outperforms the average for England (69.8%).

5.31 Improving staying-on rates and improving attainment post 16 will also have a positive impact on graduate retention as more learners in the city region enter Higher Education. Indeed, it is the learners who enter University from backgrounds with a low uptake of Higher Education who are most likely to translate into retained graduates. The impact of increased tuition fees is that the numbers of ‘home students’ in Higher Education will increase (proportionately) regardless of any local policy interventions. Graduates over the age of 25 are proportionally more likely to remain in the area than their younger counterparts.

**Economic Role of City Region Assets**

5.32 The literature on the locational decisions of both businesses and workers in relation to quality of life and residential offer is relatively limited, not least because there are considerable methodological and conceptual difficulties in clarifying and quantifying the contribution of the various relevant factors (e.g. quality of life factors including the residential, cultural and environmental offer).

5.33 This conceptual and methodological complexity makes it difficult to answer one of the key underlying study questions, namely the extent to which TWCR’s quality of place offer plays a positive or negative role in attracting and retaining better skilled residents. Whilst there is a reasonable body of literature, which asserts that the current residential offer is hindering the city region’s economic competitiveness (or at least has the potential to do so in the future due to a lack of professional/executive apartments and houses), by failing to provide for “aspirational housing”, there is no compelling evidence to support this.

5.34 Previous Residential Futures research in TWCR, undertaken by Tribal23, has looked at wider quality of place issues using a scoring system based on access to facilities and amenities as well as environmental quality. This work highlights the trade-offs between higher quality environments (a notably subjective quality but tending to be identified with rural and suburban places) and access to facilities, particularly cultural and leisure amenities. The pattern, which emerges, in this research is that the core urban areas generally have a poor quality of place, with the reverse in suburban and rural locations.

5.35 Nevertheless, Newcastle and Gateshead in particular have together pursued a culture-led model of regeneration in the last decade, culminating in significant improvements in the city region’s cultural offer, which has the potential to act as both image-altering assets and anchors for further creative industry growth.

5.36 This may help to explain part of the reason for the increased attraction of students to TWCR Higher Education Institutions (HEIs). In 2008, a survey of students by accommodationforstudents.com suggested that Newcastle was ranked top in the UK as the best city for students to live in, based on five criteria: going out (restaurants, pubs, bars and clubs), shops (supermarkets, corner shops, book shops, video shops), transport links (buses, trams, train, underground), community (safety, student population, surroundings) and facilities (gyms, libraries, parks).

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23 Tribal, Residential Futures (2009).
5.37 In addition, some of the city region's universities are highly rated research institutions: Durham came 14th (out of 122 HEIs rated) in the 2008 Research Assessment Exercise, and had some 20 departments ranked as 5 or 5* star (the highest rating, denoting international standard research). The University of Newcastle was also ranked in the top 30.

5.38 Overall, the evidence suggests that economic factors remain the primary influences governing migration decisions. Quality of life issues, whilst not irrelevant, are secondary considerations. Older HMPs place a higher value on the quality of the local area (schools, safety, cleanliness) and younger workers place a greater emphasis on access to cultural and leisure facilities and the night-time economy.

Summary

5.39 The population of TWCR has grown since 2001, driven by increased numbers of international migrants (predominantly students and young workers). However, there has been little change in scale of gross in-migration between 2001 and 2008 (28,020 people moved into the city region in 2001 compared to 27,200 in 2008, accounting for less than 2% of the total population).

5.40 Gross in-migration of higher level managerial and professional workers accounts for 2.7% of TWCR resident stock of this group and lower level managerial and professional 1.5% (the lowest of all city region comparators), although TWCR has not had to attract large numbers of high-skilled workers from elsewhere to meet demand from the city region's employers. HMPs typically migrate from the rest of North East, Scotland, Yorkshire & Humber and North West.

5.41 Students and young professionals tend to move to Newcastle, Sunderland and Durham, although these areas are losing 20-24 year olds (reflecting graduate leavers) and 25-29 year olds (which is disconcerting as these are more likely to be career builders). Older HMPs tend move to Tynedale, Wansbeck, North Tyneside and Chester-le-Street (acting as residential and commuter locations in the city region).

5.42 The current levels of demand for higher-level skills are being met by the existing labour pool in TWCR without the need to attract highly-skilled workers from elsewhere (either to live or commute into key employment centres). Only a small minority of firms (according to the Adroit business survey) appear to view the ability of TWCR to attract highly-skilled workers from elsewhere to be a weakness. However, a stronger shift in demand for higher-level skills may require a change in migration patterns. A larger and more varied supply of “professional class” housing may also be required to attract high-skilled in-migrants.

5.43 Neighbouring regions (Yorkshire & Humber, North West) and London are the main destinations for HMPs leaving TWCR. This reflects the sustained growth in London economy and increased pull of Leeds and Manchester. Out-migration rates are lower than other city regions, but there is also much less in-migration, which suggests that TWCR is a more static, less dynamic labour market than its comparators. Out-migration of HMPs and LMPs continues to outstrip in-migration.

5.44 There is overall net population loss amongst the 20-44 year group, although this is common to all comparator city regions except Bristol and Nottingham. The 20-29 year old age groups account for 45% of out-migration (mainly accounted for by graduates).

5.45 Graduates of TWCR universities that found jobs in the city region fell from 5,233 (2002/03) to 4,687 (2007/08). The overall retention rate fell from 42% in 2002/03 to 37% in 2007/08: around 66% of
“local” students took their first jobs in TWCR, whilst only 17% of “imported” students did so. The majority of those finding jobs found employment in the public sector.

5.46 TWCR is a net exporter of young workers and HMPs. This is a long-term trend and there is now greater competition from Leeds and Manchester. TWCR students are more likely to remain in the local economy, but arguably by taking jobs they are over qualified for. The major influence on wider graduate migration patterns remains the availability of suitable jobs.
6. Future Employment & Skills Prospects

6.1 A number of scenarios (“what if” views of the world) have been developed to help inform thinking about policy towards skills and other matters in the city region. This involves taking a baseline forecast of sectoral and occupational change as the starting point, and scenarios then can be compared to the changes implicit or explicit in these forecasts.

6.2 In undertaking this analysis, the study has drawn on regional-level forecasts produced for One North East by Cambridge Econometrics. The North East Economic Model (NEEM), developed by Durham University, has also been utilised to model change within TWCR, and to provide analysis and answers to research questions 6 and 7, summarised below:

- Question 6: Future demand for workers and skills
- Question 7: Meeting future skills needs.

**Question 6: How is the demand for skills at different occupational levels likely to change in the medium (5 years) and longer (10 years) term?**

6.3 Any attempt to understand and forecast the nature of demand for future skills is tantamount to gazing into a particularly opaque crystal ball. What is clear is that the UK economy and city regions are poised in a period of particular uncertainty. This uncertainty reflects the uncharted waters of:

- The speed and pace of global recovery, especially in the UK’s and North East England’s main export markets (particularly Continental Europe). Economists recognise that much of the stimulus for economic growth over the medium term will have to come from export markets as UK domestic demand from the consumer and public sector is likely to be very dampened down.

- The interplay between the Coalition Government’s rapid fiscal tightening (i.e. tax increases and major public spending and benefits cuts), and the private sector’s ability to grow and create new and replacement jobs. There is a lack of consensus between economists as to how these two forces will interplay at a UK level.

- The impact of these factors on a city region, such as TWCR, that is particularly dependent on the public sector for employment and has had a relatively weak private sector.

6.4 Any forecasts of future demand should be treated with caution. However, a baseline or starting point is required in order to help compile future projections. A recent forecasting exercise has been carried for ONE North East/NERIP by Cambridge Econometrics (April 2010)24. TWCR has been given access to the headline findings emerging out of this forecasting exercise. These forecasts are at the regional (not city regional) level. However, the broad shape of the forecasts can be applied to the city region. A base year has been constructed to which the sectoral changes forecast at a regional level have been applied to get some idea of the likely changes in employment.

6.5 The most important headline from this exercise is that forecast total employment in the city region is unlikely to grow from the current position for the foreseeable future. Indeed, after a further significant decline in 2010, 2011 and 2012 (cumulatively around 3% or around 20,000 FTEs), the

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regional forecasts imply that total employment will flat line at best and possibly continue towards a modest decline in a period of jobless growth, where the economy does not grow at a faster rate than productivity growth. This general forecast of the city region’s prospects is a reasonable starting point. Figure 6-1 shows the employment forecast at a regional level. TWCR is expected to follow a very similar path. However, for the reasons stated below it is quite possible that, in the short term at least, the baseline forecast may underestimate the rate of jobs losses due to the forthcoming economic shock from significant public sector contraction.

6.6 The regional forecasts also take a view about likely sectoral change in the North East. These are summarised for some of the key employment sectors below (that collectively account for 85% of employment in the city region). Caution is needed with sectoral forecasts but there are several interesting points:

- Within a picture of overall employment decline there are stronger losers and some sectors that may experience some growth.

- Although not shown, employment is forecast to continue to decline in nearly all manufacturing sectors essentially because of strong productivity coupled with modest outputs growth.

- Very few sectors are forecast to see net employment growth: those that are include computing, banking & finance and other (i.e. personal services).

- The base forecasts assume that public administration employment will shrink by 7% between 2009 and 2015, education by 3.5% and health by around 2%. They also assume that retailing employment will contract by 5% as a result of continuing squeeze on consumer disposable income. As these forecasts were produced earlier this year it is unlikely they will have
necessarily factored in the full implications from the Emergency Budget for the region and TWCR. This is especially important as the city region accounts for 77% of all public administration employment in the North East.

6.7 In the absence of occupational forecasts for the North East regional sectoral forecasts have been translated to produce an overview of likely occupational change in the city region to 2015. This overview also needs to be caveated as there are no occupational forecasts produced for the North East that have been released to the city region.

6.8 Consequently, it is necessary to take a view of how occupational shares of employment are likely to change by sector. This has been done by using the regional forecasts prepared by sector, and applying these to the TWCR baseline and also to national trends in occupational shares.

6.9 This different look at the forecast shows that the effect of overall limited economic growth is to lead to net employment declines in all occupations in TWCR, but that the trend shifts in structure of the nature of organisations and type of economic activity within sectors is driving demand for increased numbers of managerial/professional level skills (a net increase of around 8,000 new jobs or 5%).

6.10 These estimates need to be treated with caution as it is possible that these national trends are not appropriate for the city region and in any case they may now be out of date given recent economic changes. What also comes out of the analysis is the possible double effect on secretarial/clerical staff of sectoral changes coupled with a strong trend in occupational reductions at this level (in particular due to advances in technology).

6.11 The indications of the future path of net demand for different types of labour are, however, very different from how actual demand will manifest itself in the labour market. This is because of the importance of replacement demand. Even if there is no net increase in the demand for a particular occupation over a period of time, there is a still a requirement for new labour to fill jobs because of the need to replace workers who leave the occupation.

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25 For instance, the trend in the increase in proportion of managerial staff in all sectors may not proceed at the rate assumed in the past given the recent recession and cost pressures on all sectors.
6.12 There are many reasons why workers leave an occupation: migration; promotion; change of job to a new occupation; retirement; withdrawing from the labour market to study or to become a carer.26

6.13 This study has applied national ratios of replacement (calculated over the period 2007-2017) to baseline employment in 2009 in order to estimate annual replacement demand. For most occupations the ratio is typically about 3.5% to 4.0%, that is to say each year on average for every 100 workers in an occupation at the start of the year, 3.5 to 4 workers have to be replaced for the reasons set out above.

6.14 As Figure 6.4 shows, even in an overall shrinking labour market, there is likely to be quite significant demand to replace skills in all occupations. However, there should be a caveat to this analysis. In the context of overall jobs reductions, pressure to increase the retirement age because of pension funding issues and concerns about jobs, it is quite possible that replacement demand may well be somewhat lower over this period than these estimates suggest.

**Effect of the Public Sector Contraction**

6.15 Work has been undertaken at a regional level on developing various future economic scenarios. In this study for TWCR, the implications of a significant improvement in the export performance, growth of the low carbon economy and a shift in skills performance have been considered. However, in terms of this executive report, a focus has been given to examining the implications of the contraction in the public sector and its implications for the city region’s labour market. All of the scenarios are covered in Technical Appendix Five.

6.16 The scale of public expenditure cuts already underway, and those announced in the Emergency Budget, represents a potentially enormous economic shock for the city region. The city region is particularly dependent on the public sector in its various guises. This is in part a result of the relatively weak private sector in TWCR, and also because the city region is the location for major central government/NDPB functions (such as the back of office functions at Longbenton and other agencies).

6.17 Establishing the precise number of public sector jobs in the city region is difficult. According to the most recent statistics on public sector employment, the North East has around 290,000 public sector

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26 Note: replacement demand is not the same as the churn within occupations from people moving job from employer to employer but staying in the same occupation. Also note that the study has applied national rates by occupation and sector to arrive at these estimates, these will only provide a rough guide for the city region.
employees. It is estimated that this means that there are approximately 195,000 public sector employees in the city region. An alternative estimate, looking at the education, health, public administration and other services sectors suggests that there could be up to 208,000 public sector employees in TWCR (although this will include some private sector employment in education and health sectors).

6.18 At present the most challenging feature to estimate in any scenario is the likely overall scale and shape of contraction in public sector employment that will occur over the next four to five years. Two approaches have been adopted to assist in the process of calculating the volume and scale of the reductions in public sector employment:

- **First**, the Office for Budget Responsibility (OBR) produced a forecast of the reduction in public sector posts as a result of the Emergency Budget proposals. This work suggests a loss of 600,000 positions across the UK. Excluding public corporations, this total amounts to an 11% reduction in the public sector workforce (the reduction is lower than some other forecasts due to the offsetting effect of real terms reduction in pay in the public sector). It is estimated that if these cuts fall proportionally in the city region this could amount to the loss in the order of 20,000 public sector jobs on current levels (3% of all current employment in the city region). It is suspected that this is a lower bound estimate of the likely labour market impact.

- **Second**, an alternative is to apply the forecast real budget reduction to departmental spend outside the health sector of 25% to the public sector (excluding the health sector) in the city region. This approach suggests that the scale of job losses could be of the order of 30,000 jobs (16% of the existing public sector workforce and around 5% of the existing city region employment).

6.19 It is important to emphasise that these job reductions are significantly larger than those implied in the baseline forecasts discussed earlier in this report (just under 10,000). Clearly, the contraction in the public sector (and real cuts in benefit payments) will have additional knock on effects in the city region’s economy and labour market via reductions in disposable incomes and also the supply chain effects from reduced public sector procurement for capital and current projects. At a national level, the estimates suggest that these further employment impacts are of the same order of magnitude as the direct job cuts. In TWCR, the initial estimates suggest that there could be an additional economic knock-on effect of around 20% (combining supply chain and induced effects).

6.20 An assessment has been undertaken of the labour market implications of the contraction in the public sector by looking at the potential implications for skills demand in different occupations (Figure 6-5). This analysis suggests that the impact of the contraction of the public sector in the city region could be significant in professional/associate professional (e.g. teachers, university professionals, etc), administrative/clerical and personal service occupations (e.g. care workers). Clearly, these estimates are speculative at this stage, but they do provide an indication of the likely pattern of the impact over the next four years of the public sector contraction.

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28 Based on 2007 data produced by St Chad’s College for the city region, the public sector in TWCR accounted for around 68% of all public sector employment in the North East region.
6.21 The reductions in head count will be achieved by a mixture of redundancy and natural wastage (not replacing those leaving jobs). The big question is how far can the labour market and economy adjust to the large number of further redundancies and reduction in white collar job opportunities? There will be several effects:

- Subject to there being job opportunities, it is envisaged that admin/clerical workers could, in theory, be re-absorbed readily into the labour market. However, the scale of job losses is of the same order of future total gross demand (replacement demand less net change) over the next six years. The conclusion is that many of these redundant public sector workers will need to be re-trained to find other jobs.

- There will be a major challenge amongst those losing public sector jobs in professional and associate professional occupations, as these skills will be relatively specialised and not necessarily transferable. There will also be an important effect from the drying up of new recruitment amongst graduates seeking to stay in or move back to the city region. One possible policy response may be the creation of an enterprise fund and support service aimed at redundant public sector professionals. The recent relative success in TWCR acting as a destination for these graduates will be hampered by the drying up of public sector professional jobs.

- Finally, the last main group affected is in personal service occupations (cleaners, care workers, teaching support etc). There are reasonable prospects for these workers to find alternative employment in the private sector, although the public sector dominates the labour market.

6.22 A detailed spatial or gender analysis of the impact of a public sector contraction has not been undertaken as part of this study. However, it is the case that the contraction of the public sector is likely to involve a disproportionate reduction in female employment (based on the gender make up of public sector employees). In geographical terms, the pain will be felt across the city region, although it is important to note that large numbers of jobs in public administration and the higher education sector are concentrating in and around Newcastle.

**Impact of Export Lead Growth**

6.23 The study also modelled the potential economic impact for TWCR of export led growth. A regional export scenario prepared by NERIP and St Chads was used that assumed a 1% per annum increase in...
the real value for exports every year from 2011 to 2030. This boost is applied over and above the baseline scenario for the region. These results are available for the Tyne and Wear City Region through the regional spatial model. The results take account of the supply chain and induced effects (from extra regional income) as a result of this export boost.

6.24 The results of this exercise suggested that an additional 10,000 jobs (+1.4%) could be created over and above the baseline for TWCR by 2020 and 5,000 (0.6%) by 2015. The results need to be treated cautiously as both the overall scale of impact and, most importantly, its sectoral distribution is in some regards surprising. The summary of the suggested impact of this scenario sector by sector is shown in Figure 6-6.

6.25 The key points are that:

- The most significant employment effects are, as might be expected, in the manufacturing sector (around 3,000 extra jobs or a 4% increase); these extra jobs are focused in the Manufacture of Fuels, Pharmaceuticals, Chemicals, Mechanical Engineering, Electronics and Motor Vehicles. The employment effects are rather less significant than the GVA effects as much of the export focussed industries are quite capital intensive.

- However, the modelling work shows that through the supply chain linkages there would be some benefits in terms of employment in those sectors supporting manufacturing (especially business services) and in sectors that benefit from the impact of a general increase in spending power in the region (e.g. retailing). In addition there are some different export boost effects as a result of the assumed increase in service sector exports.

6.26 We have not carried out a detailed skills analysis of these sectoral effects as there is simply not enough data to do so and there would be a real danger of setting out results with spurious accuracy. However, an initial analysis suggests given the quite broad sectoral effects that the employment impacts of export-led growth would be spread across most broad occupational groups. However, the precise skills impacts would of course depend on the export sectors. We suspect that there would be significant demand for engineering skills, for extra sales and marketing skills (especially involving foreign languages) and related business administrative skills. The analysis suggests that managerial, skilled trades and process operatives are likely to see the highest percentage growth (as would be expected given the importance of manufacturing). However, the proportion of this additional demand accounted for by managerial and professional staff varies widely from manufacturing sector to sector and indeed firm to firm, so much would depend on which sector and firms were more successful.
Detailed Occupational and Sectoral Demands

6.27 Attention has focused above on the big picture in terms of the main occupational trends. Clearly, on top of these trends there will be specific skills demands in the future that occur at all levels of the labour market. In terms of higher level skills there are:

- Continued demands for skills development within the existing workforce, for instance, as part of continued professional development (CPD) or upskilling and multi-skilling.
- Likely to be demand for very specific occupational skills linked to potential areas of growth as the economy develops.

**Question 7: How is the supply of labour that is equipped to take up employment at these different occupational levels likely to change in the same period?**

6.28 There is a complex picture in terms of future labour demand in TWCR. How well is the city region equipped to meet these demands?

Future Supply Trends

6.29 The latest ONS population projections predict a modest rise in the working age population of the city region of just 1,000 people between 2008 and 2020. This is equivalent to a rise of only 0.01% p.a. compared to a growth rate of 0.4% p.a. between 2000 and 2008. This overall figure disguises significant variations within the city region. The main growth areas of the previous decade (Newcastle and North Tyneside) will see their working age population continue to expand by approximately 14,000 residents (4.4%). In contrast Sunderland will see its working age population contract by 7,000 residents (-4.1%). However, this near static position in terms of population of working age, which is of course very sensitive to the assumptions made about migration, needs to be set against the recent contraction in employment and forecast further contraction in employment over the next 4-5 years.

6.30 In terms of the overall skills (or at least qualification levels) of the workforce, the available forecasts suggest that, broadly, the city region is on track to deliver the net change in higher skills levels needed by forecast demand. The proportion of working age people achieving a Level 4+ qualification has increased from 19% in 2000 to 24.7% in 2008. If this rate was projected forward, just over 35% of the population would be expected to achieve a Level 4+ qualification by 2020 (still some way below the 40% target set by Leitch for 2020).

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29 Especially international migration, which has been the main source of increases in working age population in the city region over the last decade.
6.31 Applying this trend to the ONS population forecasts translates to an increase of around 110,000 people with a Level 4+ qualification between 2008 and 2020 (or an additional 9,300 people per annum). These changes would create a supply of higher level skills running well in advance of what is forecast to be needed on the demand side. Taking managerial, professional and associate professional occupations as the “graduate-level skills occupations”, net demand over the next 6 years could be as little as 3,000 per annum.

6.32 HESA graduate data shows that the city region’s universities produce around 10,000 graduates each year (9,600 in 2002/3 and 9,800 in 2007/8 – the only two years for which we have data). The graduate retention rate has fallen slightly from 42% to 38% between 2002/3 and 2007/8. In both years the city region attracted around 1,000 graduates from elsewhere. If retention stays at 40% and TWCR continues to attract 1,000 other graduates p.a., the city region can expect to attract/retain an additional 5,000 new graduates each year.

6.33 In terms of the forecast increase in the stock of those qualified to Level 4+, this leaves a total of around 4,300 people per annum who would be either older graduate in-migrants or people who have progressed from Level 3 qualifications through workplace development schemes. There are currently 241,000 working age people whose highest qualification is Level 3 (including people with trade apprenticeships). If all of the extra level 4 qualifications were to come via the progression of this group this would equate to up-skilling of around less than 2% of the total each year (assuming no drop out), which seems quite achievable.

6.34 In conclusion, the scale of development of the qualification levels of the workforce appears to be comfortably running ahead of what is forecast to emerge from the demand side requirements. In the absence of a better utilisation of graduate/higher level skills by the economy the phenomenon of latent or under-utilised skills could become a more significant feature of the TWCR labour market.

**Summary**

6.35 The economic recovery in the North East region is expected to be characterised by a period of jobless growth in the medium-term (a 3% fall in employment [32,000 workers] is forecast between 2009 and 2015 whilst GVA is expected to grow by 11% during the same period). Changes for demand within sectors are far more important drivers of demand for skills than sectoral change itself. Modelling suggests that over the period 2009-15 there will be net growth of 8,000 professional and managerial workers in TWCR (increase of 5%), and substantial falls in demand for administrative positions (13% reduction).

6.36 Strong continuation of growth in replacement demand is expected. Typically, each occupational group in TWCR needs 3.5% to 4% of jobs to be filled every year by new entrants. This demand dominates the forecast net change across all occupations and equates to some 23,000 managers and senior officials (SOC 1) and just under 20,000 professionals (SOC 2). The North East baseline forecast is for a reduction of 9% in public administration and defence employment, a fall of 4% in jobs in education, and a 3% loss of jobs in health and social work during the period 2009-15, an overall loss of 10,000 jobs in the public sector in TWCR by 2015.

6.37 In addition, a study published by the Work Foundation predicts that the North East region will lose 33,000 public sector jobs over the same period, out of an anticipated 750,000 public sector job losses nationally. Applying the latest predicted spend figures from the Office for Budgetary Responsibility (OBR) to TWCR would result in a loss of 20,000 public sector jobs in the city region, whilst a 25% cut
across all elements of the public sector (except health) would result in a loss of 30,000 public sector jobs across the city region. The cuts are expected to most adversely affect professional (6,000-9,000 job losses), administrative and secretarial (5,000-8,000 reduction) and associate professional staff (5,000-7,000 fewer posts).

6.38 Export led growth offers the potential to offset some of these job losses, subject to how well placed firms in TWCR are to grow existing markets and to enter new ones. An assumed 1% per annum increase in the real value for exports every year from 2011 to 2030 would create an estimated additional 5,000 jobs (+0.6%) over and above the baseline for TWCR by 2015 and 10,000 jobs (+1.4%) by 2020. The analysis suggested that managerial, skilled trades and process operatives are likely to see the highest percentage growth (as would be expected given the importance of manufacturing).

6.39 The accompanying Technical Report Four to the Executive Report, also explores research available to inform the development of a low carbon economy led growth scenario. This points toward a likely trajectory of the TWCR economy that involves a transition to a lower carbon economy, and which can benefit for example, from the growth of markets for low emission and electric vehicles; the development of renewable energy and off-shore wind; and retro-fitting buildings so that their environmental performance improves. Further research into the metrics of this scenario are however required, given the limited data available to map baselines for low carbon sectors and industries.
7. Policy Implications & Priorities

7.1 Drawing upon the previous analysis in this report, this chapter sets out the main implications emerging from the characteristics of the TWCR labour market, the city region's recent performance during a sustained period of growth and its prospects during a period of austerity. The chapter begins by considering the implications of the changes which are taking place and will be played out over the next decade, before a wider ranging consideration of the areas of action which policy makers should consider to address these issues.

7.2 The Coalition Government is expected to publish a new Strategy for Skills after the Comprehensive Spending Review on 20 October, which will accompany a white paper on sub-national economic growth. When considering potential short to medium term options to address policy opportunities and challenges, local authorities, business and partners in TWCR will need to be mindful of these developments.

Question 9: What are the implications of potential changes in supply and demand for: in-migration at different occupation levels; workforce development, particularly in respect of higher level skills; worklessness amongst lower skilled groups; demand for housing in terms of tenure and price range

7.3 There is always a degree of uncertainty over future economic and labour market prospects, as no one can be sure of the economic events which may unfold. At the heart of all economic forecasting is the assumption that the past provides a reasonable basis for the future. Although this can be the case for sustained periods of time, this situation tends not to persist. The current economic climate therefore makes forecasting, especially at sub-national levels such as at the city region scale, more fraught and uncertain. This chapter sets out the main policy implications for partners, focused around the four themes of in-migration, workforce development, worklessness and housing.

In-migration

- Successful economies need open and competitive labour markets in which employers can attract the skilled workers that they require. Historically, TWCR has managed to meet its requirement for skilled and unskilled workers from within the city region and region, with the need for the in-migration of more highly skilled workers being fairly modest. Although the data is limited, the in and out flow of higher skilled migrants appears to have been fairly low and broadly balanced over the last decade.

- Looking to the future, economic conditions over the next four to five years mean that in general the broad demand for higher skilled workers will be lower than over the previous decade. Nevertheless, there will continue to be a significant demand for these groups of workers during the forthcoming period, which will be driven by replacement demand and also an expansion in some sectors and employers. However, the upshot is that at least in the short term, the city region will not have a particular need for higher levels of in-migration amongst higher skilled workers, compared to the last decade, and it could well be lower.

30 A White Paper is expected to be published in late autumn.
• The city region will continue to need specialised and experienced managers and professionals, with some employers seeking to recruit these at a national (or even international) level. This will continue to be the case for more senior managers where the labour market is fairly thin in TWCR, but also in some of the niche sectors which may grow strongly. This is supported by the evidence from the senior managers and software consulting case studies undertaken in this research project.

• TWCR needs to be able to compete for the best workers, although firms typically are not able to pay the same wages as their counterparts in other parts of the country, nor are there the same career opportunities available within the city region compared to Manchester or Leeds. TWCR needs to emphasis other factors, such as the quality of life and to promote enterprise opportunities, in order to attract workers.

• The release of higher skilled workers from the public sector could, to some extent, dampen the need to attract workers from outside the city region. These workers will almost certainly meet some of the replacement demand from within the public sector, though a key issue is the extent to which they can meet the needs of a growing private sector. This will depend upon the nature of the demand and transferability of the skills of the redundant workers. Clearly the skills of IT workers in the public sector are more transferable to the private sector than senior managers in the health service.

• The city region has performed fairly well over the decade in terms of its ability to retain graduates (and to some extent attract them), especially those that originate within the North East. One of the consequences of the reduction in the size of the public sector, and its impact upon labour demand, is that TWCR may struggle to retain graduates on the scale that it has done in recent times. There is likely to be an increase in the out-migration of recent graduates from the TWCR, especially if the economy of London and the greater South East emerges from recession quicker than the North East. Action is required to retain these graduates.

• The need for large numbers of migrants (which tend to be international), with intermediate and lower skills, is not likely to return until the economy of TWCR starts to grow rapidly again, in particular in consumer-facing sectors (housing, retail and leisure markets, personal services, etc).

Workforce Development

• The need to continue to raise the skills and qualifications of the TWCR workforce in order to drive increased and sustained economic competitiveness has not evaporated due to the recession or the current economic and public sector debt challenges. The provision of appropriate and relevant work related training, whether provided in work or through the FE/HE sector, must continue to be a priority for the city region.

• Related to this, there is the need for greater alignment between skills and employment investment that more closely reflects the sectors and skills needs within a functioning local labour market. Whilst this is a national issue, it is particularly relevant within TWCR due to the sectoral and occupational shifts, which will continue to occur at a pace as the economy emerges from recession and adapts to reductions in its public sector. The city region has been moving towards a model of demand led provision for a number of years, although the on-going reorganisation of workforce delivery may lead to additional uncertainty. Partners
should keep a watching brief on future Government Policy and White Papers, which will have implications for funding and delivering workforce development to meet future skills needs.

- The demand for work related training may be dampened as a consequence of the impact of the recession and the downsizing of the public sector. However, it is critically important to bear in mind a number of factors:
  - First, even during difficult economic times, some sectors will continue to expand and will have a net requirement for some types of skilled workers. This process will require training, the precise nature of which will depend on the sector, occupation and tasks.
  - Second, there will be significant replacement demand across all occupations and most sectors. The degree of training required will depend upon the balance between (i) the potential to use workers freed up from contracting employers or sectors; and (ii) the need to train new cohorts of workers for these jobs.
  - Third, there will be a pressing need for work related training and retraining aimed at redundant workers from the public sector, in order to enable them to regain employment in other sectors of the TWCR economy.

- Historically, the public sector has been a major funder of workforce development, including at Levels 3 and 4. The reduction in employment and, as expected, training budgets, could have a significant effect on the overall volume of training, which could undermine the long term competitiveness of the city region.

- Although the implications of the Coalition Government’s policies for workforce development are still uncertain, it is already clear that there will be a sharp fall in the level of public sector resources made available for adult workforce development. This could have important implications for the ability of employers to meet their skill needs as the economy emerges from recession and into growth. There will also be a pressing need to continue to persuade employers of the benefits of training and hence to demonstrate a greater willingness to meet the associated costs. Local government and its partners should develop new innovative ways of working together with businesses to encourage additional employer and individual investment in work-related training and development.

**Worklessness**

- The past decade was very positive for TWCR in terms of increasing economic participation rates and reducing the number of JSA and Incapacity Benefit claimants. The nature of employment growth has been beneficial in moving large numbers of workless residents into employment, including large numbers of the more disadvantaged in the labour market.

- The recession has created significant challenges – in particular a rapid increase in JSA claimants, with mixed opportunities for re-employment in the short term. Some groups are particularly vulnerable including young people, those with lower skills and those from deprived communities. In addition, there will be an excess supply of workers in some specific occupational groups, including administrative workers in both the public and private sectors.
Some sectors are expected to recover more quickly, although this assumption is likely to be complicated by the emerging cuts in the public sector, and the impact this could have upon the fragile recovery taking place in the city region. In general, the opportunities for an immediate return to growth in financial services and construction are probably weak, whilst sectors with the prospect to grow the export of goods or services out the city region may be better placed.

The cuts in public sector expenditure are likely to lead to substantial additional unemployment in TWCR, prior to the economy having recovered sufficiently to deal with consequences of the recession. There are likely to be three broad groups:

- Professional and managerial – employability will depend on the degree of specialism and transferability of skills, and the pool of suitable opportunities in the private sector as the economy recovers, as well as the duration of service and age as some older workers withdraw from the labour market.

- Administrative – generally good transferability of skills to private sector, although not an occupation with particularly high replacement demand.

- Personal services – good transferability for when the private sector recovers.

In conclusion, in the medium to long term, the TWCR economy will face real challenges around its ability to absorb large numbers of: (i) administrative workers with backgrounds in both the private and public sector; (ii) young people; and (iii) higher skilled workers, especially more recent graduates or specialist staff, operating in a small labour market pool.

Demand for Housing

- The demand for housing has fallen during the recent recession and the prospect of the sharp fall in public sector jobs and an overall decline in employment in TWCR will further dampen demand in the short to medium term. The expected increase in worklessness amongst the younger and lower and semi skilled workers may have significant implications for home ownership in the longer term. This could be further exacerbated by changes to welfare and housing benefit.

- There is the potential for these impacts to be geographically concentrated within TWCR, especially in those areas which have benefited from: (i) sharp reductions in worklessness; and (ii) a shift towards private ownership. Parts of Sunderland, Newcastle and Gateshead, in particular, could be affected. On the other hand, other places (possibly including outer Newcastle and North Tyneside) could be impacted as a consequence of residents in these areas who are younger public sector employees having taken on substantial levels of debt to enable them to buy their first home.

- In the short term, lower employment and hence lower owner occupation could have a negative impact on the ability of TWCR to deliver on some its aspirations for higher quality and innovative family housing schemes aimed at higher managerial and professionals in the city region’s main urban areas.
Strategic Priorities

7.4 The implications of the above analysis are that the following issues must be addressed if TWCR is to make the shift towards being a high skilled, knowledge based economy that can compete with the better performing city regions. The issues have been split into two types of strategic priorities:

- Long standing barriers to economic growth in TWCR that could continue to hold the city region back in the short term require decisive action.
- Challenges that require longer-term solutions to raise the productive potential of the TWCR economy.

Tackling the skills deficit. Whilst improving, TWCR’s skill profile remains relatively weak compared to many comparable city regions, especially at higher levels and in terms of the number with no formal qualifications. This gap needs to be tackled as an urgent priority.

Tackling concentrations of worklessness. There remains a need to tackle the concentrations of worklessness in specific locations within the city region and amongst key disadvantaged groups, specifically older workers and NEETs.

Enabling local graduates to fulfil their potential and attracting high skilled in-migrants. TWCR needs to make better use of the skillsets of those graduates who choose to stay and live and work in the city region, and to attract more young graduates through promotion of enterprise, using supply side measures, in order to drive the demand side of the economy and stimulate economic growth.

Developing employment hotspots. TWCR needs to create a critical mass of knowledge based businesses in the urban core in order to attract higher value investment, higher skilled workers and generate self-sustaining agglomeration benefits.

Responding to public cutbacks. High skilled public sector workers, who lose their jobs as part of the reductions in public expenditure, should be supported to develop the skills they need to meet private sector demand and to consider self-employment as a route into the labour market in TWCR.

Promoting growth sectors. Partners should ensure that the skills supply meets the future needs of businesses in growth sectors, including through actions to ensure that greater demand for higher level skills resulting from increased investment in low carbon technologies and renewable energy can be met, and that large employers are able to access high quality local suppliers.

Meeting current and future employer needs. Work with key training providers to ensure that they develop training courses and programmes that are appropriate for the needs of employers, taking account of sectoral drivers, occupational change and replacement demand.

Raising demand for training. Stimulate greater demand for training amongst SMEs by working with businesses to enhance understanding of how they can articulate and procure the training needed to enhance productivity and innovation. This includes putting mechanisms in place to ensure that firms and individuals understand the importance of investing in level 3 and level 4 skills.

7.5 These priorities are explored further in Question 10 below.

Question 10: What are key options open to partners to balance occupational labour demand and supply more effectively and enable increases in the employment rate within Tyne and Wear City Region?

7.6 The previous sections highlighted the strong economic and employment growth during the last decade, at least up to the middle of 2008. The nature of employment change in TWCR has contributed to growth in demand for intermediate and higher level skills, with the public sector being particularly prominent in driving demand for workers qualified to Level 4 and above. The jobs growth has also been a key factor (in conjunction with welfare reform) in increasing economic participation and a major reduction in worklessness across the city region.
Looking to the future, the proposed cuts in public sector expenditure, in conjunction with national economic trends, will lead to a significant short term reduction in employment in both public and private sectors. However, it is important to note that there is a great deal of uncertainty attached to the prospects for the TWCR economy, especially in the medium and longer term.

The forecasts undertaken as part of this study suggest that whilst there will be modest demand in some occupations driven by sectoral growth, the greater source of additional demand will be driven by occupational change within sectors. Much of this additional demand will be at higher occupational levels and personal services occupations. However, the greater source of demand for skills will be from replacement demand at all occupational levels, with particularly strong demand at an intermediate and higher level.

In light of these recent trends and future prospects, this report has highlighted what are considered to be the main demand and supply issues and also how TWCR can more effectively use its skills, enterprise and related assets to enhance the competitiveness of the city region. These issues have been split between those that are short term and those that are for the medium and longer term.

**Short Term**

In the short term (up to 2012) the expectation is that at least at an aggregate level the supply of labour will exceed the demand. As has been the case between the middle of 2008 and 2010, the employment base will continue to contract and the level of claimants can be expected to rise. In terms of demand for workers and skills, there will continue to be fairly strong replacement demand across most occupational groups and some limited expansion demand. Given the current occupational profile of the claimant count and the expected growth in redundancies, it is unlikely that employers will experience major difficulties in recruiting the staff and skills they require from within the city region.

The greater challenge facing TWCR up to 2012 will be making the necessary labour market adjustments in order to minimise the impacts of the expected fall in employment and an increase in worklessness, as well as ensuring the supply side of the economy is able to respond as the economy recommences growth. Nevertheless, any proposed priorities and actions will need to be coordinated alongside the City Strategy Pathfinder, which is currently being refreshed (as part of the revised model for employment support being introduced by DWP nationally). The key points are:

- The continued prioritisation of job search support for the growing number of short term unemployed so that they can make a speedy return to work, but also maintaining the employability of those workers who are less successful in gaining work and experience longer durations of unemployment (issues associated with skills decay, loss of networks, demotivation, etc).

- The provision of timely and targeted advice and guidance to workers affected by large scale redundancies within TWCR (especially in the public sector, but also the private sector affected through supply chain effects), and to workers vulnerable to redundancy.

- Linked to the above point, specific actions to retain the more highly skilled workers in the city region in particular those affected by redundancy or threat of redundancy – as these workers are typically more mobile and may be tempted to look for work outside the city region. This could include direct support for companies to engage highly skilled individuals who have been made redundant to utilise their skills in growth sectors such as renewable energy manufacture and software consultancy.
A focus on key labour market groups, especially the more disadvantaged, who have been assisted into work during a period of more benign economic conditions, as well as young people who will find current economic conditions and overall job prospects particularly challenging. This could include community projects and volunteer activities to mobilise unemployed and inactive people and facilitate integration into the labour market.

A focus on the encouragement of enterprise and creative learning by providing opportunities for young people to work within businesses where there are specific skills shortages.

Connect learning with regeneration, in order to ensure that the right skills are available within those communities, which are near to planned regeneration activity. This will include brokerage services to newly attracted businesses, proactive skills programmes, and targeted pre-recruitment training.

There will also be the need to continue to pursue demand side actions, for example:

- Working closely with sectors and employers with large short term expansion or replacement demand (for example in the manufacturing sector), with the aim of both meeting employers skill needs and placing unemployed workers in jobs; working with Sector Skills Councils (SSCs) to target these.
- Working with sectors and employers to encourage employers to train staff to meet longer term skill needs, and to resist the temptation to reduce training volumes.

In light of the changes, which are currently being made to the approach to and funding of economic development and regeneration at a sub-national level, there is the need for local authorities, private sector and other partners to work closely together across functional economic areas to address many of the issues highlighted above.

Medium and Longer Term Considerations

Turning to the longer term, whilst subject to considerable uncertainty, the employment rate in TWCR is not expected to rise above the high of 2008 nor will a major imbalance occur between occupational skill demand and supply at the city region level. The lesson from the last decade is that TWCR has been able, by and large, to meet its skill needs during a period of strong and sustained economic growth. The exception to this projection could be if the city region receives a greater and more prolonged economic shock from the proposed public sector expenditure and jobs cuts or if it fails to adjust adequately to the challenges this process presents (especially in terms of addressing worklessness and the related social issues).

How TWCR can more effectively use its skills, enterprise and related assets to enhance the competitiveness of the city region is explored below. This study has pointed to the availability of a good range of employment as the key factor in attracting and retaining well qualified workers. The research has also pointed to a number of public policy levers, which are seen as having an important contribution to make to the city region’s ability to attract talent and higher order economic functions.
Agglomeration and Density

7.16 This study has established that TWCR and its core employment areas draw on a reasonably large pool of higher managerial and professional people, giving it an overall pool of potential labour in these occupational groups which compares well to other medium sized city regions. As such the city region has a good skills proposition and partners need to ensure it clearly communicates this message to potential inward investors.

7.17 The analysis suggests that labour market agglomeration in TWCR is dampened by the city region’s scale, its location and accessibility, the dispersal of economic activity across the city region, and the city region’s sectoral mix. The higher skilled labour market is dominated by the public sector and is ‘thin’ in terms of private sector knowledge based industries. TWCR is also very thin for more specialist skill groups (especially where these skills are specific to a particular sector e.g. software designers as opposed to accountants) and senior managers of larger businesses.

7.18 There is no simple quick fix to the thinness of the labour market and associated agglomeration issues, although there is a range of issues which should be considered:

• Excellent accessibility of residential and employment locations within the city region is critical to the size of the higher skilled labour pool and agglomeration effects. There is some evidence that road congestion, especially ‘north-south’ within the city region, is an issue and could become a greater constraint upon economic competitiveness as the city region expands.

• The fact that TWCR has a number of decentralised employment centres and major sites across the city region, with the prime residential areas concentrated to the north, east and west of Newcastle, adds further weight to this argument. TWCR also has to face agglomeration (and sustainability) implications relating to future decisions about the locations of employment sites (which could be more likely to generate limited agglomeration benefits and also prove to be less sustainable in environmental terms).

• Improved transport links from the outer areas to the economic centres of the city region can go only a small way to addressing the issue of labour market density since much of the area in the periphery of TWCR is sparsely populated, although some towns have identified the need to improve links to the economic core.

• There is some scope to increase the pool of highly skilled workers by enhancing accessibility between TWCR and other city regions, although in practice this is likely to be fairly limited. The main opportunity would be between TWCR and York and Leeds, although the costs of reducing travel times (which are already reasonable at peak times) may not merit the gains, which could be secured in increased inter-city commuting and enhanced agglomeration.

• TWCR is characterised as a dispersed city region, with Newcastle Gateshead and Sunderland being the more dominant economic centres. However, Newcastle and it surrounding area is not, to the same scale, the economic driving force within the TWCR (as a business and residential location) as Manchester is within the Manchester City Region or Leeds within the Leeds City Region. This is a result of TWCR having a range of assets and employments sites located across the wider economic geography of the city region.
Enterprise and Economic Growth

7.19 The evidence presented in this report points towards the supply of higher skills – the attraction and retention of workers with these skills – is largely a demand side issue in TWCR (although other factors are also important). The ability of the city region to increase its supply of highly skilled workers will be driven primarily by the extent to which TWCR is able to grow the overall size of its economy and, in particular, its knowledge based industries. A range of actions are set out below that might help to stimulate enterprise and business growth:

- Encouraging economic growth – there is a tendency to focus on knowledge based industries or niche sectors, the growth of the economy as a whole will drive up the demand for higher level skills. The policy levers to generate general growth of the business base will be different to those needed to stimulate niche sectors. Partners will need to bear this in mind when making their policy choices.

- Pursuing opportunities around niche sectors – the economic linkages report (Adroit Economics and Ekosgen) highlights the potential to secure the growth of niche high value, high skills KBIs, including digital, software, media and creative and renewable energy. The extent to which these sectors have achieved to date a strong position, their future potential and the overall strength of the case for targeting resources at them varies. In the context of reduced support, in the form of both resources and policy approaches, for sectoral targeting in the future, careful consideration will need to be given to the prioritisation of what will be scarce resources.

- Stimulating the market and raising awareness of the need for leadership development. This would be a first step in the development of an innovation culture within businesses (the development of new products, processes, marketing strategies, or organisational structures), which can have a major positive impact on business productivity and wider economic competitiveness.

- Continuing inward investment opportunities – as noted above, TWCR has a good proposition in terms of the size of its higher skilled pool, as well as the pool of intermediate skills. There will continue to be inward investment opportunities (e.g. shared services centres), including from the public sector, and partners will need to continue to target these.

- Developing programmes to help businesses improve the skills of their graduate employees. This could be focused on a number of key sectors, but should also support shortage of skillsets that are applicable across many sectors.

- Stimulating enterprise through policies to encourage business formation in the knowledge based industries. These enterprises are already well established across the city region and have an important part to play in future growth. There is a need to expand and tailor support to two main groups in order to counter the economic impact of public sector cuts in particular, namely:

  - Large number of highly skilled public sector workers will be made redundant in the coming years and self-employment and business start-up will be viable routes for some of these workers. If successful and on a sufficient scale, this will help to not only retain these workers in the city region, but also to grow the business base.
Favourable market conditions and a buoyant economy are also crucial for graduate retention and there is the risk that TWCR may struggle to keep its graduates in current market conditions. There is an important role for graduate enterprise and work experience support to help them onto the jobs ladder in TWCR or to establish their own businesses.

All of these actions can make an important contribution to growing the demand for higher skills. One of the greatest contributions to this would be through four or five private sector knowledge intensive businesses in TWCR achieving stellar growth (as Sage has done over the last decade).

Improving the Skills of Residents

This study has pointed to the policy imperative to raise the skills profile of the working age population in TWCR, as well as more specifically acquiring both higher level skills generally and the specialist skills required by knowledge based industries. The current challenge does not diminish this requirement. There are a number of action points:

- There will be a continuing need for labour at all skill levels; especially with intermediate and higher level skills. This will not be driven by economic expansion. Replacement demand and occupational shifts will be important factors. Partners will need to continue to plan for these requirements.

- There will also be a continuing need to raise the overall skills profile of the city region, working towards the achievement of the Leitch targets. The longer term skills trends will continue (in particular a shift in demand towards higher level skills), and there is the general need to push ahead in raising skills and to secure a more demand responsive system.

- The study also suggests that there would be benefit in policies which encourage the professional training and development infrastructure to be as responsive as possible to the needs of the city region’s knowledge based industries.

Quality of Life and Related Assets

The role that high quality housing and wider liveability play in attracting and retaining high skilled workers has become a prominent policy issue in its own right in the last decade. The extent to which an under-supply of high quality places hinders the growth of higher skills is less clear cut, and much of the evidence appears to be anecdotal. The evidence suggested that these are important but not sufficient factors in the attraction and retention of higher skilled workers.

The Housing and the Economy Study undertaken by NLA has considered the housing issue and policy implications in detail. However, below are a number of policy implications, which should specifically be considered as part of a package to encourage the growth of knowledge based industries and the attraction of higher skilled workers:

- There is limited evidence to suggest that TWCR cannot offer its higher skilled workers a sufficient range of residential options. The existence of extended travel to work areas ensures that the reach of the city region is into high quality housing markets in areas such as Tynedale, Northumberland and North Tyneside. However, the number of prime housing areas in the main urban centres in TWCR is limited, and this suggests there could be shortcomings in the quality and range of the offer which may act as a constraint in attracting and retaining these workers from outside the city region.
With few exceptions, the main urban centres within the city region have not been setting the pace for the quality of its housing developments aimed at higher skilled workers. If raising the quality of the TWCR housing offer is seen as a priority, action in this area should be about:

- making the case for how things should be done differently and working collectively to marshal the resources and the commitment to ensure that more future housing developments achieve higher standards; and

- gathering clearer evidence on the types of housing required, and then underpinning developments with investments in improvements to quality of place, assets and public services.

There is the potential to raise the profile of urban living for Higher Managerial and Professional families, a strategy which has been pursued in a number of city regions affected by the migration of these groups to more rural outlying areas. This activity should be aimed at two distinct audiences. First, TWCR needs to send clear signals to developers and investors about the type of urban residential development and supporting infrastructure it wants to see. Second, potential occupiers of new residential developments, and existing residents of cities and towns, should be made aware of the merits of locating themselves and their families in inner urban locations.

**Worklessness**

7.24 Many of the issues around worklessness, and the contribution that a reduction in worklessness can play in increasing employment, have already been highlighted under the short term actions in this report, and in more detail in the Employment and Skills Strategic Action Plan prepared by the Tyne and Wear Employment and Skills Board, and partners in Northumberland and County Durham.

7.25 However, one additional dimension is the connectivity and accessibility of the major employment centres in out of centre locations. A number of these large employment sites have experienced strong jobs growth over the last decade, but have poor accessibility to some major concentrations of worklessness which are themselves poorly connected to public transport hubs.

7.26 The priority for the future should be to ensure that major new and expanded employment sites have good public transport links to neighbouring communities with high worklessness. Often the frequency and cost of these services can be as important an issue as the presence of these services.