

GREATER MANCHESTER WORK & SKILLS STRATEGY AND PRIORITIES 2016 TO 2019

FOREWORD



As the implementation of the Greater Manchester Agreement gathers pace, there has never been a more interesting and challenging time for Greater Manchester, as we work hard to create a prosperous employment and skills landscape that benefits all residents and businesses across the city region.

Greater Manchester has a long and proud history of innovation and leadership, and our ambition is to see this great city region not only at the heart of a thriving Northern Powerhouse but also leading the way as an exemplar of what can be achieved through a dynamic, integrated work and skills system which recognises that with better skills comes improved employability and, in turn, increased productivity.

The ambition is clear: we want all our residents to be in a position to achieve their goals through productive, fulfilling employment with skills at the heart of personal and professional development, whether entering the world of work for the first time or progressing in their careers. Our ground-breaking devolution agreements with Government provide a unique opportunity to deliver our ambitions and to join up with other public services such as transport and health.

We want to ensure that Greater Manchester's employers have access to and ownership of an adaptable, resilient local workforce with the skills they need to thrive now as well as a work-ready talent pool to draw upon for the future. We want to ensure that the work and skills infrastructure in Greater Manchester – from providers of learning and skills to the support services which enable residents of all ages to identify, access and excel in their chosen learning – provides the support and the pathways that will deliver a system with the needs of our employers and learners at its heart.

This Work and Skills Strategy, and the ten priorities which underpin it, will be key to delivering this ambition. I commend it to you, and I look forward to receiving comments and feedback from our key strategic partners.

Cllr Sean Anstee

Vice Chairman & Lead Member for Skills, Employment & Worklessness Greater Manchester Combined Authority

INTRODUCTION



Greater Manchester's Work and Skills Strategy has at its heart a very simple concept: delivering a work and skills system which meets the needs of our employers and residents.

Whilst the concept is simple, the Greater Manchester context is highly complex, with some elements devolved whilst others remain under the purview of central Government. We have the dual challenge of both supporting economic growth and reforming our public services, as well as the additional opportunities presented by initiatives including the devolution of Greater Manchester's health service and the outcomes of the Area Based Review of further education provision.

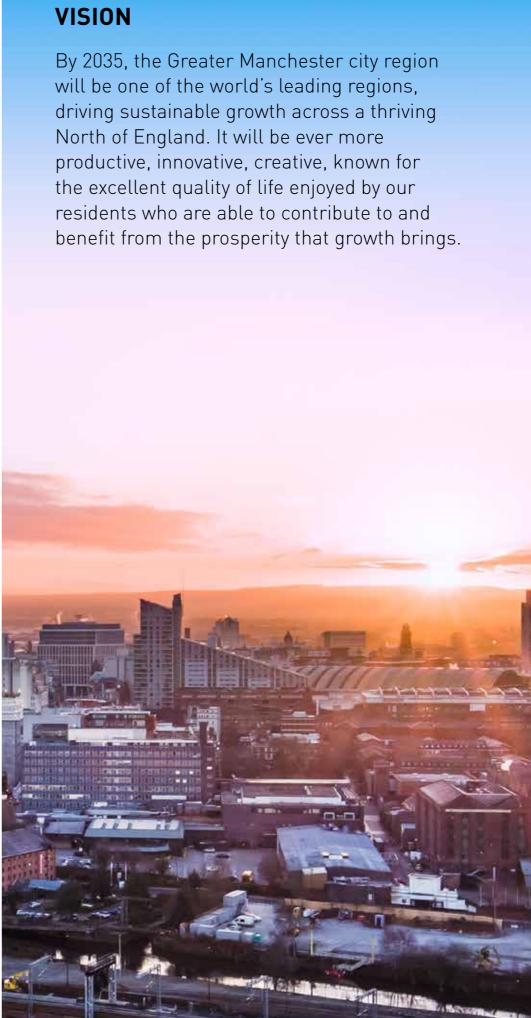
Against that backdrop, we must establish how best to focus our resources and efforts in order to maximise the impact of activity across Greater Manchester. This Strategy aims to draw together those numerous interrelated strands of activity across a rich and diverse work and skills landscape, to bring cohesion, and to set out a direction of travel for the coming years.

The Strategy must add real value to the way that we shape what we do, both strategically and operationally, and for that to happen we must ensure that we have identified the right overarching objectives, underpinned by appropriate and achievable priorities. We are confident that the direction of travel is right, but we need to ensure that this becomes a shared vision to which we can all commit and work towards together.

Achieving this collective ambition is not a straightforward task, but if we get it right it has the potential to transform lives across Greater Manchester, both now and for generations to come. I look forward to working with you to put this Work and Skills Strategy into action.

Theresa Grant

Lead Chief Executive for Skills, Employment & Worklessness Greater Manchester Combined Authority



GREATER MANCHESTER WORK AND SKILLS SYSTEM

To deliver the above vision, young people will leave the education system with the knowledge, skills, and attributes needed to succeed in the labour market. Working age adults who are out of work and /or who have low levels of skills, will have access to the skills and wider support needed to enter and sustain employment and there will be an offer for all adults to up-skill and progress their careers. There is a step-change needed to ensure that the GM skills demand and supply systems are more engaged; with the leadership and capacity to coproduce and co-fund the higher level and technical skills, needed to increase productivity, improve skills utilisation and grow the economy. Recognising that globalisation, technological change and an ageing population and workforce will continue to impact on the sectors and occupations that are likely to grow, the GM skills system will need to be flexible, adaptable and resilient in the long-term.

Objectives

Greater Manchester Leaders have agreed the following broad objectives for the future Work and Skills system in GM;

- 1. **employers** will be at the heart of our skills and work system and be incentivised to invest in, and utilise, the skills of their workforce
- 2. **residents** will be given support, whenever they need it, to make informed choices about their employment and career progression options
- 3. **young people** will leave compulsory education well prepared for the world of work and further study
- 4. **further education and training providers** will progress more people in to intermediate and advanced level skills in areas linked to Greater Manchester's growth sectors
- locally commissioned work and skills initiatives will provide integrated support targeted at the unemployed and those furthest from the labour market
- 6. health commissioning will be integrated with skills and work support to capitalise on the fact that 'good work is good for your health'.



Analysis of Current & Future Work & Skill Needs in Greater Manchester

Greater Manchester is set to undergo a radical economic transformation over the next two decades. Independent analysis shows that, because of its scale and economic assets, GM has the potential to play a leading role in delivering the Northern Powerhouse ambition. Delivering on this ambition will mean that over the next two decades GM needs to plan for at least 300,000 additional residents (the equivalent of a whole new borough), create an additional 220,000 jobs (and replace 170,000 workers each year who retire or otherwise leave the labour market), substantially increase the resident employment rate, and raise the productivity of those in work. The Northern Powerhouse is perhaps a once in a generation opportunity for Greater Manchester to realise its economic potential. Ensuring that our residents have the skills to play their part in contributing to, and benefiting from, this growth opportunity will be critical.

There is a clear link between qualification levels and economic participation and success. The employment rate rises from 37% for those with no qualifications to 66% for those with level 2; for those with L4 or above skills, the rate is 83%. Furthermore, wages also tend to rise with qualification. For those with low qualification levels (eg. entry level or L1 skills), typical hourly wages are just under £10 an hour; for those with level 4 or higher, hourly pay is almost double that. Equipping the people who live in GM with appropriate skills, both of the 'hard' and 'soft' sort, to participate, to advance, and to adapt in a rapidly evolving world of work guides the city region's thinking around skill development.

Employment rate vs Qualifications



Skills are relevant to all sections of the current and future workforce. Joblessness remains a significant problem in GM. The employment rate is lower in GM than the UK (69.5% in the year to September 2015, compared with 73.2% for the UK). Correspondingly, the unemployment rate is also higher (7.2% compared with 5.6% in the UK for the same period). As growth brings more jobs, skill acquisition is a critical part of helping residents transition into work. Whether retraining, upskilling or accessing other services (such as careers advice or intensive job support) the city region has a duty to ensure growth is inclusive and job-rich.

Equipping the people who live in GM with appropriate skills both the 'hard' and 'soft' sort to participate, to advance, and to adapt in a rapidly evolving world of work guides the city region's thinking around skill development.



GM has been working with employers, skills providers, local authorities and others to identify current gaps and likely future trends which will need to be met. Close understanding of the skill needs of sectors underpins the approach. The emphatic message from employers is that skills gaps are an inhibitor of growth and investment, especially in sectors such as digital, financial and professional services, construction (vital to deliver the transportation infrastructure and housing for GM and the north), health and social care (including health innovation) and the advanced manufacturing sector (the sectors most likely to drive future growth). Put simply, a lack of skills holds GM back. Therefore, identifying and acting quickly to rectify skills deficiencies, and ensure the skills system meets the needs of the economy, must be a central plank of the city region's economic challenge.

The emphatic message from employers is that skills gaps are an inhibitor of growth and investment... Put simply, a lack of skills holds GM back.

In line with recent experience the GM economy is likely to create jobs across the skills spectrum. However, the greatest demand for skills is predicted to be at higher skill levels. The Greater Manchester Forecasting Model (GMFM), produced by Oxford Economics, indicates that of the nearly one million job expected to be created in the years to 2022 in Greater Manchester, half will require skills at least to NVQ level 3, and a quarter to level 4. There are also a number of significant investments taking place over the next decade or so where it will be critical to ensure the provision of high level skills. As business changes, so too must the skills supply system. Ensuring sufficient skills at levels 3, 4, 5 and higher is vital. Yet, as noted above, most publicly funded provision is oriented towards basic and lower skills. Employer funded, individual funded and loan funded learning must also be part of the mix of policy responses.

However, while high skilled work has been and will continue to be the fastest growing type of work, GM also exhibits many of the features of the UK economy: substantial numbers of low paying jobs typically concentrated in sectors with low productivity. These sectors have been adding labour in the years since the recession at a faster rate than the

overall economy. Just under a quarter of jobs pay less than a living wage in GM. It is critical that the skills system acts as an enabler of labour market progression, facilitating movement up skill levels rather than (in effect) trapping citizens in low income work. At the same time there are likely to continue to be a number of sectors which have high levels of employment and currently rely on lower skilled roles. Where possible, these sectors need to be supported to compete through higher skills and innovation rather than low prices and low skills.

The analysis has identified four main skills trends which need to shape $\mathsf{GM}\xspace's$ skills provision:

1. Gaps in basic and generic skills which run across sectors

The gaps in basic and generic skills which affect businesses across sectors include English and Maths which universally underpin employment and progression. The need for generic skills of management, communication, organisation, and problem solving has been identified across almost all sectors, while digital skills are needed not only in the digital sector itself, but across most others as well. 'Digitisation' and automation are likely to transform work; upskilling GM residents will be the best survival strategy.

2. The need to shift skills delivery to higher levels across (principally level 4) across most of the key growth sectors

There are important differences between sectors which need to be incorporated into any work and skills strategy; and some sectors are anticipated to generate employment at relatively low skill levels (for example, retail, logistics and hospitality) and also need the support of the skills system. However, GM's key growth sectors (for employment and GVA) typically converge on the forecast that these sectors will increasingly need skills at higher levels. GM's skills gaps are at their sharpest at level 4. To enable residents to take advantage of growth, a focus on upskilling the population, and progression through learning and employment, must be paramount.

3. The need to understand the specific skills needs and dynamics of GM's main growth sectors



GM's main growth sectors, important in terms of supporting a modern, knowledge-driven economy and accelerating growth, are Manufacturing, Financial & Professional Services (including Business Services), Digital and Creative Industries, and Health Innovation. These sectors all offer significant potential to deliver GVA growth in their own right. Health Innovation, though, through its link to GM's devolved health and social care system, has a wider role to play in transforming the productivity of GM's whole population. All these sectors have skills needs and gaps need to be understood and responded to in order to ensure that they realise their full growth potential. Alongside these key growth sectors, GM has a number of sectors have a critical role in enabling and supporting growth in these growth sectors, including construction, logistics, retail and hospitality & tourism, which all also report skills challenges that will need to be addressed. Tacking skills gaps and shortages in the Construction sector will be especially important to ensure that growth across GM is not constrained.

A more detailed analysis of the skills requirements of the above sectors is attached in appendix one.

4. An exclusive focus on reforming the skills supply system will be insufficient: supporting businesses to move up the value chain will also enable skills performance.

GM's analysis also suggests that there are other challenges which will not be met by reforming the supply side alone, but are barriers to businesses becoming more productive. These issues include the following. First, poor skills utilisation (for example, there is some evidence that there are more degree level qualified people in GM than there are degree level jobs). Second, low pay occupations are increasing in GM, but low skilled occupations staying the same; implying that higher skills do not necessarily prefigure higher pay. And third, some GM employers are often orientated towards 'low price, low skill, low pay' product market strategies (meaning, business models that seek to compete on the basis of low prices and low skills) to a greater extent than is typical in the UK as a whole. These types of competitive strategy imply limited demand for skills. GM will therefore be working with employers (for example through newly devolved business support services) to invest in skills and improve skill utilisation and help firms compete on the basis of higher skills and greater innovation.

Current Position in GM (2015)

As the above sector analysis indicates, there are skills gaps and shortages across key sectors in Greater Manchester, particularly at higher technical and technician levels, with a mismatch between supply and demand. However, the publically funded skills system post-16 is characterised by a high volume of low skills and a low volume of high skills, a reverse of what is needed. For example over 70% of the Adult Skills Budget (post 19) is spent on level 2 qualifications while the demand from GM's growth sectors is primarily for level 3 and above.

There is a need to significantly increase the number of young people in Greater Manchester who leave school with 5 GCSEs including English and Maths, or its equivalent. Currently there are 45% of GM young people leaving school without this qualification, which is below the national average. There is a wide variation between levels of achievement across different local authority areas in GM. The foundations for poor educational attainment are set early with 40% of GM children entering school who are not "school ready". The cost of addressing lack of level 2 qualifications in English and Maths, is met by the Adult Skills Budget where over half of that budget is spent on "second chance" English and Maths with poor outcomes and poor value for money.

45% 40%

GM young people leaving school without 5 GCSEs

GM children entering school who are not "school ready"

The delivery of Careers Education Information Advice and Guidance (CEIAG) is fragmented, not always well linked to labour market opportunities and of variable quality. Vocational education pathways for 16 to 19 year olds and young adults need to be improved, in line with the government's Post-16 Skills Plan, published in July 2016 alongside



the independent review of technical and professional education led by Lord Sainsbury. The number of young people (aged 16-24) accessing apprenticeships has grown from a low baseline in recent years but is levelling off and most apprenticeship starts are at intermediate level not the advanced, higher and degree level needed to drive productivity and growth. Apprenticeship success rates are variable across the conurbation and need to improve overall.

The number of GM residents with no qualifications has reduced from 20% in 2004 to 11% today but we are still performing below the national average which is 9%. There are around 250,000 GM residents of working age claiming benefits, 80% of whom are out of work, and with a significant number claiming a health related benefit. This number has remained static through periods of economic growth and recession. The welfare to work system is for the most part separate from the skills system, with different drivers and incentives and neither the welfare to work nor the skills system is well enough integrated with the wider range of public services needed to support those who are most complex into work. The welfare to work system is largely geared up to delivering services based on an individual's eligibility criteria (benefit type), rather than their individual characteristics or complexity of need, although this will change. Taken together, the Work & Skills system does not always incentivise the correct activities or behaviours e.g. paying for progression towards the labour market in a poorly defined way, when a shorter term work focused skills intervention may result in a sustainable job.

Residents without qualifications





There are low levels of productivity and innovation and in GM over £1bn is spent on in work tax credits, demonstrating that many GM residents are working in low-paid jobs often with poor career progression. As well as up-skilling individual residents this needs to be addressed through better skills utilisation and a move to higher value activities by some businesses.

Transformational Change in the GM Work & Skills System

The ability to grow, attract and retain skilled labour, build resilience and adaptability in the current and future workforce is a prerequisite for future economic growth. Over the medium term, Greater Manchester needs a transformational education, skills and employment system that delivers the higher level and technical skills needed to drive the productivity in GM's growth sectors and deliver a step change improvement in basic and generic skills including English, Maths and Digital to ensure that young people and unemployed adults can make the transition to and sustain work.

Greater Manchester needs a transformational education, skills and employment system that delivers the higher level and technical skills needed to drive productivity in GM's growth sectors, and to deliver a step-change improvement in basic and generic skills, including English, maths and digital.

This will require the school system to increase the number of young people who achieve 5 GCSEs including English and Maths (or equivalent qualification) at 16. As well as continued improvements in STEM achievement at A-level for young people pursuing the academic route, there is a need for improved vocational education & training pathways for 16 to 19 year olds and young adults.

The analysis of the current and future skills needs in Greater Manchester points to the need to prioritise and find new ways to deliver higher level, technical and professional skills. A substantial growth in the number of higher and degree level apprenticeships will make an important contribution to meeting this skills gap. Beyond apprenticeships there will need to be an investment strategy to lever in additional capital and revenue funding and to drive innovation.

Employers will be required to play an active role in co-producing and co-funding skills at higher levels, as well as investing in their own work forces. Therefore better connecting the demand and supply sides of the skills system is a prerequisite, with long-term and dynamic relationships between employers and FE and HE institutions in Greater Manchester. Capacity to deliver this more engaged system is a leadership and management priority for schools, colleges and universities but also for businesses to ensure a better utilisation of skills and a drive towards a more productive and higher waged economy in Greater Manchester.

There will be a requirement for greater planning and collaboration between schools, colleges and universities in GM. Over time, this may result in a smaller number of more strategic institutions with centres and campuses across GM that are accessible for general and vocational education up to level 3 and more specialist provision for technical and higher level skills at key locations including a new Institute of Technology. All of this will need to be under pinned by an expanded role for employers and an appropriate infrastructure that can respond and flex to meet new models of delivery.

The employment support and skills system in GM also needs to provide a more effective and integrated pathway into sustainable work for the majority of the circa 200,000 GM residents of working age who are claiming an out of work benefit. A more bespoke offer integrated with a wider range of public services is needed for residents claiming Employment Support Allowance, as the number has remained stubbornly high through periods of recession and growth and for those with a range of complexity in their lives. Pilot programmes such as Troubled Families and Working Well have proven to be effective but these need to be significantly scaled up at some pace to deliver the impact needed. There is also a need to make sure that these programmes and related ESF activity effectively target the neighbourhoods across GM where there are significant concentrations of ESA claimants.

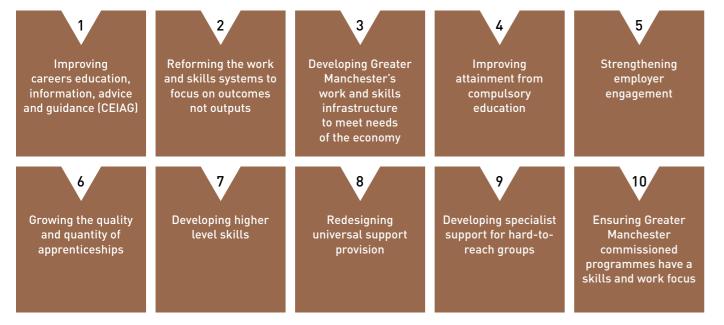


Universal Credit has been rolled out across Greater Manchester. This provides an opportunity to better integrate the skills offer with the employment support offer for those residents for whom low skills is a barrier to securing better paid and quality employment. A complementary approach with businesses is required to encourage them to pay the Living Wage and to provide working conditions that contribute to employee health and well being and improves productivity by reducing absence levels. At a macro-level this will reduce the number of children growing up in poverty in working households, reduce the dependence on in-work tax credits, which at over £1.1 bn is significantly larger than out of work tax credits.

GM WORK & SKILLS PRIORITIES 2016 - 2019

In Greater Manchester we need to be ambitious about the future of our work and skills system if we are to seize the opportunities that Devolution provides, capitalise on national changes and minimise the risk from reduced levels of Government investment. We also need to be realistic about the challenges we face and our baseline position. The opportunities and challenges are not uniform across GM and we recognise that there is a lot of good work at local authority level upon which we can build. Therefore we need to be focused on where we concentrate GM level resources to add value and maximise the impact of GM work and skills initiatives. The 10 priorities for the next 3 years are:





1) Improving careers education, information, advice and guidance (CEIAG)

We will radically improve the quality of CEIAG to ensure that young people and adults - and the parents, teachers, trainers, colleagues and friends that advise them - understand the range of education, training and employment opportunities available in Greater Manchester and are able to make informed choices. This will be founded on high-quality labour market information.



2) Reforming the work and skills systems to focus on outcomes not outputs

We will develop a series of outcome frameworks to underpin future Greater Manchester commissioning to ensure all work and skills provision supports sustainable employment and career progression. The outcome frameworks will ensure that young people and adults are given the skills needed for the world of work: English & Maths, digital, meaningful work experience, and the behaviours/soft skills employers want (for example, communications, team-work, time-keeping).

3) Developing Greater Manchester's work and skills infrastructure to meet needs of the economy

Working through the Area Based Review, the JCP Estate Review and the One Public Estate programme, we will ensure that general education and training provision at level 3 and below is available locally in all parts of Greater Manchester. We will also develop specialist and technical provision at Level 3 and above in areas linked to GM's growth sectors in a small number of centres of excellence in accessible locations in Greater Manchester.

4) Improving attainment from compulsory education

We will focus our efforts on significantly improving attainment of 5+ GCSEs grades A*-C including English and Maths and STEM subjects at age 16 and ensuring that more young people achieve a Level 3 equivalent qualification by age 19.



5) Strengthening employer engagement

Working with the LEP, employer bodies, and local authorities, we will develop a comprehensive approach to employer engagement to genuinely put employers at the heart of the skills and work system. This will ensure that: (1) publicly funded provision better meets the requirements of employers; (2) employers increasingly recognise the value of workforce development and investing in the skills of their employees at all levels; (3) the higher-level skills needed for growth are developed and commissioned by business, recognising that changes to public funding means that most of this will need to be funded through FE loans and employer investment; (4) employers are engaged in the system to support people to stay in and (re)enter the labour market.

6) Growing the quality and quantity of apprenticeships

We will develop an approach to significantly increase the number and quality of apprenticeships in Greater Manchester. At the same time will also shift the balance of provision increasingly towards advanced and higher level apprenticeships in GM's growth sectors. This will be delivered through providing better CEIAG, improved employer workforce development, and the co-ordination of public sector activity in response to the Apprenticeship Levy.

7) Developing higher level skills

We will work to join up activity within schools, further education and training providers and universities in Greater Manchester to ensure that there is a seamless system where young people and adults easily and routinely progress to achieve degree-level equivalent skills. We will also work with universities to connect graduates with employment opportunities in Greater Manchester's SME base and retain more graduates in the city region.

8) Redesigning universal support provision

We will redesign universal back to work support services so that there is an early assessment of need. For those residents that require support, a personalised offer will be delivered based on their specific circumstances. This will be delivered in an integrated way with other local services to improve the customer experience and increase sustainable job outcomes.

9) Developing specialist support for hard-to-reach groups

We will focus on delivering a successful expansion of the Working Well Programme and, through the Work and Health Programme recommissioning, designing a new offer for complex 18-65 year olds who have experienced long periods outside the labour market. This support will be developed to fully utilise complementary public, private and community services.

10) Ensuring Greater Manchester commissioned programmes have a skills and work focus

We will work with partners to ensure that relevant programmes commissioned by Greater Manchester partners - including ESF programmes, business support activity and GM Health (particularly mental health) programmes - have a strong work and skills component to support the delivery of GM's work and skills objectives.

APPENDIX 1 - SECTOR ANALYSIS OF GM GROWTH SECTORS

Business, financial & professional services

BFPS is a dominant sector in GM and is forecast to grow quickly. It accounts for 22.1% of employment, adding jobs at a faster rate than in the rest of UK between 2010 and 2013/14; it also accounts for 29.1% of GVA. Forecasting suggests the sector is likely to add between 113,600 and 160,000 jobs by 2035¹. It represents one of the great economic opportunities for the city region and is critical the skills system can support this expansion. One of the important ways that skills can support the sector is by helping shrink the productivity gap: the BFPS sector contains some of the largest productivity lags with the UK of any economic sector. GVA per job is 20% lower in professional and scientific activities in GM than in the UK, and as much as 36% lower in financial service activities.

The sector is 'graduate hungry' and requires a high calibre of level 3 and 4 gualified residents to meet business requirements, especially in the financial and professional subsectors of BFPS. Currently, there are some prominent skills gaps in this sector. For example, 60.6% of employees working in professional services have a level 4+ qualification in the UK, compared with 49.9% in the North West (GM data unavailable). Shrinking this gap is a critical element in the strategy. Yet it is a mistake to think the needs of the sector lie solely on the skills supply side: how businesses deploy, organise and utilise skills is also a factor behind underperformance. Closely related to the skills gap is a deficit in management and leadership skills: these have been identified in surveys and gualitative evidence as being key to growing more productive businesses in this sector. Forecasting from Oxford Economics suggests that by 2035, 61.5% of the people working in the sector will be skilled to level 4 or above (people skilled at level 3 and level 2 are likely to decline in number).

There is currently a risk of mismatch between what the skills system delivers and the economic need. Most course starts in further education and training, as well as apprenticeships, are at level 2, while the need is at levels 3, 4 and upwards (often graduates). To meet the challenge, the skills system needs to be focussed on progression and on increasing skills provision to the upper ends of the BFPS-relevant skills spectrum. It is the 'associate professional' roles (support roles in the professions) that are often the hardest to fill with applicants with the right skills (though wages may also play a part in recruitment difficulties). Meanwhile, technological change is likely to mean business needs around technical skills are also in the midst of rapid evolution: for example, actuaries in the insurance subsector; staff that can combine digital with financial service skills in the financial services subsector; and legal associate professionals with the required customer and communications skills are very highly sought-after.

Digital

The digital and creative sector has been the single fastest growing sector in GM between 2010 and 2013, growing by 4.1% between 2010 and 2013. Currently, 55,000 people work in over 9,000 businesses in GM, the vast majority of which (over 90%) employ fewer than 10 people. Forecasting suggests that up to 30,000 more jobs could be added in the sector in the years to 2035.

Data on job vacancies, suggests that half of the top ten specialist skills requirements in advertised job vacancies in Greater Manchester in 2015 were digital-related (job vacancies for 'programmers and software development professionals', 'web design and development professionals' and 'IT business analysts, architects and systems designers' are especially prominent).

Due to the agile nature of the digital sector, with permanent technological transformation, it is difficult to devise and maintain up-to-date curricula; skill needs are being constantly updated. The difficulty of developing the appropriate skills for GM's successful digital industries is exacerbated a lack of employer engagement. SMEs and self-employment are prevalent, and this structure can present challenges when attempting to organise employers to ensure the curriculum is relevant. Digital industries tend to demand skills as need arises, as technological change creates too much uncertainty for them to predict future skills needs. Skill gaps and mismatches appear to be particularly pervasive in this sector, as high vacancy rates coexist with high unemployment for computer science graduates.

As with BFPS, some of the digital related skills challenges are similar. The most obvious qualifications gap is at level 4: 66.5% of digital and creative employees in the UK have at least a level 4 qualification (typically graduates – a level 6 on the NQF), while in GM, the proportion is 59%. To compete with other cities and to serve its burgeoning digital economy, GM needs to focus attention on growing digital-related level 4 plus qualifications. However, there are many digitally-specific skills challenges as well.

The digital and creative sector depends on the mix of skills, as well as highly specialist skills. Developing a mix of science, technology, engineering, art and design, maths and manufacturing, as well as the ever important softer skills, is critical. Additionally advice should be provided to young people at school and university to identify the skills they will need for a career in the sector, as well as to market the sector to a wider field of potential recruits (for example, girls). Finally, technological trends will call for individuals with specialised knowledge in certain fields: cyber security, mobile and cloud computing, big data and social media. This awareness of the balance of skills mix and ultra-specialisation needs to shape the distinctive GM approach to nurturing its digital skills.

Manufacturing

Manufacturing has been in long-term decline as the service sector has grown. However, it still accounts for 10% (114,000 jobs) of employment in GM and is highly productive, representing 15% of the city region's GVA. In turn, GM accounts for a third of the North West's manufacturing employment and has notably higher GVA than the UK average (£65,100 for GM in 2013 and £59,200 for the UK). The sector is of profound importance to the city region's economy – especially in key subsectors such as advanced manufacturing and textiles. Indeed, between 2010 and 2013, manufacturing employment actually grew in eight of the ten GM districts. Nevertheless, forecasting by Oxford Economics suggests 29,000 fewer jobs by 2035.

In terms of the current skills profile of manufacturing, the sector appears to be complex and diverse: it creates jobs across the skills spectrum to a more notable degree than other sectors (level 4+: 25%; level 3: 13%; level 2: 21%; level 1: 13%; 'other qualifications' (typically workers with qualifications gained abroad): 11%; no qualifications 18%). In turn, the skills system needs to supply skills across the different levels.

Manufacturing relies on a strong foundation in the basic, management and STEM skills. However, the sector also needs more high level and technical skills. There is a marked difference between the advanced manufacturing and other subsectors within manufacturing as a whole in the distribution of skills levels amongst the workforce: while more than 40% of workers in advanced manufacturing have Level 4 or higher skills, this is the case for approximately 20% of employees in other manufacturing subsectors. Once more, there is a lag in qualifications levels among the highest qualified between GM and the UK; the largest gap is in the advanced manufacturing subsector.

Unlike most other sectors investigated, extrapolation of current trends for qualification seems to not indicate growth of the share of higher skilled workers in manufacturing. The GMFM expects the overall share of employees with Level 4+ education to be only 25% in 2035. In the absence of disruptive innovations and exogenous shocks, it appears that manufacturing might continue to provide employment opportunities across all skill levels, although the advanced manufacturing subsector is likely to have a growing need at level 4+.The skills system needs to serve this plurality of skills needs.

Yet once more management and leadership skills will be critical to helping 'the makers' flourish – especially against the background of innovation, digitalisation and technological change. There is mounting evidence that the quality of leadership and management in GM's manufacturing SMEs is adversely impacting on the growth potential of the sector and the productivity of the UK as a whole. As international competition intensifies, so does the pressure on UK businesses to perform and to innovate. Productivity of the sector is growing, but not as strongly as in the nation's major competitors.

Health & Social Care

Health and social care is a particularly diverse sector. It ranges from researchers with post-doctoral qualifications, medical doctors and Level 6 nurses to level 2 healthcare assistants, and cleaners. In the North West, just over 52% of those employed in the sector hold NVQ level 4+ qualifications (slightly lower than the 54% who do so in the UK). The current skills profile suggests the GM city region has a higher proportion of workers who hold a level 3 qualification than the UK (21% versus 16.3%).

The sector is already a key part of the GM devolution agenda, with powers being devolved from central Government to better integrate health services with social care, providing a sustainable and more efficient service for residents. The proposed reconfiguration of health and social care towards more pro-active and community led care presents a major shift in the way in which the sector currently operates. It brings with it opportunities for more integrated care across private, voluntary and public sector providers and greater flexibility of working across services for employees.

Projected skills demand for Level 4 and above is expected to grow further as 57% of health and social care workers are expected to require some form of tertiary education in 2035. It is also important to note that GM's medical and dental, as well as hospital based workforce, is proportionally larger than that of Great Britain. However, the parts of the health and care workforce that have seen the strongest recent growth are in care (both residential and non residential), which have witnessed between 35 and 44% growth in GM between 2009 and 2014. The health and care workforce is known to be relatively well qualified, but relatively low paid.

In terms of skill requirements, the city region needs a mixed portfolio of skill development. It needs to meet the expanded economic need with skills at levels 2 and 3, while at the same time seeking to sharply increase level 4 and graduates. The issue of progression from low paid

work is known to be especially challenging in care. The skills system needs to support labour progression by rewarding providers who enable learners to progress to higher value work.

Second, skills development needs to help the sector's employees to develop skills for working across both health and social care sectors needs. Medical (and care) training will need to move away from the traditional single agency perspective and prepare students for multidisciplinary team working.

Strongly aligned with this reconfiguration and the shift toward care in community and home settings, there are strong opportunities for growth in the social care sector. An ageing population, changing expectations and the growth in personalisation through personal combined health and social care budgets, places increasing demand and choice within the system and creates growth opportunities for new entrants and existing providers in the private and voluntary sectors.

Construction

With over 27,000 new jobs projected over the next two decades, if recent trends continue as well as a replacement demand for around 7,400 per annum, more than 40% of businesses report hard-to-fill vacancies. The construction sector is a crucial but often overlooked enabler for many of the policies associated with creating a Northern Powerhouse (such as major rail and transport infrastructure projects, e.g. HS2 and HS3). In addition, GM's need for upwards of 10,000 houses a year will also increase construction skills requirements. A continued constrained supply of skilled construction workers might be one of the decisive bottlenecks for infrastructure investment in the north. Currently many vacancies require technical skills that applicants don't

¹ The variance depends on different growth scenarios compiled by Oxford Economics – a 'baseline' forecast and an 'accelerated growth scenario'.

possess, as skills mismatches between labour supply and demand imply that qualifications and training being completed often does not meet the needs of occupations in GM.

Based on current trends, almost half of workers in the construction sector are expected to possess level 3 or higher qualification in 2035, due to growth in the NVQ4+ share (just under 30% are expected to need level 4), although counter intuitively the share of workers without qualifications is expected to rise as well.

The skills system needs to support the construction sector though developing skills across the different levels, working closely with employers to ensure mismatches are minimised and that training content matches need. Once more, this activity needs to be shaped by the understanding that advanced technical skills at higher levels (level 4+) are likely to increasingly shape the construction industry.

Skills formation services need to meet the requirements of an unusually fragmented supply chain with many micro businesses. Despite the demand for skilled staff, survey research by New Economy on skills in the construction sector highlights that many firms are too small to be able to afford to train staff internally. Four-fifths of companies in the sector in GM have no formal training budget at all.