

Skills and Employment in Cumbria:

**Evidence Base** 

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## **CONTENTS**

		Page
EXE	CUTIVE SUMMARY	1
1	INTRODUCTION	8
2	LABOUR SUPPLY	10
3	ECONOMY AND DEMAND FOR LABOUR	32
4	EMPLOYMENT AND SKILLS PROJECTIONS	49
5	EMPLOYER FEEDBACK ON SKILLS NEEDS AND THE SKILLS SYSTEM	55
6	PERFORMANCE OF THE SKILLS SYSTEM	60
7	REVIEW OF FACILITIES AND CAPACITY	87
8	IN CONCLUSION	93

#### **EXECUTIVE SUMMARY**

#### Introduction

- This report provides a comprehensive evidence base on skills and employment in Cumbria. It has been produced to support and underpin the Cumbria Skills Investment Plan which will inform how the LEP deploys and influences funding for skills in Cumbria.
- The report draws largely on the analysis and interpretation of published data, supported by feedback from employers and skills providers that has been obtained specifically for this exercise.

## **Labour Supply**

- Cumbria has c. 500,000 residents (0.9% of the England total) but the population has been reducing each year since 2009. It is also becoming older, with sharp increases observed in the 65+ age group and decreases in the number of residents aged 0-15.
- Cumbria's working age population (16-64) is also shrinking, contrary to national trends, and based on current projections will reduce by nearly 20,000 people between 2016 and 2026. By 2037, it is forecast to have reduced by 41,000 people.
- Overall, economic activity and employment rates in Cumbria are high (only in Barrowin-Furness are they below national averages). However, professional and associate professional occupations are under-represented. These occupations include engineers, teachers, legal professionals and quality control officers.
- The skills profile of Cumbria based on the levels of qualifications held by its working age population – is broadly similar to that of the North West and England as a whole, although a smaller proportion of the workforce in Cumbria has higher level skills. However, over the past 10 years, there have been significant reductions in the number of people with no or low level qualifications.
- Across all areas of Cumbria, most people work within the district in which they reside, from 90% in Carlisle to 70% in Allerdale. There are three main cross-boundary travel to work areas in Cumbria: between Allerdale and Copeland, between Barrow-in-Furness and South Lakeland, and between Allerdale, Carlisle and Eden. There is relatively little movement between Copeland and Barrow-in-Furness, despite their proximity.
- The Jobseeker's Allowance and (latterly) Universal Credit claimant rates in Cumbria has
  consistently been lower than that of the North West and England but has followed
  broadly the same pattern, peaking during the recession followed by year-on-year
  reductions since 2012. JSA/UC claimant rates are considerably lower in Eden and South
  Lakeland than elsewhere in Cumbria, reflecting the population profile in those districts

### **Economy and Demand for Labour**

- Cumbria has in excess of 19,000 businesses, nearly half of which are located in either South Lakeland or Carlisle.
- As at 2014, the largest sectors in Cumbria in employment number terms were wholesale and retail trade, manufacturing, and human health and social work, together accounting for almost half of all employment. Cumbria has employment concentrations in manufacturing and accommodation and food service activities, but below average employment in education, professional, scientific and technical activities, administrative and support service activities.
- In 2013, almost £10bn of GVA was generated in Cumbria. This represents a 29% increase from 2004, although during the same period the increase nationally was slightly higher at 31%.
- Growth in average wages in Cumbria outstripped growth regionally and nationally between 2004 and 2014. As at 2014, the average wage in Cumbria, at £26,200, was 94% of the national average.
- Business start-up rates in Cumbria have followed regional and national trends since 2005. Business survival rates are strong and exceed regional and national averages at every point from one to five years inclusive. Nearly half of all businesses in Cumbria that were set up in 2008 were still in business after five years.
- The business base in Cumbria is dominated by micro businesses (employing fewer than 10 people) as it is nationally, although Cumbria has a slightly greater concentration of micros and slightly lower proportions of small, medium and large businesses.
- Skills gaps in Cumbria are slightly more prevalent than they are nationally, with employers reporting that they tend to be caused by staff being new to their role or training still being in progress. In relative terms, skills gaps resulting from staff lacking motivation or not having received appropriate training are more common in Cumbria than they are nationally.
- Overall, training activity amongst the Cumbrian workforce is less prevalent than across
  the North West and the country as a whole. Hard to fill vacancies are no more
  prevalent, although there are concentrations in hotels in restaurants, transport,
  storage and communications, and health and social care.

### **Employment and Skills Projections**

 Replacement demand in Cumbria – jobs that will need to be filled as a result of retirements, occupational mobility and outward migration – is estimated at 66,500 jobs between 2016 and 2021 inclusive. In excess of 40% of all replacement demand jobs are expected to be at Level 4 and above.

- Over the same period, it is estimated that approximately 7,300 new jobs will be created in the nuclear sector, largely as a result of the new build programme at Moorside.
- Also over the same period, an estimated 6,500 new jobs will be created through general (non-nuclear) economic growth and other infrastructure schemes. Between 2016 and 2021 inclusive, an estimated 80,300 jobs may therefore need to be filled in Cumbria.
- Cumbria is not currently well placed to meet this challenge. If the employment rate target set in the Skills Investment Plan is achieved<sup>1</sup>, the county will have around 6,000 more people in employment in 2021 than it does now. In addition, an estimated 18,000 young people will enter the working age population between 2016 and 2021 and will stay in the county and be suitable for work. Cumbria's response to the employment challenge would therefore be approximately 24,000 people. This is 30% of the estimated number of jobs that will need to be filled.

### **Employer Feedback on Skills Needs and the Skills System**

- Via a series of focus groups and consultation events, over 50 employers in Cumbria from a range of sectors provided feedback on the roles they find it hardest to fill, the skills gaps that exist in their current workforce and how, if at all, the local skills system could better meet their needs.
- Most were inclined to state that recruitment per se is a challenge, regardless of the
  role on offer, and that they typically receive relatively few applications from candidates
  with the required skills and aptitudes. Where vacancies are in rural areas, involve
  unconventional hours or are low paid, the problems can be worse.
- As well as stating that recruitment is an ongoing problem generally, employers also identified a selection of sector specific challenges. These include (although are not limited to) electrical trades and high level technical occupations in advanced manufacturing, chefs and kitchen staff in the visitor economy and HGV drivers in transportation and logistics.
- Employers also reported a range of skills gaps within their existing workforces. Examples again not an exhaustive list include warehousing and distribution skills in the logistics sector, various technical and business process skills in agriculture and process and quality/safety management skills in advanced manufacturing. They also identified a series of more generic, cross-sector or enabling skills, including various aspects of leadership and management, project and programme management and customer service.
- Employers' main asks of the local skills system were that it be made easier for them to identify and understand the different avenues of support that are available; that provision be influenced to a greater extent by employer need; and that barriers to

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<sup>&</sup>lt;sup>1</sup> The Skills Investment Plan sets a target of achieving an average employment rate in Cumbria of 78%.

training in certain sectors, e.g. agriculture, be recognised in the design of delivery models for training provision.

### **Performance of the Skills System**

- On average, during the early part of their schooling, children in Cumbria perform relatively well. However, the proportions of pupils making the expected progress in English and Maths between Key Stage 2 (age 11) and Key stage 4 (age 16) in Cumbria are below national averages.
- GCSE performance, compared with national averages, is good, as is the rate of participation amongst 16-17 year olds in education or work based learning. Yet despite recent improvements, the proportion of Cumbria's 19 year olds qualified to Level 2 sits slightly below the national average, as does the proportion qualified to Level 3.
- Apprenticeships are more common in Cumbria than elsewhere (in 2013/14, 11% of young people chose an apprenticeship as their post-16 destination compared with 4% nationally). More than four fifths of the apprenticeships in 2013/14 were in health, public services and care; engineering and manufacturing technologies; retail and commercial enterprise; and business, administration and law.
- 2013/14 saw a 32% increase in starts on apprenticeships in engineering and manufacturing technologies and a 25% increase in agriculture, horticulture and animal care. However, starts on construction apprenticeships reduced by 15%.
- Education and Training (defined in this context as FE and work based learning combined) learning aim starts in engineering and manufacturing, construction and ICT showed a modest increase between 2012/13 and 2013/14. There has been a relatively large proportionate increase in starts on Level 4 learning aims in Cumbria, although these only account for a small proportion of Education and Training provision overall.
- In 2012/13, there were just over 5,000 full-person equivalent (FPE) students on HE provision in Cumbria. The main provider of HE provision in the county is the University of Cumbria, accounting for 79% of FPE students. Although their student numbers are smaller, it is evident that the four FE colleges are also key providers of HE provision in Cumbria.
- Over two-thirds (68%) of HE students in Cumbria are first degree undergraduate students, as is the case nationally. The majority (66%) of employed first degree graduates from HEIs in Cumbria in 2012/13 went to work in the North West.

#### Conclusions

### The Population Challenge

The most significant challenge that Cumbria faces in meeting its economic aspirations
is that its working age population is shrinking and is forecast to continue shrinking over
the next 20 years. This is set against a backdrop of relatively low unemployment, high

levels of replacement demand and a significant number of new jobs that are likely to be created through nuclear new build and other major investments.

- There is a pressing need to address current migration patterns, to attract new skilled labour and to ensure that Cumbria is seen as somewhere where quality of life is matched by quality of career opportunity. This will require a holistic, co-ordinated approach that encompasses housing, public services, connectivity and road and rail infrastructure, all of which have been highlighted by employers as weaknesses and barriers to recruitment.
- The nuclear new build programme will offer new employment opportunities on a scale rarely seen in the county and as such has the potential to act as a fantastic stimulus to the local economy. Population trends and the risk of displacement in other sectors (where employers already cite low applicant numbers as a major issue in filling vacancies) must nonetheless be considered when targets are set for the proportion of new jobs to be filled by the indigenous population.

#### **Workforce Skills**

- Skills gaps are more common in Cumbria than across England as a whole and Cumbrian
  employers are less likely to provide formal training opportunities for their staff, despite
  the majority of them identifying the need to upskill their workforce. While
  improvements have been made over the past 10 years, it also remains the case that a
  below average proportion of the workforce has higher level skills.
- Supporting the development and improvement of workforce skills across the county, where market failures currently exist, is therefore a sensible priority for the LEP. The evidence suggests that a series of sector specific interventions may be required alongside programmes targeting cross-sectoral or enabling skills, including those linked to various leadership and management disciplines.
- Employers are keen that workforce development interventions in the future respond
  to and meet their needs. Establishing a delivery model that calls on the expertise and
  insight of employer panels or forums to ensure strong alignment between demand and
  supply may therefore be advisable. The LEP should also consider how to simplify the
  interface between the skills system and employers, many of whom reportedly find it
  confusing and time consuming.
- In the light of the working age population issue and migration trends, the potential value of reskilling initiatives such as those aimed at people being made redundant should be noted, especially where these can be focussed on job opportunities in growth sectors. The LEP may also wish to consider providing retraining support for employers who lose staff to the major infrastructure programmes and who may struggle to successfully backfill.

#### **Unemployment and Underemployment**

- Cumbria has relatively low unemployment with claimant patterns that typically mirror national activity but on a lesser scale. However, unemployment remains above average in Barrow-in-Furness (the location of BAE) and Copeland (the location of both Sellafield and the proposed nuclear new build at Moorside). Industry focussed unemployment initiatives, such as Sector Based Work Academies, could therefore fill a worthwhile purpose in these parts of the county. A drive to involve more employers and younger people in Traineeships should also be considered to help provide pathways into employment in those areas where new vacancies are expected.
- Employers in Cumbria frequently say that they would like job applicants and current employees to have stronger skills in English and maths. It is also recognised that low skills in these areas can act as a barrier to progression and perpetuate underemployment. Supporting adults to obtain skills in English and maths that enable them to progress to qualifications at Levels 2 and 3 should therefore be considered by the LEP, as should supporting adults to achieve a first full Level 2 qualification.

#### **Preparing the Next Generation**

- Apprenticeships have been a success story in Cumbria over recent years, both in terms
  of participation and success rates. Research has also shown them to be beneficial to
  the economy, employers and apprentices themselves.
- The foundations on which to generate further growth in apprenticeships are therefore solid, although given the already high rates of participation in the county, a programme of interventions is likely to be needed to stimulate further take-up. Engaging large employers in driving growth, supporting smaller businesses to offer apprenticeships and co-ordinating communications and marketing activities may all be appropriate.
- Ensuring that skills providers, parents and young people have access to up-to-date, impartial information about jobs and careers in industry sectors across Cumbria will also be important. There is a strong drive from both employers and the skills system to enable this to happen. To help ensure that it does, and that it builds on good practice already taking place in the county, LEP investment in a coherent, complementary careers information, advice and guidance offer would be justified. This would seek to align the work of Enterprise Advisors, Careers and Enterprise Company, the Cumbria Careers and Enterprise Education Group, the Skills Funding Agency and others active in this space.

#### **Building Capacity in the Skills System**

 The skills system in Cumbria has a number of strengths. GCSE performance is above the national average, as is participation in apprenticeships and apprenticeship success rates. FE and work based learning success rates are, overall, very close to the national average.

- The county does however have a relatively small outturn of school leavers each year
  and whilst many young people go to university, relatively few return to the county to
  live and start a family. In addition, the higher education STEM offer is limited
  considering the growth that is expected in STEM related industries in Cumbria over the
  coming years.
- Emerging evidence also points to forthcoming capacity issues in the skills system. These are likely to be most pressing in nuclear operations and civil engineering construction, where the provider base lacks capacity to respond to increases in demand. Further analysis of these issues is being planned by CoNE and will help to provide more precision on both the scale and composition of the challenge and the most appropriate response.
- Investments could also be justified to support the LEP's other priority sectors, e.g. by upgrading and improving the industry relevance of facilities in advanced manufacturing, logistics and the visitor economy.

#### 1 INTRODUCTION

### **Purpose of this Report**

- 1.1 This report provides a comprehensive evidence base on skills and employment in Cumbria. It has been produced to support and underpin the Cumbria Skills Investment Plan which will identify priorities for the Local Enterprise Partnership's (LEP) investments in the skills system.
- 1.2 The report draws largely on the analysis and interpretation of published data, supported by feedback from employers and skills providers that has been obtained specifically for this exercise.

#### Introduction to Cumbria

- 1.3 Cumbria is the second largest county in England and accounts for almost half of the land mass of the North West. Home to 500,000 residents and with an employed workforce of 229,000, Cumbria's economy is diverse and complex, encompassing world-class engineering, manufacturing and energy companies, high quality food and drink companies and a unique visitor offer. Cumbria is home to a number of large, multinational companies whose impact spreads much wider through their supply chains. Notwithstanding the significance of these employers, SMEs provide the backbone of the Cumbrian economy, with 99.7% of businesses employing fewer than 250 people and 89% employing fewer than 10.
- 1.4 Published in 2014, Cumbria's Strategic Economic Plan<sup>2</sup> (SEP) identifies four key economic drivers. Skills Development is one, alongside Business Support, Infrastructure Improvements and Environmental Sustainability. These economic drivers are essential to grow the whole economy and, in particular, to maximise the key economic assets for the county, defined in the SEP as:
  - Advanced Manufacturing Growth: Cumbria has a rich industrial heritage and a
    highly regarded manufacturing sector. Two of the UK's largest industrial sites
    are located in the county, involving the nuclear industry at Sellafield in West
    Cumbria and the submarine shipyard operated by BAE Systems at Barrow-inFurness, while food manufacture is very important to Carlisle. Production units
    operated by multinational companies can be found throughout the county.
  - Nuclear and Energy Excellence: The nuclear industry is one of Cumbria's key assets, with a hard-won global reputation for excellence and innovation. Sellafield is Europe's most complex nuclear site and employs around 10,000 people, with thousands more in the supply chain in market-leading local companies.
  - **Vibrant Rural and Visitor Economy:** The majority of Cumbria's businesses and its resident population are located in rural areas, and as such the county's rural

<sup>&</sup>lt;sup>2</sup> http://www.cumbrialep.co.uk/wp-content/uploads/2014/03/Cumbria-LEP-final-report-1-April-2014.pdf

economy is diverse and multi-sectoral. The rural nature of Cumbria is one of its defining features, boasting magnificent land and seascapes and tremendous resources. The Lake District National Park attracts millions of visitors each year and is widely recognised as one of the most scenic areas of England. The west of the county has a stunning coastline that presents opportunities for economic growth, while the north of the county hosts a significant part of Hadrian's Wall and the historic city of Carlisle.

- Strategic Connectivity of the M6 Corridor: In the UK and Eire context, North Cumbria is at the geographical centre for distribution and redistribution. Logistics and agri-related businesses are thriving along the M6, with Carlisle hosting Eddie Stobart, an iconic brand and a leader in the logistics and distribution sector. Other leading businesses include the H&H Auction Mart at Rosehill (the largest mart in England), AW Jenkinson in Penrith (a national distributor of timber products) and Houghton Parkhouse in South Lakeland (a leading agricultural haulage manufacturer).
- 1.5 The LEP's vision for Cumbria is to have one of the fastest growing economies in the UK, in an energised and healthy environment. The SEP conveys the LEP's ambition for 2024, which includes creating 15,000 additional full-time equivalent jobs, boosting Cumbria's economy by £600m more than current predictions<sup>3</sup>, supporting local planning authorities to deliver 30,000 new homes, raising skills levels and reducing skills gaps.

## **Coverage of the Report**

- 1.6 This report is structured in the following way:
  - Chapter 2 looks at the current and future labour supply in Cumbria, including population, economic activity and the skills profile.
  - Chapter 3 examines labour market demand, including employment, productivity levels, the business base and employer demand for skills.
  - Chapter 4 presents employment projections associated with the anticipated nuclear new build programme, other known infrastructure schemes and replacement demand.
  - Chapter 5 conveys the key messages from primary research undertaken with employers during the development of this evidence base.
  - Chapter 6 presents data on the performance of the skills and employment system in Cumbria.
  - Chapter 7 reports on feedback from skills providers about their estates and facilities, recruitment difficulties and capital investment plans.
  - Chapter 8 draws out the implications arising from the analysis in the preceding chapters and sets out issues to be considered in the forthcoming Skill Investment Plan.

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<sup>&</sup>lt;sup>3</sup> At the time that the SEP was written in 2014.

#### 2 LABOUR SUPPLY

#### **Summary of Key Points**

- Cumbria has c. 500,000 residents (0.9% of the England total) but the population has been reducing each year since 2009. It is also becoming older, with sharp increases observed in the 65+ age group and decreases in the number of residents aged 0-15.
- Cumbria's working age population (16-64) is also shrinking, contrary to national trends, and based on current projections will reduce by nearly 20,000 people between 2016 and 2026. By 2037, it is forecast to have reduced by 41,000 people.
- Overall, economic activity and employment rates in Cumbria are high (only in Barrow-in-Furness are they below national averages). However, professional and associate professional occupations are under-represented. These occupations include engineers, teachers, legal professionals and quality control officers.
- The skills profile of Cumbria based on the levels of qualifications held by its working age population is broadly similar to that of the North West and England as a whole, although a smaller proportion of the workforce in Cumbria has higher level skills. However, over the past 10 years, there have been significant reductions in the number of people with no or low level qualifications.
- Across all areas of Cumbria, most people work within the district in which they
  reside, from 90% in Carlisle to 70% in Allerdale. There are three main crossboundary travel to work areas in Cumbria: between Allerdale and Copeland,
  between Barrow-in-Furness and South Lakeland, and between Allerdale, Carlisle
  and Eden. There is relatively little movement between Copeland and Barrow-inFurness, despite their proximity.
- The Jobseeker's Allowance (and, latterly) Universal Credit claimant count rate in Cumbria has consistently been lower than that of the North West and England but has followed broadly the same pattern, peaking during the recession followed by year-on-year reductions since 2012. JSA/UC claimant count rates are considerably lower in Eden and South Lakeland than elsewhere in Cumbria, reflecting the population profile in those districts.

### Introduction

- 2.1 This chapter analyses the supply of labour in the Cumbria LEP area. It covers:
  - Population profile, trends and projections;
  - Economic activity and inactivity, including employment, unemployment, NEET<sup>4</sup> and claimant counts;
  - Skills profiles;
  - Travel to work patterns.

### The Population of Cumbria

- 2.2 In 2014, the population of Cumbria was 497,874, equal to 7% of the population of the North West and 0.9% of the national population.
- 2.3 Between 2001 and 2014, the county's population increased by just over 10,000 residents (Figure 2.1), giving net growth of just over 2%. Nationally and regionally over the same period, the population grew more quickly by 9% and 5% respectively. Note also that:
  - The population of Cumbria has been in decline every year since 2009. This is in contrast to year-on-year increases regionally and nationally.
  - Cumbria's population is becoming older: the number of residents aged 65+ increased by 22% between 2004 and 2014.
  - The number of young people aged 0-15 in Cumbria fell by 9% between 2004 and 2014, compared with a 3% increase nationally.

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<sup>&</sup>lt;sup>4</sup> Not in Employment, Education or Training.

505,000 500,000 495,000 487,795 485,000 480,000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Figure 2.1: Population Change (all ages): Cumbria

Source: Mid-Year Population Estimates (MYPE)

2.4 The pattern of population change has however varied at the local level (Table 2.1). Carlisle and Eden, for example, have shown relatively strong population growth, whereas in South Lakeland and Copeland the population has remained relatively static. In Barrow-in-Furness it has fallen.

Table 2.1: Population of Cumbria by District						
	2001	2001 2014 % of LEP total		2001-2014 change		
Carlisle	100,764	108,022	21.7%	7.2%		
Eden	49,879	52,630	10.6%	5.5%		
Allerdale	93,544	96,471	19.4%	3.1%		
South Lakeland	102,397	103,271	20.7%	0.9%		
Copeland	69,251	69,832	14.0%	0.8%		
Barrow-in-Furness	71,960	67,648	13.6%	-6.0%		
Cumbria	487,795	497,874	100%	2.1%		
North West	6,772,985	7,132,991	-	5.3%		
England	49,449,746	54,316,618	-	9.0%		

Source: MYPE

# Age Profile of the Population

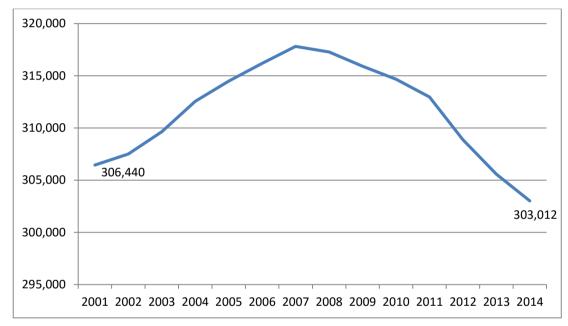
2.5 In 2014, a slightly smaller proportion of the population in Cumbria was of working age (16-64) than was the case nationally (61% compared with 63%). The same was also true of residents aged 34 and below (37% in Cumbria compared with 44% nationally). By contrast, Cumbria had a higher proportion of residents aged 50-64 and 65+ than was the case across the country as a whole (Table 2.2).

Table 2.2: Population by Age Group (2014)								
	0-14	15-19	20-24	25-34	35-49	50-64	65+	
Cumbria	76,232	27,747	26,460	52,072	95,452	106,756	113,155	
Cumbria %	15.3%	5.6%	5.3%	10.5%	19.2%	21.4%	22.7%	
England %	17.8%	5.9%	6.6%	13.7%	20.3%	18.1%	17.6%	

Source: MYPE

2.6 Cumbria's working age population shrank by 1% (c. 3,400 individuals) between 2001 and 2014 and has been in decline each year since 2008 (Figure 2.2). Regionally and nationally there has been year-on-year growth (with the exception of a small dip in 2011) in the working age population, resulting in overall increases of 5% and 9% respectively between 2001 and 2014.

Figure 2.2: Working Age Population Change in Cumbria



Source: MYPE

2.7 Carlisle is the only district in Cumbria where the working age population grew between 2001 and 2014 (Table 2.3). South Lakeland and Barrow-in-Furness saw the largest declines, both in absolute and proportionate terms. In those two districts alone there was a combined net decrease of more than 6,000 individuals of working age.

Table 2.3: Working Age Population by District						
	2001	2014	Change			
Carlisle	63,770	67,615	+6%			
South Lakeland	63,148	60,143	-5%			
Allerdale	58,856	58,447	-1%			
Copeland	44,222	43,477	-2%			
Barrow-in-Furness	44,949	41,763	-7%			
Eden	31,495	31,567	+/-0%			
Cumbria	306,440	303,012	-1%			
North West	4,297,158	4,509,760	+5%			
England (incl. London)	31,705,826	34,475,354	+9%			

Source: MYPE

2.8 Across all areas of Cumbria there have been large increases in the 65+ age group. These range from +16% in Barrow-in-Furness to +38% in Eden.

## **Ethnicity Profile**

2.9 The vast majority (98%) of Cumbrian residents are reported to be White British. This is higher than the national average of 90% and results in all other ethnic groups being under-represented compared with England as a whole. There is very little variation in the ethnicity profile of Cumbrian residents by district.

## What has influenced Population Change in Cumbria?

- 2.10 The recent change in Cumbria's overall and working age population can be explained (in quantitative terms) primarily by two factors:
  - Domestic migration: between 2004 and 2014, slightly more people came to live in Cumbria than left, with the largest net increases (absolute and proportionate) observed in Eden and South Lakeland. The largest outflow (absolute and proportionate) was from Barrow-in-Furness, which had a net migration reduction of more than 1,800 people. Importantly, however, the trend has been for younger people to leave the county and for older people to move in.
  - Natural change: the birth rate in Cumbria has fallen below the death rate, especially in South Lakeland. Between 2004 and 2014, Carlisle and Barrow-in-Furness were the only districts where more people were born than died. Nationally, birth rates exceed death rates.

### **Population Projections**

2.11 Based on data produced by the Office for National Statistics, Cumbria's total population is forecast to increase slightly to 2022 but to then return to 2016 levels by 2026. Regionally and nationally there is expected to be population growth (Table 2.4).

Table 2.4: Popi	ulation Projections	– All Ages	
Year	Cumbria	North West	England
2016	497,800	7,181,800	55,019,800
2017	497,600	7,209,000	55,414,500
2018	497,800	7,236,700	55,811,800
2019	498,000	7,263,400	56,198,300
2020	497,900	7,290,300	56,582,100
2021	498,100	7,316,100	56,962,100
2022	497,900	7,342,300	57,337,800
2023	498,000	7,367,600	57,708,200
2024	498,000	7,392,200	58,072,600
2025	497,600	7,416,100	58,430,500
2026	497,800	7,439,200	58,781,100
% change (2016-2026)	0%	+4%	+7%

Source: ONS

- 2.12 The same data source predicts a decline in Cumbria's working age population of -6% between 2016 and 2026 (Table 2.5). Should this be correct, then in 2026 there will be almost 19,000 fewer people aged between 16 and 64 in the county than there were 10 years earlier. The significant consequences of this could include:
  - The ability of Cumbrian employers to grow their workforce, or at least to do so through the recruitment of local people;
  - The proportion of new jobs (estimated at around 13,000 in the nuclear sector alone) that it is realistic to earmark for the indigenous population;
  - The demands that will be placed on the health and social care sectors and the older population continues to grow.

Table 2.5: Working Age Po	pulation Projectio	ons
Year	Cumbria	England
2016	298,351	34,842,000
2017	296,398	34,976,000
2018	294,261	35,079,000
2019	292,334	35,177,000
2020	290,834	35,290,000
2021	289,061	35,388,000
2022	287,321	35,496,000
2023	285,447	35,598,000
2024	283,492	35,712,000
2025	281,436	35,809,000
2026	279,355	35,892,000
% change (2016-2026)	-6%	3%

Source: ONS

2.13 District level projections are shown in Table 2.6. In proportionate terms, Barrow-in-Furness and Copeland – the locations of significant programmes of investment in the advanced manufacturing and nuclear industries – are expected to experience some of the largest declines.

Table 2.6: Working Age Population Projections by Local Authority					
	Change				
Carlisle	66,773	63,129	-5%		
South Lakeland	58,880	55,408	-6%		
Allerdale	57,119	53,350	-7%		
Copeland	42,943	39,601	-8%		
Barrow-in-Furness	41,529	38,712	-7%		
Eden	31,108	29,155	-6%		
Cumbria	298,351	279,355	-6%		

Source: ONS

2.14 Extending the projections out 2037 shows Cumbria's working age population shrinking by 14% – 41,000 individuals aged 16-64 – compared with 2016 levels.

### **Economic Activity**

2.15 People are classed as being economically active if they are employed, self-employed or unemployed but are seeking work.

2.16 At 80% in 2015, economic activity rates in Cumbria are higher than for the North West region (75%) and England (excluding London<sup>5</sup>) (78%). Cumbria also experienced an above average increase in economic activity rates between 2005 and 2015: +3% compared with +0.5% nationally.

<sup>&</sup>lt;sup>5</sup> England data is quoted excluding London as this allows for more realistic national comparisons given the notable difference in economic performance between London and the rest of the UK.

80% 75% 70% 65% 60% 2011 2005 2007 2012 2013 2015 2006 2008 2009 2010 2014 North West ■ England (excl. London) Cumbria

Figure 2.3: Economic Activity – 2005 to 2015

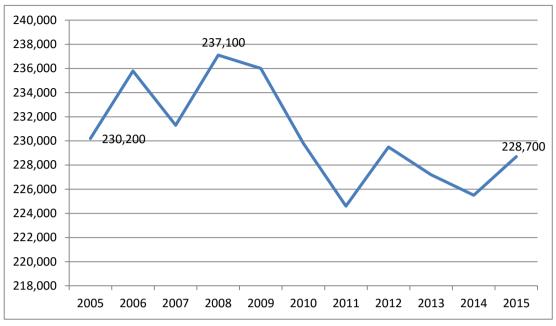
Source APS<sup>6</sup>

### **Employment Levels and Employment Rate**

2.17 Employment (defined as the number of residents in an area who are in employment, regardless of the location of their workplace) has fluctuated in Cumbria over the past 10 years but has not yet returned to pre-recession levels (Figure 2.4). This is in sharp contrast to the national picture (Figure 2.5) whilst across the North West, employment has now almost returned to the 2008 pre-recession position (Figure 2.6).

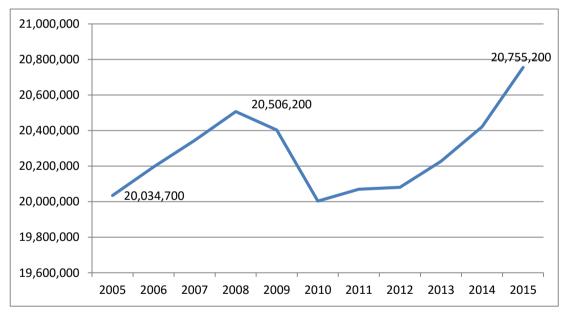
<sup>&</sup>lt;sup>6</sup> Annual Population Survey data enables the analysis of changes over time, but the relatively small sample upon which it is based (c. 1,500 people across the county) should be noted.

Figure 2.4: Employment Change 2005-2015: Cumbria



Source: APS

Figure 2.5: Employment Change 2005-2015: England (excl. London)



Source: APS

3,160,000 3,134,900 3,140,000 3,138,500 3,120,000 3,100,000 3,083,000 3,080,000 3.060.000 3,040,000 3,020,000 3,000,000 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

Figure 2.6: Employment change 2005-2015: North West

Source: APS

2.18 Despite the sluggish recovery of employment levels following the recession in Cumbria (influenced in part by population change), the employment rate of the working age population, at 76%, remains relatively high. As at 2015, the national figure was 73% and the regional figure was 70%. At a local authority level, all but one of Cumbria's districts (Barrow-in-Furness) has an employment rate that is above the national average (Figure 2.7).

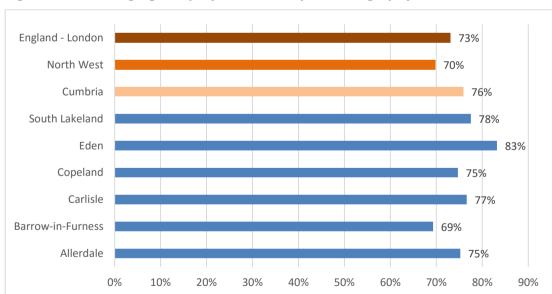


Figure 2.7: Working Age Employment Rate by Sub-Geography – 2015

Source: APS

2.19 The most significant change in the working age population employment rate between 2005 and 2015 has been in South Lakeland which has seen a decrease of almost 10%, or 5,000 individuals, reflecting the influx of retirees. By contrast, Allerdale, Copeland and Carlisle have observed increases in their working age population employment rates (Table 2.7).

Table 2.7: Working age population employment rate change						
	2005	2015	Change 2005- 2015	% Change		
Allerdale	41,800	43,700	1,900	4.5%		
Barrow-in-Furness	30,900	29,600	-1,300	-4.2%		
Carlisle	50,400	52,000	1,600	3.2%		
Copeland	31,000	32,400	1,400	4.5%		
Eden	26,400	26,300	-100	-0.4%		
South Lakeland	49,600	44,700	-4,900	-9.9%		
Cumbria	230,200	228,700	-1,500	-0.7%		
North West	3,083,000	3,134,900	51,900	1.7%		
England (excl. London)	20,034,700	20,755,200	720,500	3.6%		

Source: APS

### **Types of Employment**

2.20 A similar proportion of Cumbria residents are in full-time employment (73%) as is the case nationally (74%). Locally, however, there are notable variations. In Eden, for example, 44% of females are in full-time employment, compared with 91% of males (Figure 2.8). At 76%, Allerdale has the highest proportion of residents in full-time employment (91% of males and 59% of females).

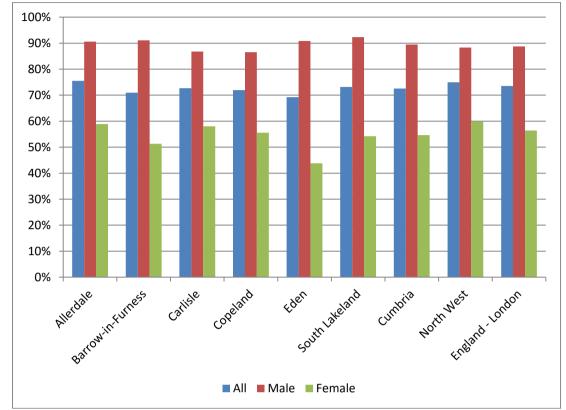


Figure 2.8: Full-time Employment 2015 - Percentage of Residents

Source: APS

- 2.21 In 2015, a slightly higher proportion of Cumbrian residents are reported to be self-employed (11%) compared with nationally (10%) and across the North West region (9%). Self-employment in Eden and South Lakeland is above average, with one in five residents (21% and 19% respectively) reported to be self-employed. In Barrow-in-Furness and Copeland, self-employment rates are below average.
- 2.22 Self-employment rates at county level have remained static at 10-11% between 2005 and 2015 with a peak in 2014 to 12% before returning to 11% in 2015. This is in contrast to the national picture where self-employment rates have risen fairly steadily from 8.8% in 2005 to 9.8% in 2015.

### **Occupations**

- 2.23 The occupational profile of Cumbrian residents in employment is similar to the regional and national profiles against most categories except:
  - Professional and associate professional occupations are under-represented in Cumbria. These occupations include engineers, teachers, legal professionals and quality control officers.
  - **Skilled trades occupations are over-represented in Cumbria.** These include farmers, metal workers, construction workers and plumbers.

Table 2.8: 2015 Occupational profile (SOC2010 – 2 digit) of residents in employment (%)					
	Cumbria	North West	England (excl. London)		
Managers, directors and senior officials	10.2%	9.6%	10.2%		
Professional occupations	14.7%	18.5%	19.1%		
Associate professional and technical occupations	9.7%	12.4%	13.6%		
Administrative and secretarial occupations	10.0%	11.2%	10.6%		
Skilled trades occupations	17.9%	10.9%	11.1%		
Caring, leisure and other service occupations	9.7%	9.9%	9.3%		
Sales and customer service occupations	7.2%	8.8%	7.8%		
Process, plant and machine operatives	8.6%	7.1%	6.7%		
Elementary occupations	11.7%	11.0%	11.0%		

Source APS

2.24 Table 2.9 shows the same data but at the next level of detail (i.e. 3 digit SOC code). Notable areas of under- and over-representation in Cumbria, compared with the national picture, include:

### • Under-representation:

- Science, research, engineering and technology professionals
- Teaching and education professionals
- Business and public service associate professionals

### • Over-representation:

- Skilled agricultural and related trades
- Skilled metal, electrical and electronic trades
- Skilled construction and building trades

Table 2.9: 2015 Occupational profile (SOC2010 – 3 digit) of residents in employment (%)				
	Cumbria	England		
		(excl. London)		
Corporate managers and directors	6.2%	7.0%		
Other managers and proprietors	4.0%	3.3%		
Science, research, engineering and technology professionals	3.0%	5.3%		
Health professionals	3.9%	4.1%		
Teaching and educational professionals	3.1%	5.1%		
Business, media and public service professionals	4.8%	4.6%		
Science, engineering and technology associate professionals	2.3%	1.8%		
Health & social care associate professionals	1.0%	1.4%		
Protective service occupations	1.0%	1.3%		
Culture, media and sports occupations	0.7%	2.0%		
Business & public service associate professionals	4.7%	7.2%		
Administrative occupations	6.8%	8.2%		
Secretarial and related occupations	3.2%	2.4%		
Skilled agricultural and related trades	3.8%	1.2%		
Skilled metal, electrical and electronic trades	6.2%	4.2%		
Skilled construction and building trades	4.9%	3.6%		
Textiles, printing and other skilled trades	3.0%	2.1%		
Caring personal service occupations	8.1%	7.4%		
Leisure, travel and related personal service	1.6%	2.0%		
occupations				
Sales occupations	6.6%	6.0%		
Customer service occupations	0.6%	1.8%		
Process, plant and machines operatives	4.4%	3.1%		
Transport and mobile machine drivers/operatives	4.1%	3.6%		
Elementary trades and related occupations	1.9%	1.8%		
Elementary administration and service occupations	9.8%	9.2%		

Source APS

## Qualifications

- 2.25 The skills profile of Cumbria based on the levels of qualifications held by its working age population is broadly similar to that of the North West and England as a whole. However, as shown in Figure 2.9, Cumbria has:
  - A smaller proportion of its working age population qualified to Level 4 and above (29%) than is the case nationally (33%) and regionally (31%).
  - A higher proportion of its working age population in Trade Apprenticeships (7%) than nationally (4%) and regionally (4%).

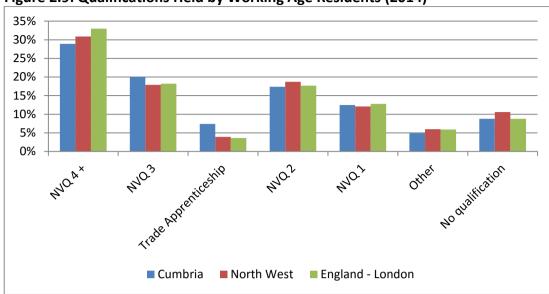


Figure 2.9: Qualifications Held by Working Age Residents (2014)

Source: APS

2.26 Despite the county's standing against the national picture, there was a marked increase between 2004 and 2014 in the proportion of working age residents qualified to Level 4+ and increases in the proportions holding qualifications at Levels 3 or 2 as their lowest level (Figure 2.10). Consequently, across all areas of Cumbria, and especially in Carlisle and Eden, there are now fewer people that have no formal qualifications or are qualified only to Level 1. Barrow-in-Furness has also seen a significant increase in the number of people with a Level 2 qualification. Table 2.10 provides details.

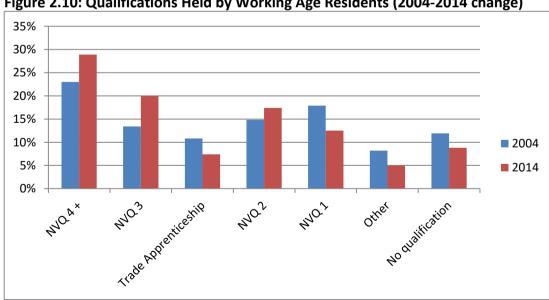


Figure 2.10: Qualifications Held by Working Age Residents (2004-2014 change)

Source: APS

Table 2.10: Qualifications of the Working Age Population (%) 2014 (2004 data in brackets)							
	NVQ 4+	NVQ 3	Trade Apprenticeship	NVQ 2	NVQ 1	Other	No qualification
Cumbria	28.9%	20.0%	7.4%	17.4%	12.5%	4.9%	8.8%
Cumbria	(23.0%)	(13.4%)	(10.8%)	(14.8%)	(17.9%)	(8.2%)	(11.9%)
North West	30.9%	17.9%	3.9%	18.7%	12.1%	6.0%	10.6%
North West	(23.3%)	(15.1%)	(7.0%)	(16.3%)	(14.6%)	(5.8%)	(17.9%)
England	33.0%	18.2%	3.6%	17.7%	12.8%	5.9%	8.8%
(excl. London)	(24.7%)	(15.2%)	(6.2%)	(16.1%)	(15.5%)	(7.3%)	(15.0%)
Allandala	31.0%	17.2%	9.7%	15.4%	11.7%	3.7%	11.3%
Allerdale	(20.6%)	(8.1%)	(11.4%)	(16.8%)	(19.3%)	(9.7%)	(14.1%)
Barrow-in-	19.7%	21.1%	9.6%	21.6%	11.8%	5.8%	10.3%
Furness	(18.2%)	(19.1%)	(14.5%)	(10.4%)	(21.5%)	(5.2%)	(11.1%)
Carlisla	28.6%	20.3%	5.3%	16.9%	13.8%	4.8%	10.3%
Carlisle	(18.2%)	(15.4%)	(8.2%)	(18.6%)	(17.9%)	(7.1%)	(14.6%)
Canaland	25.8%	19.3%	10.0%	15.3%	12.3%	7.2%	9.9%
Copeland	(19.1%)	(12.7%)	(14.7%)	(15.1%)	(17.1%)	(8.4%)	(12.9%)
E.L.	31.5%	19.6%	5.4%	18.1%	13.6%	4.6%	7.1%
Eden	(27.1%)	(13.7%)	(5.8%)	(11.6%)	(20.3%)	(8.8%)	(12.7%)
Courth Lakaland	34.6%	22.3%	5.2%	18.3%	11.9%	4.0%	3.8%
South Lakeland	(34.5%)	(12.3%)	(10.5%)	(13.2%)	(13.3%)	(9.6%)	(6.6%)

Source: APS

### **Travel to Work**

2.27 The vast majority of Cumbrian residents work in Cumbria. A small number travel elsewhere in the North West or to other regions (Table 2.11).

Table 2.11: Travel to Work (2014)								
	Total residents in work	Work in Cumbria	Outside Cumbria		No Fixed workplace			
Cumbria	244,454	Home workers: 185,994	76.1%	10,821	5.5%	15,587		
		Non-home workers: 32,052	13.1%			6.4%		

Source: Census, 2011

2.28 Figure 2.11 shows the proportion of residents from each of Cumbria's districts that work locally (i.e. within the district in which they reside) and the proportion who work elsewhere. The key message is that across all areas of Cumbria, most people work locally, with proportions ranging from 70% in Allerdale to 90% in Carlisle.

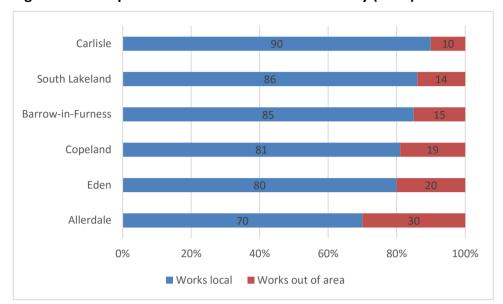


Figure 2.11: Proportion of Residents who work locally (2014)

Source: Census 2011

- 2.29 Figure 2.12 shows there are three main travel to work areas in Cumbria:
  - Between Allerdale, Carlisle and Eden;
  - Between Allerdale and Copeland;
  - Between Barrow-in-Furness and South Lakeland.
- 2.30 It also shows that there is little movement between Eden and South Lakeland, despite being geographically close, and likewise between Copeland and Barrow-in Furness.

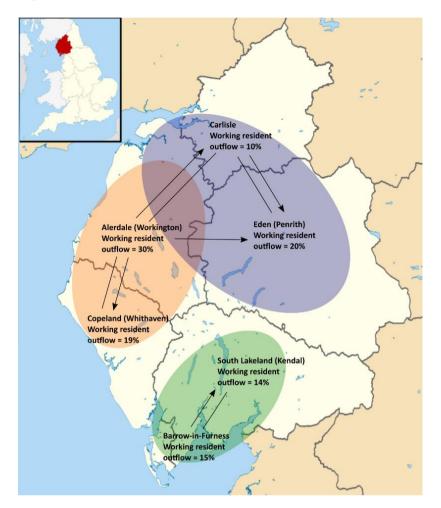


Figure 2.123: Travel to Work Patterns in Cumbria

Source: Working resident outflow data is based on Census, 2011.

2.31 The distance people will to travel to work varies considerably by qualification level and occupation. Almost half of those qualified to Level 2 or below work within 5km of their home, compared with less than a third of those with qualifications at Level 4 and above (Table 2.12). Those with higher level qualifications are significantly more likely to travel 20km or more than those with qualifications at lower levels.

Table 2.12: Cumbria travel to work by qualification and occupation (2011)							
	Less than 5km	5km - 20km	20+ km	Work mainly at or from home/other	Total		
Level 2 and below	45%	24%	11%	20%	100%		
Level 3/Apprenticeship	41%	27%	14%	19%	100%		
Level 4 or higher	31%	29%	21%	20%	100%		
Other	40%	22%	12%	25%	100%		
Managers, directors and senior officials	33%	24%	16%	27%	100%		
Professional occupations	31%	30%	23%	16%	100%		
Associate professional and technical occupations	31%	28%	21%	20%	100%		
Administrative and secretarial occupations	48%	30%	11%	11%	100%		
Skilled trades occupations	28%	20%	11%	41%	100%		
Caring, leisure and other service occupations	49%	26%	11%	14%	100%		
Sales and customer service occupations	62%	23%	10%	6%	100%		
Process, plant and machine operatives	39%	30%	15%	16%	100%		
Elementary occupations	51%	22%	11%	16%	100%		

Source: Census 2011

## **Claimants**

2.32 At the time of writing, approximately 29,000 people claim working age benefits in Cumbria. This is comprised of Jobseekers Allowance (JSA), Employment and Support Allowance (ESA), Income Support (IS) and Universal Credit (UC) claimants who are unemployed or underemployed. Table 2.13 provides a district level breakdown and shows that claimant rates are highest in Barrow-in-Furness (the location of BAE) and Copeland (the location of both Sellafield and the proposed nuclear new build at Moorside). The table intentionally excludes the ESA Support Group – currently estimated at 13,000 residents – as this group has been assessed as unfit for work and work related activity in the foreseeable future.

Table 2.13: Cumbria claimant count by district and benefit type (2015)								
	JSA	ESA	IS	UC unemp.	Total unemp.	UC underemp.	All benefits	% WAP*
Barrow- in-Furness	933	1,240	925	97	3,195	54	3,249	7.8%
Copeland	531	1,060	660	421	2,672	262	2,934	6.7%
Carlisle	716	1,450	1,165	366	3,697	183	3,880	5.7%
Allerdale	810	1,200	865	413	3,288	315	3,603	6.2%
South Lakeland	107	630	305	168	1,210	107	1,317	2.2%
Eden	124	320	240	455	1,139	202	1,341	4.2%
Totals	3,221	5,900	4,160	1,920	15,201	1,123	16,324	5.4%

<sup>\*</sup>Working Age Population. Source: DWP

2.33 In Cumbria the JSA claimant count rate has consistently been lower than that of the North West and nationally but has followed broadly the same pattern, peaking during the recession followed by year-on-year reductions since 2012 (Figure 2.14).

Figure 2.14: JSA/UC Claimant Count (% of working age population). 2013-2015 figures include Universal Credit



Source: DWP

2.34 JSA/UC claimant count rates are considerably lower in Eden and South Lakeland than elsewhere in Cumbria, reflecting the population profile in those districts. With the

exception of Carlisle, the claimant rate in the other districts is, and has consistently been, above the county average (Figure 2.15).

5.0%

4.0%

3.0%

2.0%

1.0%

2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

Barrow-in-Furness =

Eden

Carlisle

South Lakeland

Figure 2.15: JSA/UC Rate (% of working age population). 2013-2015 figures include Universal Credit

Source: DWP

## **Economic Inactivity**

- Allerdale

Copeland

2.35 In 2014, 59,600 people of working age in Cumbria were economically inactive. Economically inactive people are those who are not in employment or unemployed, and are not seeking work. They include people who may be retired, looking after a family, studying or long-term sick. Over half of those who are economically inactive in Cumbria are aged 50-64 (Table 2.14). Note that there are, in relative terms, far fewer economically inactive 35-49 year olds in Cumbria than there are nationally. The same is also true of 16-19 year olds.

Table 2.14: Economic inactivity by age – 2014								
	All ages	16-19	20-24	25-34	35-49	50-64		
Cumbria No.	59,600	8,400	4,800	7,600	8,600	30,200		
Cumbria %	100%	14.1%	8.1%	12.8%	14.4%	50.7%		

Source: APS

- 2.36 Unsurprisingly, retirement accounts for the largest proportion of economically inactive people in Cumbria at 27.6%. This is greater than for the North West (14.8%) and nationally (15.6%).
- 2.37 The long-term sick (25.4%) and those looking after a family/home (22.9%) also account for notable proportions of those who are economically inactive in the county, as is the case regionally and nationally. Proportionately, far fewer people are economically inactive in Cumbria because they are a student.

Table 2.15: Reason for economic inactivity (% of economically inactive)							
	Cumbria	%	North West %	England (excl. London) %			
Student	770	12.9%	23.6%	25.4%			
Looking after family/home	13,600	22.9%	24.5%	25.0%			
Temporary sick	1,700	2.9%	2.6%	2.2%			
Long-term sick	15,100	25.4%	26.0%	21.9%			
Retired	16,500	27.6%	14.8%	15.6%			
Other	4,700	7.8%	7.9%	9.4%			

Source: APS

# Young People 'Not in Education, Employment or Training' (NEET)

2.38 In 2014, there were 710 young people aged 16-18 who were not in education, employment or training in Cumbria. This equates to 4.3% of 16-18 year olds in the county, which is slightly lower than the national figure of 4.9% and lower still than the figure of 5.2% for the North West.

Table 2.17: NEET								
	Cumbria	%	North West	England				
NEET (16-18) 2012	910	5.3%	6.4%	5.9%				
NEET (16-18) 2013	810	4.9%	5.6%	5.5%				
NEET (16-18) 2014	710	4.3%	5.2%	4.9%				

Source: DWP NEET

### 3 ECONOMY AND DEMAND FOR LABOUR

#### **Summary of Key Points**

- Cumbria has in excess of 19,000 businesses, nearly half of which are located in either South Lakeland or Carlisle.
- As at 2014, the largest sectors in Cumbria in employment number terms were wholesale and retail trade, manufacturing, and human health and social work, together accounting for almost half of all employment. Cumbria has employment concentrations in manufacturing and accommodation and food service activities, but below average employment in education, professional, scientific and technical activities, administrative and support service activities.
- In 2013, almost £10bn of GVA was generated in Cumbria. This represents a 29% increase from 2004, although during the same period the increase nationally was slightly higher at 31%.
- Growth in average wages in Cumbria outstripped growth regionally and nationally between 2004 and 2014. As at 2014, the average wage in Cumbria, at £26,200, was 94% of the national average.
- Business start-up rates in Cumbria have followed regional and national trends since 2005. Business survival rates are strong and exceed regional and national averages at every point from one to five years inclusive. Nearly half of all businesses in Cumbria that were set up in 2008 were still in business after five years.
- The business base in Cumbria is dominated by micro businesses (employing fewer than 10 people) as it is nationally, although Cumbria has a slightly greater concentration of micros and slightly lower proportions of small, medium and large businesses.
- Skills gaps in Cumbria are slightly more prevalent than they are nationally, with employers reporting that they tend to be caused by staff being new to their role or training still being in progress. In relative terms, skills gaps resulting from staff lacking motivation or not having received appropriate training are more common in Cumbria than they are nationally.
- Overall, training activity amongst the Cumbrian workforce is less prevalent than
  across the North West and the country as a whole. Hard to fill vacancies are no
  more prevalent, although there are concentrations in hotels in restaurants,
  transport, storage and communications, and health and social care.

### Introduction

- 3.1 This chapter analyses the demand for labour in the Cumbria LEP area. It covers:
  - Employment by sector and district;
  - Economic contribution;
  - Productivity;
  - Structure of the business base;
  - Employer demand for skills.

# **Employment by Sector**

3.2 Between 2009 and 2014, seven sectors in Cumbria experienced growth in employment (Figure 3.1). In some of these, especially transportation, education, other service activities and manufacturing, growth on this scale was very much at odds with what was happening nationally.

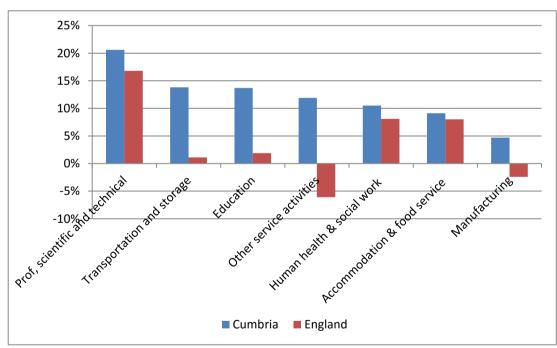


Figure 3.1: Growth Sectors in Cumbria

Source: BRES

- 3.3 Over the same period, other sectors in Cumbria experienced a decline in employment, the most notable being:
  - Agriculture, forestry and fishing (33% decline);
  - Financial and insurance activities (23% decline);

- Information and communication (18% decline);
- Arts, entertainment and recreation (18% decline).
- 3.4 With the exception of information and communications, where employment levels rose, the above sectors also contracted nationally between 2009 and 2014, although not to the same extent as in Cumbria.
- As at 2014, the largest sectors in Cumbria in terms of employment numbers were wholesale and retail trade, manufacturing, and human health and social work, which together account for 48% of all employment in the county (Figure 3.2 and Table 3.1). Accommodation and food services, education, construction and professional, scientific and technical activities accounted for just under a third.

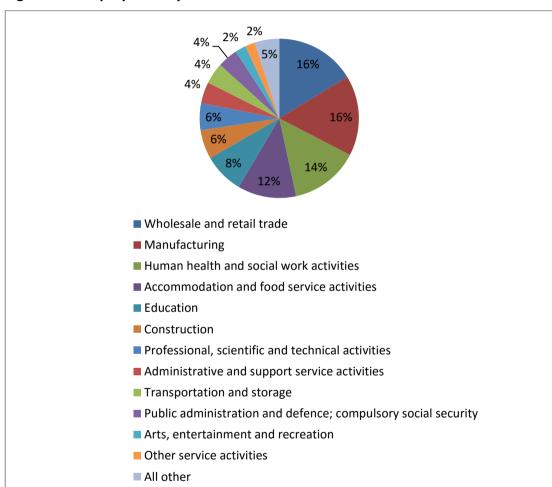


Figure 3.2: Employment by Sector – Cumbria 2014

Source: BRES

<sup>\*</sup>All other includes: Real estate activities, Information and communication, Financial and insurance activities, Water supply; sewerage, waste management and remediation activities, Agriculture, forestry and fishing, Electricity, gas, steam and air conditioning supply, Mining and quarrying.

Table 3.1: Employment by sector – Cumbria 2014		
	Employees	%
Wholesale and retail trade	37,900	16.3%
Manufacturing	37,900	16.3%
Human health and social work activities	32,600	14.0%
Accommodation and food service activities	27,600	11.9%
Education	19,100	8.2%
Construction	13,700	5.9%
Professional, scientific and technical activities	12,900	5.5%
Administrative and support service activities	10,100	4.3%
Transportation and storage	9,900	4.3%
Public administration and defence; compulsory social security	9,600	4.1%
Arts, entertainment and recreation	5,100	2.2%
Other service activities	4,700	2.0%
Real estate activities	3,800	1.6%
Information and communication	2,700	1.2%
Financial and insurance activities	2,400	1.0%
Water supply; sewerage, waste management and remediation activities	1,400	0.6%
Agriculture, forestry and fishing	600	0.3%
Electricity, gas, steam and air conditioning supply	400	0.2%
Mining and quarrying	300	0.1%
Grand Total	232,700	100.0%

Source BRES

3.6 Whilst Cumbria has a similar structure (in broad terms) to the North West and England as a whole in terms of its dominant sectors, it has considerably higher proportions employed in manufacturing and accommodation and food service activities. By contrast, it has smaller proportions employed in education, professional, scientific and technical activities, administrative and support service activities than is the case nationally and across the North West (Figure 3.3).

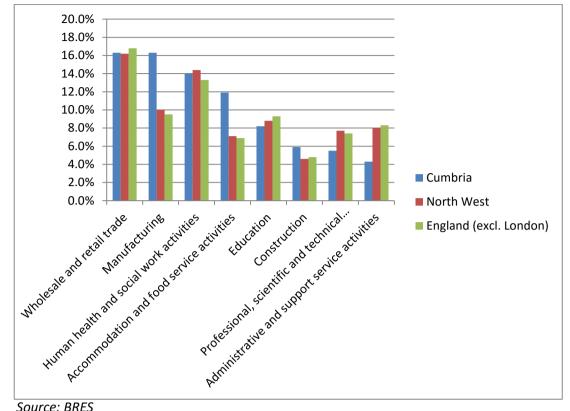


Figure 3.3: Sectoral representation 2014 (dominant employment sectors)

Source: BRES

# Sectoral Employment by District

- Table 3.2 shows sectoral employment (numbers and proportions) in each of 3.7 Cumbria's six districts. The key messages are that:
  - With the exception of Eden, manufacturing is prevalent in all six districts.
  - Wholesale and retail trade is prevalent in Carlisle, South Lakeland and Allerdale. These three sectors collectively account for over 70% of all wholesale and retail trade employment in Cumbria.
  - Accommodation and food services supports the employment of 27,600 people across Cumbria, with many of those in Eden and South Lakeland where the tourism industry is particularly strong.
  - The education sector accounts for the employment of 19,100 people in Cumbria, over two thirds of whom are employed in South Lakeland, Carlisle, and Allerdale.

Table 3.2: Sectoral employment by district<sup>7</sup>

		Cumbria	,	Allerdale	Barrow	-in-Furness		Carlisle		Copeland		Eden	South	Lakeland
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Agriculture, forestry and fishing	600	0.3%	100	0.3%	100	0.3%	200	0.3%	0	0.0%	200	0.8%	100	0.2%
Mining and quarrying	300	0.1%	100	0.3%	0	0.0%	0	0.0%	0	0.0%	200	0.8%	0	0.0%
Manufacturing	37,900	16.3%	6,100	15.7%	7,800	26.5%	5,500	9.5%	11,000	34.6%	2,100	8.6%	5,300	10.5%
Electricity, gas, steam and air conditioning supply	400	0.2%	100	0.3%	100	0.3%	100	0.2%	0	0.0%	0	0.0%	100	0.2%
Water supply; sewerage, waste management and remediation activities	1400	0.6%	300	0.8%	100	0.3%	300	0.5%	300	0.9%	100	0.4%	300	0.6%
Construction	13,700	5.9%	2,900	7.5%	1,600	5.4%	2,900	5.0%	1,900	6.0%	1,600	6.6%	2,800	5.5%
Wholesale and retail trade	37900	16.3%	6700	17.2%	4300	14.6%	1,0800	18.8%	2,900	9.1%	3,800	15.6%	9,300	18.3%
Transportation and storage	9,900	4.3%	1,400	3.6%	900	3.1%	4,600	8.0%	600	1.9%	1,300	5.3%	1,200	2.4%
Accommodation and food service activities	27,600	11.9%	4,600	11.8%	1,900	6.5%	4,000	6.9%	2,200	6.9%	4,900	20.2%	10,000	19.7%
Information and communication	2,700	1.2%	300	0.8%	500	1.7%	700	1.2%	200	0.6%	200	0.8%	700	1.4%
Financial and insurance activities	2,400	1.0%	300	0.8%	300	1.0%	900	1.6%	200	0.6%	200	0.8%	600	1.2%
Real estate activities	3,800	1.6%	600	1.5%	100	0.3%	1,200	2.1%	200	0.6%	400	1.6%	1,300	2.6%
Professional, scientific and technical activities	12,900	5.5%	1,600	4.1%	1,700	5.8%	3,800	6.6%	2,300	7.2%	1,200	4.9%	2,400	4.7%
Administrative and support service activities	10,100	4.3%	1,800	4.6%	800	2.7%	3,100	5.4%	1,800	5.7%	900	3.7%	1,800	3.6%
Public administration and defence; compulsory social security	9,600	4.1%	1,700	4.4%	900	3.1%	3,100	5.4%	1,100	3.5%	1,600	6.6%	1,100	2.2%
Education	19,100	8.2%	4,000	10.3%	2,400	8.2%	4,400	7.6%	1,900	6.0%	2,100	8.6%	4,300	8.5%
Human health and social work activities	32,600	14.0%	4,700	12.1%	5,000	17.0%	9,600	16.7%	4,200	13.2%	2,700	11.1%	6,300	12.4%

 $<sup>^{7}\,\</sup>mathrm{Figures}$  in the source data are rounded to the nearest hundred.

## Skills and Employment in Cumbria: Evidence Base

		Cumbria		Allerdale	Barrow	/-in-Furness		Carlisle		Copeland		Eden	South	Lakeland
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Arts, entertainment and recreation	5,100	2.2%	800	2.1%	500	1.7%	1,100	1.9%	500	1.6%	500	2.1%	1,600	3.2%
Other service activities	4,700	2.0%	800	2.1%	400	1.4%	1,300	2.3%	500	1.6%	300	1.2%	1,500	3.0%
Activities of households as employers; undifferentiated goods-and services-producing activities of households for own use	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Activities of extraterritorial organisations and bodies	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Grand Total	232,700	100.0%	38,900	100.0%	29,400	100.0%	57,600	100.0%	31,800	100.0%	24,300	100.0%	50,700	100.0%

Source: BRES

# **Economic Contribution (Gross Value Added)**

- 3.8 Gross Value Added (GVA) is a measure of the value of goods and services produced in a local economy. It comprises wages earned by employees and the profit made by businesses in the local area.
- 3.9 In 2013, £9.7 billion of GVA was generated in Cumbria (Table 3.3). This represents a 29% increase from 2004, although during the same period the increase nationally was slightly higher at 31%.

Table 3	Table 3.3: Cumbria GVA growth overtime, 2004-2013				
Year	GVA	Year on year % change			
2004	£0.75bn				
2005	£0.72bn	-3.5%			
2006	£0.83bn	14.4%			
2007	£0.85bn	3.5%			
2008	£0.89bn	4.4%			
2009	£0.88m	-1.2%			
2010	£0.93bn	5.8%			
2011	£0.91bn	-2.7%			
2012	£0.94bn	3.9%			
2013	£0.97bn	2.6%			
2004	-2013 Change: Cumbria	+29%			
2004	1-2013 Change: England	+31%			

Source: GVA by LEP, ONS

### **Productivity**

3.10 In 2013, GVA per full-time employee in Cumbria was 82% of the national figure: £68,320 compared with £83,644, suggesting a below average level of productivity, overall, in the county (Table 3.4).

Table 3.4: GVA per full-time employee (2013)			
	GVA per full-time employee		
Cumbria	£68,320		
England (excl. London)	£83,644		
Cumbria % of England	82%		

Source Regional Accounts and BRES

## **Productivity by sector**

3.11 Productivity levels vary by broad sector, with GVA per FTE levels ranging from £52,197 for wholesale and retail trade, transportation and storage and accommodation and food service activities, to £106,766 for financial and insurance activities.

3.12 Manufacturing, professional, scientific and technical activities; administrative and support service activities; and financial and insurance activities are the broad sectors that have a GVA per FTE closest to the national average (Table 3.5). GVA per FTE for information and communication in Cumbria is considerably lower is the case nationally.

Table 3.5: Productivity by sector 2012		
Sector	GVA per FTE	% of England (excl. London)
Mining and quarrying	£96,514	71.5%
Manufacturing	£73,928	100.4%
Construction	£67,009	74.4%
Wholesale and retail trade; Transportation and storage; Accommodation and food service activities	£52,197	79.2%
Information and communication	£70,719	66.0%
Financial and insurance activities	£106,766	92.4%
Professional, scientific and technical activities; Administrative and support service activities	£55,109	96.4%
Public administration and defence; compulsory social security; Education; Human health and social work activities	£55,917	81.7%
Arts, entertainment and recreation; Other service activities; Activities of households as employers; undifferentiated goods-and services-producing activities of households for own use	£83,380	79.4%
Total	£68,342	82.8%

Source Regional Accounts and BRES

## Wages in Cumbria

3.13 Growth in average wages in Cumbria outstripped growth regionally and nationally between 2004 and 2015 (Table 3.6). However, as at 2015, the average wage in Cumbria remained below the national average.

Table 3.6: Change in average wages – 2004 to 2015						
	Median 2004	Median 2015	Change			
Cumbria	£21,006	£26,169	24.6%			
North West	£20,895	£25,721	23.1%			
England £22,438 £27,869 24.2%						
Source: Annual Surve	ey of Hours and I	Earnings				

3.14 Figure 3.4 shows the change in average wages between 2010 and 2015 by district. Note that the significantly higher average wage in Copeland (c. £40,000 in 2015) is influenced largely by the salaries paid at Sellafield. In the other districts, the range in average salaries has become smaller over the five years, although it remains the case that they are lowest in Carlisle and Eden.

£45,000 £40,000 £35,000 £30,000 £25,000 £20,000 £15,000 £10,000 £5,000 £0 2010 2011 2012 2013 2014 2015 Barrow-in-Furness —— Carlisle Allerdale South Lakeland Copeland -Eden

Figure 3.4: Average Wages by District: 2010-2015

Source: Annual Survey of Hours and Earnings

## The Cumbria Business Base

#### **Business density**

3.15 There were approximately 19,815 active businesses in Cumbria in 2014, nearly half of which were located in either South Lakeland or Carlisle (Table 3.7).

Table 3.7: Active businesses by sub-geography (2014)					
	Count	%			
Allerdale	3,645	18.4%			
Barrow-in-Furness	2,100	10.6%			
Carlisle	3,780	19.1%			
Copeland	2,325	11.7%			
Eden	2,455	12.4%			
South Lakeland	5,510	27.8%			
Cumbria	19,815	100.0%			

Source: Business Demography

3.16 Business density – at 65 businesses per 1,000 working age population – is higher in Cumbria than across the North West region (55 per 1,000 working age population) and England as a whole (61 per 1,000 working age population). However, this varies considerably by district, from 92 per 1,000 working age population in South Lakeland – in part reflecting the older population in that district – to 50 in Barrow-in-Furness (Table 3.8).

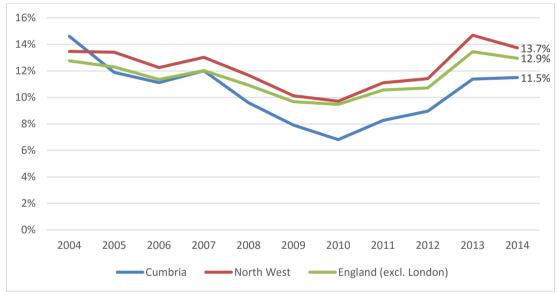
Table 3.8: Business density – businesses per 1,000 working age population (2014)			
	Count		
Allerdale	62		
Barrow-in-Furness	50		
Carlisle	56		
Copeland	53		
Eden	78		
South Lakeland	92		
Cumbria	65		
North West	55		
England (excl. London)	61		

Source: Business Demography and MYPE

### **Business Start-Up and Survival Rates**

3.17 The business start-up rate in Cumbria has followed the regional and national trend since 2005, albeit at a lower rate (Figure 3.5). In 2014, the business start-up rate in Cumbria was 11.5% compared with 13.7% in the North West and 12.9% nationally.

Figure 3.5: Business start-up rates 2004-2014 (as a percentage of active businesses)



Source: Business Demography

3.18 Business survival rates are strong in Cumbria and exceed regional and national average at every point from one to five years inclusive. Nearly half (47%) of all businesses in Cumbria that were set up in 2009 were still in business after five years (Figure 3.6).

5 years 4 years 3 years 2 years 1 year 0% 10% 30% 40% 50% 60% 70% 80% 90% 100% ■ England (excl. London) ■ North West Cumbria

Figure 3.6: Business survival rates (businesses born in 2009)

Source: Business Demography

### **Business Base by Size**

3.19 The business base in Cumbria is dominated by micro businesses (employing fewer than 10 people) as it is nationally – Figure 3.7. Cumbria does, however, have a slightly greater concentration of micros and, consequently, slightly lower proportions of small, medium and large businesses.

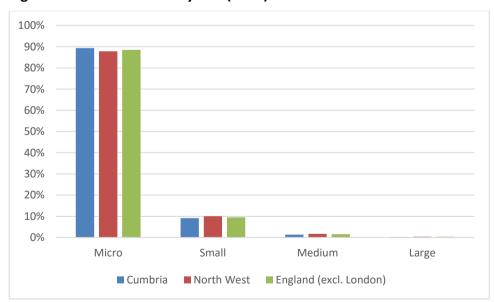


Figure 3.7: Business base by size (2015)

Source: UK Business: Activity, Size and Location, 2015, Nomis

## **Skills Gaps**

- 3.20 The proportion of employers reporting skills gaps (where staff lack some of the skills needed to perform their job to the optimum level) in Cumbria was, based on the UK Employer Skills Survey in 2013, 16%. This compares with a national figure of 15%.
- 3.21 Skills gaps amongst elementary staff are more commonly reported in Cumbria than nationally (6% of employers report skills gaps in these disciplines compared with 3% nationally). Skills gaps amongst skilled trades and caring, leisure and other services staff also appear to be slightly higher in Cumbria, whereas skills gaps amongst sales/customer service staff are less prevalent (Table 3.8).

Table 3.8: Skills gaps within the existing workforce (2013)				
	Cumbria	National		
	%	%		
Managers	3%	3%		
Professionals	1%	1%		
Associate professionals	1%	1%		
Administrative/clerical staff	3%	3%		
Skilled trades	3%	2%		
Caring, leisure and other services staff	2%	1%		
Sales/customer service staff	3%	4%		
Machine operatives	1%	1%		
Elementary staff	6%	3%		
Any skills gap	16%	15%		

Source: UK Employer Skills Survey, UKCES

3.22 The most common causes of skills gaps reported by employers are staff being new to their role and training only partially completed at the time of the survey (Table 3.9). Staff lacking motivation, staff not receiving appropriate training and insufficient improvement in performance following training are also, in relative terms, common causes of skills gaps in Cumbria.

Table 3.9: Causes of Skills Gaps in Cumbria (2013)	
	%
Staff are new to the role	67%
Their training is only partially completed	66%
Staff lack motivation	35%
They have not received the appropriate training	33%
They have been on training but their performance has not improved sufficiently	31%
The introduction of new working practices	22%
Unable to recruit staff with the required skills	21%
The introduction of new technology	17%
The development of new products and service	13%
Problems retaining staff	10%
Lack of other skills e.g. communication, interpersonal*	3%
Non-work related problems e.g. health or personal problems*	2%
Lack of aptitude to do job/reached maximum potential*	1%

Source: UK Employer Skills Survey, UKCES, 2013

3.23 Skills gaps are most prevalent amongst establishments in the education (42%), and health and social work sectors (33%). The hotels and restaurants (21%), and wholesale and retail (20%) sectors also have a greater proportion of establishments with skills gaps compared with the Cumbrian, North West and national averages.

Table 3.10: Skills Gaps in Cumbria by Sector (2013)	
	% of establishments with skills gaps
Education	42%
Health and social work	33%
Hotels and restaurants	21%
Wholesale and Retail	20%
Business services	14%
Construction	13%
Manufacturing	11%
Transport, storage and communications	11%
Community, social and other activities	11%
Agriculture	5%
Electricity, Gas and Water	*
Cumbria Total	16%
North West Total	16%
England Total	15%

Source: UK Employer Skills Survey, UKCES, 2013

<sup>\*</sup> Insufficient data for this sector.

## **Training by Sector**

- 3.24 UK Employer Skills Survey data suggests that in the 12 months prior to the survey in 2013, three fifths (60%) of employers in Cumbria had provided training for their staff. The equivalent figure regionally and nationally was 66%, i.e. overall, training activity amongst the Cumbrian workforce is less prevalent than across the North West and the country as a whole.
- 3.25 As shown in Table 3.11, it is of note that in agriculture and hotels and restaurants (a proxy for the visitor economy) both of which are priorities for the LEP the proportion of employers providing training is below the national average. The same is also true of construction. Hotels and restaurant employers report an above average incidence of skills gaps yet a below average likelihood of training their staff.

Table 3.11: Training by sector	(2013)		
		% of	% of
	% of	establishments	establishments
	establishments	providing off-	providing on-
	training staff	the-job training	the-job training
	over the last 12	in the last 12	in the last 12
	months	months	months
Education	100%	70%	95%
Health and social work	99%	91%	74%
Community, social and other			
activities	77%	52%	63%
Business services	72%	63%	61%
Manufacturing	68%	60%	48%
Transport, Storage and			
Communications	65%	40%	51%
Hotels and restaurants	61%	39%	49%
Wholesale and Retail	53%	35%	41%
Construction	52%	45%	30%
Agriculture	30%	22%	18%
Electricity, Gas and Water	*	*	*
•			
Cumbria Total	60%	46%	47%
North West Total	66%	49%	52%
England Total	66%	48%	52%

Source: UK Employer Skills Survey, UKCES, 2013

### **Vacancies**

3.26 While vacancies per se in Cumbria appear less prevalent than they do nationally (in the 2013 UK Employer Skills Survey, 15.5% of Cumbrian employers reported a vacancy compared with 18.0% across England), it is of note that:

<sup>\*</sup> Insufficient data for this sector.

- Vacancies for skilled trade occupations are significantly higher in Cumbria than they are nationwide (Table 3.12). These occupations include farmers, metal workers, construction workers and plumbers.
- Vacancies for professional and associate professional occupations are also more prevalent in Cumbria. These occupations include engineers, teachers, legal professionals and quality control officers.

Table 3.12: Prevalence of vacancies (no. of employers reporting at least one		
vacancy)		A) .: 1
	Cumbria	National
	% (of all vacancies)	% (of all vacancies)
Managers	6.2%	5.3%
Professionals	14.8%	13.1%
Associate professionals	8.1%	15.9%
Administrative/clerical staff	11.2%	12.8%
Skilled trades occupations	16.1%	10.7%
Caring, leisure and other services staff	13.1%	12.4%
Sales and customer services staff	14.5%	11.9%
Machine operatives	3.2%	4.4%
Elementary staff	11.9%	12.4%
Unclassified staff	1.0%	1.2%

Source: UK Employer Skills Survey, UKCES

- 3.27 Skills shortage vacancies where a vacancy exists because applicants lack the skills needed for the role are no more prevalent in Cumbria than they are nationally (4% of employers in the 2013 survey reported having one or more skills shortage vacancy). However they are distinctly more prevalent in the following sectors in Cumbria:
  - Hotels and restaurants (6% of employers reported a skills shortage vacancy);
  - Transport, storage and communications (8% of employers);
  - Health and social care (20% of employers).

#### **Hard to Fill Vacancies**

- 3.28 A similar position exists in terms of hard to fill vacancies, i.e. they are no more prevalent in Cumbria than across the country as a whole but there are concentrations in hotels in restaurants, transport, storage and communications, and health and social care.
- 3.29 The main cause of hard to fill vacancies reported by employers in Cumbria was a low number of applicants with the required attitude, motivation or personality (39%), closely followed by a low number of applicants with the required skills (37%).

- Nationally, the main cause of hard to fill vacancies was the low number of applicants with the required skills (41%).
- 3.30 Having not enough people interested in doing the job accounted for a third of hard to fill vacancies in Cumbria (33%). This is a much higher proportion than is the 18% reported nationally and reflects the population demographics of the county.
- 3.31 Cumbria's geography also plays a part in hard to fill vacancies, with a remote location or poor public factor the main cause in a further 30% of hard to fill vacancies (compared with only 7% nationally). Similarly, a low number of applicants accounts for over a quarter of hard to fill vacancies in Cumbria 27% but only 13% nationally.

Table 3.13: Main causes of having a hard to fill vacancy		
	Cumbria	National
	%	%
Low number of applicants with the required attitude,	39%	19%
motivation or personality	3370	1570
Low number of applicants with the required skills	37%	41%
Not enough people interested in doing this type of job	33%	18%
Remote location/poor public transport	30%	7%
Low number of applicants generally	27%	13%
Lack of work experience the company demands	19%	26%
Lack of qualifications the company demands	15%	18%
Poor terms and conditions (e.g. pay) offered for post	11%	13%
Too much competition from other employers	9%	8%
Job entails shift work/unsociable hours	5%	10%
Poor recruitment channels/mechanisms (inc. lack/cost of advertising)	4%	1%
Not full-time/permanent work	2%	1%
Difficulty with work permits/immigration issues for non-EU staff	1%	0%
Benefits trap	1%	1%
Poor career progression / lack of prospects	0%	3%
Low number of suitable applicants inc. age of applicants	0%	1%
Seasonal work	0%	1%
Lack of funding for the position	0%	1%
Other	7%	8%
No particular reason	0%	1%
Don't know	0%	1%
Total	100%	100%

Source: UK Employer Skills Survey, UKCES

#### 4 EMPLOYMENT AND SKILLS PROJECTIONS

#### **Summary of Key Points**

- Replacement demand in Cumbria jobs that will need to be filled as a result of retirements, occupational mobility and outward migration – is estimated at 66,500 jobs between 2016 and 2021 inclusive. In excess of 40% of all replacement demand jobs are expected to be at Level 4 and above.
- Over the same period, it is estimated that approximately 7,300 new jobs will be created in the nuclear sector, largely as a result of the new build programme at Moorside.
- Also over the same period, an estimated 6,500 new jobs will be created through general (non-nuclear) economic growth and other infrastructure schemes.
   Between 2016 and 2021 inclusive, an estimated 80,300 jobs may therefore need to be filled in Cumbria.
- Cumbria is not currently well placed to meet this challenge. If the employment rate target set in the Skills Investment Plan is achieved<sup>8</sup>, the county will have around 6,000 more people in employment in 2021 than it does now. In addition, an estimated 18,000 young people will enter the working age population between 2016 and 2021 and will stay in the county and be suitable for work. Cumbria's response to the employment gap would therefore be approximately 24,000 people. This is 30% of the estimated number of jobs that will need to be filled.

### Introduction

- 4.1 This chapter presents information on the employment and skills implications of the following:
  - **Replacement demand**, i.e. posts that need to be filled as a result of people retiring or moving jobs.
  - New jobs in the nuclear sector, namely the proposed nuclear new build at Moorside, the Successor nuclear submarine programme at BAE in Barrow and the continuation of existing strategy and operations at Sellafield.
  - Other expansion demand, i.e. new jobs created in sectors other than nuclear and the associated supply chain.
- 4.2 The sources from which the data is drawn are explained in Table 4.1. It is important to note that these sources include what in some cases amounts to a considerable degree of assumption and approximation. The intention at this stage is not therefore

<sup>&</sup>lt;sup>8</sup> The Skills Investment Plan sets a target of achieving an average employment rate in Cumbria of 78%.

claim precision in the projections, but to convey in broad terms the likely scale of the challenge.

Table 4.1: Projections Data Overview		
Activity	Source	Notes
Replacement demand	Working Futures	Produced by the UK Commission for Employment and Skills.
Nuclear sector	Cogent/ CoNE	Nuclear new build projections in the Cogent data are based on Hinckley Point C data, adjusted based on feedback from CoNE to incorporate factors that are specific to the proposed new build in Cumbria.
Other infrastructure schemes	Various	These are typically very high level or outline projections, reflecting the early stages of several of the schemes. They have been gathered either from the representatives of the schemes themselves or estimated using intelligence based on comparable schemes elsewhere.

## **Replacement Demand**

- 4.3 Replacement demand is defined as posts that need to be filled as a result of retirements, occupational mobility (i.e. people changing jobs within the county) and outward migration, i.e. people in work that leave the county.
- 4.4 Via the Working Futures model, the UKCES provides projections of replacement demand at LEP level. The latest release of Working Futures data covers the period from 2012 to 2022 and shows a replacement demand figure for Cumbria of almost 111,000 jobs, i.e. over the period from 2012 to 2022, 111,000 jobs will need to be filled as a result of retirements, occupational mobility and outward migration.
- 4.5 To bring this into line with the timelines used for the other projections in this chapter, the total projected replacement demand for Cumbria (110,855) has been divided by 10 to give an annual figure, and multiplied by 6 to provide an estimate for the period from 2016 to 2021 inclusive. This results in replacement demand of 66,513 between 2016 and the estimated peak demand in the nuclear sector in 2021.
- 4.6 Table 4.2 below breaks down the 2016-2021 projections by qualification level and shows that:
  - Replacement demand in Cumbria between 2016 and 2021 inclusive is estimated at 66,500 jobs;
  - 41% of the jobs are expected to be at Level 4 or above (note that this compares
    with 29% of the current working age population in Cumbria that is qualified at
    this level);
  - 43% are expected to be at Level 2 or Level 3;
  - 16% are expected to require qualifications at Level 1 or no formal qualifications.

Table 4.2: 2016-2021 Replacement Demand by Qualification Level		
Qualification Level	Replacement Demand	% of Total Replacement Demand
No qualifications	3,372	5%
Level 1	7,179	11%
Level 2	15,169	23%
Level 3	13,326	20%
Level 4	4,269	6%
Level 5	4,430	7%
Level 6	12,534	19%
Level 7	5,352	8%
Level 8	882	1%
Total	66,513	100%
Source: Working Futures/YCL		

4.7 Agriculture, energy and water, and transport and communication, are the sectors in Cumbria that have the highest proportions of workers aged 55+ and for whom the replacement demand challenge is arguably the most immediate. However, in terms of scale, the challenge appears to be far greater in distribution, hotels and restaurants and public administration, education and health.

Table 4.3: Older Workforce Profile by Sector		
	Estimated % of the workforce aged 55+	Estimated no. aged 55+
Agriculture, Energy and Water	28%	3,850
Manufacturing	19%	6,200
Construction	19%	4,000
Distribution, Hotels and Restaurants	18%	11,200
Transportation and Communication	24%	3,500
Finance, Real Estate and Professional	23%	6,000
Public Administration, Education and Health	20%	12,700
Source: Census		

# **Activity in the Nuclear Sector**

4.8 Plans are being developed to build a new nuclear power station and associated ancillary buildings on land adjacent to Moorside on the West Coast of Cumbria. With a cost of £16bn over ten years, the new power station, when complete, will provide sustained employment opportunities for approximately 1,000 people.

- 4.9 Alongside this, the continuation of existing strategy and operations at Sellafield will provide secure employment for c. 10,000 personnel. At BAE systems, the design, manufacture and commissioning of the Successor nuclear submarine programme is expected to generate c. 800 jobs<sup>9</sup>.
- 4.10 Together these programmes are expected to see nuclear industry and supply chain employment in the county rise from its current level of around 26,900 to 34,200 in 2021: an increase of 7,300 new jobs. The vast majority of these jobs more than 95% are expected to be in the following pinch point groups (defined as pinch points because two of the following three criteria apply: significant volumetric growth; current industry shortage; limited local supply):
  - Civil engineering, construction and construction management.
  - Project management and controls.
  - Operations and commissioning.
  - Nuclear safety case management and safety assessors.
  - Business functions.
  - Chemistry, chemical engineering and higher level skills.
  - Plant and design engineering.
  - Quality management.
- 4.11 The estimated number of new jobs by pinch point group is shown in Table 4.4. Note that whilst the table shows a reduction in the number of safety case managers and safety assessors by 2021, this masks an expected increase in demand to 2018.

Table 4.4: Estimated Recruitment Requirements by Pinch Point		
Pinch Point	Estimated Recruitment Requirement to 2021	
Civil engineering, construction and construction management	3,500	
Project management and controls	330	
Operations (including reactor processing, plant operations and commissioning)	20	
Nuclear safety case management and safety assessors	-100	
Business functions (including commercial skills)	110	
Chemistry, chemical engineering and higher level skills	45	
Plant and design engineering	3,150	
Quality management	120	
Estimated Total for Pinch Points	+7,175	
Source: CoNE		

<sup>&</sup>lt;sup>9</sup> This is an estimate based on information supplied by the Ministry of Defence.

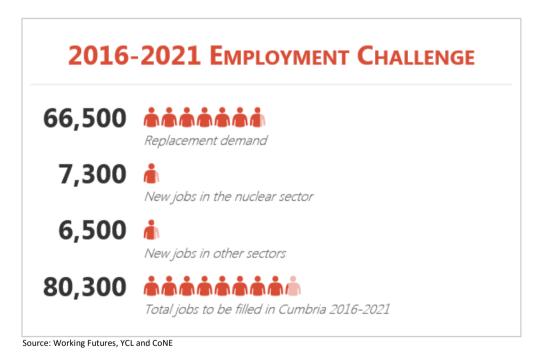
4.12 CoNE's intention is to undertake further detailed scope definition and viability assessment in order to explore each of the pinch points in further detail.

## **Other Expansion Demand**

4.13 The Working Futures model estimates that approximately 5,000 new jobs will be created in Cumbria between 2016 and 2021 inclusive, in addition to those specific to the nuclear sector and its supply chain. In addition to this, the county has other infrastructure schemes which, based on current intelligence, could create jobs between 2016 and 2021. These include the Dong Walney Extension, West Cumbria Mining and North West Coast Connections (National Grid). A very high level combined estimate for these schemes is 1,500 jobs. This gives a total estimated expansion demand figure, excluding nuclear, of 6,500 new jobs between 2016 and 2021.

## In Summary

4.14 As shown below, an estimated 80,300 jobs may need to be filled in Cumbria between the start of 2016 and the end of 2021.



- 4.15 Cumbria is not currently well placed to meet this challenge:
  - If the employment rate target set in the Skills Investment Plan is achieved<sup>10</sup>, the county will have around 6,000 more people in employment in 2021 than it does now (it will also have become one of the highest employment rates of LEPs across the country). This will address just 7% of the employment gap.

<sup>&</sup>lt;sup>10</sup> The Skills Investment Plan sets a target of achieving an average employment rate in Cumbria of 78%.

- Cumbria's annual Year 11 outturn<sup>11</sup>, i.e. young people aged 16, is approximately 5,000 pupils, around 1,850 of which (based on recent participation rates) progress on to university. Historically, most of this cohort have not returned to the county on completion of their higher education studies. Were this to continue, it could be assumed that approximately 3,150 young people will enter Cumbria's working age population each year. With NEET rates currently at around 4%, the best case scenario for the county is therefore that approximately 3,000 young people per year will be able to take up employment in Cumbria.
- 4.16 Across the six year period from 2016 to 2021 inclusive, and factoring in the 6,000 additional people in work through a county-wide employment rate increase, Cumbria's response to the employment gap would be approximately 24,000 people. This is 30% of the estimated number of jobs that will need to be filled.



Source: YCL

4.17 Fundamentally therefore, Cumbria needs more residents of working age to sustain current levels of economic performance and to provide the foundation for growth. Without the necessary supply of labour with the skills that employers need, there is a real risk that the county will become less appealing as a place for businesses to locate and invest.

<sup>&</sup>lt;sup>11</sup> Based on the Annual School Capacity Survey, which collects information about local authority maintained primary and secondary schools, academies and city technology colleges.

#### 5 EMPLOYER FEEDBACK ON SKILLS NEEDS AND THE SKILLS SYSTEM

#### **Summary of Key Points**

- Via a series of focus groups and consultation events, over 50 employers in Cumbria from a range of sectors provided feedback on the roles they find it hardest to fill, the skills gaps that exist in their current workforce and how, if at all, the local skills system could better meet their needs.
- Most were inclined to state that recruitment per se is a challenge, regardless of the role on offer, and that they typically receive relatively few applications from candidates with the required skills and aptitudes. Where vacancies are in rural areas, involve unconventional hours or are low paid, the problems can be worse.
- As well as stating that recruitment is an ongoing problem generally, employers
  also identified a selection of sector specific challenges. These include (although
  are not limited to) electrical trades and high level technical occupations in
  advanced manufacturing, chefs and kitchen staff in the visitor economy and HGV
  drivers in transportation and logistics.
- Employers also reported a range of skills gaps within their existing workforces.
   Examples again not an exhaustive list include warehousing and distribution skills in the logistics sector, various technical and business process skills in agriculture and process and quality/safety management skills in advanced manufacturing. They also identified a series of more generic, cross-sector or enabling skills, including various aspects of leadership and management, project and programme management and customer service.
- Employers' main asks of the local skills system were that it be made easier for them to identify and understand the different avenues of support that are available; that provision be influenced to a greater extent by employer need; and that barriers to training in certain sectors, e.g. agriculture, be recognised in the design of delivery models for training provision.

### Introduction

5.1 This chapter presents the main messages arising from feedback gathered from employers during the development of this evidence base. Employers were consulted via four bespoke focus groups arranged by the Cumbria Chamber of Commerce and through facilitated discussions at a Cumbria Chamber of Commerce Power 40<sup>12</sup> event and an Advanced Manufacturing Skills Summit. A combined total of more than 50 businesses attended these events, representing a broad range of industry sectors and each of Cumbria's six districts.

<sup>&</sup>lt;sup>12</sup> A cross-sector group of influential businesses located in the county.

- 5.2 At each of the events, employers were asked for their views against three main topics:
  - The roles that they find it hardest to recruit into;
  - Skills gaps within their current workforce;
  - How the skills system in Cumbria could better meet their needs.
- 5.3 Employers were given the opportunity to discuss the above in groups and to share their responses via plenary feedback sessions.

#### Recruitment

- 5.4 Employers across all sectors were inclined to state that recruitment per se is challenging, regardless of the roles they are trying to fill. When asked why, the main reasons that they gave were:
  - They typically receive relatively few applications for advertised vacancies;
  - Only a relatively small proportion of applicants have the skills and aptitudes necessary for the job;
  - External factors, such as public transport, can limit the volume of applications, especially in rural areas and where jobs involve unconventional hours or are low paid.
- 5.5 These points resonate very clearly with the results of the UK Employer Skills Survey which, in 2013, found that low numbers of applicants and issues linked to transport and remote locations were amongst the main reasons why hard-to-fill vacancies exist in the county.
- 5.6 As well as stating that recruitment is an ongoing challenge generally, employers also identified a selection of roles that they have found it especially difficult to fill with people of the right experience and calibre. These are summarised in Table 5.1, split by sector where appropriate.

Table 5.1: Recruitment Challenges by Sector		
Sector	Roles that are difficult to fill	
	- Electrical trades	
	- High level technical positions	
Advanced Manufacturing	- Control system engineers and technicians	
	- Graduate engineers	
	- Associate professionals	
	- Chefs	
Visitor Economy	- Kitchen staff	
Visitor Economy	- Good quality apprentices	
	- Experienced front-of-house staff	
Transportation and Logistics	- HGV drivers	
Health and Social Care	- Nurses	
Health and Social Care	- Domiciliary and residential care staff	
	- Engineers (all types)	
Cross-sector	- Graduates	
	- Project managers	
	- HR professionals	
Source: YCL		

5.7 Employers in the visitor economy, in particular, expressed concern that the full breath of their sector and the jobs and careers prospects it offers are not being accurately conveyed to young people, especially in schools. Alongside this, employers in a range of sectors, especially where they employ engineers and/or project managers, are concerned that they will lose staff to the nuclear new build programme or to Sellafield (the latter is already reported to be an issue). They would welcome support from the LEP to help with reskilling and backfilling when this occurs.

## **Workforce Skills: Sector Specific**

5.8 Feedback from employers, alongside findings from the desk based analysis, highlighted a series of skills gaps/issues that have a sector specific focus. Some of these, for example in the advanced manufacturing sector, cite specific occupations or skills types. In other sectors, such as construction and adult social care, the evidence is less about specific skills and more about the disconnect that exists between skills gaps, employers' propensity to train and their upskilling requirements.

Table 5.2: Skills Gaps and Issues by Sector		
Sector	Roles that are difficult to fill	
	- Process skills	
Advanced	- Quality and safety management	
Manufacturing	- Business improvement techniques and lean manufacturing	
Wanaractaring	- Occupational health	
	- Procurement and supply chain skills	
Transportation and	- Warehousing	
Logistics	- Distribution	
Agriculture	- Various technical skills, e.g. spraying and chainsaw use	
7 Gileattare	- Adopting new business processes and approaches	
	- Skills gaps/issues are reported across the majority of	
Engineering	engineering roles, giving rise to concerns over progression	
	and the ability to replace an ageing workforce.	
	- Skills gaps in this sector are twice the all-sector average and	
Health and Social Care	attrition is high. Employers say it is often difficult to provide	
	structured training beyond induction, statutory and role-	
	critical skills.	
	- A below average proportion of construction employers	
Construction	currently provide training yet the majority have identified	
	the need to upskill.	
Source: YCL		

# **Workforce Skills: Enabling Skills**

- 5.9 In addition to skills issues that are sector specific, employers also identified a series of more generic areas where they believe their workforce could be better equipped. These generic or enabling skills are not new, nor have they been ignored by workforce development programmes in the past, but they were nonetheless cited with some regularity at most of the focus groups and consultation events:
  - Leadership and management: from team leading and line management skills for those that are new to the roles, through to strategic business management skills.
  - **Project and programme management:** considerable competition exists in the labour market for skilled project and programme managers, with SMEs in particular often struggling to recruit. There is a keen willingness for 'grow your own', supported where necessary by structured training.
  - Customer service skills: employers report that expectations of customer service across the economy as a whole have risen considerably and continue to do so. The UK Employer Skills Survey in 2013 found that 41% of Cumbrian businesses with skills gaps said that these gaps included customer handling skills, making it one of the most frequently cited skills gap areas. This was backed up by employers attending the focus groups, many of whom feel that the customer service skills of their workforce could be stronger.

• English and maths/skills for sustained employment: employers report that poor English and maths skills in their workforce not only hinder progression but also contribute to attrition.

## **Asks of the Skills Systems**

- 5.10 Employers attending the focus groups identified three main asks of the skills system in Cumbria. These were:
  - 1. Clarity and ease of understanding: employers often it find it time consuming and difficult to understand the support that is available for training, especially given the different eligibility criteria attached to different programmes and funding pots. They would welcome the introduction of a single point of access perhaps via an online portal or gateway that helps steer them towards the most appropriate avenues of support based on their needs.
  - 2. Responsive and employer influenced: employers were generally complimentary about the training they had accessed from providers in Cumbria. They nonetheless see a benefit in establishing a delivery model especially for workforce development activity whereby sector-based employer panels or forums engage with the provider network and provide an up to date articulation of need. Collectively, they spoke of a desire for public funding for skills to be needs driven and for it to be able to respond to emerging issues as well as those that are already known.
  - 3. Flexible delivery models: regardless of their sector, employers appear to favour short, bite-sized provision over longer courses (although this depends on the level of qualification/skill being sought). In terms of how training is delivered, and the unit cost of delivery, employers did however request that sectoral differences be recognised. Specifically, employers (and employer representative organisations) in the agricultural sector said that traditional delivery models for workforce training tend to result in low levels of sign up. For agricultural employers to participate, training typically needs to take place very near to their farms/places of work, be structured around short sessions that minimise time away from the workplace and be readily affordable. They also noted that agricultural employers are more likely to participate if the training focuses initially on practical/technical disciplines rather than management or business skills. Once they have engaged with the technical/practical training they are more likely to consider other topics such as those related to management.

#### 6 PERFORMANCE OF THE SKILLS SYSTEM

#### **Summary of Key Points**

- On average, during the early part of their schooling, children in Cumbria perform relatively well. However, the proportions of pupils making the expected progress in English and Maths between Key Stage 2 (age 11) and Key stage 4 (age 16) in Cumbria are below national averages.
- GCSE performance, compared with national averages, is good, as is the rate of
  participation amongst 16-17 year olds in education or work based learning. Yet
  despite recent improvements, the proportion of Cumbria's 19 year olds qualified
  to Level 2 sits slightly below the national average, as does the proportion
  qualified to Level 3.
- Apprenticeships are more common in Cumbria than elsewhere (in 2013/14, 11% of young people chose an apprenticeship as their post-16 destination compared with 4% nationally). More than four fifths of the apprenticeships in 2013/14 were in health, public services and care; engineering and manufacturing technologies; retail and commercial enterprise; and business, administration and law.
- 2013/14 saw a 32% increase in starts on apprenticeships in engineering and manufacturing technologies and a 25% increase in agriculture, horticulture and animal care. However, starts on construction apprenticeships reduced by 15%.
- Education and Training (defined in this context as FE and work based learning combined) learning aim starts in engineering and manufacturing, construction and ICT showed a modest increase between 2012/13 and 2013/14. There has been a relatively large proportionate increase in starts on Level 4 learning aims in Cumbria, although these only account for a small proportion of Education and Training provision overall.
- In 2012/13, there were just over 5,000 full-person equivalent (FPE) students on HE provision in Cumbria. The main provider of HE provision in the county is the University of Cumbria, accounting for 79% of FPE students. Although their student numbers are smaller, it is evident that the four FE colleges are also key providers of HE provision in Cumbria.
- Over two-thirds (68%) of HE students in Cumbria are first degree undergraduate students, as is the case nationally. The majority (66%) of employed first degree graduates from HEIs in Cumbria in 2012/13 went to work in the North West.

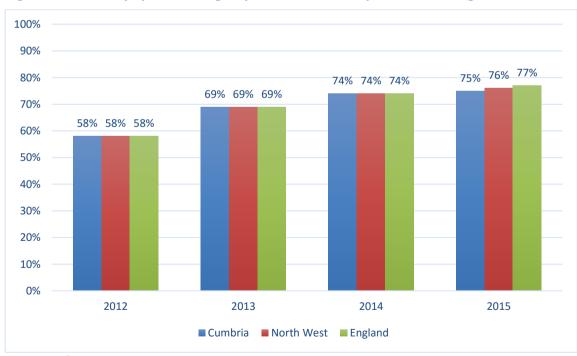
### Introduction

- 6.1 This chapter covers:
  - Educational performance from Key Stage 1 to Key Stage 4 (GCSE);
  - Projections of the size of Cumbria's school cohorts in the future;
  - Participation, attainment and destinations of young people aged 16-19;
  - Participation in post-compulsory education in Cumbria providers;
  - Apprenticeships;
  - Community Learning;
  - Higher Education.

#### **Educational Performance**

6.2 On average, during the early part of their schooling, children in Cumbria perform relatively well. For example, the percentage of pupils in Cumbria's primary schools reaching the required standard of phonic decoding<sup>13</sup> in Year 1 has increased year on year since 2012 although in 2015 it dipped below the national average.

Figure 6.1: Year 1 pupils meeting required standard in phonic decoding



Source: DfE

<sup>&</sup>lt;sup>13</sup> The elementary skills needed to learn to read.

- 6.3 The proportion of pupils achieving Level 4 or above at Key Stage 2 has also shown an upward trend in Cumbria and, as at 2015, was in line with the national average (Figure 6.2). However, the proportions of pupils making the expected progress in English and maths between Key Stage 2 (age 11) and Key stage 4 (age 16) in Cumbria are below national averages:
  - In 2013/14, the proportion making the expected progress in English in Cumbria was 67%, compared with 71% nationally;
  - The equivalent figures for maths were 73% in Cumbria and 75% nationally.

82% 81% 80% 80% 80%80% 80% 79% 79% 78% 78% 77% 76% 76% 76% 75% 75%75% 75% 74% 72% 71% 70% 68% 66% 2012 2013 2014 2015 Cumbria ■ North West ■ England (State) ■ England (All Schools)

Figure 6.2: Percentage of pupils achieving Level 4 or above at Key Stage 2

Source: DfE

### **GCSE Attainment**

6.4 In 2013/14, almost two thirds (65.5%) of pupils in Cumbria's state funded schools achieved five A\*-C grades at GCSE, although this falls to 56.8% when English and Maths are included. In both cases, Cumbria performs better than the North West region and England as a whole, as it does against measures of A\*-G achievement (Figure 6.3). In 2013/14, approximately 400 young people in Cumbria finished Key Stage 4 without achieving five GCSEs at grades A\*-G.

94% 93% 90% 98% 98% 98% 100% 92% 91% 85% 90% 80% 66% 65% 64% 70% 57% 56% <sub>53%</sub> 60% 50% 40% 30% 20% 10% 0% 5+A\*-C grades 5+ A\*-C including 5+A\*-G grades 5+ A\*-G including Any passes English & English & mathematics GCSEs mathematics GCSEs ■ Cumbria ■ North West ■ England

Figure 6.3: GCSE attainment 2013/14

Source: DfE

6.5 In 2013/14, 4 of Cumbria's 35 state funded secondary schools (11%) did not meet the Department for Education's floor target. This is in line with the national average but lower than for the North West, i.e. Cumbria outperforms the region as a whole against this measure (Figure 6.4). A school is below the floor standard if less than 40% of pupils achieve five or more A\*-C grade GCSEs, including English and maths, and the expected progress between Key Stage 2 and Key Stage 4 is less than the median of 74% in English and 67% in maths.

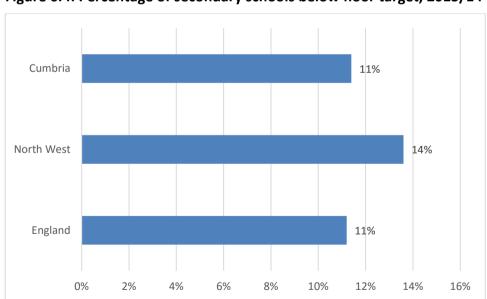


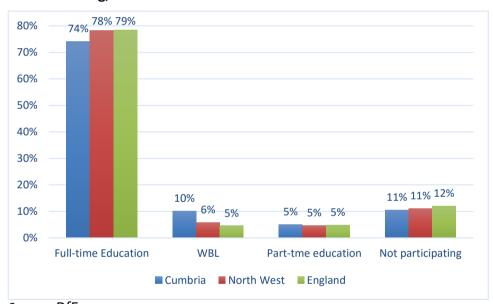
Figure 6.4: Percentage of secondary schools below floor target, 2013/14

Source: DfE

## Participation at 16-17

- 6.6 The Department for Education gathers information on the participation in education and work-based learning of 16-17 year olds. This is measured as a percentage of the full 16-17 year old cohort and is available for local education authority areas. The summary messages for Cumbria are that:
  - The proportion of 16-17 year olds participating in education or work based learning increased from 86% in 2002 to 89% in 2012, peaking at 91% in 2011;
  - Over the same period nationally, the figures rose from 79% to 88%.
- 6.7 As shown in Figure 6.5, the vast majority of 16-17 year olds in Cumbria in 2012 were in full-time education. The above average proportion participating in work based learning is accounted for, in part at least, by the prevalence of Apprenticeship activity in the county.

Figure 6.5: Percentage of 16-17 year olds participating in education and work-based learning, 2012



Source: DfE

### Level 2 and Level 3 Attainment at age 19

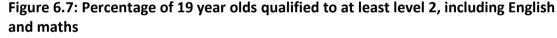
6.8 In 2014, the proportion of Cumbria's 19 year olds qualified to Level 2 stood at 84% and had risen from 71% in 2005. Cumbria sits slightly below England as a whole in this regard – the 2014 figure for England was 86% (Figure 6.6).

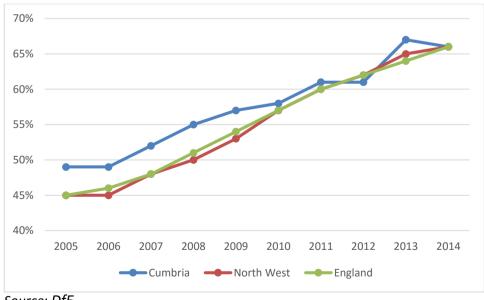
85% 80% 75% 70% 65% 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 **C**umbria North West — England

Figure 6.6: Percentage of 19 year olds qualified to at least Level 2

Source: DfE

6.9 In 2014, two thirds (66%) of the 19 year olds in Cumbria – and indeed two thirds of 19 year olds nationally – were qualified to Level 2 including English and maths (Figure 6.7). Whilst this is a significant improvement on the 2005 figure of 49%, it still means that one in every three 19 year olds in the county (more than 2,000 individuals in total) lack what many perceive to be the core qualifications required for career progression.





Source: DfE

6.10 Cumbria performs below the national average in terms of the proportion of its 19 year olds qualified to Level 3, although the significant improvements that have been made over the past 10 years should be noted (Figure 6.8).

60% 55% 50% 45% 40% 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 North West Cumbria **England** 

Figure 6.8: Percentage of 19 year olds qualified to at least level 3

Source: DfE

#### **Free School Meals**

6.11 A relationship between attainment and deprivation is evident within data which differentiates between pupils eligible for free school meals (at the age of 16) and those who are not. In 2014, free school meal pupils had considerably lower attainment levels than non-free school meal pupils at both Levels 2 and 3 (Figure 6.9). This disparity is slightly greater in Cumbria than across the North West region and England as a whole, especially in terms of attainment at Level 3.

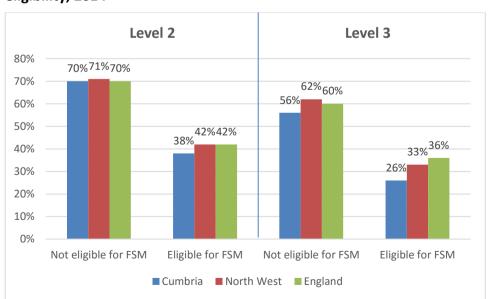


Figure 6.9: Percentage of 19 year olds attainment by free school meal (FSM) eligibility, 2014

Source: DfE

### Destinations at Key Stage 4 and Key Stage 5

6.12 The vast majority (89%) of young people completing Key Stage 4 in Cumbria in 2012/13 continued in education in 2013/14, with 35% attending an FE College, 42% a school sixth form and 11% beginning an Apprenticeship. The most significant differences between Cumbria and England as a whole are that Apprenticeships are a more common post-16 destination in the county and, conversely, attending a sixth form college is less common.

Table 6.1: Destinations at Key Stage 4: 2012/13 Cohort, Destination in 2013/14			
	Cumbria	North West	England
FE College	35%	37%	34%
School Sixth Form	42%	26%	39%
Sixth Form College	5%	21%	13%
Other FE	7%	4%	4%
Apprenticeship	11%	6%	4%
Employment with Training	1%	1%	1%
Not Sustained	5%	6%	5%
Not Captured	1%	1%	1%
Source: DfE			

#### The Future Schools Cohort

6.13 The Annual School Capacity Survey collects information about local authority maintained primary and secondary schools, academies and city technology colleges, and enables projections to be made about the size of the cohort that will move between primary and secondary schools over the years ahead. Primary-to-secondary projections for Cumbria, based on this survey, are shown in Figure 6.10. The key message is that the cohort is expected to remain relatively static at around 5,100 to 5,200 young people for the full horizon covered by the projections, i.e. to 2018/19.

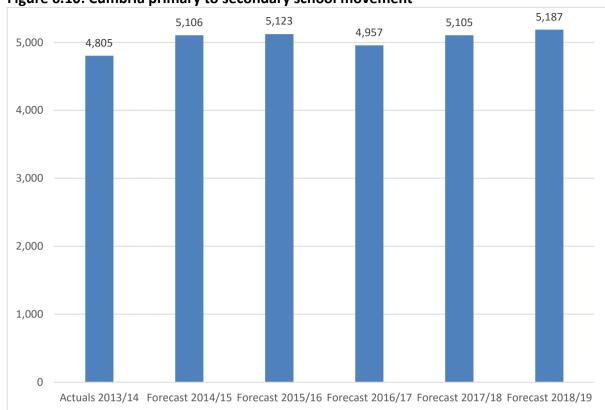


Figure 6.10: Cumbria primary to secondary school movement

Source: Annual School Capacity Survey

6.14 Table 6.2 shows the average projected movement from primary to secondary school by district. Reflecting the population demographics of each area, these range from an average of 464 pupils in Eden to 1,209 in Carlisle.

Table 6.2: Primary to secondary school movement by district		
District	Average pupil movement 2014/15 to 2018/19 inclusive)	
Allerdale	970	
Barrow-in-Furness	740	
Carlisle	1,209	
Copeland	698	
Eden	464	
South Lakeland	917	
Source: Annual School Capacity Survey 2014		

### **Year 11 Cohorts**

6.15 Drawing on the same source (the Annual School Capacity Survey 2014), projections show that the Year 11 cohort in Cumbria, i.e. pupils aged 16, will shrink to a low of around 4,800 pupils in 2017/18 (a reduction of 11% on 2013/14 levels), before increasing to around 5,100 over the following three years.

4.400 5,400 5,600 4,600 4,800 5,000 5,200 Actuals 2013/14 5,429 Forecast 2014/15 5,332 Forecast 2015/16 5,122 Forecast 2016/17 Forecast 2017/18 4,805 Forecast 2018/19 5,106 Forecast 2019/20 5,123 5,094 Forecast 2020/21

Figure 6.11: Cumbria year 11 cohorts

Source: Annual School Capacity Survey

6.16 With the exception of Carlisle, this general pattern is projected to occur in each of the six districts, although in some – most notably Eden and South Lakeland – the reduction to 2017/18 is more pronounced (Table 6.3).

Table 6.3: Projected Year 11 cohorts by district							
District	2013/14	2020/21	% Change to	% Change to			
DISTRICT	Yr 11	Yr 11	2020/21	2017/18			
Allerdale	904	820	-9.3%	-11.7%			
Barrow-in-Furness	959	930	-3.0%	-9.7%			
Carlisle	1,072	1,142	+6.5%	-11.9%			
Copeland	903	820	-9.2%	-11.7%			
Eden	572	472	-17.5%	-17.7%			
South Lakeland	1,019	910	-10.7%	-13.9%			
Source: Annual School Capacity Survey 2014							

#### **Year 13 Cohorts**

6.17 The Year 13 projections (i.e. school leavers aged 18) follow a similar pattern to the Year 11s, the difference being that the smallest cohort is expected to occur in 2019/20 (Figure 6.12). In 2020/21, the cohort is expected to contain a similar number of pupils as in 2013/14 (a reduction of 1.7%).

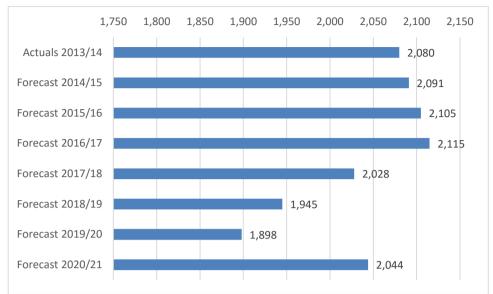


Figure 6.12: Cumbria year 13 cohorts

Source: Annual School Capacity Survey

- 6.18 Only in Barrow-in-Furness is the Year 13 cohort expected to be larger in 2020/21 than in 2013/14 (Table 6.4). In proportionate terms the reduction is expected to be largest in Carlisle, although the absolute change is relatively small (20 pupils in Carlisle and 18 in Barrow-in-Furness, for example).
- 6.19 Note that the Allerdale and Copeland figures are the same. This is because the source data groups these together under a 'West Secondary Planning Area' which, for the purposes of this analysis, has been split equally across the two districts.

Table 6.4: Projected Year 13 cohorts by district						
District	2013/14 Yr 13	2020/21 Yr 13	% Change to 2020/21			
Allerdale	343	339	-1.2%			
Barrow-in-Furness	111	129	+16.2%			
Carlisle	480	460	-4.2%			
Copeland	343	339	-1.2%			
Eden	289	280	-3.1%			
South Lakeland	514	497	-3.3%			
Source: Annual School Capacity Survey 2014						

## **Education and Training**

6.20 The data in this section counts *learning aims* (as opposed to individual learners), reflecting the fact that learners will often be pursuing numerous learning aims within their programme of study. These may be at different levels and cover different subject areas.

6.21 'Education and Training' in this context includes FE provision and workplace learning<sup>14</sup>. Apprenticeships and community learning are considered later in the chapter.

## Starts - Overall and by Sector Subject Area

- 6.22 The Education and Training data and indeed all the data in this section is taken from the Skills Funding Agency's Data Cube. It covers all learners learning within Cumbria (it does not include learners whose registered home address is in Cumbria but who learn outside of the county).
- 6.23 In 2013/14, there were 44,666 starts on Education and Training Learning Aims in Cumbria. Three fifths of these (40%) were in Preparation for Life and Work. The three most common sector subject areas after that noting that none accounted for more than 10% of starts were Health, Public Services and Care, Retail and Commercial Enterprise and ICT (Table 6.5).
- 6.24 Between 2012/13 and 2013/14, there appears to have been a drop of 16% in Education and Training starts in Cumbria. As shown in Table 6.5, the largest reductions, in proportionate terms, have been in:
  - Agriculture, Horticulture and Animal Care: -44% in starts;
  - Education and Training: -25%;
  - Arts, Media and Publishing: -21%
- 6.25 Languages, Literature and Culture and, significantly in the context of the LEP's priority sectors, Science and Mathematics, have shown the largest proportionate increases. This is due largely to the introduction of Government policy which dictates that teenagers in England who fail to achieve at least a grade C in English and maths GCSEs will have to continue studying the subjects until the age of 18.
- 6.26 The large decreases in starts recorded as 'Unknown' and 'Not Applicable' can be explained by the introduction of the Study Programme, which, in general terms, has meant that learners aged 16-18 have fewer recorded learning aims on the ILR. Note than when the data for 'Unknown' and 'Not Applicable' starts are removed from the analysis, the overall reduction in starts between 2012/13 and 2013/14 is 5.7%.

<sup>&</sup>lt;sup>14</sup> On the Data Cube, all ESF funded provision is recorded as 'education and training'. Workplace learning, in the context of the Cube, is only recorded as such where it is funded through the Adult Skills Budget. As such, workplace learning numbers, when considered in isolation, appear very low. For that reason they have been incorporated under the 'education and skills' umbrella heading.

Table 6.5: Starts on Education and Training by Sector Subject Area						
Table 6.5: Starts on Education and	Training by	Sector Su	bject Area			
	2012/13	%	2013/14	%	Change 2012/13- 2013/14	
Health, Public Services and Care	4,636	8.7%	4,019	9.0%	-13.3%	
Science and Mathematics	2,040	3.8%	2,441	5.5%	19.7%	
Agriculture, Horticulture and Animal Care	1,512	2.8%	848	1.9%	-43.9%	
Engineering and Manufacturing Technologies	2,701	5.1%	2,869	6.4%	6.2%	
Construction, Planning and the Built Environment	2,649	5.0%	2,701	6.0%	2.0%	
Information and Communication Technology	2,858	5.4%	3,034	6.8%	6.2%	
Retail and Commercial Enterprise	3,491	6.6%	3,301	7.4%	-5.4%	
Leisure, Travel and Tourism	866	1.6%	800	1.8%	-7.6%	
Arts, Media and Publishing	1,606	3.0%	1,263	2.8%	-21.4%	
History, Philosophy and Theology	260	0.5%	231	0.5%	-11.2%	
Social Sciences	300	0.6%	239	0.5%	-20.3%	
Languages, Literature and Culture	752	1.4%	1,083	2.4%	44.0%	
Education and Training	502	0.9%	377	0.8%	-24.9%	
Preparation for Life and Work	19,813	37.2%	17,982	40.3%	-9.2%	
Business, Administration and Law	2,604	4.9%	2,755	6.2%	5.8%	
U - Unknown	4,879	9.2%	308	0.7%	-93.7%	
X - Not Applicable	1,803	3.4%	415	0.9%	-77.0%	
Grand Total	53,272	100.0%	44,666	100.0%	-16.2%	
Source: Data Cube						

## Starts: by Age and Level

6.27 The majority of the reduction in starts on Education and Training provision in Cumbria is accounted for 16-18 year olds (Table 6.6) although the number of starts by learners aged 19-24 also fell by 15%. Various reasons will have influenced the 16-18 drop, including the effects of the Raising the Participation Age reforms, which have seen more young people choose school or a sixth form college as their post-compulsory education preference.

Table 6.6: Starts on Education and Training by Age at Start							
	2012/13	%	2013/14	%	Change 2012/13-2013/14		
Under 16	358	0.7%	367	0.8%	2.5%		
16-18	25,372	47.6%	17,720	39.7%	-30.2%		
19-24	8,519	16.0%	7,240	16.2%	-15.0%		
25+	19,023	35.7%	19,339	43.3%	1.7%		
Grand Total	53,272	100.0%	44,666	100.0%	-16.2%		
Source: Data Cube							

6.28 The number of starts on entry level learning in Education and Training provides evidence of the important role played by Further Education providers in addressing basic skills and employability needs in Cumbria. Overall, the vast majority of starts (more than three quarters) in both years were at lower levels. There has been a relatively large proportionate increase in starts on Level 4 learning aims, although these only account for a small proportion of provision overall, while the reduction in 'Not Applicable' starts are explained by the aforementioned Study Programme.

Table 6.7: Starts	Table 6.7: Starts on Education and Training by Learning Aim Notional NVQ Level						
	2012/13	%	2013/14	%	Change 2012/13- 2013/14		
Entry level	5,900	11.1%	5,670	12.7%	-3.9%		
Level 1	15,956	30.0%	13,077	29.3%	-18.0%		
Level 2	14,556	27.3%	14,455	32.4%	-0.7%		
Level 3	7,774	14.6%	6,921	15.5%	-11.0%		
Level 4	537	1.0%	701	1.6%	30.5%		
Higher level	108	0.2%	30	0.1%	-72.2%		
Not applicable	8,441	15.8%	3,812	8.5%	-54.8%		
Grand Total	53,272	100.0%	44,666	100.0%	-16.2%		
Source: Data Cu	be						

6.29 The pattern of starts by level varies by learner age (Table 6.8). Level 3 starts accounted for over a quarter of all starts made by 16-18 year olds in 2013/14, compared with 14% of 19-24 year olds and 15.5% across age groups. Learners aged 25+ are notably over-represented at Entry Level and Level 1.

Table 6.8: Education and Training: Starts on Learning Aim Notional NVQ Level by Age at Start								
		2	013/14					
	Under 16	Under 16 16-18 19-24 25+ Tota						
Entry level	37.9%	7.1%	13.2%	17.1%	12.7%			
Level 1	8.4%	26.2%	28.4%	32.8%	29.3%			
Level 2	18.5%	31.6%	34.2%	32.7%	32.4%			
Level 3	0.0%	26.8%	13.9%	6.1%	15.5%			
Level 4 (original)	0.0%	0.6%	3.4%	1.8%	1.6%			
Higher level	0.0%	0.0%	0.1%	0.1%	0.1%			
Not applicable	35.1%	7.7%	6.7%	9.4%	8.5%			
Grand Total	100%	100%	100%	100%	100%			
Source: Data Cu	be							

## **Education and Training Success Rates**

6.30 Note that the data on Education and Training success rates covers classroom based learning only, i.e. it does not include work based learning. In 2013/14, Cumbria's

Education and Training success rates dipped below the national average although, at more than 82%, still remained high.

Table 6.9: Education and Training Success Rates in Cumbria						
	Cumbria	National	Difference (Percentage Points)			
2012/13	84.7%	84.1%	+0.6			
2013/14	82.3%	82.5%	-0.2			
Change (Percentage Points)	-2.4	-1.6	-			
Source: Skills Funding Agency						

# **Apprenticeships**

- 6.31 Apprenticeships are a key part of the Government's aim to upskill the workforce and provide the higher level technical and vocational skills that are needed within the workforce. They also provide a mechanism to develop the skills of those already in work, facilitating progression within the labour market and access to higher paid employment.
- 6.32 In 2013/14, there were 5,500 starts on an Apprenticeship in Cumbria. More than four fifths of these were in four framework areas (Table 6.11):
  - Health, public services and care;
  - Engineering and manufacturing technologies;
  - Retail and Commercial Enterprise;
  - Business, Administration and Law.

Table 6.11: Starts on Apprenticeships in Cumbria – 2013/14						
	2013/14	Percentage				
Health, Public Services and Care	1,110	20.2%				
Science and Mathematics	9	0.2%				
Agriculture, Horticulture and Animal Care	195	3.5%				
Engineering and Manufacturing Technologies	1,127	20.5%				
Construction, Planning and the Built Environment	291	5.3%				
Information and Communication Technology	157	2.9%				
Retail and Commercial Enterprise	1,131	20.6%				
Leisure, Travel and Tourism	129	2.3%				
Arts, Media and Publishing	8	0.1%				
Education and Training	111	2.0%				
Business, Administration and Law	1,232	22.4%				
Grand Total	5,500	100.0%				
Source: Data Cube						

6.33 Between 2012/13 and 2013/14, apprenticeship activity in Cumbria fell by 230 starts, or 4%. This was the result of a 19.7% reduction on Advanced Level Apprenticeships which was greater than the combined increases in intermediate and higher level apprenticeships (Table 6.12).

Table 6.12: Starts by Type of Apprenticeship							
2012/13	%	2013/14	%	Change 2012/13- 2013/14			
3,050	53.2%	3,312	60.2%	8.6%			
2,600	45.4%	2,087	37.9%	-19.7%			
80	1.4%	101	1.8%	26.3%			
5,730	100.0%	5,500	100.0%	-4.0%			
	2012/13 3,050 2,600 80	2012/13 % 3,050 53.2% 2,600 45.4% 80 1.4%	2012/13     %     2013/14       3,050     53.2%     3,312       2,600     45.4%     2,087       80     1.4%     101	2012/13     %     2013/14     %       3,050     53.2%     3,312     60.2%       2,600     45.4%     2,087     37.9%       80     1.4%     101     1.8%			

6.34 The reduction in Advanced Level Apprenticeships was accompanied by a reduction of older (25+) apprentices in Cumbria between 2012/13 and 2013/14, with numbers falling from 2,278 to 1,650. This decline is associated with the introduction (and subsequent withdrawal) of Advanced Learning Loans for learners aged 24+ for Advanced Apprenticeships. It remains to be seen whether the take up of Advanced Apprenticeships will return to previous levels in the future.

Table 6.13: Cumbria Learner Profile by Age: Apprenticeships						
	2012/	/13	2013/	14	Change	
	No.	%	No.	%	%	
Under 16	2	0.03%	1	0.02%	-50%	
16-18	1,643	28.7%	1,984	36.1%	+20.8%	
19-24	1,807	31.5%	1,865	33.9%	+3.2%	
25+	2,278	39.8%	1,650	30.0%	-27.6%	
Total	5,730	100%	5,500	100%	-4%	
Source: Data Cube						

- 6.35 Whilst apprenticeship numbers overall have reduced in Cumbria, it is of note that in some of the subject areas that are closely linked to the LEP's priority sectors, starts rose over that period. For example:
  - 25% increase in starts in agriculture, horticulture and animal care (from 156 to 195);
  - 32% increase in Engineering and Manufacturing Technologies (from 855 to 1,127);
- 6.36 However, in other sectors that that will be important to the LEP's future growth plans, and to the health and wellbeing of its population, participation in apprenticeships has declined. In construction and the built environment, for example, starts fell by 15%, whilst in health, public services and care they fell by 18% (Table 6.14).

Table 6.14: Apprenticeship starts by sector: Change 2012/13 – 2013/14								
	2012/13	%	2013/14	%	Change (%)			
Business, Administration and Law	1,567	27.3%	1,232	22.4%	-21.4%			
Health, Public Services and Care	1,349	23.5%	1,110	20.2%	-17.7%			
Retail and Commercial Enterprise	1,156	20.2%	1,131	20.6%	-2.2%			
Engineering and Manufacturing Technologies	855	14.9%	1,127	20.5%	31.8%			
Construction, Planning and the Built Environ.	344	6.0%	291	5.3%	-15.4%			
Leisure, Travel and Tourism	89	1.6%	129	2.3%	44.9%			
Education and Training	76	1.3%	111	2.0%	46.1%			
Information and Communication Technology	125	2.2%	157	2.9%	25.6%			
Agriculture, Horticulture and Animal Care	156	2.7%	195	3.5%	25.0%			
Arts, Media and Publishing	1	0.0%	8	0.1%	700.0%			
Science and Mathematics	12	0.2%	9	0.2%	-25.0%			
Total	5,730	100.0%	5,500	100.0%	-4.0%			
Source: Data Cube								

## **Apprenticeship Success Rates**

6.37 The overall apprenticeship success rate in Cumbria is significantly higher than the equivalent national figure. Despite a slight reduction from the previous year, in 2013/14 the difference was nearly seven percentage points and had widened from the position 12 months earlier (Table 6.15).

Table 6.15: Apprenticeship Success Rates					
	Cumbria	National	Difference (Percentage Points)		
2012/13	79.3%	73.4%	+5.9		
2013/14	77.8%	71.1%	+6.7		
Change (Percentage Points)	-1.5	-2.3	-		
Source: Skills Funding Agency					

6.38 In 2013/14, Cumbria's average success rate in Apprenticeships was between 3.1 (for 25+) and 8.7 (for 19-24) percentage points above the national average. With the exception of the 16-18 cohort, the gap had widened from the previous year in each age group.

Table 6.16: Apprenticeship Success Rates by Age Group								
	2012	2/13	Difference (Percentage Points)	2013/14		Difference (Percentage Points)	Change 2012/13-2013/14 (Percentage Points)	
Age	Cumbria	National		Cumbria	National		Cumbria	National
All Ages	78.6%	73.3%	+5.3	77.9%	70.9%	+7.0	-0.7	-2.4
16-18	80.3%	73.4%	+6.9	78.8%	72.2%	+6.6	-1.5	-1.2
19-24	82.8%	74.3%	+8.5	82.4%	73.7%	+8.7	-0.4	-0.6
25+	74.4%	72.5%	+1.9	71.0%	67.9%	+3.1	-3.4	-4.6
Source: Skills Funding Agency								

# **Community Learning**

6.39 Community learning includes a range of community-based and outreach learning opportunities for adults. It is primarily provided by local authorities and FE colleges and may include developing new skills, reconnecting with learning and/or preparation for progression to formal learning/courses.

#### **Starts**

6.40 In Cumbria in 2013/14, there were 9,998 starts on community learning, the vast majority of which (96%) were by learners aged 25+. Between 2012/13 and 2013/14, starts fell by 17%, due in part at least to changes in funding and policy for this type of provision.

Table 6.17: Community Learning Starts (by Age at Start)							
	2012/13	%	2013/14	%	Change 2012/13-2013/14		
19-24	447	3.7%	344	3.4%	-23.0%		
25+	11,574	96.3%	9,654	96.6%	-16.6%		
Total	12,021	100.0%	9,998	100.0%	-16.8%		
Source: Data Cube							

## **Sector Subject Areas**

- 6.41 Over two-thirds of community learning provision in 2013/14 was accounted for by the following three sector subject areas (a similar picture to the year before):
  - Arts, media and publishing (38%);
  - Leisure, travel and tourism (17%);
  - Languages, literature and culture (15%).
- 6.42 Notable differences from 2012/13 include a 70% reduction in the number of starts on preparation for life and work course and the 46% in retail and commercial enterprise starts (Table 6.18). Although relative small in absolute terms, there was a

large proportionate increase in the number of starts in engineering and manufacturing technologies.

Table 6.18: Starts on Community Learning by Learning Aim Sector Subject Area						
	2012/13	%	2013/14	%	Change 2012/13- 2013/14	
Arts, Media and Publishing	4,244	35.3%	3,749	37.5%	-11.7%	
Leisure, Travel and Tourism	1,837	15.3%	1,655	16.6%	-9.9%	
Languages, Literature and Culture	1,964	16.3%	1,471	14.7%	-25.1%	
Information and Communication Technology	1,129	9.4%	875	8.8%	-22.5%	
Business, Administration and Law	482	4.0%	470	4.7%	-2.5%	
Health, Public Services and Care	403	3.4%	422	4.2%	4.7%	
Preparation for Life and Work	1,044	8.7%	315	3.2%	-69.8%	
Retail and Commercial Enterprise	501	4.2%	273	2.7%	-45.5%	
Agriculture, Horticulture and Animal Care	155	1.3%	139	1.4%	-10.3%	
Engineering and Manufacturing Technologies	51	0.4%	107	1.1%	109.8%	
History, Philosophy and Theology	128	1.1%	101	1.0%	-21.1%	
Construction, Planning and the Built Environment	48	0.4%	58	0.6%	20.8%	
Science and Mathematics	35	0.3%	26	0.3%	-25.7%	
Social Sciences	0	0.0%	25	0.3%	0	
X - Not Applicable	0	0.0%	312	3.1%	0	
Grand Total	12,021	100%	9,998	100%	-16.80%	
Source: Data Cube						

## Levels

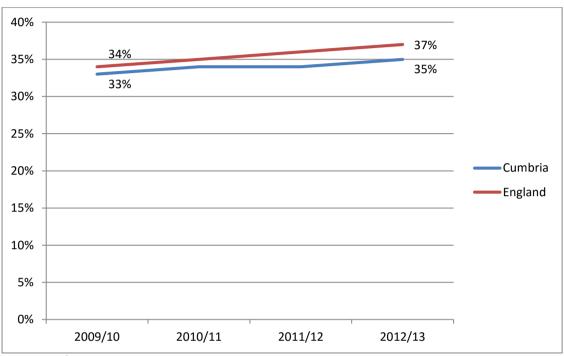
6.43 As would be expected given that most community learning does not lead to a formal qualification, the vast majority (97%) of starts do not correspond to a NVQ level (Table 6.19).

Table 6.19: Community Learning Starts by Learning Aim Notional NVQ Level						
	2012/13	%	2013/14	%		
Entry level	256	2.1%	312	3.1%		
Level 2	6	0.0%	0	0.0%		
Not applicable	11,759	97.8%	9,686	96.9%		
Grand Total	12,021	100.0%	9,998	100.0%		
Source: Data Cube						

# **Higher Education**

6.44 The proportion of young people progressing from maintained schools in Cumbria to higher education by the age of 19, at 37%, sits below the national average of 39% (Figure 6.13).

Figure 6.13: Percentage of 15 year olds pupils in maintained schools who enter HE by age 19



Source: BIS

6.45 In Cumbria, there is a larger gap between the progression rates for free school meals (FSM) and non-FSM pupils (23 percentage points) than is the case across England as a whole (17 percentage points). In Cumbria, 13% of pupils with free school meals entered HE in 2012/13, compared with 37% of those not in receipt of free school meals (Table 6.20).

Table 6.20: Estimated percentage of students who entered HE (2012/13)							
	FSM	Non-FSM	Gap (pp)	All	% of Pupils With FSM		
Cumbria	13%	37%	24	35%	9%		
NW	20%	42%	22	38%	16%		
England	23%	40%	17	37%	13%		
Source: BIS							

### Students Registered with HEIs in Cumbria

### Providers in Cumbria

6.46 In 2012/13, there were just over 5,000 full-person equivalent (FPE) students on HE provision in Cumbria. The main provider of HE provision in Cumbria is the University of Cumbria, accounting for 79% of FPE students on HE provision in 2012/13 (Figure 6.14). Although the numbers of FPE students are smaller, it is evident that Furness College and Lakes College are also key providers of HE provision in Cumbria, as are Carlisle College and Kendal College.

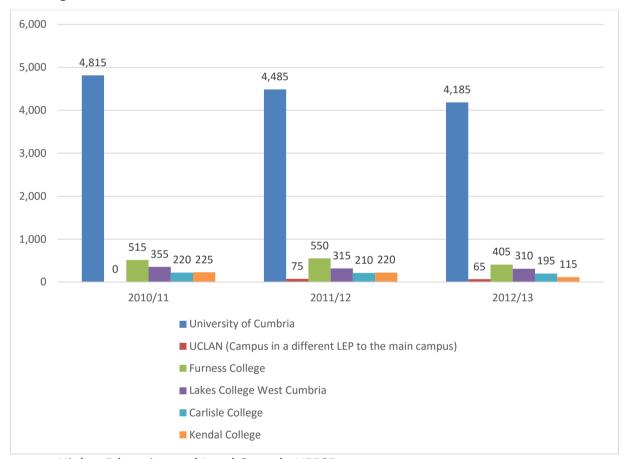


Figure 6.14: Number of FPE Students in HE Providers in Cumbria

Source: Higher Education and Local Growth, HEFCE

#### Type of HE Provision

- 6.47 Over two-thirds (68%) of HE students in Cumbria are first degree undergraduate students, as is the case nationally. The proportion of students studying other types of undergraduate degrees and foundation degrees in Cumbria is higher than it is nationally. In particular, Foundation Degree students account for 14% of all HE students in Cumbria, whereas nationally they account for just 2%.
- 6.48 Postgraduate students (taught and research) are under-represented in Cumbria (10% and <1%), compared with the national picture (19% and 5%). See Figure 6.15.

19% Postgraduate Taught 10% 5% Postgraduate Research 6% Other Undergraduate 8% Foundation Degree 14% 68% First Degree 68% 0% 30% 40% 100% 10% 20% 50% 60% 70% 80% 90% ■ England ■ Cumbria

Figure 6.15: HE Students Taught at HEIs in Cumbria and HE Students Taught at HEIs in England (2012/13)

Source: HESA

#### Characteristics of HE Students in Cumbria

## Age

6.49 In 2012/13, the majority (63%) of undergraduate FPE students at HEIs in Cumbria were under 21, with 11% aged 21-24 and 26% aged over 24. At FE colleges in Cumbria, the age profile is different, with an even split between FPE students aged under 21 (39%) and over 24 (38%) studying HE qualifications, and a further 23% aged 21-24. This reflects the fact that most learners undertaking HE qualifications in the county's FE colleges are in employment.

100% 90% 80% 70% 63% 60% ■ FEC 50% 39% 38% ■ HEI 40% 26% 30% 23% 20% 11% 10% 0% Under 21 21-24 Over 24

Figure 6.16: Percentage of undergraduate FPEs by age on entry at a HEI or FE College in Cumbria (and studying for an HE qualification) 2012/13

Source: Higher Education and Local Growth, HEFCE

#### Domicile

6.50 UK domiciled students account for the vast majority of FPE students studying HE qualifications in HE (97.6%) and FE (99.8%) Students undertaking higher education courses at FE colleges are very rarely from outside the UK, and only 2% are from outside the North West region. Higher Education Institutions in Cumbria (primarily the University of Cumbria) attract students from across the UK, with 40% coming from outside the North West.

97.8% 100% 90% 80% 70% 57.7% 60% ■ FEC 50% 39.9% HFI 40% 30% 20% 10% 2.0% 0.1% 1.6% 0.1% 0.8% 0% ΕU Home region Other UK Rest of the World

Figure 6.17: Region of domicile of FPE students registered at a HEI or FEC in Cumbria (and studying for a HE qualification) 2012/13

Source: Higher Education and Local Growth, HEFCE

## Subjects Studied by HE Students in Cumbria

- 6.51 The subject areas differ significantly between the HE provision delivered in HEIs in Cumbria and the HE provision delivered in FE colleges. The majority (73%) of HE provision in HEIs was, in 2012/13, accounted for by the following subject areas:
  - Creative Arts and Design (22%);
  - Subjects Allied to Medicine (16%);
  - Social Studies (14%);
  - Initial Teacher Training (14%);
  - Biological Sciences (9%).
- 6.52 These subject areas account for a much smaller proportion of HE provision in FE colleges, with the exception of Initial Teacher Training, which is the subject area where the proportion of students is closest between HE and FE providers (14% compared with 9%).
- 6.53 In contrast, in FE colleges, engineering and technology accounts for 42% of all HE provision (and less than 1% of HE provision in HEIs). Business and administrative studies, computer science and education are also popular subjects for HE provision in FE colleges (and less so in HEIs).

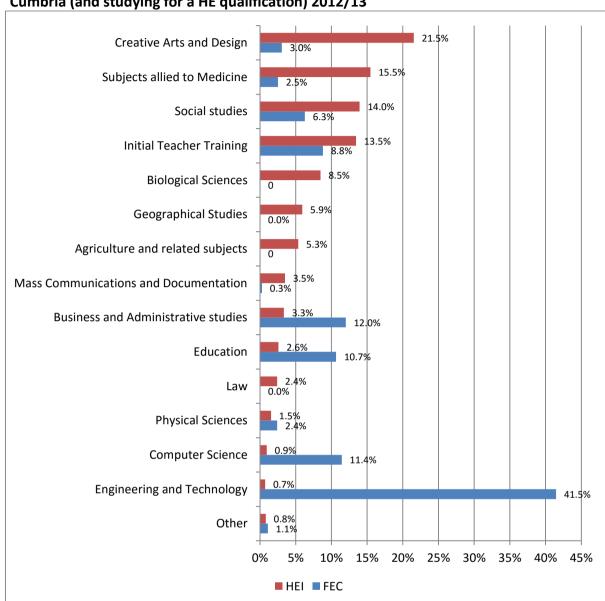


Figure 6.18: Percentage of HE student (FTEs) by subject registered at a HEI or FEC in Cumbria (and studying for a HE qualification) 2012/13

'Other' includes: Mathematical Science, Architecture, Building and Planning, and Historical and Philosophical Studies.

Source: Higher Education and Local Growth, HEFCE

#### **Destinations of HE students studying in Cumbria**

### Destinations

6.54 Of the first degree students graduating from HEIs in Cumbria in 2012, nearly three-quarters (72%) went into work. Just under than 10% were unemployed and a similar proportion went onto work and study. The remainder went onto further study (6%) and for 4% the destination was classed as 'other'.

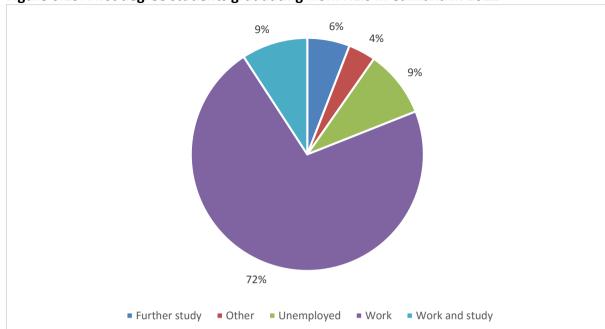


Figure 6.19: First degree students graduating from HEis in Cumbria in 2012

Source: Higher Education and Local Growth, HEFCE

## **Employment Location of Graduates**

6.55 The majority (66%) of employed first degree graduates from HEIs in Cumbria in 2012/13 went to work in the North West (including in Cumbria).

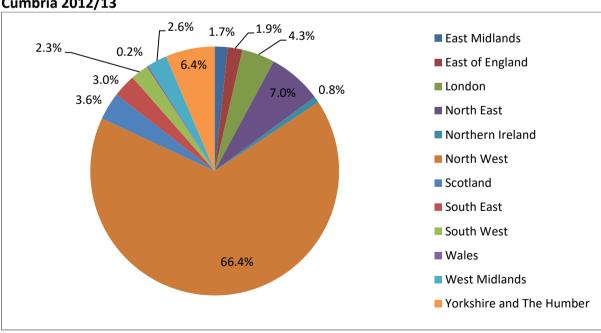


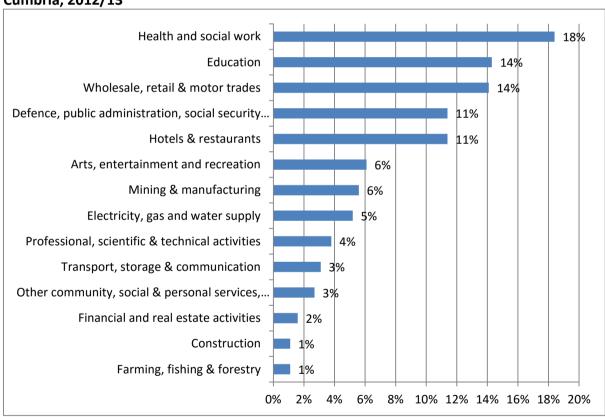
Figure 6.20: Employment location (region) of first degree graduates from HEIs in Cumbria 2012/13

Source: Higher Education and Local Growth, HEFCE

## Sector

- 6.56 The following five employment sectors account for over two-thirds of first degree graduates from HEIs in Cumbria:
  - Health and social work (18%);
  - Education (14%);
  - Wholesale and retail (14%);
  - Defence, public administration, social security and international organisations (11%);
  - Hotels & restaurants (11%).

Figure 6.21: Sectoral employment destinations of first degree graduates from HEIs in Cumbria, 2012/13



Source: Higher Education and Local Growth, HEFCE

## 7 REVIEW OF FACILITIES AND CAPACITY

### **Summary of Key Points**

- FE colleges and key private training providers in Cumbria were invited to
  contribute to the development of this evidence base by providing information
  about their facilities, equipment and capital investment plans across a range of
  curriculum areas. A partial response was received, and as such the results give
  only a partial assessment, although a number of common themes emerge.
- Engineering and manufacturing technologies: there has been considerable recent investment in this curriculum area. Workshops, classroom facilities and equipment are, in many cases, reported to be in excellent condition, although they have limited expansion capacity. Planned investments centre on the installation of new equipment such as laser cutters and CNC machines. More substantial capital investments are linked to external developments such as the National College for Nuclear and the LEP's capital investment priorities.
- Science and mathematics: science and mathematics facilities amongst providers
  in Cumbria include dedicated laboratories, facilities in forensic science, bio
  medical science and specialist online learning facilities for mathematics and
  statistics. They are rated by providers as either "as new" or "sound" and have
  some, albeit limited, expansion capacity. It is anticipated that plans for the
  National College for Nuclear will enhance the science offer and facilities of certain
  providers
- ICT: Providers in Cumbria have IT infrastructures that include digital and audio studios, coding and design software, 3D projectors, laptop banks and specialist software capabilities. Providers typically rate them as either "as new" or "sound" and budget each year for a refresh of capitalised equipment. Repeat advertising is sometimes required for ICT lecturing posts.
- Construction, planning and the built environment: providers indicate that
  construction related facilities are generally very good and offer industry relevant
  provision across a range of disciplines. Although providers do not have definite
  plans to make further capital investments, there is interest in expanding capacity
  to meet the demands of new infrastructure projects. It is reported that good
  quality, technically qualified lecturers in construction are difficult to recruit due to
  the high salaries offered by industry.
- Leisure, Travel and Tourism: leisure and sports facilities (which were the focus of
  the providers' responses in this curriculum area) vary considerably, with some
  providers owning an array of multi-use facilities and others hiring local leisure
  centres. None of the providers that responded has any definite plans to expand
  or upgrade their facilities, although one provider intends to re-enter the travel
  and tourism sector when appropriate.

### Introduction

- 7.1 The FE colleges and key private training providers in Cumbria were invited to contribute to the development of this evidence base by providing written information about their facilities and equipment (scale and condition), staffing (including recruitment difficulties and skills gaps) and capital investment plans/priorities.
- 7.2 The exercise concentrated specifically on the following curriculum areas, chosen because of their alignment with the SEP and, in the case of construction and ICT, recognition of likely future increases in demand:
  - Engineering and manufacturing technologies;
  - Construction, planning and the built environment;
  - Information and communications technology;
  - Leisure, travel and tourism;
  - Agriculture, horticulture and animal care.
- 7.3 The exercise did not generate a response from all of the organisations that were invited to participate and as such the results give only a partial assessment, although a number of common themes and message do emerge.
- 7.4 The following sections of this chapter summarise those themes and messages, structured by curriculum area. In the interests of confidentiality, individual organisations are not named.

# **Engineering and Manufacturing Technologies**

## **Facilities**

- 7.5 There has been considerable recent investment in this curriculum area by skills providers in Cumbria. The information submitted for this exercise highlighted, amongst other things, state of the art engineering workshops and classroom facilities, high quality CNC lathes and milling machines, CAD suites, pillar drills, extensive machining and welding shops, control and instrumentation equipment and the largest Nuclear Big Rig in the UK. Engineering and manufacturing provision in the county is available from Level 1 through to post-graduate level.
- 7.6 The majority of the facilities described by providers were categorised as either 'as new' or 'sound'. Providers report that the facilities are either at, or are close to, full capacity.

## **Future Plans**

7.7 Planned investments in estates and facilities in engineering and manufacturing appear to concentrate on the installation of new equipment such as laser cutters and five axis CNC machines. More substantial capital investments were also identified

but their feasibility is linked to external developments such as the National College for Nuclear and the LEP's capital investment priorities.

#### Staff Recruitment

- 7.8 Providers have encountered difficulties in recruiting skilled engineering and manufacturing lecturers, particularly in civil engineering, engineering project management and welding and fabrication.
- 7.9 There are various reasons for this, including, for some providers, proximity to Sellafield, the wider appeal of the county as a place to live and work and a national shortage of high quality candidates. One of the providers explained that for hard to fill posts, they offer enhanced salaries through a hard-to-recruit allowance.

## **Science and Mathematics**

#### **Facilities**

- 7.10 Science and mathematics facilities amongst the providers that contributed to this exercise include dedicated laboratories (e.g. for chemistry, biology and physics), facilities in forensic science, biopharma manufacturing and bio medical science, specialist online learning facilities for mathematics and statistics and general teaching and learning space for mathematics, some of which can accommodate hundreds of learners. In addition, science and mathematics provision is also integrated within other curriculum areas, e.g. engineering and manufacturing technologies.
- 7.11 The facilities in this curriculum area are rated by providers as either 'as new' or "sound". Providers report some scope to accommodate more learners within current facilities, although not on any significant scale.

#### **Future Plans**

- 7.12 One provider is working with several partners to develop and extend its existing chemistry facilities. Another forecasts the need for additional bespoke laboratory space if demand in the sciences continues to grow as expected, and a third is keen to expand their provision and facilities in life sciences in response to local industry need.
- 7.13 It is also anticipated that plans for the National College for Nuclear will enhance the science offer and facilities of certain providers.

#### Staff Recruitment

7.14 Providers have experienced difficulties recruiting high quality mathematics tutors.

## **Information and Communications Technology**

#### **Facilities**

7.15 Providers in Cumbria have IT infrastructures, resources and facilities, both general and specific, that support learning from entry levels through to higher level skills. These include, although are by no means limited to, digital and audio studios, coding and design software, 3D projectors, laptop banks, Mac suites, Cisco networking suites and specialist software capabilities. They are rated by providers as either being 'as new' or 'sound'.

#### **Future Plans**

- 7.16 Providers did not identify any planned investments in their ICT capabilities over the short term, although each does budget for an annual refresh of its capitalised equipment.
- 7.17 There is also some interest in exploring the feasibility of the FE colleges moving to a shared IT network in order that a collaborative county-wide managed service would be possible.

## **Staff Recruitment**

7.18 Providers report that repeat advertising is sometimes required for ICT lecturing posts.

Despite offering a hard-to-recruit allowance, some providers still encounter difficulties and do not consistently receive applications from quality candidates.

## Construction, Planning and the Built Environment

### **Facilities**

- 7.19 The information submitted by providers suggests that the facilities and learning environments for construction, planning and the built environment are very good. Over the past six years, at least two new construction centres have opened at colleges and providers highlighted their state of the art facilities across a range of areas, including:
  - Woodworking and joinery;
  - Brickwork;
  - Gas and plumbing;
  - Electrical installation;
  - Welding.
- 7.20 Equipment available to learners includes mortal mills, high specification CNC machines, panel saws, band saws, drill posts, spindle tables and moulding cutters. The vast majority of the facilities that featured in the providers' returns were rated 'as new'.

#### **Future Plans**

7.21 Although none of the providers have definite plans to make further investments in their capital infrastructure in this curriculum area, there is interest in expanding capacity to meet the demands of forthcoming infrastructure projects.

#### Staff Recruitment

7.22 Providers report that good quality, technically qualified lecturers in construction are difficult to recruit due to the high salaries offered by industry. Roles requiring expertise in civil engineering, construction project management, electrical installation and plumbing were highlighted as being especially difficult to fill. At least one of the providers has offered financial incentives to overcome the recruitment challenges.

## Leisure, Travel and Tourism

#### **Facilities**

- 7.23 Providers responding to this exercise gave information about leisure and sport provision/facilities but not about travel and tourism. Travel and tourism provision does exist in the county, but not amongst the providers that responded.
- 7.24 Leisure and sports facilities vary considerably across FE providers. These range from providers with comprehensive facilities (multi-use sports halls, 3G outdoor pitches etc.) and dedicated teaching classrooms, to others that have to hire local leisure centres for certain activities to ensure that learners have access to the experiences they require to complete their qualifications. Providers with their own facilities rated these either as 'as new' or 'sound'.

#### **Future Plans**

7.25 None of the providers that responded has any definite plans to expand or upgrade their facilities relating to the provision of leisure and sport. One provider intends to re-enter the travel and tourism sector when appropriate and would like to include adventure tourism and outdoor education within that offer.

#### Staff Recruitment

7.26 No issues were identified by the providers in relation to the recruitment of staff in this curriculum area.

## **Agriculture, Horticulture and Animal Care**

7.27 Only one of the providers reported any provision in this curriculum area and this centred on animal care. This provision is delivered from a recently refurbished building, which is split into units to support animals, exotics, rehabilitation, intensive care and quarantine. There is also a fully equipped x-ray and operating theatre supported by two veterinary surgeons, veterinary nurses and apprentices.

- 7.28 The provider plans to introduce Level 4/5 technical and professional higher level courses in this curriculum area, including Higher and Degree Level apprenticeships. Were funding available, they would be keen to expand their current facilities to incorporate more learners at all levels and to enable additional courses to be provided.
- 7.29 No issues were reported with regard to staff recruitment.

# 8 IN CONCLUSION

# The Population Challenge

- 8.1 The most significant challenge that Cumbria faces in meeting its economic aspirations is that its working age population is shrinking and is forecast to continue shrinking over the next 20 years. This is set against a backdrop of relatively low unemployment, high levels of replacement demand and a significant number of new jobs that are expected to be created through nuclear new build and other major investments.
- 8.2 There is a pressing need to address current migration patterns, to attract new skilled labour and to ensure that Cumbria is seen as somewhere where quality of life is matched by quality of career opportunity. This will require a holistic, co-ordinated approach that encompasses housing, public services, connectivity and road and rail infrastructure, all of which have been highlighted by employers as weaknesses and barriers to recruitment.
- 8.3 The nuclear new build programme will offer new employment opportunities on a scale rarely seen in the county and as such has the potential to act as a fantastic stimulus to the local economy. Population trends and the risk of displacement in other sectors (where employers already cite low applicant numbers as a major issue in filling vacancies) must nonetheless be considered when targets are set for the proportion of new jobs that will be filled by the indigenous population.

### **Workforce Skills**

- 8.4 Skills gaps are more common in Cumbria than across England as a whole and Cumbrian employers are less likely to provide formal training opportunities for their staff, despite the majority of them identifying the need to upskill their workforce. While improvements have been made over the past 10 years, it also remains the case that a below average proportion of the workforce has higher level skills.
- 8.5 Supporting the development and improvement of workforce skills across the county, where market failures currently exist, is therefore a sensible priority for the LEP. The evidence suggests that a series of sector specific interventions may be required alongside programmes targeting cross-sectoral or enabling skills, including those linked to various leadership and management disciplines.
- 8.6 Employers are keen that workforce development interventions in the future respond to and meet their needs. Establishing a delivery model that calls on the expertise and insight of employer panels or forums to ensure strong alignment between demand and supply may therefore be advisable. The LEP should also consider how to simplify the interface between the skills system and employers, many of whom reportedly find it confusing and time consuming.
- 8.7 In the light of the working age population issue and migration trends, the potential value of reskilling initiatives such as those aimed at people being made redundant should be noted, especially where they can be focussed on job opportunities in

growth sectors. The LEP may also wish to consider providing retraining support for employers who lose staff to the major infrastructure programmes and who may struggle to successfully backfill.

## **Unemployment and Underemployment**

- 8.8 Cumbria has relatively low unemployment with claimant patterns that typically mirror national activity but on a lesser scale. However, unemployment remains above average in Barrow-in-Furness (the location of BAE) and Copeland (the location of both Sellafield and the proposed nuclear new build at Moorside). Industry focussed unemployment initiatives, such as Sector Based Work Academies, could therefore fill a worthwhile purpose in these parts of the county. A drive to involve more employers and younger people in Traineeships should also be considered to help provide pathways into employment in those areas where new vacancies are expected.
- 8.9 Employers in Cumbria frequently say that they would like job applicants and current employees to have stronger skills in English and maths. It is also recognised that low skills in these areas can act as a barrier to progression and perpetuate underemployment. Supporting adults to obtain skills in English and maths that enable them to progress to qualifications at Levels 2 and 3 should therefore be considered by the LEP, as should supporting adults to achieve a first full Level 2 qualification.

# **Preparing the Next Generation**

- 8.10 Apprenticeships have been a success story in Cumbria over recent years, both in terms of participation and success rates. Research has also shown them to be beneficial to the economy, employers and apprentices themselves.
- 8.11 The foundations on which to generate further growth in apprenticeships are therefore solid, although given the already high rates of participation in the county, a programme of interventions is likely to be needed to stimulate further take-up. Engaging large employers in driving growth, supporting smaller businesses to offer apprenticeships and co-ordinating communications and marketing activities may all be appropriate.
- 8.12 Ensuring that skills providers, parents and young people have access to up-to-date, impartial information about jobs and careers in industry sectors across Cumbria will also be important. There is a strong drive from both employers and the skills system to enable this to happen. To help ensure that it does, and that it builds on good practice already taking place in the county, LEP investment in a coherent, complementary careers information, advice and guidance offer would be justified. This would seek to align the work of Enterprise Advisors, Careers and Enterprise Company, the Cumbria Careers and Enterprise Education Group, the Skills Funding Agency and others active in this space.

# **Building Capacity in the Skills System**

- 8.13 The skills system in Cumbria has a number of strengths. GCSE performance is above the national average, as is participation in apprenticeships and apprenticeship success rates. FE and work based learning success rates are, overall, very close to the national average.
- 8.14 The county does however have a relatively small outturn of school leavers each year and whilst many young people go to university, relatively few return to the county to live and start a family. In addition, the higher education STEM offer is limited considering the growth that is expected in STEM related industries in Cumbria over the coming years.
- 8.15 Emerging evidence (e.g. that gathered by CoNE) also points to forthcoming capacity issues in the skills system. These are likely to be most pressing in nuclear operations and civil engineering construction, where the provider base lacks capacity to respond to increases in demand. Further analysis of these issues is being planned by CoNE and will help to provide more precision on both the scale and composition of the challenge and the most appropriate response.
- 8.16 Investments could also be justified to support the LEP's other priority sectors, e.g. by upgrading and improving the industry relevance of facilities in advanced manufacturing, logistics and the visitor economy.