Solent LEP Skills Strategy Evidence Base Report

Produced by Marchmont Observatory
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GLOSSARY

ABI	Annual Business Inquiry
ALPHI	Association of Learning Providers for Hampshire and the Isle of Wight
BIS	Department for Business, Innovation and Skills
CIPD	Chartered Institute of Personnel Directors
CSR	Comprehensive Spending Review
DWP	Department of Work and Pensions
ESF	European Social Fund
ESS	Employer Skills Survey
EU	European Union
FE	Further Education
FSB	Federation of Small Businesses
FTE	Full time equivalents
GDP	Gross Domestic Product
GVA	Gross Value Added
HE	Higher Education
HNC	Higher National Certificate
HND	Higher National Diploma
HtFV	Hard-to-fill Vacancy
IAG	Information, Advice and Guidance
ICT	Information and Communications Technology
IMD	Index of Multiple Deprivation
IoD	Indices of Deprivation
IT	Information Technology
JCP	Jobcentre Plus
NEET	Not in Education, Employment or Training (Young People)
NVQ	National Vocational Qualifications
ONS	Office for National Statistics
PUSH	Partnership for Urban South Hampshire
SFA	Skills Funding Agency
SME	Small and Medium-Sized Enterprises
SSA	Sector Skills Assessment
SSC	Sector Skills Council
SSV	Skills Shortage Vacancy
STEM	Science, Technology, Engineering and Maths
UK	United Kingdom
UKCES	UK Commission for Employment and Skills
WBL	Work-based Learning

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Solent Skills Strategy Steering Group:

Angela Alderman, Assistant Director, BIS South Central & West
Amanda Beable, Marine Growth Sector Manager, Hampshire County Council
Denise Edghill, Skills Lead for City Deal and ex officio support to Solent ESB
Graham Ellis, Board Member, Solent ESB
Sarah-Jane Hadley, Head of Marketing & Recruitment (UK), Astrium Ltd
Anne-Marie Mountifield, Solent LEP Chief Executive
Paul Quigley, Visiting Business Entrepreneur, Portsmouth University
Nasser Siabi, Private sector representative from Micro link PC Limited
Dee Williams, British Marine Federation
Fiona Wilmot, Board Member, Solent ESB

Telephone interviewees:

Chris Allington, Solent LEP and Deputy Chair of ESB
David Arrell, Darrell McDermott
Dr Richard Blackwell, DVC, Southampton Solent University
Bob Hiskey, Chair of ALPHI
Cath Longhurst, Chief Executive, Portsmouth and SE Hampshire EBP
Sarah McCarthy-Fry, Chair of ESB
Dr Alistair McDermott, Director of Innovation Services, Portsmouth University
Ian MacGillivray, Institute of Engineering and Technology
Angela Wright, Chief Executive, Solent EBP

Marchmont Observatory Project Team

Chris Evans, Director
Ben Neild, Assistant Director
Hilary Stevens, Senior Analyst
Andy Dean, Co-ordinator
Kevin Aggett, Research Associate
Hilary Todd, Administrator

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1. INTRODUCTION

1.1 Aim of the report

Solent Local Enterprise Partnership (Solent LEP) has set ambitious targets for growth[1]. Achieving those stretching targets requires an employment and skills system which meets the needs of employers both now and in the future. To achieve results, Solent LEP is committed to working together with employers and skills providers to ensure that, over time, the dialogue between the two is improved and achieves a more responsive and sustainable system, which will deliver economic growth and a more balanced economy.

This report provides the evidence base for the *Solent LEP Skills Strategy,* which aims to influence the delivery of skills which meet the needs of individuals and businesses in the Solent LEP area. This report has been commissioned by the Solent LEP and produced by the Marchmont Observatory at the University of Exeter. This evidence base draws extensively on existing research and strategies, on a detailed review of the data and on the views of a wide range of partners and stakeholders.

The *Solent LEP Skills Strategy* sets out the skills needs and priorities for the Solent area; allows national and European funding to be effectively targeted on local priorities; and can be used as a basis for ensuring that provision reflects local labour market requirements. It also forms part of the wider Solent LEP *Strategic Economic Plan*.

Developing a world-class workforce is central to Solent's growth ambitions and is a key strategic priority within *Transforming Solent*, *Strategic Economic Plan.* To that end, Solent LEP has been successful in securing investment funding from a range of sources, and is committed to ensuring that these public funds are properly integrated and deployed to maximise private sector leverage and investment. The *Skills Strategy* is therefore essential not only in identifying priorities for collaborative action, but will drive the future investment strategy and the deployment of resources in support of local growth. These include the *Southampton and Portsmouth City Deal*, the *Solent EU Strategic Investment Funds Strategy 2014–20* and the forthcoming *Local Growth Deal*.

Ultimately, the success of the strategy will be measured by improvements in performance. Solent will need to improve the skills of the current and future workforce, ensuring that the labour market works more effectively and efficiently. But the success of the *Skills Strategy* will not simply be a case of measuring indicators; it will be measured by the extent to which it brings together Solent businesses, universities, learning providers and public agencies into a joint effort.

[1] *Transforming Solent, Strategic Economic Plan*, 2014-20, Solent LEP December 2013.

1.2 Background

LEPs have been given a clear task by the Government - to provide the strategic leadership to set economic priorities and create the right environment for business and growth. LEPs therefore have as their focus measures to create jobs, improve business conditions and generate growth.

Current Government policies on employment and skills emphasise the need to use increasingly scarce resources in a smarter way and to move to a more 'demand-led' system, where employers and individuals have a greater ownership of the skills agenda. This is intended to strengthen the link between skills provision and the current and future requirements of the economy.

As well as promoting a demand-led approach, Government strategy stresses the importance of localism: the idea that local people and businesses know best what is needed in their area. This move to localism has resulted in LEPs being given increasing strategic responsibility for economic development in their areas. One new responsibility is the requirement on LEPs to consult with partners and produce plans for local growth including skills. LEPs have also been given responsibility for setting strategic priorities for the 2014-2020 European Structural & Investment Funds (SIF), including European Social Fund (ESF) priorities and the local growth deal.

The *Solent LEP Skills Strategy* and evidence base have been commissioned by Solent LEP and have been overseen by the Solent Employment and Skills Board (ESB) and a project Steering Group.

1.3 Evidence Base

The research and analysis for this evidence base was carried out between October and November 2013, although findings from the earlier European SIF consultation process, which began in the summer of 2013, have been utilised in developing the *Skills Strategy*. This Evidence Base Report draws together information from:

- Analysis of a range of data sources, including use of forecasts from Working Futures and Oxford Economics, separately commissioned by Solent LEP. Data on post-16 learning provision was made available by the Skills Funding Agency (SFA), and Higher Education Statistical Agency (HESA) data was used to develop a picture of Higher Education (HE) provision in the area.
- A range of reports on Key Sectors which draws on a wide range of evidence from Sector Skills Councils (SSCs) and the UK Commission for Employment and Skills (UKCES).
- An online survey which secured responses from 34 partners, and interviews with nine partners.
- A series of consultation events, working groups and meetings took place with Solent Further Education (FE) colleges, representatives of PUSH (Partnership for Urban South Hampshire) local authorities with responsibility for skills and employment, meetings of the Solent

Employment and Skills Board (ESB) and a meeting with the Association of Learning Providers for Hampshire and the Isle of Wight (*ALPHI*).

- This evidence report also draws on the extensive consultation that underpinned the development of the *European Union Structural and Investment Funds 2014-2020 Draft Strategy*.

1.4 Report Structure

This *Solent Skills Strategy Evidence Base* is structured as follows:

In Section 2, we look at the policy and economic context.

In Section 3, we look at the demand side of the economy, identifying the nature of employment and the demand for skills.

In Sections 4 to 6, we examine the supply of labour and skills available in the Solent LEP economy and the flow of new skills into the economy due to new entrants into the labour market and skills development within the exiting workforce.

Section 7 looks at data on provision and draws together the analysis of demand and supply to examine issues and skills gaps.

In Section 8, we look at some of the skills needs of a small selection of priority sectors.

In Section 9, we look at the issue of raising employer investment in skills.

In Section 10, we consider the key issues emerging from the data analysis and feedback from partners and stakeholders.

2. CONTEXT

2.1 National Economic Context

The last few years have witnessed unprecedented economic and political change. There is a need to understand better growth factors, sectors and opportunities, and link this to demand for new and emerging skills.

The Solent LEP economy will be strongly influenced by the national economic and policy context. The adverse economic conditions and financial crisis continue but with signs of recovery. The negative impacts of the downturn - weak demand, constrained access to finance and low levels of investment - are still being felt by businesses in the Solent area. The Coalition Government's approach continues to be spearheaded by its deficit reduction plans and monetary activism. As the same time, a range of reforms seek to support businesses and create jobs.

The 2013 Chancellor's Budget saw the Office for Budget Responsibility (OBR) halved the forecast growth for 2013 from the 1.2% it had predicted in December 2012 to 0.6%. However, the UK economy has gained momentum through 2013[2], GDP growth has exceeded forecasts, and there are early signs that growth is balanced across the main sectors of the economy. The factors which weighed on UK growth between 2010 and 2012 – the Euro crisis, commodity price inflation and the impact of the financial crisis – are abating, but external risks remain.

The UK labour market has continued to perform better than forecast, with a net increase of over 1.4 million jobs in the private sector since the first quarter of 2010. Employment in the three months to September 2013 was at its highest ever level, and unemployment has continued to fall. Business investment has been weak, but there are signs of a return of the confidence needed to support investment decisions and improve productivity.

2.2 Context

The national policy environment for skills and employment has also changed markedly in recent years.

2.2.1 The Growth Agenda

Economic growth is a clear government priority and this emphasis is likely to gather strength as we enter the second half of the Government's current term in office. Significant changes have taken place in the external environment, and in terms of the infrastructure and funding in support of local and regional economic growth.

[2] 2013 Chancellor's Autumn Statement, HM Treasury

This has been underpinned by the creation of a single Local Growth Fund, some of which will be allocated, and a proportion, subject to competition. The LEP will soon be producing a *Strategic Economic Plan* to underpin the local growth deal and strategy for the European Union (EU) Structural and Investment Funds (SIF) in England.

2.2.2 Skills Strategy

Skills for Sustainable Growth (2010) set out the Government's vision for the Further Education (FE) and skills system, closely followed by the publication of *New Challenges: New Chances (2011).* At the heart of the strategy is the expansion of Apprenticeships, including expanding the numbers of adult Apprenticeships available as well as improving the Apprenticeship package, so that Level 3 (A Level equivalent) becomes the level to achieve. Higher Apprenticeship provision was also expanded (see Richard's Review below). The Growth Review has confirmed the need to focus on Science, Technology, Engineering and Mathematics (STEM), as well as English and Maths and Apprenticeship delivery.

Entitlement to free training for a first full Level 2 qualification for those over the age of 25 has gone. Now this will have to be co-funded. And from 2013/14, those over the age of 24 will need to take out a loan in order to secure their first Level 3. A major question for providers is what impact will this have on the participation of the 25+ cohort in training?

Finally, colleges and training providers are being given greater freedoms to respond to learner demand and there is a recognition that local government and LEPs have a role in directing and informing where government money is invested. Government is developing a single funding system for adult skills for full implementation from the 2013/14 academic year. The Department for Business, Innovation and Skills (BIS) is working closely with the Department for Education (DfE) to ensure that the full benefits of simplification are achieved for FE colleges and training organisations delivering for 16-18 and 19+ learners.

The Government is also streamlining its management of the EU Common Strategic Framework funds in England, aligning priorities on the basis of the plans led by LEPs. A further £350 million will be available for the Regional Growth Fund, to provide support for jobs and growth across England until the end of this Parliament and increase funding for the Employer Ownership Pilot by £90 million, from £250 million to £340 million, to enable more employers to shape training provision directly.

The Autumn Statement 2013 set out further actions in relation to young people. It acknowledges that equipping young people with the skills to succeed in this evolving job market is crucial to securing UK global competitiveness in the recovery. The Government will support youth employment and improving basic skills, including making it cheaper to employ young people and investing to reduce the number of young people who are Not in Education, Employment or Training (NEET). The Autumn Statement 2013 abolishes employer National Insurance Contributions (NICs) for under-21 year olds earning less than £813 a week, equivalent to the point at which higher rate tax is charged, from April 2015. It will apply to both existing employees and to employers taking on new staff. No individual's state pension

entitlement will be affected by this measure. Additional support will be provided to help young people find apprenticeships.

The Government also announced putting business at the centre of the Apprenticeship system by enabling employers to receive funding for the training costs of apprentices directly through an HMRC-led system and ensuring that employers contribute. This change will raise apprenticeship standards and ensure they align with the needs of business. There will be further investment in Higher Apprenticeships, to enable more people to develop high-level skills by providing £40 million to deliver an additional 20,000 Higher Apprenticeship starts over the next two academic years.

2.2.3 Reform of Higher Education

Alongside significant changes taking place in FE, there is equally radical change in the provision of Higher Education (HE). The combined impact of fiscal restraint, the proposals of the Browne Review[3] and the White Paper, *Higher Education: Students at the heart of the system*, (BIS), published in 28 June 2011, are widely anticipated to lead to significant changes in the HE landscape over time. The proposals in the White Paper, seen together with reforms to teaching funding, signal a period of significant change for the sector. This, combined with the increases in student fees, may lead to significant changes in participation in HE within university settings and potentially means a new cohort of young people seeking to acquire higher-level skills through more vocational routes. The White Paper also identified an important role for FE in delivering higher-level skills. It envisages FE colleges contributing to the diversity of the sector through providing choice for students, and in delivering locally-relevant, vocational HE and lifelong learning.

The Autumn Statement 2013 announced that the Government will remove the cap on student numbers at publicly-funded Higher Education Institutions (HEIs) in England by 2015-16, enabling institutions to expand their provision to meet demand from an estimated 60,000 young people a year who have the grades to enter HE but cannot currently secure a place. To ensure that institutions provide places in the subjects most needed in the economy, the Government will provide extra funding for STEM students of £50 million per academic year from 2015-16.

2.2.4 Education Reform and Raising the Participation Age

The Government is increasing the age to which all young people in England must continue in education or training, requiring them to continue until the end of the academic year in which they turn 17 from 2013, and until their 18th birthday from 2015. Young people currently in Year 11 and below are affected. Raising the Participation Age (RPA) means that young people will able to choose one of the following options post-16:

- full-time education, such as school, college or home education;
- an apprenticeship;

[3] Securing a Sustainable Future for Higher Education: Independent Review of Higher Education Funding and Student Finance (the Browne review, 2009-10), 2010.

- part-time education or training if they are employed, self-employed or volunteering full time (which is defined as 20 hours or more a week).

At the same time, statutory responsibility for careers guidance and wider Information, Advice and Guidance (IAG) moved from local authorities to schools as of September 2012. This change coincided with a shift towards greater autonomy for schools, with over 40% nationally now having converted to Academies augmented by the creation of new University Technical Colleges, Studio Schools and Free Schools, examples of which are in planning or have started locally. The shift to school autonomy makes managing the consistency of IAG more problematic, with the potential that large numbers of young people may fail to get quality access to guidance on all of the training and career options open to them. In order for the full range of training options to be made available to young people in schools, a partnership approach will be required with input from universities, skills providers, schools and employers.

2.2.5 Welfare reform

The UK Government is currently pushing through some of the biggest changes to the welfare system in 60 years, with the aim of saving around £18 billion by 2015. Though the ability to make this scale of changes partly depends on the overall performance of the economy, there is no doubt that the Coalition Government is serious about both major policy change and major structural change to produce savings. The basic themes are around making work pay, streamlining benefits, ensuring those who can work are working (or looking for jobs), zero tolerance of fraud and a move towards online provision of services. These changes will clearly have a major impact on those individuals and families affected by the benefits system (or who may be affected) and an impact on those responsible for delivering these services, including Local Authorities and Jobcentre Plus. Skills Conditionality will be continued under the Universal Credit regime for Jobseeker's Allowance (JSA) claimants on contributory benefit and Universal Credit claimants with full conditionality.

2.3 Local Economic Context

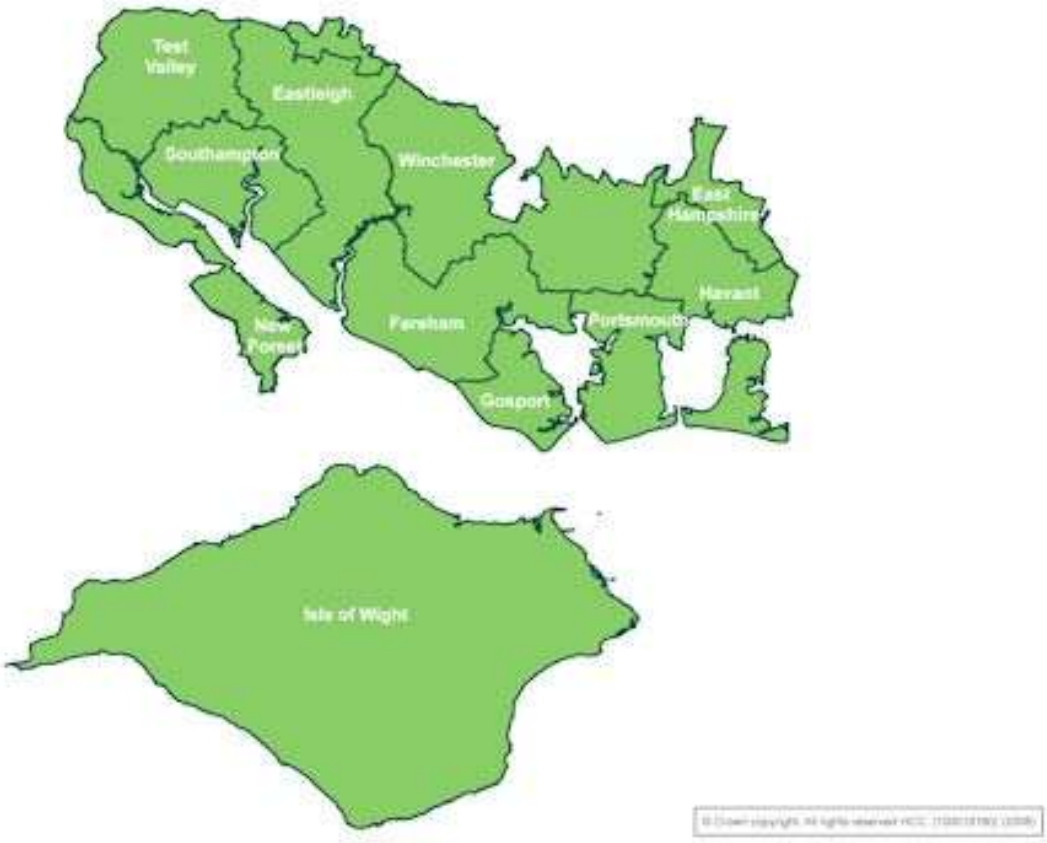
2.3.1 The Solent LEP Area

With a population of more than 1.3 million (2011) and more than 50,000 businesses, the Solent LEP is an internationally-recognised economic hub anchored around the Isle of Wight, the two cities of Portsmouth and Southampton, the M27 corridor and the Solent waterway. Located 120km to the south west of London, Solent accounts for 17% of the South East's land area and borders three other LEPs: Coast to Capital; Enterprise M3 and Dorset.

The economy has a significance that extends beyond the locality, making an important contribution to the national economy. Adjacent to the English Channel, one of the world's busiest shipping lanes, and close to mainland Europe, Solent is home to internationally-important marine ports. Solent also has immense natural advantages supported by strengths in key economic sectors, world-class universities, a strong base of high quality FE colleges,

renowned heritage, countryside and coastline, and excellent transport links by road, rail, air and sea.

Figure 1: Constituent local authority areas of the Solent LEP



The Solent Local Economic Assessment, *Anchoring Growth: An economic assessment of the Solent area,* Centre for Cities (May 2013), identifies the following key issues and concluded that:

- The Solent economy has seen relatively strong growth over the past decade. Growth in economic output, however, has not been accompanied by large increases in private sector employment. As a result, the area is more dependent on large employers and the public sector than the wider South East, making it vulnerable to business failure and public sector cuts.
- The Solent economy has been affected by the prolonged recession. It is characterised by areas of high public sector dependency and a decline in business stock, particularly in the Small and Medium-sized Enterprise (SME) sector. More recently, it has had to absorb the economic shock caused by the planned closure of the Ford manufacturing plant in Swaythling and the contraction in defence-related activity following the Strategic Defence and Security Review (SDSR).

- Strategies to support a sustained economic recovery in the Solent need to be based on the area's real assets and strengths. These include the area's global connections through the ports and the airport, and the four universities. The Solent's maritime sector is nationally significant and has been identified as a key growth sector in the sub-region.
- The cities of Portsmouth and Southampton – and their ports – lie at the heart of the Solent economy, providing nearly 40% of high-skilled jobs in the Solent. While economic activity is concentrated in Portsmouth and Southampton, the two cities are not punching their economic weight. At the same time, the Isle of Wight, with a population of 138,253, has GDP well below the average for Solent as a whole. In addition, it has to contend with geographic isolation. In recognition of these challenges, a case is currently being made for Assisted Area status for the Isle of Wight.
- With the move towards a more knowledge-intensive economy, the future growth prospects for the Solent are dependent on the ability of the cities to attract businesses, by offering access to suppliers, customers and skilled workers, and to drive growth.
- The recession had a considerable impact on the Solent's businesses and business confidence remains low. Due to the nature of supply chains in the Solent, the closure of large companies and public sector cuts are seen as major threats to business survival. The Solent LEP has a central role to play in supporting business growth.
- With the move towards a more knowledge-intensive economy, the future growth prospects for the Solent are dependent on the ability of the cities to attract businesses by offering access to suppliers, customers, and skilled workers, and to drive growth. Solent LEP is thus committed to making the most of the opportunities offered by Portsmouth and Southampton, whilst also helping those cities to tackle a range of challenging issues.

2.4 The Solent Growth Vision

The overarching strategy for Solent is, *Transforming Solent* (currently in development) which supercedes the *Solent LEP – A Strategy for Growth*. The vision of the Solent LEP and its partners is to create an environment that will bring about sustainable economic growth and private sector investment in the Solent. It will assist this globally-competitive area to reach its full potential, enabling existing businesses to grow, become more profitable and to be greener; enabling the creation of new businesses and attracting new businesses to the region. Solent LEP wants to secure a more prosperous and sustainable future for all who live in the area and is committed to building a strong economy with businesses that are able to compete successfully in global markets. At the same time, a number of challenges arise as a result of the recent recession. Solent has many assets on which to build and which will support the drive for growth. Essential to this is the co-ordination of public and private sector investment to achieve this goal and the need to make the best use of the area's assets. *Transforming Solent* has identified six strategic priorities:

- Supporting new businesses, **enterprise** and ensuring SME survival and growth.

- Focusing on **infrastructure** priorities including land assets, transport and housing, reducing flood risk and improving access to superfast broadband.
- Establishing a single **inward investment** model to encourage companies to open new sites in the region, supported by effective marketing.
- Investing in **skills** to establish a sustainable pattern of growth, ensuring local residents are equipped to take up the jobs that are created.
- Developing **strategic sectors** and clusters (interconnected groups and businesses) of marine, aerospace and defence, advanced manufacturing, engineering, transport and logistics businesses, low carbon and the visitor economy – establishing the area as a business gateway, at both local and international levels.
- Building on our substantial knowledge assets to support **innovation** and build innovative capacity in the Solent area to stimulate growth in Solent businesses and in new high growth sectors.

2.4.1 City Deal

The Southampton and Portsmouth City Deal also contributes to Solent's broader labour market and skills ambitions. The City Deal aims to:

- increase the ability of the skills system to respond to employer demand, including for SMEs and micro-businesses, through the creation of a bespoke Marine and maritime sector Employer Ownership of Skills programme and an employer-led Solent Skills for Growth Fund;
- deliver an innovative jobs pilot targeting those furthest from the labour market and helping them get into sustained work using an intermediate labour market scheme;
- develop a Solent-wide economic benefit procurement model in each local authority and a pilot with a government department to demonstrate the ability to maximise the local SME supply chain, skills and employment opportunities for local people linked to £500 million+ per annum Solent procurement;
- establish a joint £1.2m Youth Community Legacy Fund with a private sector company aimed at increasing the employment opportunities for young people.

2.4.2 Solent Enterprise Zone

The Solent Enterprise Zone Skills Plan recommends focusing the European Investment Strategy to:

- raise awareness of employment opportunities, through the delivery of improved Information Advice and Guidance (IAG) services;

- support the acquisition of higher-level skills (Level 3 and above) required by the Advanced engineering, Marine and Aerospace sectors;
- support people who are at risk of redundancy or who have recently been made redundant; and
- encourage retention of graduates with STEM skills.

2.4.3 Low Carbon Economy

Underpinning this is Solent's commitment to generating economic and business growth together with new jobs by developing a Low Carbon Green Economy. The Solent area aims to become the national leader and internationally recognised for its Low Carbon Green Economy. Sustainability will be at the heart of Solent's success in generating economic growth, prosperity and improving quality of life. Key priorities are supporting:

- New Low Carbon and Green Technology - capitalising on the world-class research in the sub-region into green technologies and turning these into business opportunities, growth and jobs as well as supporting strong manufacturing.
- Resource Efficiency in Homes and Businesses - ensuring homes and businesses minimise waste including waste of energy, to support household disposable income and business competitiveness.
- Generation of Secure, Renewable and Low Carbon Energy in the Solent Area - developing large-scale renewable energy such as tidal and offshore wind, together with small-scale on homes and businesses and renewable and district energy schemes incorporated into new developments where practical.

Thus building a skills base that is able to contribute to the Low Carbon economy will be essential.

2.4.4 Solent EU Strategy and local growth plan

Solent LEP has also developed and consulted upon an *EU Structural & Investment Funds 2014–2020 Strategy*, which includes proposal for significant investment in skills and employment. Plans for the local growth deal are also under way and will include significant investment plans for skills and employment in the Solent LEP area.

3. DEMAND SIDE ANALYSIS

In this section, we examine the demand for labour. The demand for skills derives from the industrial and occupational structure of the economy and how that is forecast to change in the future.

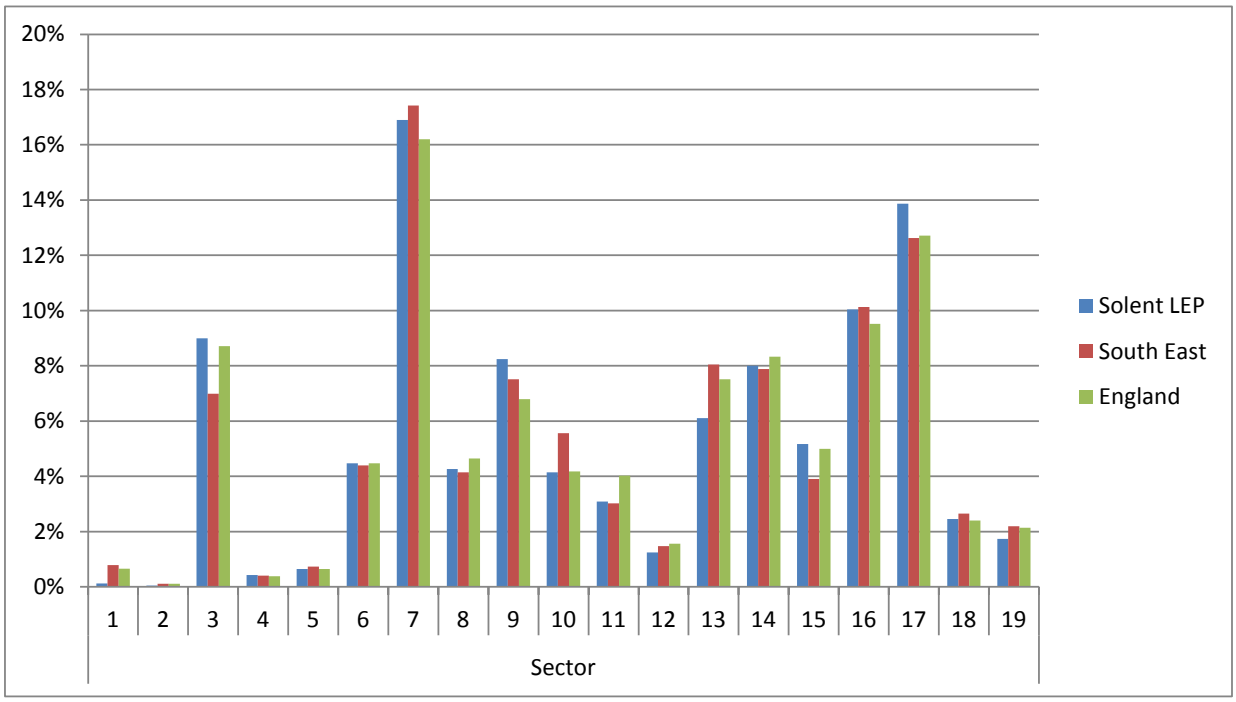
3.1 Industrial structure

Analysis of the industrial structure of the local economy is a useful measure of the quality of employment available. It also helps us to consider whether the area provides a sufficiently diverse and balanced spread of employment opportunities for all residents.

3.1.1 Industrial structure of the Solent LEP area

Employment in the Solent LEP area broadly reflects the industrial pattern seen across the South East and England as a whole, albeit with some suggestion of local concentrations in certain sectors. In common with the regional and national averages, the three largest sectors locally in terms of employment are **Wholesale/Retail, Health and Education**. Figure 2 shows that, compared with the rest of the South East, Solent LEP has a **particular concentration of employment in Manufacturing, Accommodation & food services, Public administration & defence and Health.**

Figure 2: Industrial Structure of Solent LEP area vs South West and England, 2011



Source: BRES 2011, via Nomis. See sector key below.

Sector Key (SIC 2007 Groups)

1 : Agriculture, forestry & fishing (A)
2 : Mining & quarrying (B)
3 : Manufacturing (C)
4: Electricity, gas, etc (D)
5: Water supply; sewerage, waste management (E)
6 : Construction (F)
7: Wholesale / retail / motor trades (G)
8 : Transport & storage (inc postal) (H)
9 : Accommodation & food services (I)
10 : Information & communication (J)
11 : Financial & insurance (K)
12 : Property (L)
13 : Professional, scientific & technical (M)
14 : Business administration & support services (N)
15 : Public administration & defence (O)
16 : Education (P)
17 : Health (Q)
18: Arts, entertainment and recreation (R)
19: Other service activities (S)

Table 1 shows the level of concentration of employment in different industrial sectors in the Solent, relative to both the South East and England as a whole. The volume of employment in Public administration and defence is 1.32 times as high in the Solent, relative to the wider region, and 1.29 times higher in Manufacturing.

Relative to the South East, Solent has low levels of employment in a number of high-value sectors, such as Information & communication and Professional, scientific & technical activities. It also has relatively low levels of employment in Finance & insurance activities relative to England as a whole, though the national figure is influenced by the concentration of this sector in London.

Table 1: Location Quotient – Concentration of employment by sector, relative to the South East and England, 2011

Solent LEP	Relative to SE	Relative to England
O : Public administration and defence	1.32	1.04
C : Manufacturing	1.29	1.03
Q : Human health and social work activities	1.10	1.09
I : Accommodation and food service activities	1.10	1.21
D : Electricity, gas, steam & air conditioning	1.06	1.11
H : Transportation and storage	1.03	0.92
K : Financial and insurance activities	1.02	0.77
F : Construction	1.02	1.00
N : Administrative and support service activities	1.02	0.96
P : Education	0.99	1.06
G : Wholesale and retail trade; repair of motor vehicles	0.97	1.04
R : Arts, entertainment and recreation	0.93	1.02
E : Water supply; sewerage, waste mgt & remediation	0.88	1.00
L : Real estate activities	0.84	0.80
S : Other service activities	0.79	0.81
M : Professional, scientific and technical activities	0.76	0.81
J : Information and communication	0.74	0.99
B : Mining and quarrying	0.44	0.45
A : Agriculture, forestry and fishing	0.16	0.19

Source: BRES 2011, via Nomis. See sector key below.

Over the last couple of years, the overall structure of the local economy has not altered radically, although some sectors have experienced significant levels of employment change. Table 2 shows that the LEP area gained around 5,000 jobs between 2009 and 2011, around 1% of all employee jobs. Over the same period, employment in England was static.

By sector, Construction and Real estate activities have been particularly hard hit, losing around 6,700 and 2,200 jobs between 2009 and 2011 respectively. This is the equivalent to the loss of 21% of all employment in Real estate and 19% in Construction. However, employment in Accommodation & food service activities (+10,400 jobs), Manufacturing (+3,500 jobs) and Wholesale & retail (+3,200 jobs) has continued to grow.

Table 2: Employment change by Sector, Solent LEP vs England, 2009 – 2011

Industrial Sector	Employee Jobs 2011	Change from 2009	% change 2009 - 2011	
			Solent LEP	England
Mining and quarrying	300	0	0%	3%
Manufacturing	58,800	3,500	6%	-2%
Electricity, gas, etc	2,800	-200	-7%	1%
Water supply / waste management etc	4,200	-100	-2%	15%
Construction	29,200	-6,700	-19%	-9%
Wholesale / retail / motor trades	110,400	3,200	3%	-1%
Transportation and storage	27,900	900	3%	-1%
Accommodation and food service activities	53,900	10,400	24%	3%
Information and communication	27,100	-1,000	-4%	3%
Financial and insurance activities	20,200	-1,600	-7%	1%
Real estate activities	8,200	-2,200	-21%	-7%
Professional, scientific / technical activities	39,900	-1,100	-3%	1%
Administrative and support service activities	52,300	1,600	3%	6%
Public administration and defence	33,800	-1,400	-4%	-7%
Education	65,600	1,500	2%	1%
Human health and social work activities	90,600	-1,100	-1%	2%
Arts, entertainment and recreation	16,100	200	1%	-1%
Other service activities	11,300	-800	-7%	-1%
Total (all sectors)	**653,400**	**4,600**	**1%**	**0%**

Source: BRES 2011, via Nomis. Figures are rounded to the nearest 100. Note: Agriculture figures have been removed as BRES doesn't cover this sector completely.

'Drilling down' further, using a more detailed sector classification, reveals several sectors that account for a particularly high proportion of employment locally compared with the UK average[4]. Table 3 shows that the most over-represented (and large) sectors are: ***building of ships and boats*** **and** ***manufacture of medical and dental instruments and supplies*****.** Other specialisms include holiday and other short stay accommodation, manufacture of air and spacecraft and related machinery, repair of fabrication metal products, machinery and equipment, insurance, manufacture of electronic components and boards, manufacture of

[4] Only sectors that employ more than 1,000 people and have location quotients higher than 2.0 are included, thus, the sectors listed are large in employment terms and are highly represented locally.

communication equipment and residential care activities for learning disabilities, mental health and substance abuse.

Table 3: Industrial specialisms (3-digit SIC) on the basis of total employment within SOLENT LEP area, 2011

	SOLENT		England	
	Total employment	% Employment	% Employment	Location Quotient
Building of ships and boats	3,400	0.5	0.1	5.0
Manufacture of medical and dental instruments and supplies	3,500	0.5	0.1	5.0
Holiday and other short stay accommodation	1,700	0.3	0.1	3.0
Manufacture of air and spacecraft and related machinery	5,500	0.8	0.3	2.7
Repair of fabricated metal products, machinery and equipment	5,300	0.8	0.3	2.7
Insurance	5,200	0.8	0.3	2.7
Manufacture of electronic components and boards	1,500	0.2	0.1	2.0
Manufacture of communication equipment	1,400	0.2	0.1	2.0
Residential care activities for learning disabilities, mental health and substance abuse	1,600	0.2	0.1	2.0

Source: BRES 2011, via Nomis. Figures are rounded to the nearest 100. Note: Agriculture figures have been removed as BRES doesn't cover this sector completely.

3.2 Projected change in the industrial structure

Looking forward, data from Working Futures suggests that total employment in the Solent LEP area will grow by 6% between 2010 and 2020, adding 46,000 jobs.

The data also suggests that the contraction in Construction shown above is a temporary phenomenon, caused by the recession, and that the sector will add 7,500 jobs, growing by 13% between 2010 and 2020. Other sectors projected to add large numbers of jobs are Professional services (+11,200), Wholesale & retail (+7,800) and Health & social work (+7,500).

The sectors that are forecast to lose the largest numbers of jobs are Engineering (-2,300) and Public administration & defence (-1,900).

Table 4: Projected employment change by sector, Solent LEP, 2010 - 2020

	2010	2020	Change 2010 - 2020	% Change 2010 - 2020
Agriculture	10,200	9,100	-1,100	-11%
Mining and quarrying	300	300	0	0%
Food drink and tobacco	3,500	3,500	0	0%
Engineering	15,400	13,100	-2,300	-15%
Rest of manufacturing	39,100	39,200	100	0%
Electricity and gas	3,000	2,200	-800	-27%
Water and sewerage	3,500	4,300	800	23%
Construction	57,500	65,000	7,500	13%
Wholesale and retail trade	111,300	119,100	7,800	7%
Transport and storage	30,600	33,100	2,500	8%
Accommodation and food	51,100	54,200	3,100	6%
Media	5,800	4,200	-1,600	-28%
Information technology	21,100	22,200	1,100	5%
Finance and insurance	23,500	25,200	1,700	7%
Real estate	10,200	12,000	1,800	18%
Professional services	50,400	61,600	11,200	22%
Support services	60,600	65,900	5,300	9%
Public admin. and defence	36,500	34,600	-1,900	-5%
Education	67,700	67,400	-300	0%
Health and social work	108,200	115,700	7,500	7%
Arts and entertainment	16,400	18,000	1,600	10%
Other services	17,700	19,700	2,000	11%
All industries	**743,600**	**789,600**	**46,000**	**6%**

Source: UKCES – Working Futures

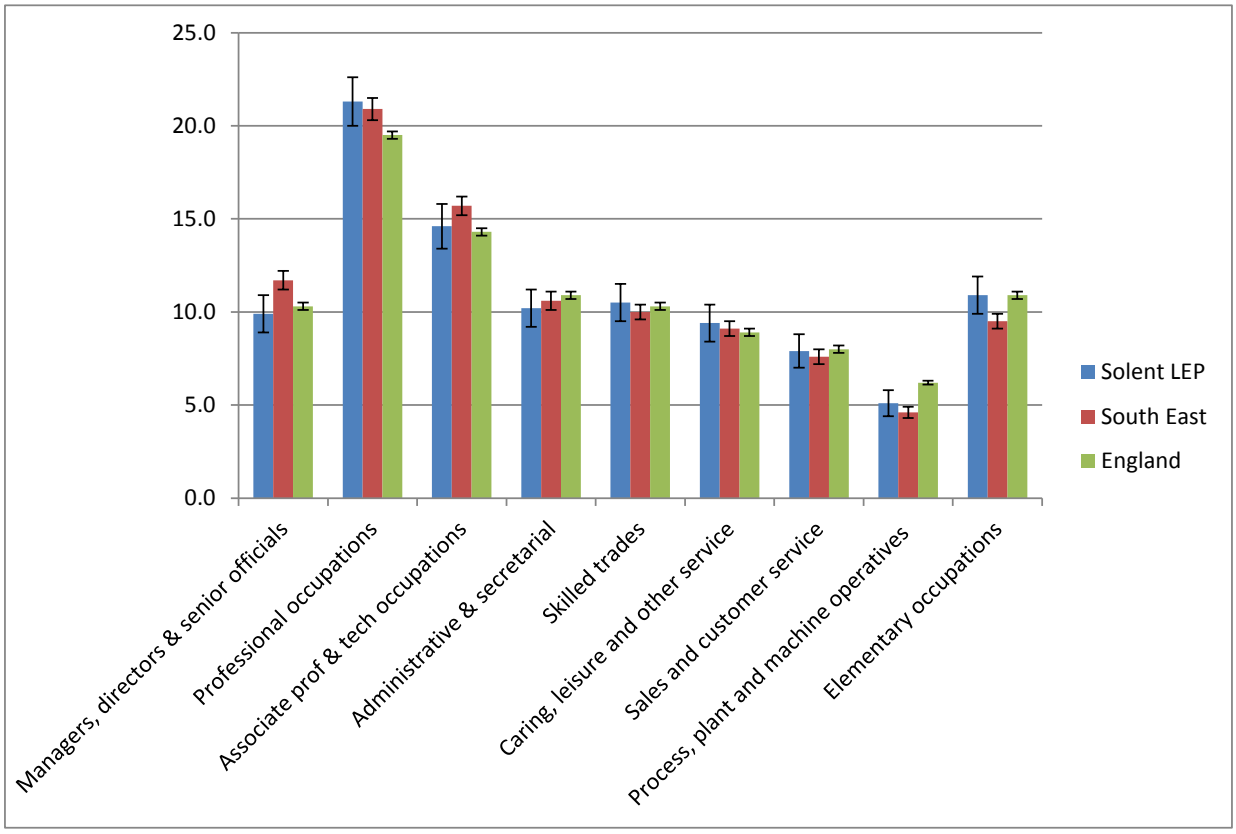
3.3 Occupational structure of employment

Occupational analysis allows us to look at the balance and quality of jobs in the local economy. Generally, it is desirable for the labour market to have a large proportion of highly-skilled, highly-paid jobs, although a healthy labour market must also offer jobs that correspond to the full range of skills in the workforce.

Looking at highly-skilled jobs, 45% of those who work in the Solent LEP area are employed in one of three 'high-skill' occupations: one-fifth (21%) are Professionals, 14% work in Associate professional or technical occupations and one-tenth (10%) are Managers, directors or senior officials. This is a higher proportion than is found across England (44.1%). However, it is also significantly below the average for the South East as a whole (48.3%).

Looking at individual occupations, relative to the national average Solent has concentrations of employment in Professional and Caring, leisure and service occupations. Interestingly, given the prevalence of manufacturing activity, it has a lower than average proportion of employment among Process, plant & machine operatives. This may be indicative of relatively capital-intensive manufacturing activity in the area.

Figure 3: Employment by occupation (%) Solent LEP vs South West and England, Apr 2012 to May 2013



Source: Annual Population Survey (via Nomis). Note: error bars show 95% confidence intervals

3.4 Projected change in employment by qualification level

This shift towards higher-level occupations will generate rising demand for higher levels of skills and qualifications. Working Futures projects that, from 2010 to 2020, the number of jobs in the Solent LEP area that require either a first degree or an 'other higher degree' will both rise by 35,000. There will also be an additional 5,000 jobs requiring a doctorate. The number of jobs requiring no qualification is projected to fall by 19,000.

Table 5 below provides a greater level of detail. It shows that the number of jobs that require no qualifications is projected to fall by around 40%, from 52,000 in 2010 to 33,000 in 2020. The proportion of jobs requiring a degree-level qualification or higher is projected to rise from 24% in 2010 to 32% in 2020.

Figure 4: Change in employment by qualification level, 2010 - 2020

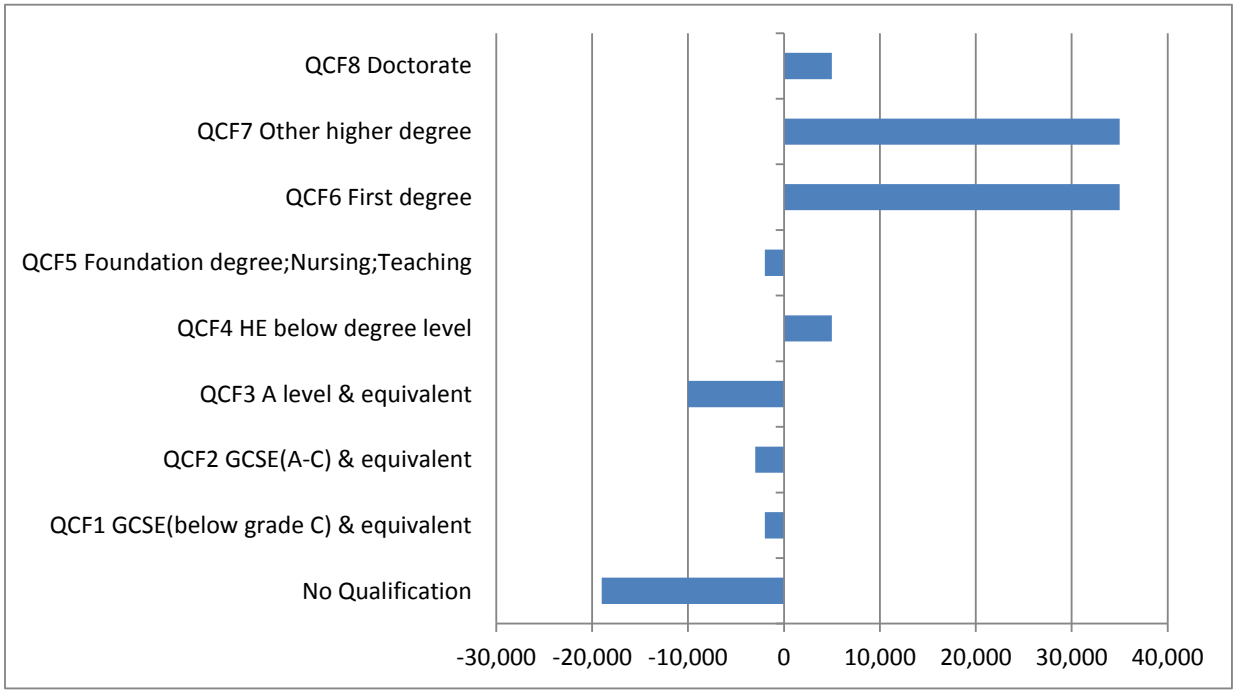


Table 5: Employment volume and % by qualification level, 2010 – 2020

	2010		2020	
	Number	**%**	**Number**	**%**
QCF8 Doctorate	8,000	1.1	14,000	1.8
QCF7 Other higher degree	55,000	7.4	90,000	11.4
QCF6 First degree	115,000	15.4	150,000	19.0
QCF5 Foundation degree;Nursing;Teaching	43,000	5.8	41,000	5.2
QCF4 HE below degree level	36,000	4.8	41,000	5.2
QCF3 A level & equivalent	149,000	20.0	139,000	17.6
QCF2 GCSE(A-C) & equivalent	160,000	21.5	157,000	19.9
QCF1 GCSE(below grade C) & equivalent	125,000	16.8	124,000	15.6
No Qualification	52,000	7.0	33,000	4.2
Total	744,000	100	790,000	100

3.5 Skills shortages and skills gaps

Employer surveys are currently the best source of intelligence on recruitment difficulties, skills shortages and gaps. The most recent large-scale survey was the Employer Skills Survey (ESS), conducted by the UKCES. Data from the survey is available down to LEP level, making some local analysis possible.

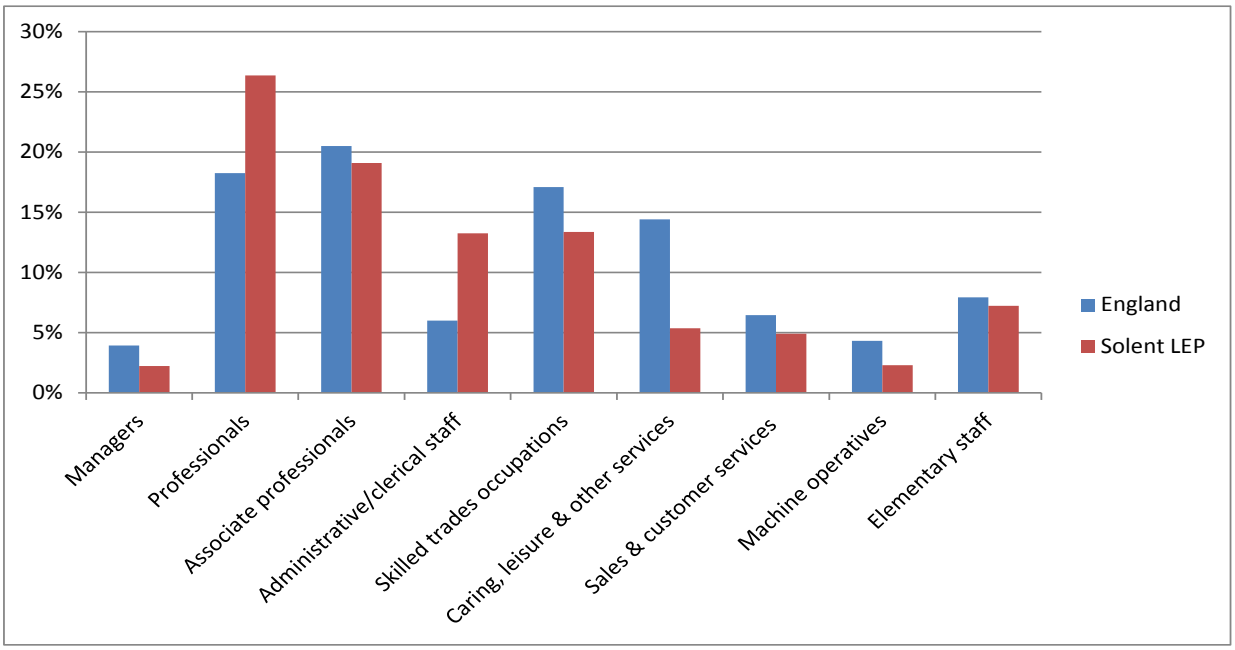
A total of 1,827 employers within the Solent LEP area took part, giving a robust sample size for analysis when looking at the local economy as a whole, but detailed sector-by-sector analysis is not possible at a local level.

3.5.1 Skills shortage vacancies

Skills Shortage Vacancies (SSVs) are those Hard-to-Fill Vacancies (HtFVs) where employers state that they are difficult to fill because applicants lack the level of skills, experience or qualifications needed to do the job. Around 2,300 local employers (5% of the total) had at least one vacancy that was hard to fill - a total of 3,500 such vacancies (or 0.5% of all employment). 23% of all vacancies locally were hard to fill. Almost 74% of all HtFVs reported in the Solent LEP area were difficult to fill due to a lack of skilled applicants (a total of just over 2,600 SSVs). This is in line with the all-England average of 74%.

Looking at the profile of SSVs by occupation, Figure 5 shows that the Solent LEP area has a higher than average proportion of SSVs in Professional occupations (26%) compared with the national average (18%). It also has a higher than average proportion of SSVs in Administrative & clerical occupations.

Figure 5: Skills shortage vacancies (%) by occupation, Solent LEP area vs England, 2011



Source: UKCES Employer Skills Survey, 2011.

The skills that were most frequently cited as lacking by Solent's employers were:

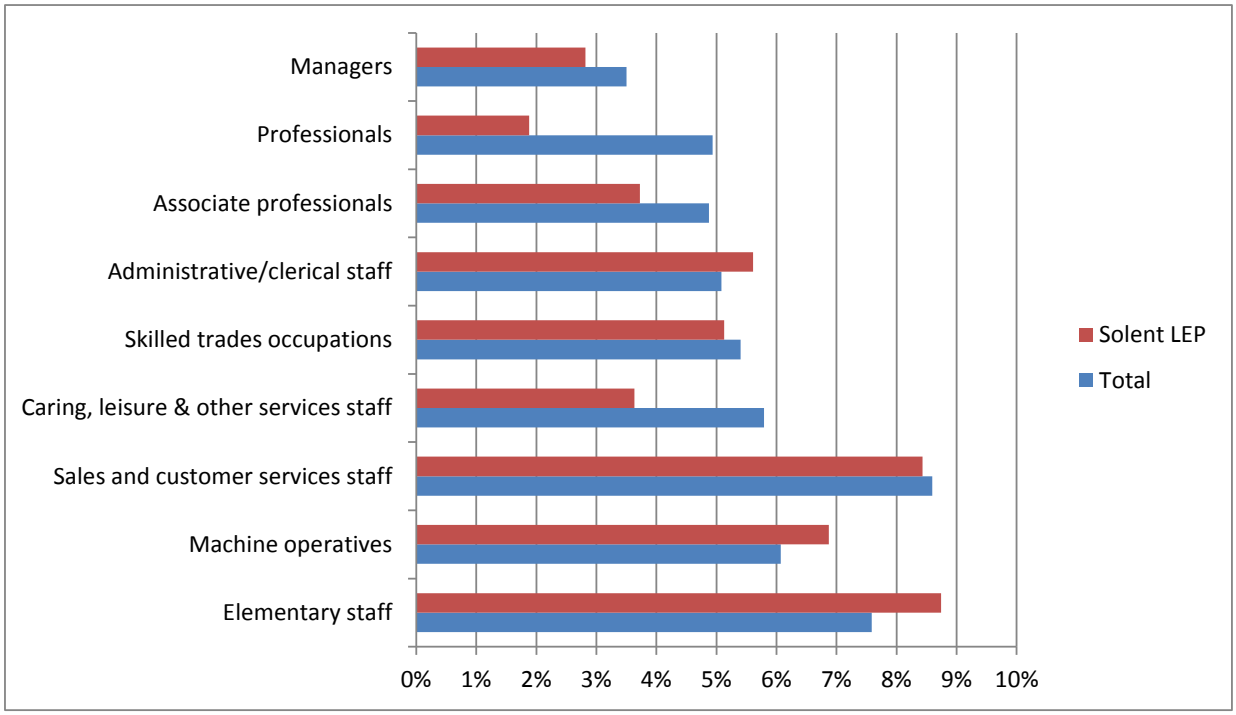
- Job-specific skills (cited as lacking in 69% of SSVs)
- Technical or practical skills (49%)
- Customer-handling skills (39%)
- Planning and Organisation skills (39%)
- Oral communication skills (34%)
- Team-working skills (33%)
- Written communication skills (30%)

3.5.2 Skills gaps

Employers were also asked to report on internal skills gaps within their organisations, which looked at skills deficiencies in existing employees rather than at vacancies. 20% of Solent LEP employers (8,500 employers) reported having a skills gap, with around 35,000 employees assessed as not being fully proficient in their jobs. This accounted for 5.3% of total employment, a slightly lower level than was reported by employers across England as whole (5.75% of employees).

Looking at the proportion of employees who were not fully proficient across different occupations, Figure 6 shows that the greatest concentrations of skills gaps were found in some of the least skilled occupations, such as Elementary occupations, Machine operatives and Sales & customer service staff. Managers, Professionals and Associate professional occupations had the lowest intensities of skills gaps (both locally and nationally), suggesting that higher-level skills were not the main source of difficulty for employers in terms of being able to obtain the skilled labour they need. Relative to England, the Solent LEP area appears to have above average levels of skills gaps among Elementary staff and people working as Machine operatives.

Figure 6: Skills gaps by occupation (% of employees not fully proficient), Solent LEP area vs England, 2011



Source: UKCES Employer Skills Survey, 2011.

When describing the skills lacking among their staff, local employers generally focused on job-specific skills: almost three-fifths (61%) of skills gaps were associated with a lack of these skills. Employers were also relatively likely to report skills gaps for planning/organisation, customer-handling, team-working, problem-solving and oral communication skills.

Less common, though still an issue in around 24% of cases where staff lacked proficiency, were insufficient strategic management skills, which have particular potential to impact on business performance and growth.

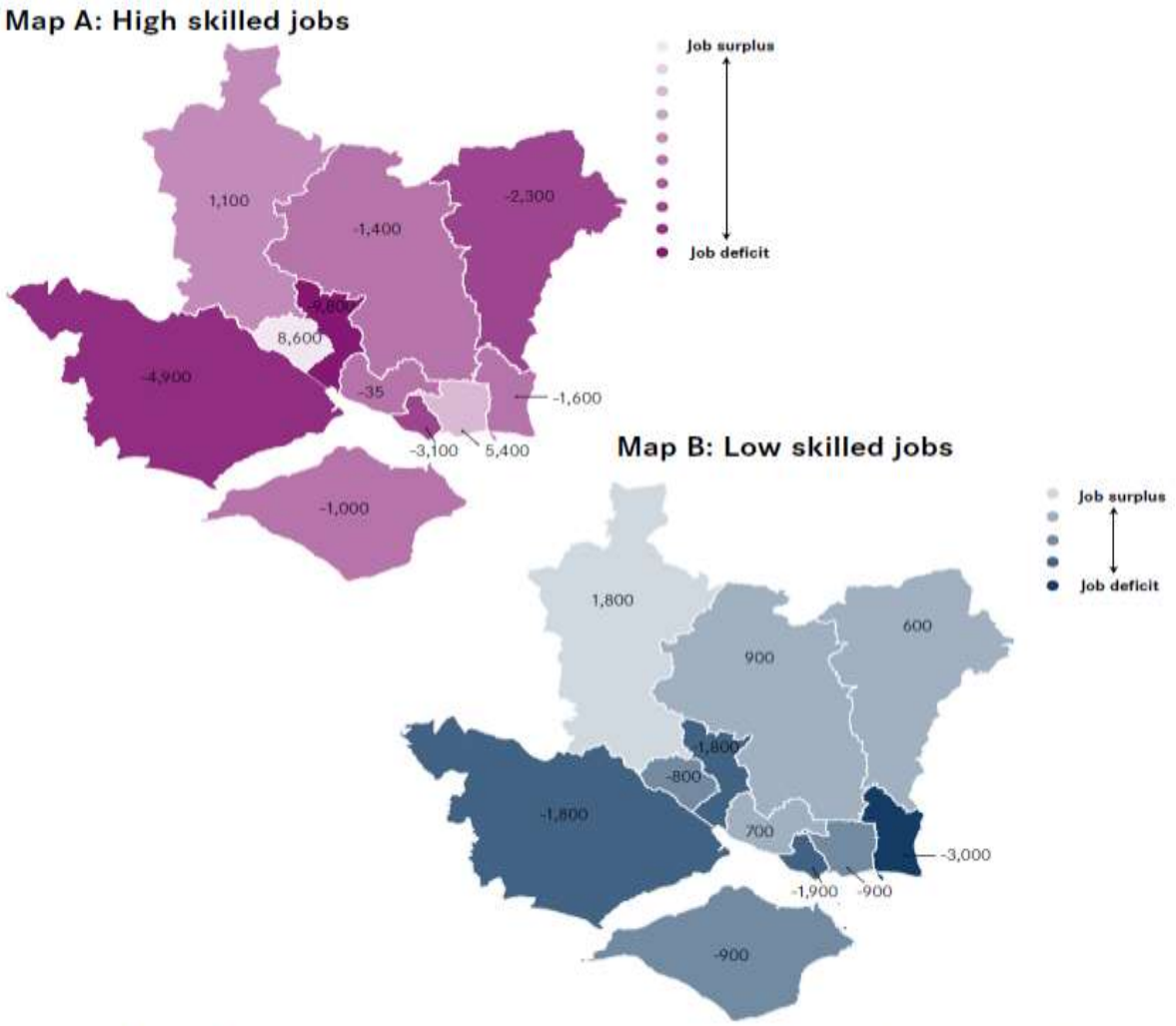
3.5.3 Implications of skills gaps

Two-thirds of employers with skills gaps felt that they were having an impact on the performance of the organisation (5,700 employers locally) with 16% feeling they had a major impact (around 1,300 employers). An increased workload for other staff was by far the most common negative impact experienced as a result of staff having skills gaps (reported by 56% of Solent employers with skills gaps). Difficulties meeting quality standards and increased operating costs were the next most common impacts, both reported by around a third of employers with skills gaps that were having an impact.

Almost four-fifths of Solent LEP employers with skills gaps (79%) had taken steps to overcome them. 68% of these had tried to overcome them by increasing training activity or spend. This was by far the most common response to skills gaps. Around 50% had reacted by increasing staff supervision or providing more staff appraisal, the two next most common responses. However, there remained around 22% of local employers with skills gaps (around 1,900 employers across the LEP area) who were taking no action to try to overcome their employees' lack of proficiency.

3.6 Jobs density by skills level

Figure 7: Maps of high and low-skilled jobs across Solent



Source: Contains Ordnance Survey data © Crown copyright and database right 2013, NOMIS Claimant Count, Job Centre Plus Vacancies, Annual Population Survey

Analysis for Anchoring Growth[5], shown in Figure 7 above, shows the difference between the demand for and supply of jobs at different skill levels across the Solent. Portsmouth and Southampton have the largest surplus of jobs at higher skill levels – more jobs than residents employed in those occupations – compared with other locations in the Solent (Map A). Reflecting the sectoral make-up of businesses in the city, the surplus of high-skilled jobs in Southampton was 1.6 times greater than in Portsmouth – or 8,600 compared with 5,400.

At the opposite end of the skills spectrum, it was those local authorities outside of the two cities that offered the greatest surpluses of lower-skilled jobs (Map B). The Test Valley, for instance, had a surplus of 1,800 lower-skilled jobs and Fareham, 700. This mirrors national trends of lower-skilled jobs dispersing out of cities. These patterns also reflect the variation in the residential offer and quality of life across local areas. For example, many areas outside the

[5] *Anchoring Growth: an economic assessment of the Solent area*, Naomi Clayton, CentreforCities, 8 May 2013

urban core offer high-skilled workers attractive places to live while they commute to work elsewhere in the Solent.

3.7 Future Demand for Skills

Determining future jobs and skills priorities requires an examination of predicted changes across different occupations and sectors. Forecasts provide some indication about likely shifts in employment structure and patterns. The latest Working Futures forecasts, covering the period from 2010-2020, develop its predictions based on past trends and provide the forecasting data used by the Government and other national agencies to predict future employment and thus trends in skills. As with all projections and forecasts, the results presented here should be regarded as **indicative of likely trends** and orders of magnitude given a continuation of past patterns of behaviour and performance, rather than precise forecasts of the future.

The Working Futures projections were developed during a period of considerable turbulence in world financial markets, with a current focus on problems of sovereign debt in areas of the Eurozone. At the time of writing, it remains unclear if these problems will trigger a further recession in Europe and the UK. The results presented here assume that such a crisis can be averted.

The baseline macroeconomic forecast underlying the results was developed in the first half of 2011. It assumes that a gradual recovery in confidence will bring about renewed growth in the UK economy, and that this will sustain employment growth in the longer-term (2010-2020). This forecast could underestimate the possible short-term downturn that might affect the economy if the problems in the Eurozone are not resolved.

When looking at future demand for employment, it is important to note that two distinct features are in play:

- **expansion demand** - where new jobs are anticipated;
- **replacement demand** – which provides a more accurate picture of skills demand because it looks at that demand which arises due to retirement and thus which requires jobs and skills to be replaced (because of retirement), even where the sector is not in expansion mode.

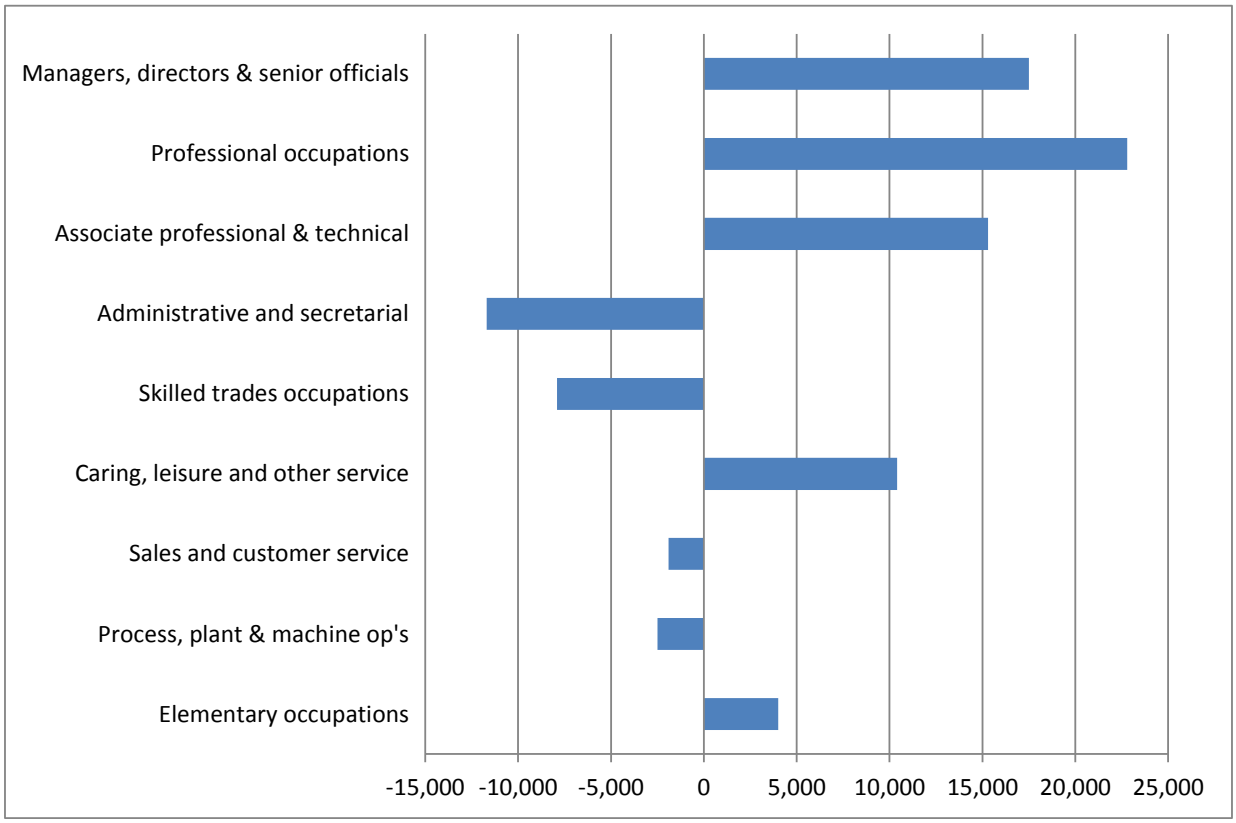
3.7.1 Expansion demand

Working Futures data suggests that employment prospects for the Solent LEP area are better than the national averages, with a projected increase of 6.2% in the total number of jobs between 2010 and 2020, compared with 5.4% for England as a whole. This is the equivalent of an increase of 46,000 jobs by 2020.

Figure 8 shows that there is a fairly clear shift away from lower-skilled employment, outside the Caring, leisure & other service occupations. The three higher-level occupations are forecast to

add 56,500 jobs over the next ten years and to comprise 48.5% of total employment in 2020, compared with 44.1% in 2010.

Figure 8: Change in employment by occupation, Solent LEP (all sectors), 2010 - 2020



Source: UKCES - Working Futures

Table 6 provides a greater level of occupational detail. It shows that the occupations in which the volume of employment is forecast to rise most rapidly are: Corporate managers & directors (+13,000), Business & public service associate professionals (+10,000) and Caring personal service occupations (+10,000). In percentage terms, employment in Culture, media & sports occupations, Other managers and proprietors and Business, media and public service professionals are all forecast to expand rapidly, by +21%.

The occupations in which the volume of employment levels is forecast to fall most dramatically are: Secretarial & related occupations (-9,000), Textiles, printing & other skilled trades (-5,000), Sales occupations (-4,000) and Skilled metal, electrical & electronic trades (-4,000). In percentage terms, Secretarial & related occupations (-33%) and Textiles, printing & other skilled trades (-31%) are projected to lose the greatest proportions of employment.

Table 6: Forecast change in employment by occupation, Solent LEP, 2010 - 2020

Occupation	2010	2020	Change 2010-2020	% change 2010-2020
11 Corporate managers and directors	58,000	71,000	13,000	22%
12 Other managers and proprietors	24,000	29,000	5,000	21%
21 Science, research, engineering & technology profs	44,000	50,000	6,000	14%
22 Health professionals	31,000	36,000	5,000	16%
23 Teaching and educational professionals	31,000	35,000	4,000	13%
24 Business, media and public service professionals	39,000	47,000	8,000	21%
31 Science, engineering & technology assoc. profs	12,000	12,000	0	0%
32 Health and social care associate professionals	8,000	9,000	1,000	13%
33 Protective service occupations	13,000	13,000	0	0%
34 Culture, media and sports occupations	14,000	17,000	3,000	21%
35 Business & public service associate professionals	54,000	65,000	11,000	20%
41 Administrative occupations	65,000	63,000	-2,000	-3%
42 Secretarial and related occupations	27,000	18,000	-9,000	-33%
51 Skilled agricultural and related trades	8,000	8,000	0	0%
52 Skilled metal, electrical and electronic trades	30,000	26,000	-4,000	-13%
53 Skilled construction and building trades	28,000	29,000	1,000	4%
54 Textiles, printing and other skilled trades	16,000	11,000	-5,000	-31%
61 Caring personal service occupations	54,000	64,000	10,000	19%
62 Leisure, travel & related personal service occ's	15,000	15,000	0	0%
71 Sales occupations	42,000	38,000	-4,000	-10%
72 Customer service occupations	14,000	16,000	2,000	14%
81 Process, plant and machine operatives	13,000	10,000	-3,000	-23%
82 Transport & mobile machine drivers and operatives	25,000	25,000	0	0%
91 Elementary trades and related occupations	11,000	11,000	0	0%
92 Elementary administration & service occupations	67,000	71,000	4,000	6%
All occupations	**744,000**	**790,000**	**46,000**	**6%**

Source: Working Futures, 2010 - 2020. Figures rounded to nearest 1000.

3.7.2 Replacement Demand

When looking at the demand for skills, it is also important to take into account the need to replace those in the workforce who will be leaving because of retirement or other factors. This is termed 'replacement demand'. Outflows in terms of replacement demand typically account for about a third or more of current employment levels over a 10-year period and outweigh any projected employment expansion or decline.

Replacement demand occurs where there is a need to recruit and train new entrants into jobs to replace those leaving[6]. In occupations where employment is projected to expand, the addition of replacement demand leads to an even greater total net employment requirement. It is important to note that total net requirements are positive across all occupations, which shows that there is a continuing need for relevant skills provision, even in areas where overall employment levels may be falling. The overall requirement is again skewed towards higher-level occupations, i.e. Managers & senior officials, Professional and Associate professional & technical occupations, which is consistent with national trends and the shift towards a more knowledge-intensive economy. There is also a Total Net Requirement for employment in Caring personal service occupations (33,000 employees over 10 years), Elementary administration & service occupations (31,000), Business & public service associate professional(31,000) and Administrative occupations (26,000).

Table 7: Net requirement for jobs by occupation (000s), Solent LEP (all sectors), 2010 - 2020

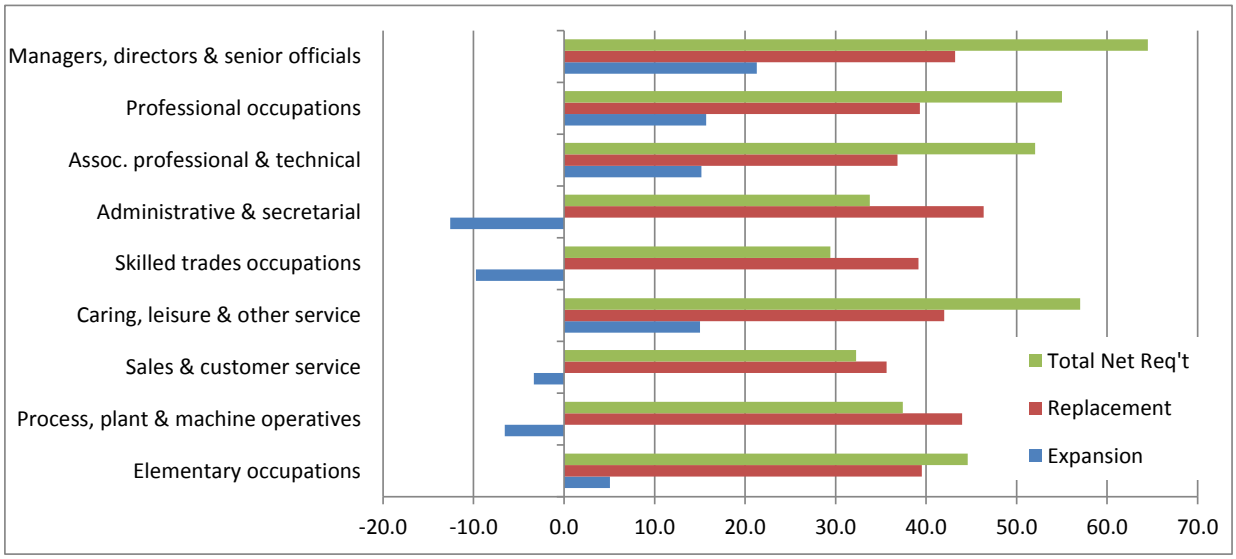
	Base year employ-ment level	Expansion demand	Replacemen t demand	Total Net requirement
Corporate managers / directors	58,000	13,000	24,000	37,000
Other managers & proprietors	24,000	4,000	12,000	16,000
Science, research, engineering & tech'y profs	44,000	5,000	15,000	20,000
Health professionals	31,000	5,000	13,000	18,000
Teaching & educational professionals	31,000	5,000	13,000	18,000
Business, media & public service profs	39,000	8,000	17,000	25,000
Science, engineering / tech'y assoc. profs	12,000	0	4,000	4,000
Health & social care associate professionals	8,000	1,000	3,000	4,000
Protective service occupations	13,000	0	4,000	4,000
Culture, media & sports occupations	14,000	3,000	5,000	8,000
Business & public service associate profs	54,000	11,000	21,000	31,000
Administrative occupations	65,000	-3,000	29,000	26,000
Secretarial & related occupations	27,000	-9,000	14,000	5,000
Skilled agricultural & related trades	8,000	0	4,000	4,000
Skilled metal, electrical & electronic trades	30,000	-4,000	11,000	7,000
Skilled construction & building trades	28,000	1,000	10,000	12,000
Textiles, printing & other skilled trades	16,000	-5,000	6,000	1,000
Caring personal service occupations	54,000	10,000	23,000	33,000
Leisure, travel & related personal services	15,000	0	6,000	7,000
Sales occupations	42,000	-4,000	15,000	11,000
Customer service occupations	14,000	2,000	5,000	7,000
Process, plant & machine operatives	13,000	-3,000	5,000	2,000
Transport & mobile machine drivers & op's	25,000	1,000	12,000	12,000
Elementary trades & related occupations	11,000	0	4,000	4,000
Elementary administration & service occp'ns	67,000	4,000	27,000	31,000
All occupations	**744,000**	**46,000**	**301,000**	**347,000**

Source: Working Futures, 2010 - 2020. Figures rounded to nearest 1000.

[6] 'Replacement demand' is defined as the number of retirements, plus occupational mobility, plus migration

Figure 9 shows the Total Net Requirement for each broad occupational group as a proportion of existing employment levels. It suggests that, over a 10-year period, the number of new employees that enterprises in Solent will need to recruit (and, potentially, train) as managers, directors and senior officials is equivalent to 65% of the existing workforce employed in these occupations. The Total Net Requirement for people in Caring, leisure & other service occupations (57%), in Professional occupations (55%) and Associate professional & technical occupations (52%) is also particularly high. By contrast, the Total Net Requirement for Skilled trades occupations equates to 29% of current employment in this occupational category.

Figure 9: Replacement Demand and Total Net requirement for jobs by occupation (%), Solent LEP), 2010 - 2020



Source: Working Futures, 2010 - 2020. Figures rounded to nearest 100.

4. SUPPLY SIDE ANALYSIS

In the first half of this Report, we have looked at the needs of employers. We now turn our attention to the Solent LEP labour market to look at the scale and nature of labour and skills available to meet those needs.

4.1 Population projections

In the context of skills planning, an important factor driving demand for skills provision is that of demographic change. Population projections (published by the ONS) are based upon the assumption that recently observed demographic trends (births, deaths and migration) are to continue, and take no account of any future local development policy, economic factors or the capacity of areas to accommodate population.

The latest projections (based on mid-year estimates for 2011) suggest that the population of the Solent LEP area will increase by around 108,000 (7%) over the next decade, rising to 1,654,000 in 2021. This is slightly below the average expected increase across England of 9%.

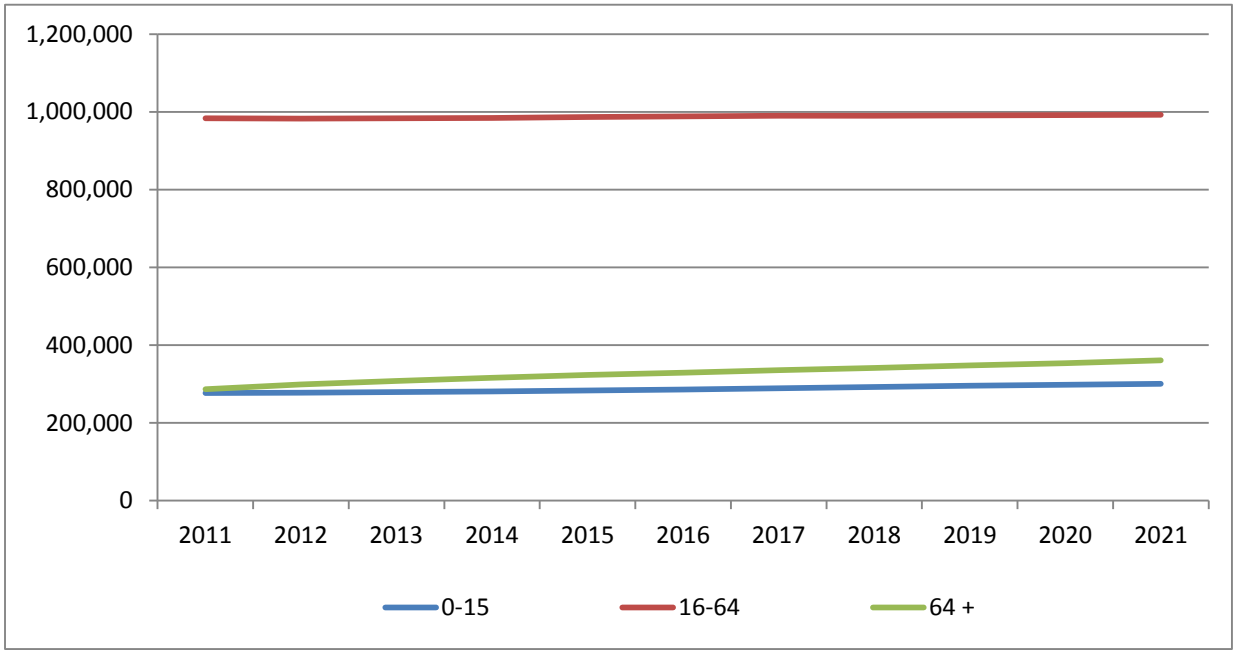
Of the total population rise of 108,000, around 42,000 is forecast to be due to natural change (births minus deaths within the resident population) and 66,000 is forecast to be due to migration. 75% of this net inward migration is forecast to be the result of domestic migration (from within the UK).

Recent demographic trends are expected to continue, resulting in a further shift in the age breakdown of the local population, both locally and nationally. Figure 10 shows that the working age population (aged 16-64) of the LEP area is predicted to remain almost static throughout the forecast period.

Growth of around 9% (equivalent to an additional 24,000 people) is expected to continue in the 0-15 age group, suggesting an increasing need for school places. And growth of around 26% (74,000 people) is anticipated among those aged 65 and over.

The overall picture, therefore, is one of moderate population growth, presumably driving a rise in consumer demand, accompanied by nil growth in the working age population. This limit to the pool from which employers can recruit may have implications for the ability of the local economy to grow, unless growth is accompanied by a rise in productivity.

Figure 10: Population projections by broad age group, Solent LEP, 2011 - 2021



Source: Office for National Statistics

Within these broad age groups, key demographics for FE and Work-Based Learning (WBL) providers are the 16-18 and 19-24 age groups. Table 8 shows that both of these age groups will shrink in absolute terms over the forecast period, with a total drop of around 9,700 16-24 year olds (-5%) living in the LEP area in this time.

Table 8: Population projections for the 16-24 age group, Solent LEP, 2011 – 2021

Age group	2011	2021	Change 2011-2021	% change 2011-2021
16-18	58,003	51,977	-6,026	-10.39%
19-24	134,378	130,677	-3,701	-2.75%
16-24 Total	**192,381**	**182,654**	**-9,727**	**-5.06%**

Source: Office for National Statistics

Within Solent, the number of 16-18 year olds is already falling, and is forecast to reach a low of around 50,500 in 2019 before starting to rise again. For 19-24 year olds, the forecast is for rapid growth over the next few years, reaching a peak of around 140,700 in 2014, before a steady decline each year for the rest of the forecast period.

The inference is that the supply of skills resulting from young people entering the labour market will decline by 2021, as a result of demographic trends. However, public policies such as ‘Raising the Participation Age’, which should increase the proportion of 17 and 18 year olds participating in education and training, do need to be offset against this.

4.2 Employment and economic activity

The recession and subsequent falls in the number of jobs available will also have had an effect on economic activity rates as well as employment rates, as people may become discouraged from participating in a difficult labour market.

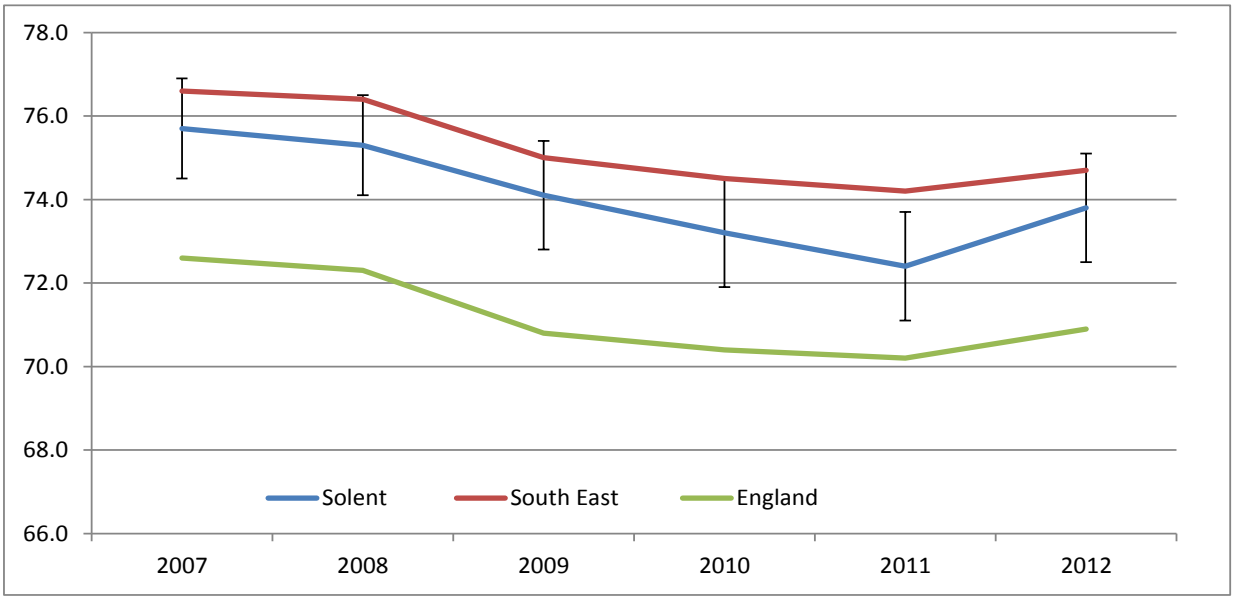
4.2.1 Employment Rate

Perhaps the simplest indicator of the strength of labour demand in a region is the employment rate. The employment rate is defined as the proportion of the working age population who are in employment, and comes from data on the resident population and labour force. One disadvantage of this measure is that it may reflect the strength of labour demand not only in the Solent LEP, but also in adjacent areas, if significant numbers of the LEP's residents commute outside the area for work. Analysis in the economic assessment for Solent suggests that there are significant levels of outward commuting from the eastern part of the LEP area, particularly into the New Forest and Southampton.

In 2012, the employment rate for the Solent LEP was 73.8%. This was well above the national average of 70.9% but below that for the South East, of 74.7%.

Figure 11 shows the trend in employment rate for the LEP, the South East and England, and shows that, between 2007 and 2011, the rate in Solent fell in line with the wider national trend. However, from 2012, the local employment rate appears to recover strongly, more strongly than the regional and national averages. It should be noted, however, that the confidence intervals at a local level are such that the strong recovery suggested by the statistics should be interpreted with some caution.

Figure 11: Employment rates, (% of population aged 16-64), 2007-2012, Solent LEP vs South East and England



Source: Annual Population Survey and Labour Force Survey, via Nomis[7]

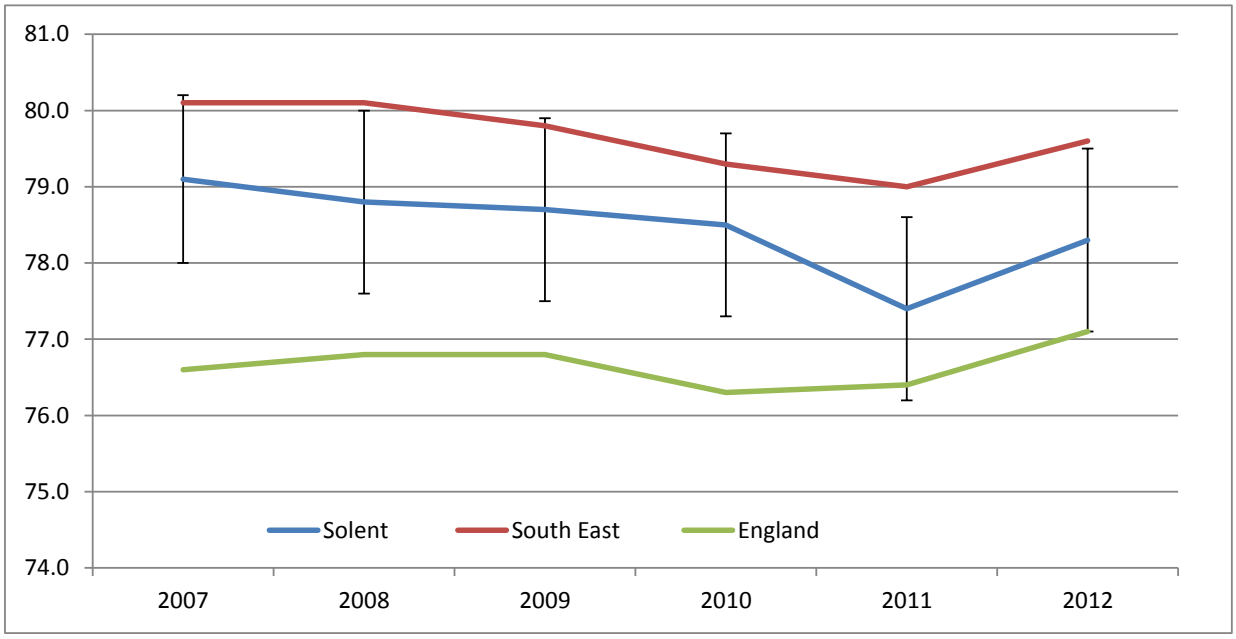
4.2.2 Economic Activity Rate

While the size of the working age population is an important factor in looking at the volume of labour supply in the region, we need also to look at how many people of working age are economically active in the labour force, that is either working, or looking for and available to start work. In 2012, the economic activity rate in the Solent LEP was 78.3%, compared with 79.6% for the South East and 77.1% for England.

Figure 12 shows that during the recession, economic activity in the Solent fell between 2007 and 2011. Activity levels recovered in 2012, but appear to remain below those found before the recession.

[7] Data only presented down to LEP level due to data reliability issues at district level caused by small survey sample sizes. Error bars show 95% confidence intervals for LEP data.

Figure 12: Economic Activity Rate, 16–64 Year olds, Solent LEP vs South East and England, 2007-2012



Source: Annual Population Survey and Labour Force Survey, via Nomis. Data only presented down to LEP level due to data reliability issues at district level caused by small survey sample sizes. Error bars show 95% confidence intervals for LEP data.

4.2.3 Self-employment and part-time employment

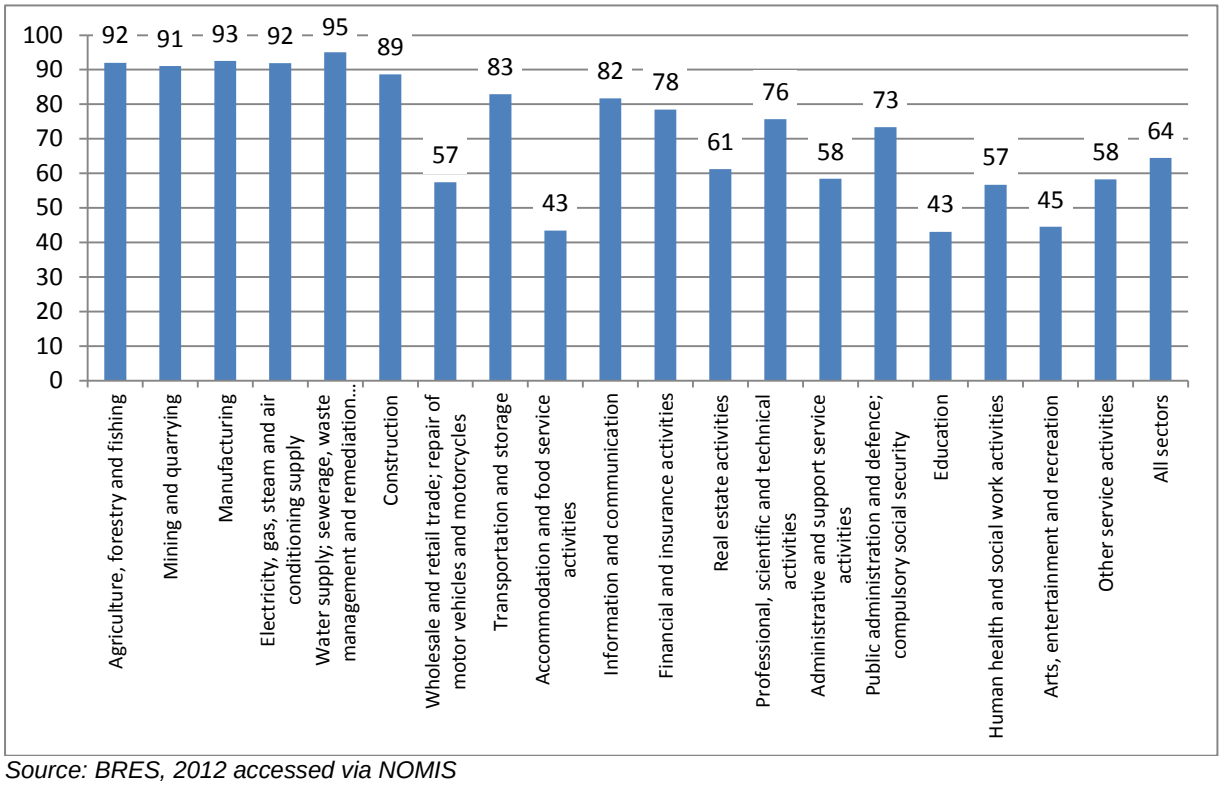
Employees account for the majority of employment (97%) within the Solent LEP area and the national economy (96%). Notwithstanding this, BRES estimate there to be around 21,400 working proprietors based in the sub-region. This includes sole traders, sole proprietors, partners and directors. The Wholesale & retail trade sector accounts for the largest number of working proprietors (4,500) although large numbers also exist within Construction (2,900), Professional, scientific & technical activities (2,700) and Accommodation & food services (2,400).

When viewed as a share of total employment, the incidence of working proprietors is highest for the Agriculture, forestry & fishing (31%), Real estate activities (14%) and Construction (9%) sectors.

According to the wider Annual Population Survey (APS) measure, the proportion of the working age population that is self-employed in Solent is 13%, compared with 14% across the UK as a whole. Almost two-thirds (64%) of employees working in the Solent LEP area work full-time hours. This compares with more than two-thirds (67%) across England.

The incidence of full-time employees varies considerably: in some (especially, production orientated) sectors, more than 90% of employees work full time. At the other end of the spectrum, full-time employees account for less than half of all employees in Accommodation & food services (43%), Education (43%) and Arts, entertainment & recreation (45%).

Figure 13: Full-time employees as a share of total employees, Solent LEP area, 2012



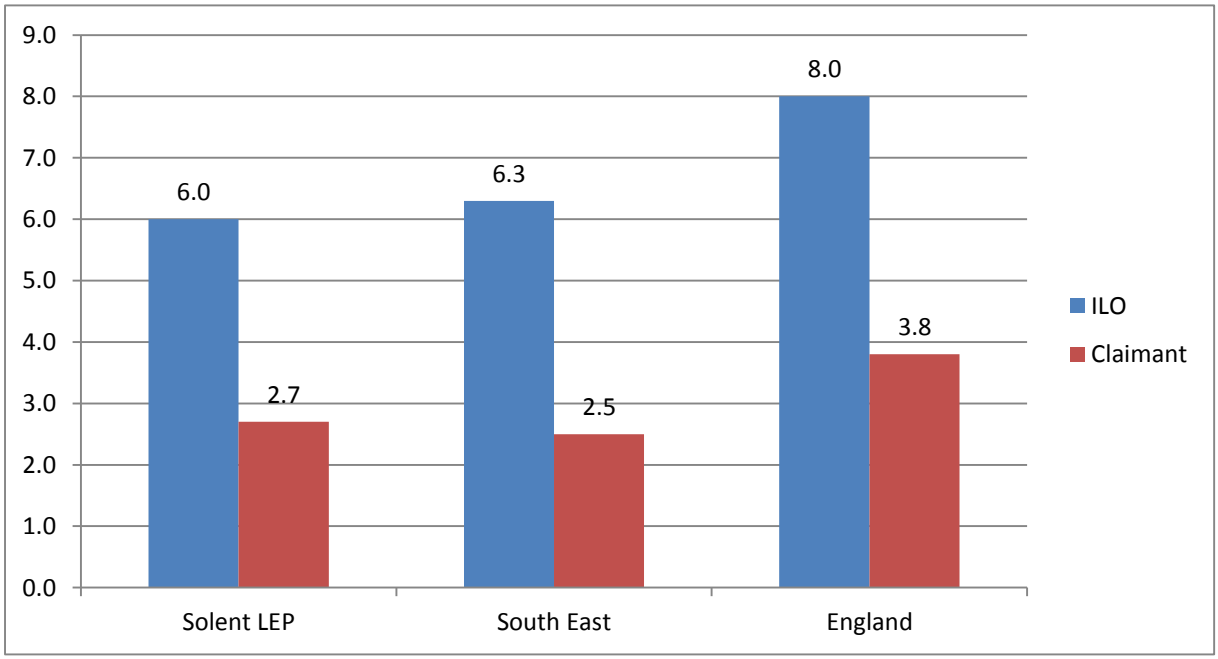
Source: BRES, 2012 accessed via NOMIS

4.2.4 Unemployment

The official unemployment rate is defined by the ILO as the percentage of economically active people (aged 16-64) in an area who are without a job, have actively sought a job in the last four weeks and are available to start work in the next two weeks, or are out of work and are waiting to start a job in the next two weeks. This definition therefore includes some people who meet these criteria but are ineligible to claim JSA and so are excluded from the claimant count measure of unemployment.

In March 2013, the claimant count unemployment rate for the Solent LEP was 2.7% (26,600 claimants), higher than the rate for the South East (2.5%), but well below the national average of 3.8% (Figure 14). Unemployment is much higher when measured by the ILO rate compared with the claimant count. The ILO gives a better estimate of the 'real' level of unemployment. Using the ILO measure (to March 2013), the Solent LEP figure is much higher, at 6.0% (45,500 unemployed). On the ILO measure, unemployment in the Solent is below both the regional and national averages.

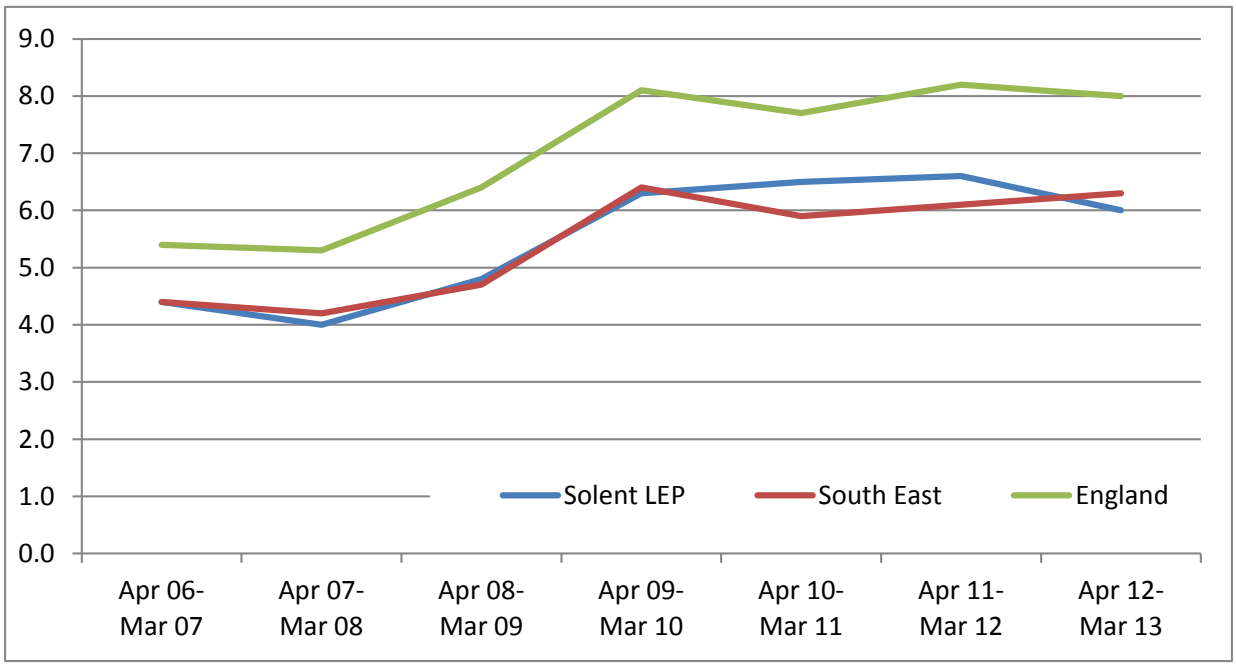
Figure 14: Unemployment rates, Claimant Count and ILO measures, Solent LEP vs South East and England, 2013



Source: Annual Population Survey (Apr 2012 - Mar 2013) and Claimant Count (March 2013) - via Nomis

Figure 15 shows that the unemployment rate in the Solent area has tracked the national and regional patterns, rising sharply between March 2008 and March 2010 and levelling off since. Although the unemployment rate in the Solent remains significantly higher than its pre-recession level, it has stayed consistently well below the national average, and has fallen in the last year, from 6.6% in the year to March 2012 to 6.0% in the year to March 2013.

Figure 15: Unemployment rate (aged 16-64), 2006 - 2013



Source: Annual Population Survey and Labour Force Survey, via Nomis. Data only presented down to LEP level due to data reliability issues at district level caused by small survey sample sizes.

This data does, however mask significant variations within the Solent LEP area. Census 2011 allows us to look at unemployment rates at the local level. This shows that there were 34 Wards where the unemployment rate was 5.0% or over, of which: 16 were located on the Isle of Wight; five were in both Gosport and Southampton; and four were in both Portsmouth and Havant. Four wards had an unemployment rate of over 7%, which is considerably higher than the average Census-based unemployment figure for England of 4.4%.

The ten wards with the highest levels of unemployment are shown in Table 9 below.

Table 9: Wards with the highest unemployment rate, Solent LEP, 2011

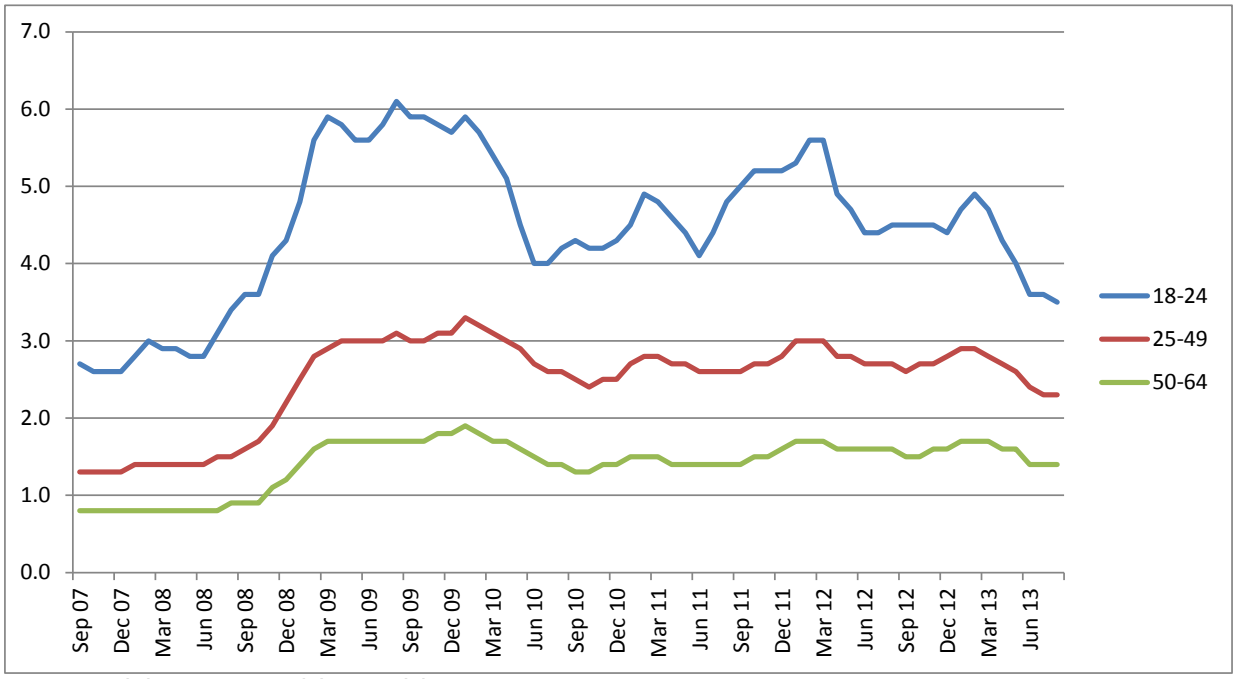
Ward	Number	% Rate	Authority
Ryde South	255	8.2%	IoW
Ryde North East	215	7.7%	IoW
Grange	281	7.7%	Gosport
Charles Dickens	979	7.0%	Portsmouth
Warren Park	353	6.8%	Havant
Newport East	138	6.6%	IoW
Battins	319	6.5%	Havant
Barncroft	291	6.4%	Havant
Bondfields	292	5.9%	Havant
Shanklin South	140	5.9%	IoW

Source: Census 2011

4.2.4.1 Unemployment by Age

Figure 16 shows that the recession had a particularly sharp impact on youth unemployment. The unemployment rate for 18-24 year olds in the Solent increased by 3.4 percentage points between September 2007 and August 2009, compared with rises of 1.8 percentage points for people aged 25 to 49 and 0.9 percentage points for those aged 50 and over. This rise in youth unemployment has been a major concern, prompting fears of a generation becoming permanently detached from the labour market. It is, therefore, extremely reassuring to see that the number of young claimants in the Solent has fallen sharply in recent months, from 4.9% in February 2013 to 3.5% in August 2013. That said, unemployment for all age groups remains considerably above pre-recession levels.

Figure 16*:* Claimant count unemployment rates by age (% of age group claiming JSA), Solent LEP, September 2007 – August 2013



Source: Claimant Count (via Nomis)

Using the ILO measure of unemployment, youth unemployment (among people aged 16-24[8]) is much higher than the rate measured by the claimant count. Latest figures to March 2013 indicate that the unemployment rate for the Solent LEP was 14.8% (17,500 unemployed).

4.2.4.2 Long-term unemployment

In addition to the total numbers of claimant unemployed, an important characteristic is the duration of unemployment. It is thought that those who have been out of employment the longest are least likely to possess the skills and experience that employers are seeking.

In August 2013, 18.5% of the unemployed in the Solent LEP area had been unemployed for 6-12 months, and 25.9% had been so for over 12 months (Figure 17). Nationally, 19.1% of the unemployed had been out of work for 6-12 months, and 30.2% for more than 12 months.

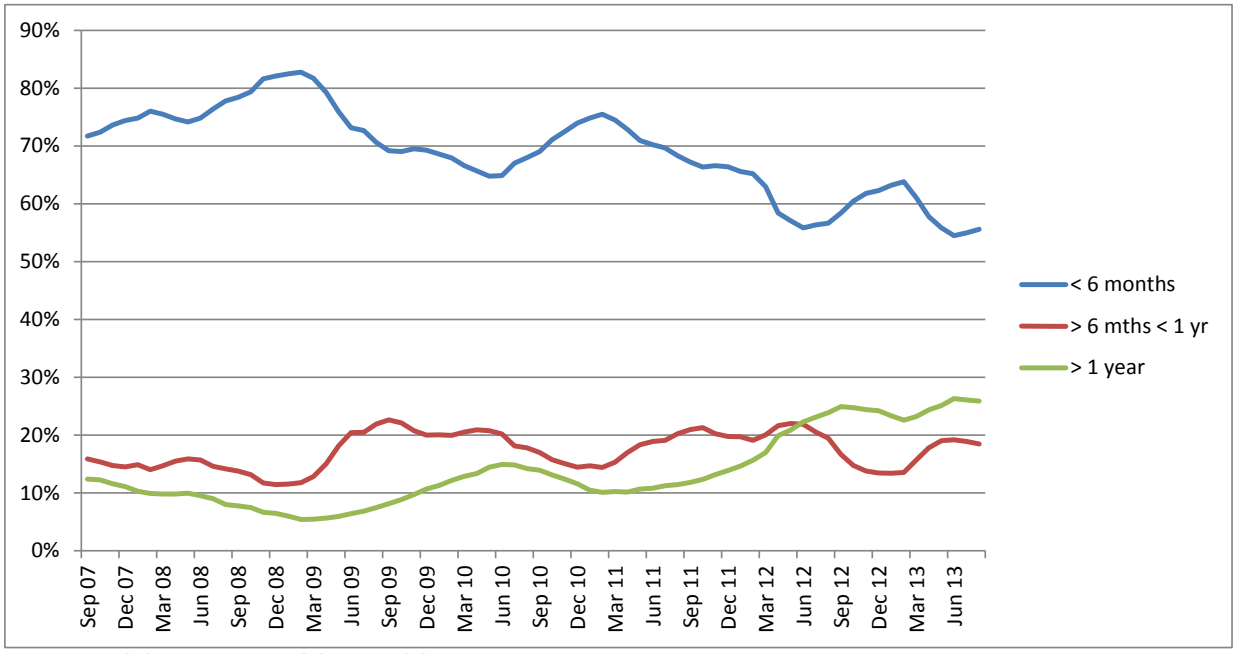
Figure 17 also shows that the proportion of the unemployed who are very long-term unemployed (more than one year) has risen dramatically in the last two years, from 11.4% in August 2011 to 25.9% in August 2013.

In absolute terms, the number of long-term unemployed (over six months) locally rose sharply from 3,450 in August 2008 to 10,750 in August 2012, before falling back to 9,250 in the last year, to August 2013.

[8] Young people aged 16 and 17 are expected to be supported by their families and are only entitled to claim Jobseeker's Allowance in exceptional circumstances. They are not, therefore, included in the Claimant Unemployment rate for young people.

This hardening of unemployment, which leads to a loss of skills, motivation and workplace behaviours, is an important issue and one that may have a lasting legacy, as long-term unemployment is normally slowest to fall during periods of economic recovery.

Figure 17: Unemployment by Duration (% of total unemployed), Solent LEP, 2007-2013



Source: Claimant Count (via Nomis)

4.2.4.3 Usual jobs of unemployed claimants

This section looks in some more detail at the characteristics of the local unemployed population in terms of their occupation, to examine the potential of this group to take advantage of current employment opportunities that employers are creating (as measured by Jobcentre Plus vacancies[9]).

Figure 18 shows that the biggest usual occupation of unemployed claimants locally was Sales occupations, which accounted for 27% of all claimants in the Solent LEP area (6,500 claimants). By comparison, there were 1,080 vacancies notified in this occupational group, suggesting a significant mismatch between the skills and employment experience of this group and those occupations generating vacancies among local employers.

Other occupations where the supply of labour appears to outstrip local demand include:

- Administrative occupations (2,175 claimants, 350 vacancies)
- Process, plant & machine operatives (700 claimants, 241 vacancies)
- Elementary trades, plant & storage related (3,895 claimants, 566 vacancies)

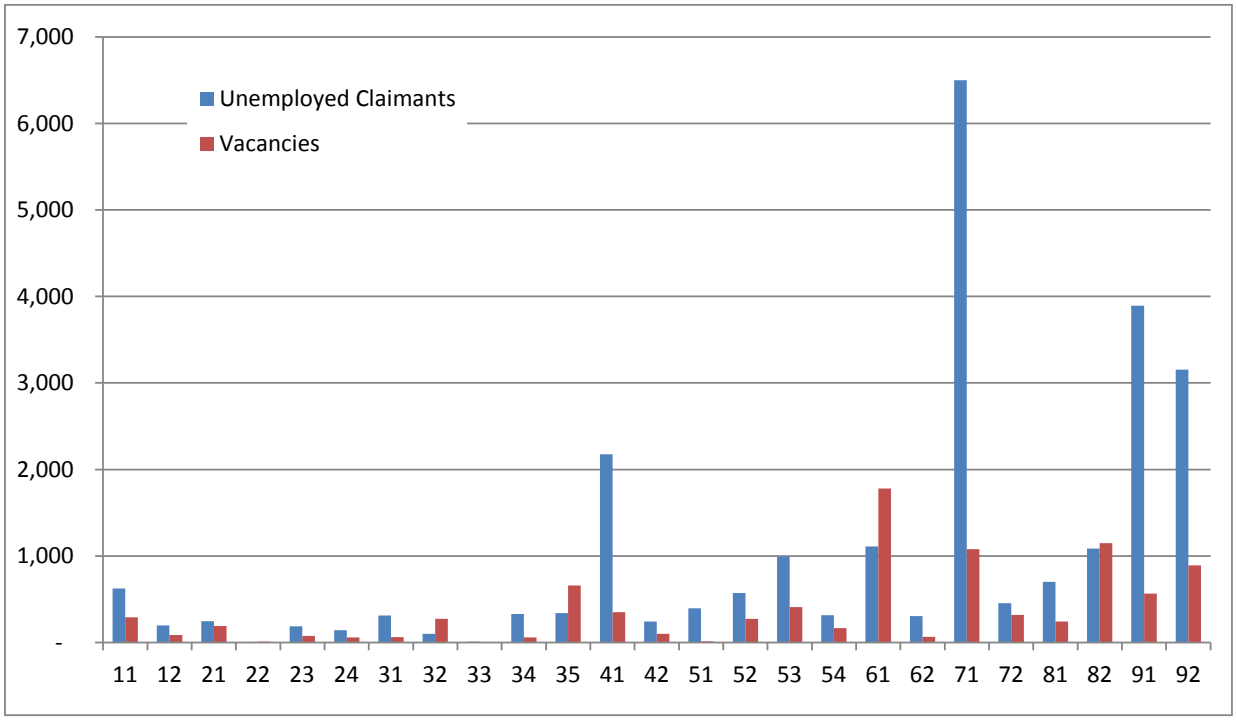
[9] Jobcentre Plus vacancies data ceased to be available from November 2012 onwards and is estimated to only captures around 30% of all vacancies. However, it is still useful in giving a broad impression of the match between the supply and demand for labour, particularly in less-skill/lower-level jobs.

- Elementary administration & service (3,155 claimants, 891 vacancies)

By contrast, there are other occupations where demand appears to outstrip the supply of labour. These are:

- Health and social welfare assoc. profs. (100 claimants, 272 vacancies)
- Business & public service assoc. profs. (340 claimants, 659 vacancies)
- Caring personal service occupations (1,110 claimants, 1,780 vacancies)

Figure 18: Claimants and Vacancies by Occupation, Solent LEP, December 2012



Source: Claimant Count (November 2012) and Jobcentre Plus Vacancies (November 2012), via Nomis

Key

11 : Corporate Managers
12 : Managers in Agriculture / Services
21 : Science and Technology Professionals
22 : Health Professionals
23 : Teaching and Research Professionals
24 : Business / Public Service Professionals
31 : Science and Technology Associate Professionals
32 : Health and Social Welfare Associate Professionals
33 : Protective Service
34 : Culture, Media and Sports
35 : Business & Public Service Associate Professionals
51 : Skilled Agricultural Trades
52 : Skilled Metal and Electronic Trades
53 : Skilled Construction and Building Trades
54 : Textiles, Printing and Other Skilled Trades
61 : Caring Personal Service
62 : Leisure and Other Personal Service
71 : Sales
72 : Customer Service
81 : Process, Plant and Machine Operatives
82 : Transport / Mobile Machine Drivers / Operatives
91 : Elementary Trades, Plant and Storage Related

41 : Administrative
42 : Secretarial and Related
92 : Elementary Administration / Service

4.2.4.4 Young People Not in Education, Employment or Training (NEETs)

Much attention is now focused on the prevalence of young people (aged 16 to 18) who are Not in Education, Employment or Training (NEET). The concern is that such people are effectively a 'lost generation' whose social and economic prospects will be reduced significantly as a result of their lack of productivity at this early age. Table 10 shows that, in March 2013, an estimated 4.7% of 16-18 year olds across the wider Solent LEP area[10] were NEET (2,695 young people). This was lower than the national (5.6%) and regional (5.1%) averages. A further 8.5% of this age group's activities were unknown.

NEET levels are often higher than average in urban areas, as is the case for Portsmouth and Southampton. The low proportion of young people who were NEET on the Isle of Wight is impressive, given the generally high unemployment levels prevalent on the Island.

Table 10: 16-18 year old NEETs, March 2013

Area	16-18 year olds known to the local authority	16-18 year olds NEET		% whose activity is not known
		Estimated number (March 2013)	% (March 2013)	
Hampshire	40,234	1699	4.2%	9.4%
Isle of Wight	4,441	157	3.5%	6.5%
Portsmouth	5,844	452	7.7%	4.3%
Southampton	6,392	387	6.1%	8.0%
Solent LEP	**56,911**	**2,695**	**4.7%**	**8.5%**
South East	256,843	13,180	5.1%	8.3%
England	1,683,686	93,904	5.6%	7.9%

Source: NCCIS Database, based on data provided by local authorities

DfE NEET statistics suggest that, between 2011 and 2012, the proportion of young people who were NEET fell in Hampshire (from 5.3% to 4.8%), on the Isle of Wight (from 5.2% to 4.7%) and in Southampton (from 7.4% to 6.3%). Only Portsmouth saw an increase in the proportion of NEETs, from 7.2% to 7.8%.

The proportion of NEETs rises between ages 16 and 18, increasing from 3.0% of Solent LEP's 16 year olds, to 5.1% of 17 year olds and 6.2% of 18 year olds. The NEET rate for the Solent LEP is 0.6 percentage points below the average for England with regard to 16 year olds, 0.2 percentage points lower than average for 17 year olds and an impressive 1.6 percentage points below the England average for 18 year olds.

[10] Data is only available at the upper tier authority level. Therefore the whole of the Hampshire has been included as being within the Solent LEP area.

A further group which is the focus of policy concern is young people in employment without training. Although they may be picking up skills informally and contributing to household incomes, this group also has an increased likelihood of becoming NEET and can switch between periods of being NEET and in employment without training.

In March 2013, there were 3,508 16-18 year olds in employment without training in the wider Solent LEP area. Nearly 75% of these young people were residents of Hampshire.

It is interesting to note that the proportion of young people in employment without training is higher in the South East than it is across England as a whole, due the relative availability of work for young people. At the local level, the proportion of 16 to 18 year olds in jobs without training is higher in Hampshire than it is in Portsmouth or Southampton, mirroring this trend. The Isle of Wight has a higher rate than one would anticipate, if this were the sole causal factor, indicating that other factors are also at play, such as the nature of the jobs created in the local labour market.

Table 11: 16-18 year olds in Employment Without Training, March 2013

Area	16-18 year olds known to the local authority	16-18 year olds in Employment Without Training	
		Estimated number (March 2013)	% (March 2013)
Hampshire	40,234	2,590	6.4%
Isle of Wight	4,441	282	6.4%
Portsmouth	5,844	294	5.0%
Southampton	6,392	343	5.4%
Solent LEP	**56,911**	**3,508**	**6.2%**
South East	256,843	13,180	5.8%
England	1,683,686	93,904	4.9%

Source: NCCIS, based on data provided by local authorities

National data shows that ,while the proportion of young people who are NEET has been remarkably consistent over time (ranging only from 9.2% to 10.4% between 2001 and 2011), the number of young people in Employment Without Training in England has more than halved in the last decade, from 15.1% in 2001 to 7.0% in 2011.

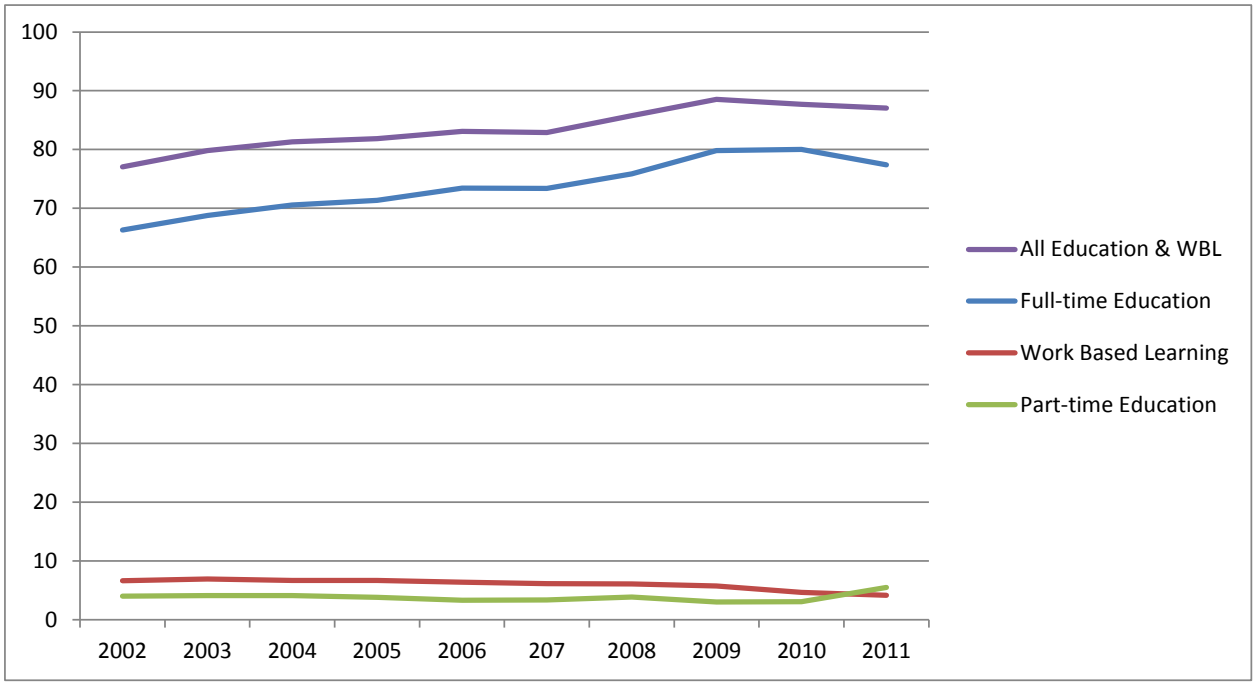
4.2.3.5 Participation in Education and Work-based Learning

Figure 19 shows that the decline in the number of young people in jobs without training has been accompanied by a fairly consistent rise in the number of young people participating in Education and WBL.

In 2011, 87% of 16 and 17 year olds in the Solent LEP area were engaged in some form of education or WBL, a rise of 10 percentage points from 77% in 2002.

However, it would be wrong to think that this had been achieved as a result of converting jobs without training into jobs with training, such as Apprenticeships. The data shows that, in 2011, just 4% of 16 and 17 year olds in the Solent LEP area were engaged in WBL, compared with 7% in 2002. The decrease in participation in WBL is entirely due to the rise in the number of young people continuing in either full or part-time education.

Figure 19: 16 & 17 Year olds, participation in education and work-based learning, Solent LEP, 2002-2011



Source: DfE SFR 12_2012

5. THE SUPPLY OF SKILLS & LEARNING

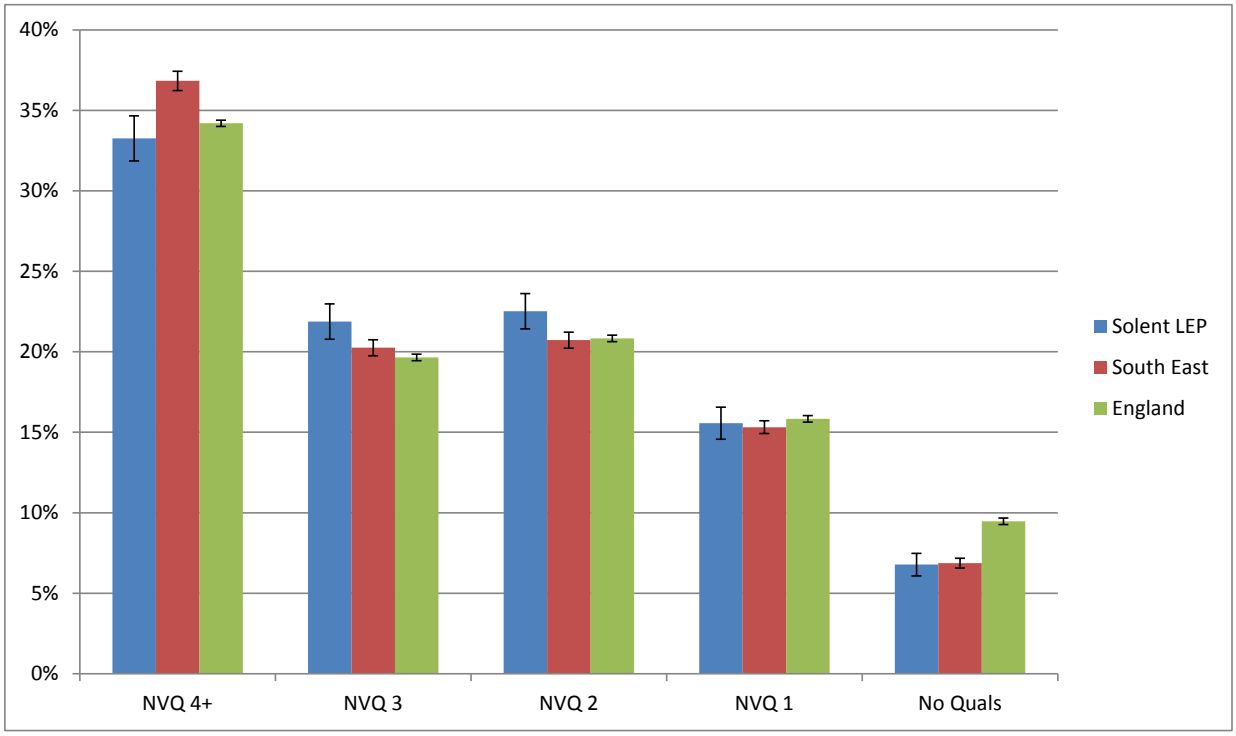
5.1 Skills of the Working Age Population

5.1.1 Workforce Qualifications

This section looks at the stock of qualifications (the best proxy for skills) within the local workforce. Together with the analysis of participation by young people in education and learning activities, and the level of qualifications they achieve, they provide an indication of the health of the labour market from how easily it can respond to changing demand from employers, through the renewal and updating of the skills of the workforce.

Figure 20 shows that in 2011, a lower than average proportion of the Solent LEP's workforce (33%) was qualified to Level 4 and above, with a higher proportion qualified to Level 3 (22%) and Level 2 (23%). On a positive note, a lower than average proportion of people in the Solent (7%) had no qualifications compared with the national average (9%).

Figure 20: Qualifications of the working age population (%), Solent LEP vs South East and England, Jan-Dec 2011

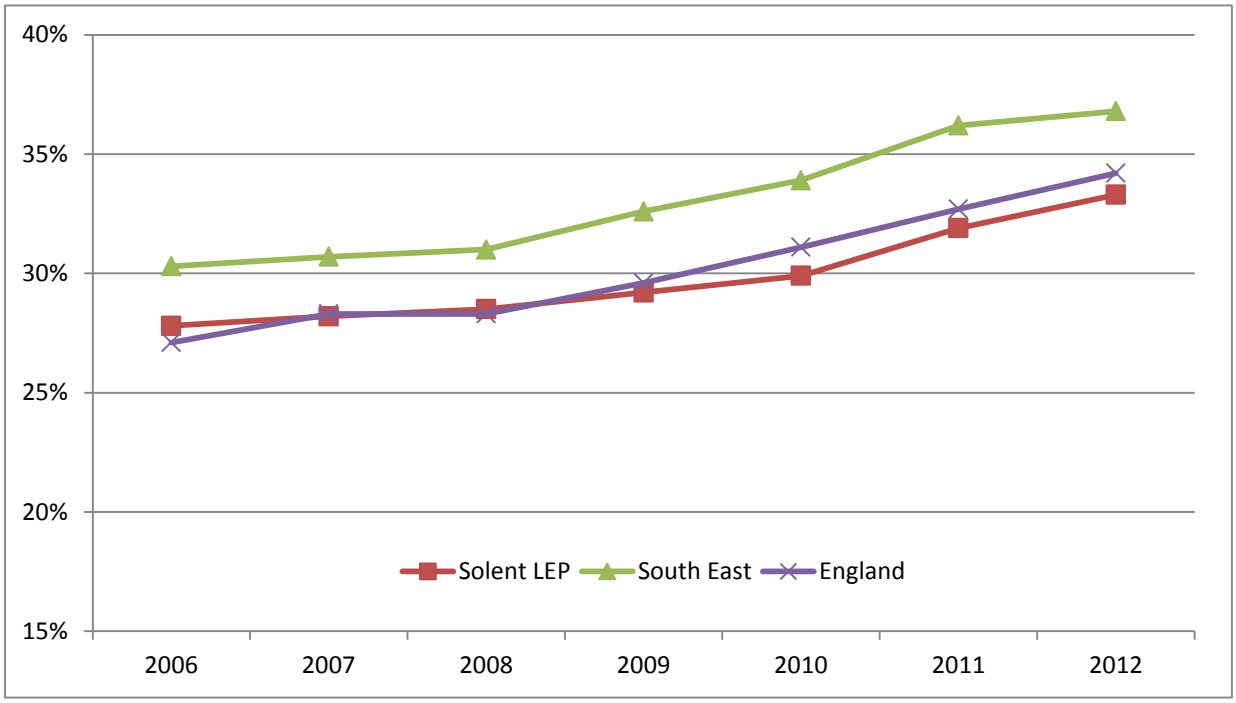


Source: Annual Population Survey (via Nomis). Note: error bars show 95% confidence intervals

Over recent years, there has been a fairly consistent rise in the achievement of qualifications at all levels. At the highest level (Level 4 and above), Figure 21 shows that the Solent LEP area has broadly followed the national and regional trends, albeit with a slightly slower rate of increase. Between 2006 and 2012, the LEP area has fallen from being around one percentage

point above the national average to one percentage behind on this measure. The gap with the regional average has also grown, from two percentage points in in 2006 to four percentage points in 2012.

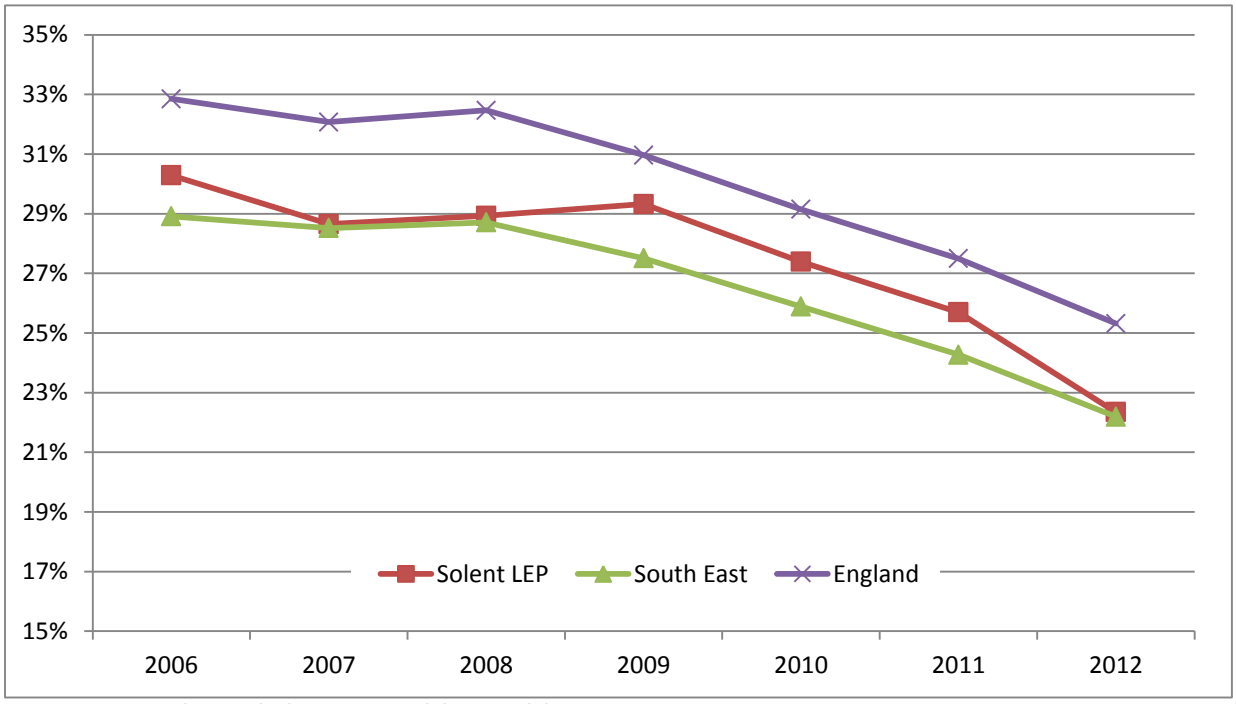
Figure 21: Trend in Level 4+ qualifications (% of the working age population), Solent LEP vs South East and England, 2006 - 2012



Source: Annual Population Survey (via Nomis).

Figure 22 shows that the proportion of the workforce without a Level 2 qualification has been falling over the same period, with Solent LEP largely in line with the South East and England as a whole. The plateau between 2007 to 2009 is likely to be partly due to the wide confidence intervals associated with local level data from the APS, and should not be of significant concern.

Figure 22: Trend in those without a Level 2 qualification (% of the working age population), Solent LEP vs South East and England, 2006-2012



Source: Annual Population Survey (via Nomis).

6. SUPPLY SIDE ANALYSIS – THE FLOW OF SKILLS

In this section we look at the flow of skills into the economy as a result of new entrants – young people as well as the development of the existing workforce.

We place particular emphasis on the supply of STEM skills, which are particularly valued by businesses in the Solent's strategic sectors and clusters in Marine, Aerospace and defence, Advanced manufacturing and Engineering.

6.1 The skills of young people

6.1.1 Key Stage 3

Table 12 shows the level of educational attainment achieved by young people in different parts of the Solent LEP at Key Stage 3. Key Stage 3 comprises the first three years of secondary school, from age 11 to 14 (years 7, 8 and 9). Evidence shows that if children do well at Key Stage 3, they significantly increase their chances of doing well at GCSE and beyond. Most children are expected to achieve level 5 or level 6 by the end of Key Stage 3.

Table 12 shows that the level of education attainment at Key Stage 3 in Hampshire is roughly in line with the national average for English, Maths and Science at both level 5 and at level 6. All other areas within Solent LEP lag behind the national averages.

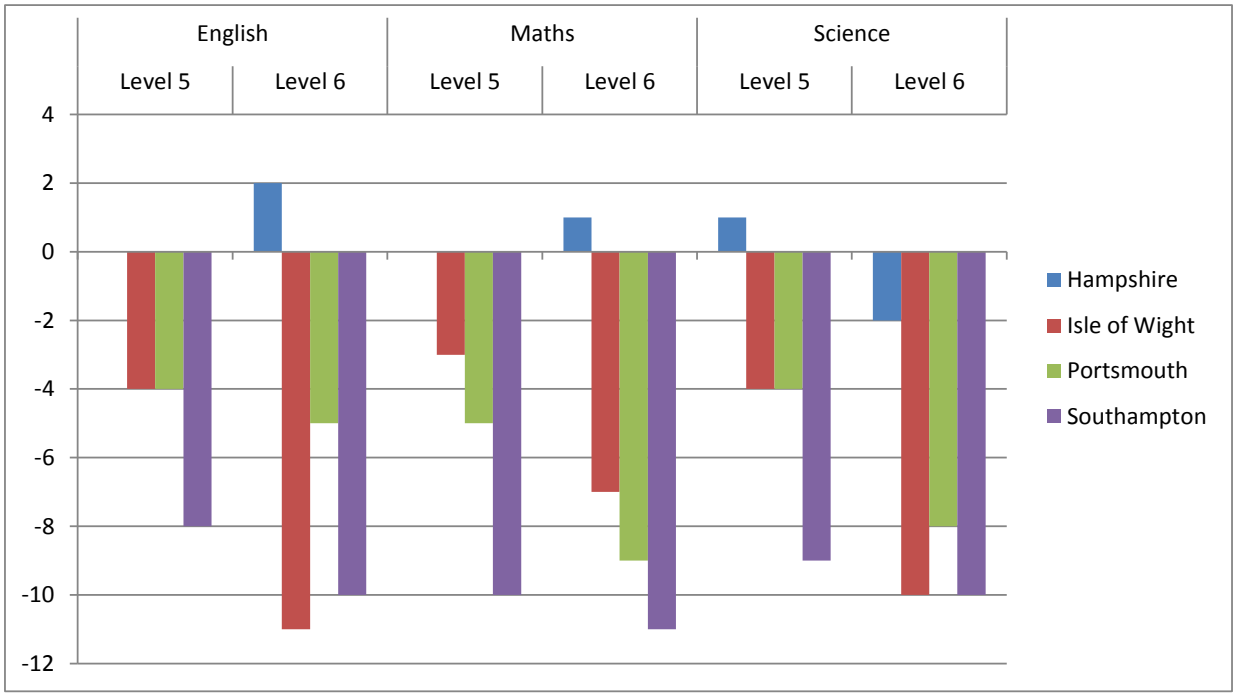
In Portsmouth and on the Isle of Wight, the gap at Level 5 is around -3 to -5 percentage points, suggesting that the majority of people attain a reasonably good standard of education across all subject areas. Interestingly, the gap widens to between -7 percentage points and -11 percentage points at Level 6, suggesting that a smaller than average proportion of 14 year olds attain at the higher level. The gap with the national average in Southampton is pronounced at both Level 5 and at Level 6, raising concerns about the number of young people within the city who may be failing to build a strong foundation for future achievement.

Table 12: Key Stage 3 results, % attaining Level 5 & attaining Level 6, 2013

	English		Maths		Science	
	Level 5	Level 6	Level 5	Level 6	Level 5	Level 6
Hampshire	86	57	84	63	86	54
Isle of Wight	82	44	81	55	81	46
Portsmouth	82	50	79	53	81	48
Southampton	78	45	74	51	76	46
South East	85	55	83	63	84	56
England	86	55	84	62	85	56

Source: DfE SFR 40_2013

Figure 23: Key Stage 3, Gap in attainment (in percentage points), Solent local authorities v's England, Level 5 & Level 6, 2013



Source: DfE SFR 40_2013

6.1.2 GCSEs

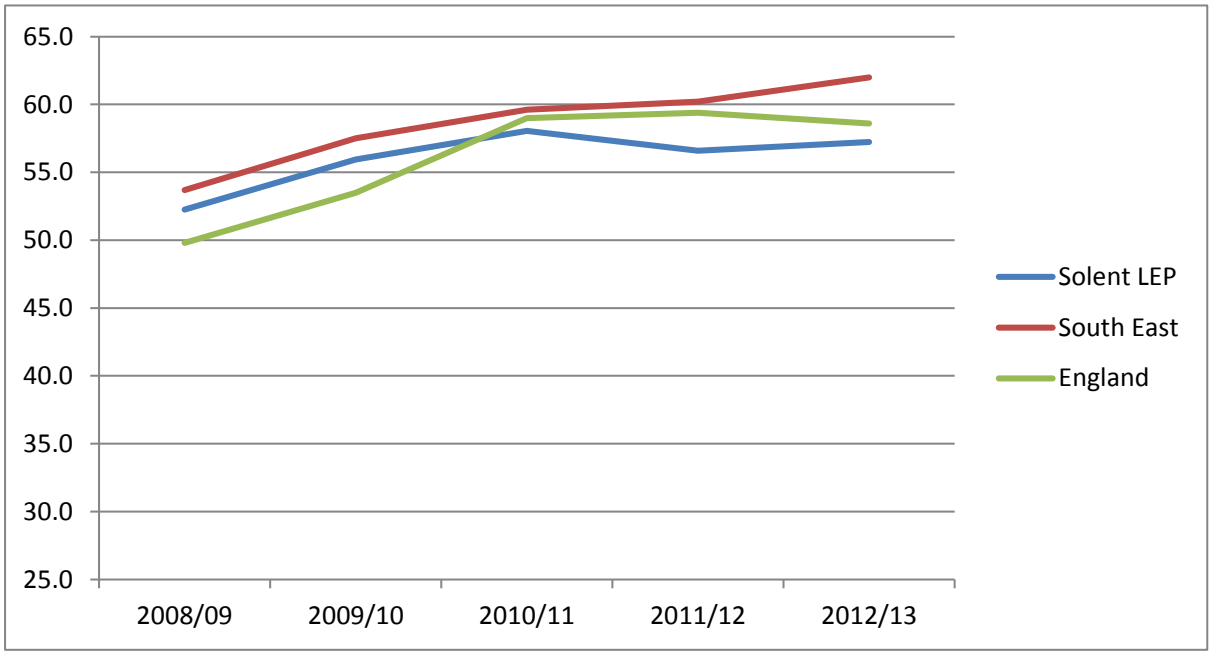
In 2012/13, 57.2% of pupils in Solent LEP schools achieved five or more GCSEs at grades A* - C including Maths and English, slightly below the regional and national averages of 62.0% and 58.6%.

As with attainment at Key Stage 3, there is a significant level of variation across the LEP area. Provisional results for 2012/13 suggest that 59.6% of pupils attained this benchmark in Hampshire, compared with 57.6% in Southampton, 48.5% in the Isle of Wight and 47.1% in Portsmouth. The data is quite volatile, showing a considerable decline for Portsmouth in the last year (from 52.4% in 2011/12) and a considerable rise on the Isle of Wight (from 44.5% in 2011/12).

However, the overall trend in recent years is not particularly positive for the Solent LEP area. In 2008/09, the LEP area scored above national average on this measure, but slower than average growth resulted in the LEP falling behind the average for England in 2010/11.

One potentially positive note is that within the LEP the rate of growth has been slowest in Hampshire and fastest in areas that have lagged against this indicator, particularly Southampton and Portsmouth.

Figure 24: Percentage of 15 year olds achieving 5+ A*-C grades at GCSE, including English and Maths, 2008/9-2012/13



Source: DfE SFR 40_2013

6.1.3 Engagement with the STEM agenda

In this section we therefore examine levels of achievement in STEM subjects at GCSE level, and levels of engagement in optional subjects.

In 2012/13, 69.8% of young people in the Solent LEP area who were at the end of Key Stage 4 gained a GCSE in Mathematics at grade C or above. This is slightly below the England average of 71.2%. As Table 13 shows, the level of achievement within the LEP varies from 60.0% in Portsmouth to 72.0% in Hampshire.

The best data on GCSE science relates to achievement of the English Baccalaureate. To get the science element of the English Baccalaureate, pupils either need to get an A*-C pass in core and additional science or they must take all of the three single sciences and get an A*-C pass in two of them. Table 13 shows that the proportion of young people entered for sciences at English Baccalaureate level varies enormously, from 45.1% on the Isle of Wight to 74.1% in Hampshire. Unsurprisingly, the proportion of young people gaining the science component of the English Baccalaureate shows a similar degree of variation, from 29.6% on the Isle of Wight to 54% in Hampshire.

Table 13: Achievement at the end of Key Stage 4 in GCSE Maths & Science, Solent LEP, 2012/13

	Mathematics	Entered for English Baccalaureate Science	Gaining English Baccalaureate Science
Hampshire	72.0	74.1	54.0
Isle of Wight	62.9	45.1	29.6
Portsmouth	60.0	60.9	34.7
Southampton	69.1	59.6	36.9
Solent LEP	**69.8**	**69.0**	**48.1**
South East	72.3	68.8	50.8
England	71.2	65.3	48.4

Source: DfE SFR 40_2013

With Core Science and Maths being compulsory parts of the national curriculum up until the end of Key Stage 4 (GCSE), levels of engagement with STEM subjects could perhaps best be measured by focusing on numbers of pupils studying Design & Technology, Manufacturing/Engineering and additional subjects in Science and Maths.

Encouraging signs are the higher than average levels of entries in additional Science and Maths options (6.1% and 5.4% respectively). There were very few entries from Solent LEP schools in Manufacturing or Engineering, but these are relatively new qualifications. 2011 was the first year of grades for these new subjects, which were introduced from September 2009.

A slightly lower than average proportion of young people in the Solent area study the individual sciences of Biology, Chemistry and Physics as separate GCSEs. This could be seen as a concern, as, although it is not a requirement for progression to study science at A Level, those who study individual sciences at GCSE are more likely to continue studying science subjects at A Level.

Table 14: GCSE Entries in STEM subjects, Solent LEP and England, 2012

STEM Subject	Solent LEP		England
	Number	% of total	% of total
Core Science	12,071	7.3%	6.9%
Biology	5,484	3.3%	3.5%
Chemistry	5,333	3.2%	3.4%
Physics	5,327	3.2%	3.4%
Additional Science options	10,014	6.1%	5.9%
Manufacturing / Engineering	34	0.0%	0.0%
Maths	20,770	12.6%	12.9%
Additional Maths options	3,457	2.1%	1.8%
All Design & Technology	7,988	4.8%	4.9%
ICT	1,469	0.9%	0.8%
STEM Total	**71,947**	**43.5%**	**43.5%**
All GCSE entries	165,248	-	3,672,458

Source: DfE, School Performance Tables KS4 underlying data

Table 15 shows that there were 22,880 A or AS Level entries in STEM subjects in Solent LEP-based providers. This represented 28.9% of all entries, compared with 31.8% for England. Maths is by far the largest subject area being studied locally, accounting for 8.1% of all entries, just above the national average. Across the LEP, there were lower than average entries in all STEM subjects other than Computer Studies / Computing, Electronics and Environmental Science.

Table 15: A & AS Level Entries in STEM subjects, Solent LEP and England, 2012

STEM Subject	Solent LEP		England
	Number	% of total	% of total
Additional Mathematics	3	0.0%	0.0%
Applied Engineering	2	0.0%	0.0%
Applied ICT	486	0.6%	1.0%
Applied Science	184	0.2%	0.3%
Biology	4,659	5.9%	6.8%
Chemistry	3,308	4.2%	5.4%
Computer Studies/Computing	648	0.8%	0.5%
D&T Food Technology	9	0.0%	0.2%
D&T Product Design	758	1.0%	1.3%
D&T Systems & Control	16	0.0%	0.0%
D&T Textiles Technology	41	0.1%	0.3%
Electronics	278	0.4%	0.1%
Environmental Science	613	0.8%	0.2%
Geology	171	0.2%	0.2%
ICT	720	0.9%	1.1%
Mathematics	6,371	8.1%	8.8%
Mathematics (Further)	1,121	1.4%	1.4%
Mathematics (Pure)	-	0.0%	0.0%
Mathematics (Statistics)	-	0.0%	0.1%
Physics	2,828	3.6%	3.9%
Science in Society	5	0.0%	0.0%
Science SA	-	0.0%	0.0%
Statistics	-	0.0%	0.0%
Use of Mathematics	659	0.8%	0.1%
STEM Total	**22,880**	**28.9%**	**31.8%**
All Subjects	79,075		

DfE, SFR 01/2012 underlying data

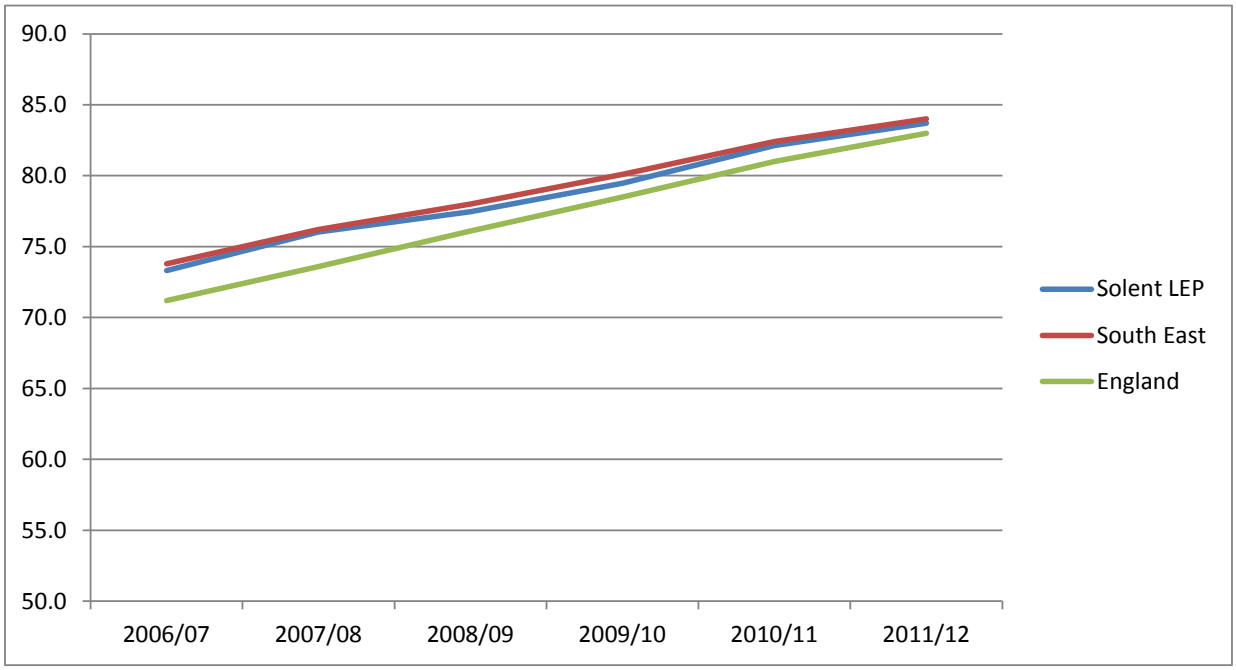
6.1.4 Attainment of Level 2 and Level 3 qualifications at 19

The achievement of a Level 2 or 3 qualification by age 19 is a key indicator for the DfE. The proportion of the Solent LEP's 19 year olds achieving a Level 2 qualification has increased significantly, by 10.4 percentage points between 2006/07 and 2011/12 to 83.7% (

Table 25). The proportion achieving this level locally in 2011/12 was 0.7 percentage points above the national average (83.0%). However, the gap with the national average has narrowed in recent years due to slower growth locally. In 2007/08, Solent was 2.4 percentage points ahead of the national average.

There are considerable differences in the proportion attaining this level within the LEP area. In Hampshire, 85.6% of 19 year olds had attained Level 2, compared with 76.1% in Southampton, 79.9% on the Isle of Wight and 82.2% in Portsmouth.

Figure 25: Attainment of Level 2 at age 19, 2005/06 - 2010/11, Solent LEP vs South East and England

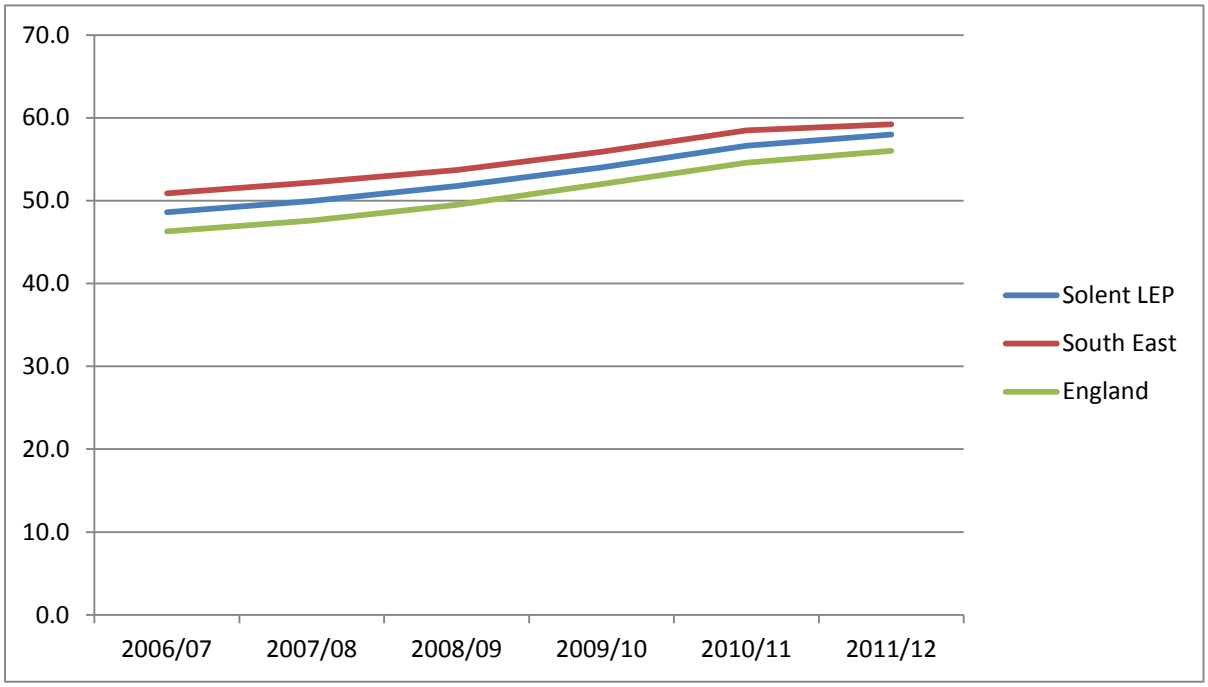


Source: DfE, SFR 13/2013

The proportion of 19 year olds achieving a Level 3 qualification has also risen consistently over the last five years, by 9.4 percentage points to 58.0% in 2010/11 (Figure 26). This is slightly ahead of the rate of improvement for the South East (8.3 percentage points) and slower than that for England as a whole (9.7 percentage points). These differences are, however, very small.

Again, there is significant variation within the LEP, with 61.4% of 19 year olds in Hampshire achieving this benchmark level, compared with 51.1% in Portsmouth, 49.3% in Southampton and 48.8% on the Isle of Wight. These last three areas all lag behind the national (56.0%) and regional (59.2%) averages by a considerable margin.

Figure 26: Attainment of Level 3 at age 19, 2005/06 - 2010/11, Solent LEP vs South East and England



Source: DfE, SFR 13/2013

Although the Solent LEP area as a whole performs relatively well on these measures, despite consistent improvements, over 16% of young people still do not achieve Level 2 by the age of 19 - generally regarded as the benchmark for employability. This represents approximately 3,600 individuals entering the labour force each year, with questions about their skills and preparedness for work.

6.1.5 Progression to HE

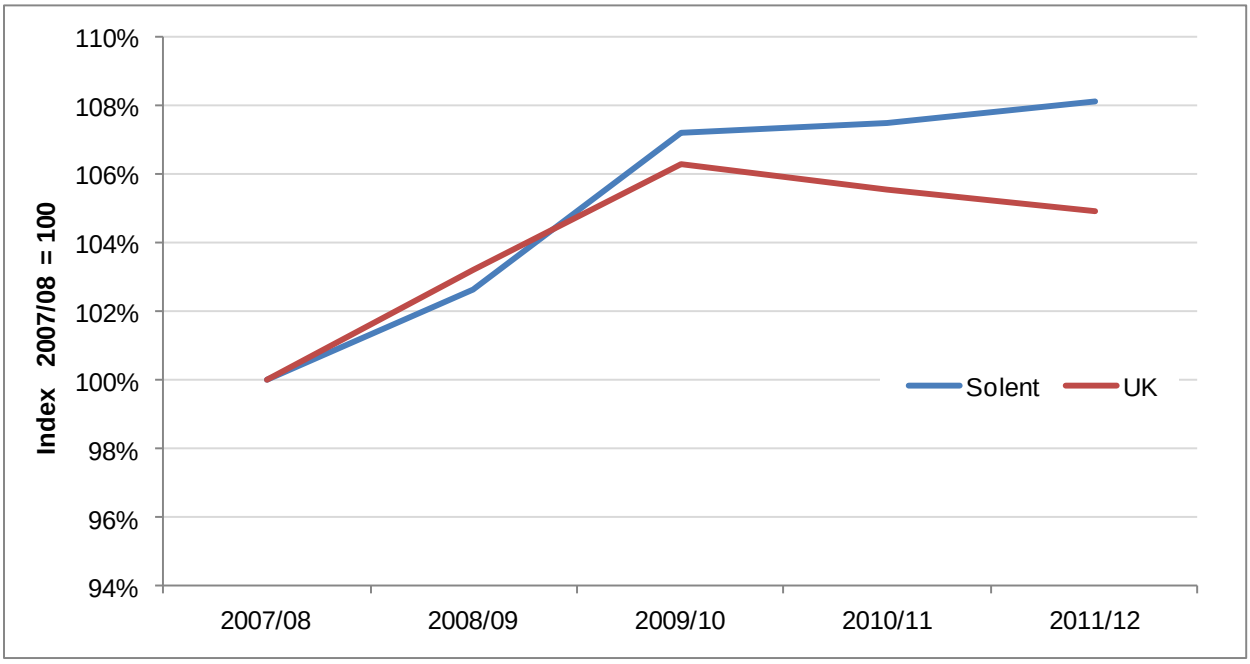
In 2011/12, 54,865 people from Hampshire, the Isle of Wight, Southampton and Portsmouth were participating in HE[11].

Figure 27 shows that the trend has been for rising participation, with a recent levelling off, and even decline at the national level, caused by the rise in tuition fees. Despite this levelling off, the overall number of HE students from the wider Solent area remained 8% higher in 2011/12 than it was in 2007/08.

Furthermore, UCAS' interim assessment for the 2013/14 entry year suggests that the downward trend that had been seen nationally has recently been reversed and that ,in the summer of 2013, around 446,000 applications were accepted by UK HEIs, a rise of around 9% (or 37,000 people) on 2012/13.

[11] It should be noted that this data only covers HEIs, and does not include any students taking HE courses at FE Colleges.

Figure 27: Indexed growth in number of HE students (full-person equivalents), Solent v's UK, 2007/08 – 2011/12, 2007/08 = 100



Source: Heidi/HESA

Although this rise is positive, the proportion of young people from the Solent area who progress into higher education is lower than the national average. The proportion of young people from Portsmouth and Southampton participating in HE is particularly low. Table 16 shows that just 31% of young people who entered an A level or another Level 3 qualification in 2009/10 progressed to a UK HEI, a figure 17 percentage points below the UK average of 48%. The Solent as a whole (41%) also lagged behind the national average.

It is interesting to note that even fewer young people from Portsmouth and Southampton progress to 'Top Third' or Russell Group Universities. While the proportion of young people progressing to all HEIs from these two cities is around 35% lower than the national average, the proportion progressing to the countries 'best' universities is around 50% below the national average. The Isle of Wight performs somewhat better, but also lags behind significantly on this measure.

This data suggests that raising the aspirations of young people locally, encouraging and supporting them to see HE as a realistic opportunity and progression route must clearly be a priority for the Solent LEP area.

Table 16: Percentage of students who entered an A Level or other Level 3 qualification in 2009/10, progressing to HE

	All UK HEIs	Top Third of HEIs	Russell Group (incl. Ox. and Cam.)	Oxford or Cambridge	All other HEIs & HE Providers
Hampshire	42%	16%	9%	1%	26%
Isle of Wight	40%	9%	5%	1%	31%
Portsmouth	31%	6%	4%	0%	25%
Southampton	31%	7%	4%	0%	25%
Solent LEP	**41%**	**15%**	**8%**	**1%**	**26%**
South East	43%	16%	9%	1%	27%
England	48%	14%	8%	1%	34%

Source: ONS

6.2 Recruitment of young people

In 2011, around 14,500 employers in the Solent LEP area (34% of all employers) recruited a young person directly following their education in the last 2-3 years. This was slightly above the national average of 31%. One quarter (25%) of employers had recruited a young person in the last 12 months. Table 17 shows that only 6 to 9% of Solent's employers had recruited from each group and that they were slightly more likely to recruit young people direct from education than the national average.

Table 17: Recruitment of Young People (% of employers recruiting), Solent LEP vs England, 2011

Young People Recruited	Solent LEP	England
16 year olds recruited to first job from school	6%	6%
17 or 18 year olds recruited to first job from school	9%	8%
17 or 18 year olds recruited to first job from FE College	9%	7%
Recruited to their first job from University or other HEI	9%	9%

Source: UKCES, Employer Skills Survey, 2011

The 2011 survey was the first time for which data had been produced at LEP level. Previous surveys had published headline figures for local authorities, but small sample sizes at authority level meant that no local reliable results could be derived on topics where only a small proportion of employers responded. Comparison with previous years is best focused at the national level.

The recruitment of young people has fallen compared with levels shown in previous surveys. Across England, the proportion of employers recruiting 16 year olds straight from school had fallen from 7% in 2007 to 5.6% in 2009 before rising to 6.0% in 2011. The proportion recruiting graduates fell from 10% in 2007 to 9% (the question regarding 17-18 year olds was asked differently in previous surveys, meaning that 2011 data is not directly comparable).

Previous surveys have also suggested that employers with recruitment difficulties and internal skills gaps have been more likely to turn to young people as a means of addressing those issues. With the onset of recession and the subsequent upsurge in unemployment, employers have had a larger pool of labour to recruit from at the same time as actually creating fewer job vacancies. Both of these factors have influenced the fall in recruitment of young people in recent years.

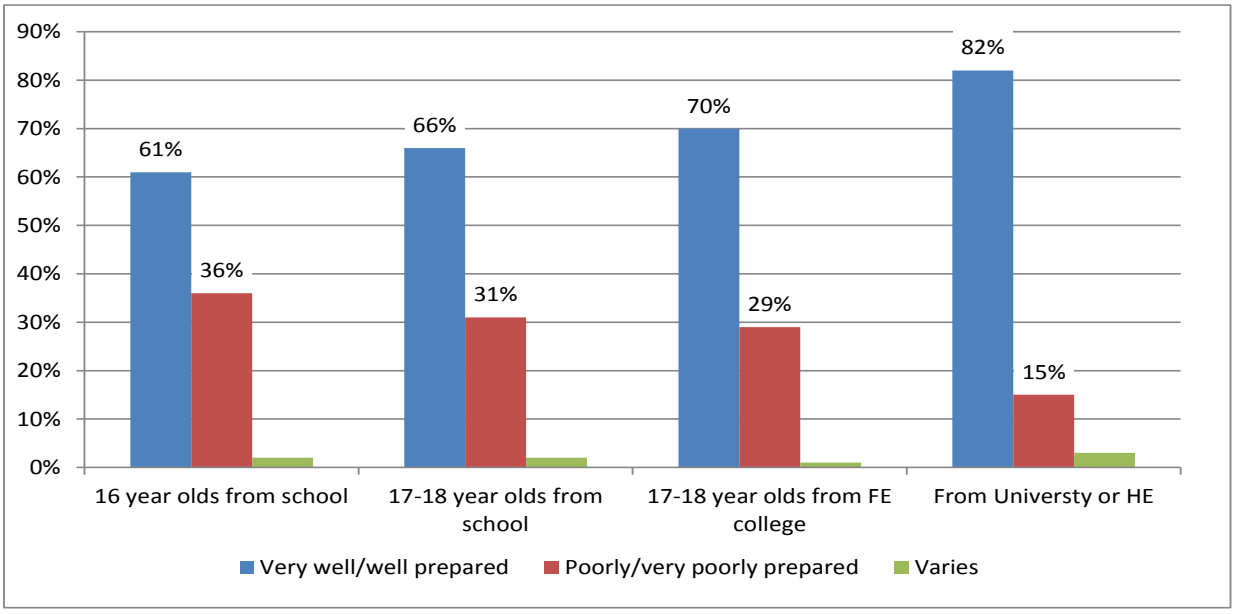
By sector, the recruitment of 16 year olds from school was highest in the Wholesale & retail, Hotels & restaurants and Personal services sectors. For all young people aged under 24, it was highest in Education, Health & social work, Community, social & personal services and Hotels & restaurants.

6.2.1 Preparedness of young people for work

NESS also asked employers to rate the preparedness for working life of the young people they had recruited directly from the education system. All employers who had taken on individuals aged under 24 direct from education were asked whether they considered these recruits to be well or poorly prepared for work. Figure 28 shows the results for 2011, and shows that the longer recruits had been in education, the better prepared they were seen as being.

Establishments that had recruited education leavers generally found them well prepared for work, and the perceived level of work-readiness increased with the amount of time recruits had spent in education, with those recruited from university best prepared (Figure 28). 17-18 year-old recruits from FE Colleges were more likely to be seen as well prepared than the same age group recruited from schools. This could be because college courses may be more vocational in nature, or that college students may be more likely to combine work and learning.

Figure 28: Preparedness for work of young people recruited, Solent LEP, 2011 (% of employers recruiting young people)



Source: UKCES, Employer Skills Survey, 2011

Among employers who had recruited young people, a lack of working world/life experience or maturity was the most commonly cited reason for a lack of preparedness for work. Responses relating to personality such as poor attitude or lack of motivation were the second most common deficiencies for each sub-group. Around one-in-five of employers who had recruited young people aged from 16 to 18 had concerns about lack of experience or attitudes and motivation. A lack of required skills or competencies was cited by fewer than 10% of employers, perhaps because employers recognised that they had a role in developing these over time.

All forms of deficit were cited less frequently by those recruiting graduates.

Table 18: Ways in which poorly prepared/skills lacking amongst young recruits, Solent LEP, 2011 (% of employers recruiting young people in the relevant group)

	16 year olds direct from school	17 or 18 year olds direct from school	17 or 18 year olds direct from FE college	Anyone direct from University / other HEI
Lack of working world / life experience or maturity	20%	19%	19%	8%
Poor attitude / personality or lack of motivation	22%	15%	17%	7%
Lack required skills or competencies	9%	9%	8%	3%
Lack of common sense	3%	3%	4%	1%
Literacy/numeracy skills	2%	1%	2%	3%
Poor education	3%	3%	4%	0%
Other	0%	0%	0%	0%

Source: UKCES, Employer Skills Survey, 2011

7. LEARNING ROUTES

This section focuses on the delivery and take-up of learning opportunities based on statistics provided by the Education Funding Agency (EFA) and the Skills Funding Agency (SFA)[12].

The first part provides an overview of the composition of the 'learning market' and how it has changed over time. In particular, it examines patterns of learning provision by programme and level, for both youth and adult learners.

The second part examines the four 'segments' of this market in more detail: youths in education and training, and Apprenticeships; and adults on education and training, and Apprenticeships. This particularly focuses on subject choices and how preferences have changed over time.

The final part assesses the extent to which locally domiciled learners can access learning opportunities locally.

7.1 Overview of the learning market

7.1.1 By programme and age

Table 19 shows that, in 2012/13, just under 272,000 learner starts were recorded with providers in the Solent LEP area. Young people, aged under 19, accounted for more than three-fifths (62%) of starts in 2012/13. Adult learners (aged 19 and over) accounted for the remaining 38% of starts.

By programme, education and training accounts for 83% of learner starts. By comparison, Adult Safeguarded Learning (10%), Apprenticeships (6%) and Workplace Learning (2%) accounted for relatively small number of learners.

The largest group was youth education and training, which accounted for 60% of learner starts. Adult education and training was the next largest market with 23% of starts.

[12] It focuses initially on learning that is delivered locally: that is it includes learners who access learning opportunities from local providers irrespective of where the learner lives (some will live outside the Solent LEP area). We then incorporate data on learners who live in the Solent LEP area to examine the extent to which learners can access learning opportunities locally.

Table 19: Learner starts (provider postcode) on government-funded learning by programme and age; Solent LEP area: 2012/3

	Education & Training	Apprentice-ships	Adult Safeguarded Learning	Workplace Learning	Total
Numbers					
Adult	61,640	12,089	26,797	4,089	**104,615**
Youth	163,376	3,896	105		**167,377**
Total	**225,016**	**15,985**	**26,902**	**4,089**	**271,992**
%					
Adult	*23*	*4*	*10*	*2*	***38***
Youth	*60*	*1*	*0*	*0*	***62***
Total	***83***	***6***	***10***	***2***	***100***

Source: Solent Data Cube, SFA

The number of learners has remained broadly stable over the last few years with volumes for 2012/3, the latest year, virtually unchanged on those recorded four years earlier. There have, however, been subtle changes to the composition of the market by age and programme type (Table 20).

Firstly, between 2008/9 to 2012/13, the youth share of the learning market expanded from 57% to 62%, while the adult share contracted. This contraction in adult learning reflects changes in government policy, notably the cessation of Train to Gain and Other Employer Based Training, and the contraction in Adult Safeguarded Learning. By contrast, the number of adult learners on Apprenticeships has more than doubled, from 5,300 in 2008/09 to 12,100 in 2012/13.

However, this rise in Apprenticeships (+6,800 starts) is much smaller than the decline in Train to Gain starts over the same period (-17,400). Given the rise in the number of Solent LEP residents aged 19 and over, the data clearly suggests that, over the last five years, there has been a contraction in the proportion of adults participating in government-sponsored education and training.

It is also interesting to note that the number of young people on the Government's flagship Apprenticeship programme only recorded modest increases over the period. Adult Apprenticeships accounted for the vast majority of the growth in this programme.

Table 20: Learner starts (provider postcode) on government-funded learning by programme and age; Solent LEP area: 2008/9 to 2012/3

	2008/9	2009/10	2010/11	2011/12	2012/13	Change	Change %
Adult	**117,471**	**117294**	**101948**	**105807**	**104615**	**-12,856**	**-11**
Education & Training	59,359	59,164	44,679	53,567	61,640	2,281	4
Train to Gain	18,376	13,585	9,891	0	0	-18,376	- 100
Apprenticeships	5,282	6,104	9,861	11,956	12,089	6,807	129
Other Employer-Based Train	1,403	5,490	4,853	0	0	- 1,403	- 100
Adult Safeguarded Learning	33,051	32,942	32,560	31,568	26,797	-6,254	-19
University for Industry	0	0	54	0	0	-	-
European Social Fund (ER)	0	9	50	0	0	-	-
Workplace Learning	0	0	0	8,716	4,089	4,089	
Youth	**154,522**	**168,866**	**171,189**	**168,593**	**167,377**	**12,855**	**8**
Education & Training	150,400	164,503	167,080	164,437	163,376	12,976	9
Apprenticeships	3,489	3,979	3,743	4,021	3,896	407	12
Other Employer-Based Train	62	183	256	0	0	- 62	-100
Adult Safeguarded Learning	571	201	108	135	105	-466	-82
European Social Fund (ER)	0		2	0	0	-	

Source: Solent Data Cube, SFA

7.1.2 By level and age

Turning to the qualification levels, Table 21 shows that almost half (48%) of all starts were at Level 2 or above and 30% at Level 3 or above. Only 1% of starts were at Level 4, 5 or higher.

Young learners are significantly more likely to be learning at Level 2 or above (58%) than adult learners (28%).

Youth learners studying at Level 3 accounted for the largest single learner cohort (26% of all learners). The next largest cohorts were adult learners studying at other levels (16%), youths (14%) studying at other levels and youths studying towards a Level 2 qualification.

Table 21: Learner starts (provider postcode) on Government-funded learning by qualification level and age; Solent LEP area: 2012/3

	Other	Entry Level	Level 1 & Entry	Level 2	Level 3	Level 4, 5 or Higher	Grand Total
Number							
Adult	42,337	16,168	16,721	21,027	7,026	1,336	104,615
Youth	37,181	9,752	22,559	27,122	70,608	155	167,377
Total	79,518	25,920	39,280	48,149	77,634	1,491	271,992
%							
Adult	*40*	*15*	*16*	*20*	*7*	*1*	*100*
Youth	*22*	*6*	*13*	*16*	*42*	*0*	*100*
Total	*29*	*10*	*14*	*18*	*29*	*1*	*100*
%							
Adult	16	6	6	8	3	0	38
Youth	14	4	8	10	26	0	62
Total	29	10	14	18	29	1	100

Source: Solent Data Cube, SFA

Looking at trends over time, Table 22 shows that the largest areas of growth, in terms of qualification level, were for 'other' qualifications and qualifications at Level 1 and Entry level.

By contrast, the number of learners studying towards a qualification at Level 2 fell by 9% for young people and 27% for adults. The proportion of adults studying for qualifications at Level 3 fell by 45% and for Level 4, by 15%.

Table 22: Learner starts (provider postcode) on government-funded learning by qualification level and age; Solent LEP area: 2008/9 to 2012/3

	2008/9	2009/10	2010/11	2011/12	2012/13	Change	%
Adult	117,471	117,294	101,948	105,807	104,615	**-12,856**	**-11**
Level 1 & Entry	35,088	34,222	27,076	28,618	32,889	**-2,199**	**-6**
Level 2	29,002	27,553	19,328	22,121	21,027	**-7,975**	**-27**
Level 3	12,839	11,664	7,777	7,077	7,026	**-5,813**	**-45**
Level 4 +	1,580	1,301	1,096	1,071	1,336	**-244**	**-15**
Other	38,962	42,554	46,671	46,920	42,337	**3,375**	**9**
Youth	**154,522**	**168,866**	**171,189**	**168,593**	**167,377**	**12,855**	**8**
Level 1 & Entry	26,793	30,140	33,396	33,959	32,311	**5,518**	**21**
Level 2	29,851	30,647	29,672	27,005	27,122	**-2,729**	**-9**
Level 3	68,124	73,050	71,247	72,940	70,608	**2,484**	**4**
Level 4 +	12	34	81	90	155	**143**	**1192**
Other	29,742	34,995	36,793	34,599	37,181	**7,439**	**25**

Note: 'Other' includes all Apprenticeship data

Source: Solent Data Cube, SFA

7.2 Sector Subject Areas

Most starts can be assigned to one of several 'Sector Subject Areas'[13]. That said, 14% of learners in the Solent LEP area were studying either 'unknown' subjects or topics that could not be classified using the system.

The most common broad areas of study (Tier 1 Subjects) were: Preparation for Life and Work (23%); Arts, Media and Publishing (10%) and Science and Mathematics (9%).

Compared with adult learners, youth learners are significantly more likely to study Science and Mathematics. They are also more likely to be studying 'unknown' subject, Engineering and Manufacturing Technologies and 'academic' subjects within the Social Sciences; Languages, Literature and Culture, and History, Philosophy and Theology.

Table 23: Learner starts (provider postcode) by Sector Subject Area and age (excludes Apprenticeships), Solent LEP, 2012/3

Sector Subject Area	*Share of starts*		
	Adult	Youth	Total
Agriculture, Horticulture & Animal Care	1	2	2
Arts, Media & Publishing	13	9	10
Business, Administration, Finance & Law	6	4	5
Construction, Planning & The Built Environment	1	1	1
Education & Training	2	0	1
Engineering & Manufacturing Technologies	1	3	2
Health, Public Services & Care	9	5	7
History, Philosophy & Theology	1	3	2
Information & Communication Technology	12	3	6
Languages, Literature & Culture	4	6	6
Leisure, Travel & Tourism	5	5	5
Preparation for Life & Work	32	18	23
Retail & Commercial Enterprise	5	3	4
Science & Mathematics	2	13	9
Social Sciences	0	4	2
Unknown/not applicable	4	19	14
Total	100	100	100

Note: Excludes Apprenticeships

Source: Solent Data Cube, SFA

7.3 Youth Education and Training

Table 24 shows the distribution of starts by youth learners engaged in Education and Training across sector subject areas and how this changed between 2008/09 and 2012/13. Youth Education and Training accounts for 97.5% of all learning by young people.

[13] This analysis excludes Apprenticeships which are classified using a different classification system.

The overall distribution of learners has remained relatively stable. The four most commonly studied subjects in 2008/09 remained the most commonly studied subjects in 2012/13. However, there are some interesting areas of growth, notably:

- Health, Public Services and Care (+30% or 2,066 learner starts)
- Science and Mathematics (+20% or 3,500 learner starts)
- Agriculture, Horticulture and Animal Care (+50%, or 1,200 starts)
- Engineering and Manufacturing Technologies (+45%, or 1,300 starts)
- Retail & Commercial Enterprise (+63% or 1,500 learners); and
- Social Science (+22% or 1,100 starts).

Subjects recording falls in learner numbers were Construction, Planning & the Built Environment and Preparation for Life and Work.

Table 24: Change in Youth Starts (provider postcode) by Sector Subject Area, Solent LEP area: 2008/9 to 2012/3

	Number of starts			
	2008/9	2012/3	Change	
			No.	%
Health, Public Services and Care	6,855	8,921	2,066	30.1
Science & Mathematics	17,691	21,202	3,511	19.8
Agriculture, Horticulture & Animal Care	2,245	3,412	1,167	52
Engineering & Manufacturing Technologies	2,818	4,095	1,277	45.3
Construction, Planning & The Built Environment	1,996	1,717	-279	-14
Information & Communication Technology	4,335	4,559	224	5
Retail & Commercial Enterprise	2,436	3,962	1,526	63
Leisure, Travel & Tourism	9,313	10,447	1,134	12
Arts, Media & Publishing	14,503	15,039	536	4
History, Philosophy and Theology	4,149	4,470	321	8
Social Sciences	4,975	6,058	1,083	22
Languages, Literature & Culture	9,603	10,549	946	10
Education & Training	36	90	54	150
Preparation for Life and Work	38,375	29,811	-8,564	-22
Business, Administration, Finance & Law	7,041	7,300	259	3.7
Unknown	24,548	29,139	4,591	18.7
Not Applicable	3,603	6,606	3,003	83.3
Grand Total	**154,522**	**167,377**	**12,855**	**8.3**

Source: Solent Data Cube, SFA

7.4 Adult Education & Training

Adult Education & Training accounted for 59% of all government-funded adult learning in 2012/13. As with youth learners, a small minority of learning courses (6%) either cannot be assigned to a sector subject area or are unknown.

Perhaps unsurprisingly, given the changes in public funding such as the cessation of Train to Gain, there is a greater degree of volatility and change in adult learner numbers compared with those for youth learners. Vocational subject areas dominate the subject choices of adult learners. However, Table 25 shows some significant swings, some of which, such as the decline in Engineering and Manufacturing Technologies, must be a concern for Solent LEP. Key changes include a decline in:

- Engineering and Manufacturing Technologies (-63%, or 1,608 learner starts)
- Languages, Literature & Culture (-51%, 1,670 starts)

The most significant areas of growth were in:

- Preparation for Life & Work (+10%, 2,070)
- Business, Administration, Finance & Law (+33%, 1,316)
- Information & Communication Technology (+19%, 975)
- Unknown/not applicable (+116%, 2137)

Table 25: Change in adult starts on Education & Training (provider postcode) by Sector Subject Area, Solent LEP area, 2008/9 to 2012/3

	Number of starts			
	2008/9	2012/3	Change	
			No.	%
Agriculture, Horticulture & Animal Care	578	876	298	52
Arts, Media & Publishing	3823	3185	-638	-17
Business, Administration, Finance & Law	3972	5288	1316	33
Construction, Planning & The Built Environment	1063	1043	-20	-2
Education & Training	2106	1820	-286	-14
Engineering & Manufacturing Technologies	2569	961	-1608	-63
Health, Public Services & Care	6876	5903	-973	-14
History, Philosophy & Theology	549	408	-141	-26
Information & Communication Technology	5113	6088	975	19
Languages, Literature & Culture	3250	1580	-1670	-51
Leisure, Travel & Tourism	1136	1077	-59	-5
Preparation for Life & Work	21446	23516	2070	10
Retail & Commercial Enterprise	3118	3516	398	13
Science & Mathematics	1728	2111	383	22
Social Sciences	196	295	99	51
Unknown/Not applicable	1836	3973	2137	116
Total	**59359**	**61640**	**2281**	**4**

7.5 Youth Apprenticeships

Youth Apprenticeships accounted for 2% of starts on any youth learning programme in the Solent LEP in 2012/13 and for 24% of all Apprenticeship starts.

The number of Youth Apprenticeship Starts has fluctuated slightly year-on-year although the trend is broadly upwards with volumes in 2012/13, 12% higher than in 2008/9 (Table 26).

While the lion's share of Apprenticeship starts continues to be at the intermediate level (65%), the share of Advanced and Higher Apprenticeships is rising. Higher Apprenticeships continue to account for only a fraction of youth Apprenticeship starts.

Table 26: Change in youth starts (provider postcode) on government-funded Apprenticeships by level; Solent LEP area: 2008/9 to 2012/3

Qualification Level	2008/9	2009/10	2010/11	2011/12	2012/13
Intermediate Level Apprenticeship	2686	3017	2605	2550	2520
Advanced	803	958	1137	1462	1371
Higher Level/Higher Apprenticeship	0	4	1	9	5
Total	**3489**	**3979**	**3743**	**4021**	**3896**

Source: Solent Data Cube, SFA

Business Administration and Management (16%), Engineering (14%), Health & Care (11%), Retail & Customer Services (7%) and ICT (7%) were the most popular subject areas[14] for youth Apprenticeships in 2012/13. The most popular Apprenticeship Frameworks among youths were:

- Engineering Manufacture 537
- Business Administration 406
- Hairdressing 287
- Children's and Young People's Workforce 253
- IT, Software, Web & Telecoms Professionals 201
- Construction Building 176
- Vehicle Maintenance & Repair 172
- Customer Service 167
- Improving Organisational Performance 163

Table 27 compares starts for 2008/9 and 2012/13. It shows that Apprenticeship volumes have risen fastest in the following sectors:

- Health & Care 152
- ICT 133
- Retail and Customer Services 115

The sectors in which Apprenticeship volumes have dropped most are:

- Engineering -307
- Public Services -178
- Education & Training -101
- Hospitality & Catering -74

[14] Note: The 233 Apprenticeship Frameworks have been classified into 25 broad sector areas to aid analysis.

Table 27: Change in youth starts (provider postcode) on government-funded Apprenticeships by Sector Subject Area; Solent LEP area: 2008/9 to 2012/3

	2008/9	2012/3	Change 2008/9 to 2012/13	
			Vol	%
Accountancy & Finance	**32**	**65**	**33**	**103**
Agriculture	0	6	6	
Animal Care	33	52	19	58
Arts, Media & Publishing	0	3	3	
Business administration and Management	164	606	442	270
Construction, Planning & The Built Environment	388	348	-40	-10
Education & Training	141	40	-101	-72
Engineering	855	548	-307	-36
Hairdressing, Barbering & Beauty Therapy	336	322	-14	-4
Health & Care	284	436	152	54
Horticulture	20	30	10	50
Hospitality & Catering	205	131	-74	-36
Information & Communications Technology	141	274	133	94
Languages, Literature & Culture	0	1	1	
Leisure &Tourism	30	16	-14	-47
Manufacturing	28	9	-19	-68
Marine Industry	62		-62	-100
Other transport & Travel	77	23	-54	-70
Public Services	200	22	-178	-89
Retail & customer services	162	277	115	71
Sport & Fitness	56	67	11	20
Utilities	31	30	-1	-3
Vehicle repair and sales	190	206	16	8
Property Services	51	56	5	10
Warehousing & Logistics	3	33	30	1000
Missing (Not Applicable/ Not Known)	0	295	295	
Grand Total	3489	3896	407	12

7.6 Adult Apprenticeships

Almost 12,100 adults started an Apprenticeship during 2012/13. Apprenticeships accounted for 12% of all adult learning in 2012/13 and for 76% of Apprenticeship starts.

The number of Adult Apprenticeship starts has increased year-on-year since 2008/09, to the point where, in 2012/13, the total number of starts was 129% higher than it was in 2008/9.

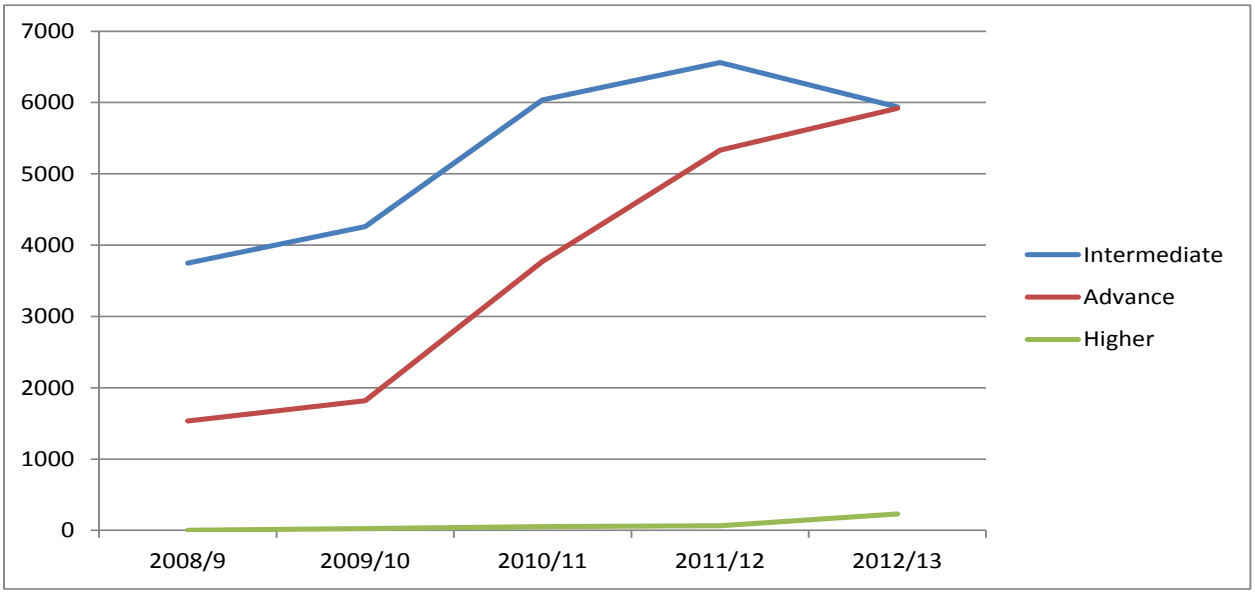
Adult Apprenticeship starts are now broadly equally split between those at intermediate (49%) and advanced (49%) level. There is a small, but rapidly growing, minority at higher level (2%). Figure 29 shows that the rise has been particularly large in Advanced Apprenticeships, at Level 3 and that the number of Intermediate Apprenticeships fell between 2011/12 and 2012/13.

Table 28: Change in Adult Apprenticeships by level, Solent LEP, 2008/9 to 2012/3

Qualification Level	2008/9	2009/10	2010/11	2011/12	2012/13
Intermediate Level Apprenticeship	3749	4259	6038	6559	5939
Advanced level apprenticeship	1532	1819	3771	5332	5919
Higher Level/Higher Apprenticeship	1	26	52	65	231
Of which: Level 4	*0*	*0*	*0*	*57*	*86*
Level 5	*0*	*0*	*0*	*8*	*145*
Total	**5282**	**6104**	**9861**	**11956**	**12089**

Source: Solent Data Cube, SFA

Figure 29: Change in Adult Apprenticeships by level, Solent LEP, 2008/9 to 2012/3



The most common Adult Apprenticeship starts are in the same 'Top 5' sectors as youth starts, but with some differences in the ranking of specific sectors. For example, Health & Care was the most popular Apprenticeship choice among adults but was the third choice among youth trainees. Adult apprentices were also more heavily clustered in the Top 5 than youth apprentices[15], perhaps indicative of a perception of a narrower set of employment options for adults.

The five most popular frameworks among adult apprentices were:

- Health and Social Care 2,680
- Business Administration & Management 2,050
- Retail & Customer Services 1,563
- Engineering 1,390
- ICT 732

[15] The 'Top 5' sectors accounted for 70% of Adult Apprenticeship starts and 55% of youth Apprenticeship starts in 2012/13.

Looking at change over time,

Table 27 shows that there was growth across the vast majority of the Apprenticeship Framework areas. The fastest rates of growth were in the following sectors:

- Warehousing & Logistics — 518% growth or +144 Apprenticeship starts
- Health & Care — 325% growth, +2,050 starts
- Business Administration & Management — 297% growth, +1,540 starts

The volume of Adult Apprenticeship starts in Engineering rose by 58%, from 877 starts in 2008/09 to 1,389 in 2012/13. While this growth is welcome, it is also below the average growth rate for Adult Apprenticeships across all sectors – 129%.

Table 29: Change in adult starts (provider postcode) on government-funded Apprenticeships by Sector Subject Area; Solent LEP area: 2008/9 to 2012/3

	2008/9	2012/3	Change 2008/9 to 2012/13		2008/9 Rank	2012/3 Rank	Change in rank
				%			
Accountancy & Finance	85	189	104	122	13	11	2
Agriculture	0	20	20		23	22	1
Animal Care	67	42	-25	-37	15	19	-4
Arts, Media & Publishing	0	3	3		24	23	1
Business administration and Management	518	2054	1536	297	**4**	**2**	**2**
Construction, Planning & The Built Environment	219	246	27	12	**9**	**8**	**1**
Education & Training	298	124	-174	-58	**8**	**14**	**-6**
Engineering	877	1389	512	58	**1**	**4**	**-3**
Hairdressing, Barbering & Beauty Therapy	86	139	53	62	12	12	0
Health & Care	632	2685	2053	325	**3**	**1**	**2**
Horticulture	29	55	26	90	16	17	-1
Hospitality & Catering	451	459	8	2	**5**	**7**	**-2**
Information & Communications Technology	364	732	368	101	**6**	**5**	**1**
Leisure &Tourism	17	46	29	171	21	18	3
Manufacturing	25	29	4	16	18	20	-2
Marine Industry	29	2	-27	-93	17	24	-7
Other transport & Travel	80	200	120	150	14	10	4
Public Services	217	205	-12	-6	**10**	**9**	**1**
Retail & customer services	821	1563	742	90	**2**	**3**	**-1**
Sport & Fitness	1	62	61	6100	22	16	6
Utilities	25	23	-2	-8	19	21	-2
Vehicle repair and sales	103	103	0	0	11	15	-4
Property Services	316	537	221	70	**7**	**6**	**1**
Warehousing & Logistics	22	136	114	518	20	13	7
Missing (Not Applicable/ Not Known)	1046	1046	0	0			
Grand Total	5282	12089	6807	129	-	-	-

Source: Solent Data Cube, SFA

7.7 Mismatch Analysis

This section explores the degree of alignment between the profile of subjects being delivered by learning providers in the Solent LEP area and the profile of employment across industry sectors. The reconciliation of sectors and subjects presents two main methodological and interpretative difficulties. Firstly, the data used in this analysis uses different categorisation systems: learner 'starts' for education and training, and Apprenticeships are categorised differently across subjects, as are HE students. Some subjects overlap slightly, for example Warehousing and Wholesaling and Retail. Secondly, some subject areas are relevant to a number of sectors (for example, ICT, or Business Administration). It should also be remembered that the employment estimates include all employment in that sector and will therefore include personnel engaged in 'core function' roles as well as those using sector-specific skills (e.g. engineering, hospitality skills).

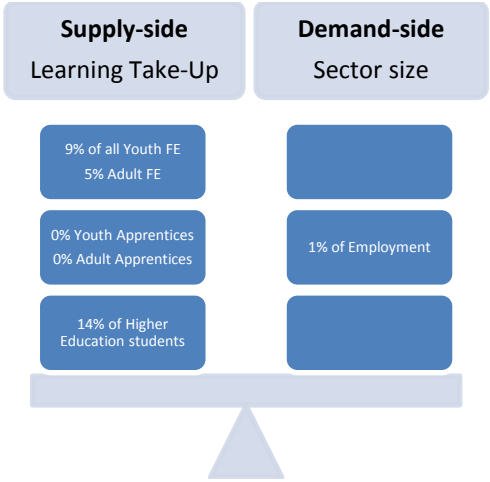
It should also be noted that many learners are studying subjects that cannot be assigned to any particular sector. This includes the 38% of adult learners (and 18% of young learners) on education and training programmes that support their preparation for life and work; and the 23% of HE learners on 'academic' subjects. It should also be noted that a fairly large percentage of youth learners on education and training programmes (19%) could not be assigned to a subject area (i.e. classified as 'not applicable or 'unknown').

7.7.1 Arts, media and publishing

☹ Over-supply of learners

While only a (very) small share of local employment is supported within the formal Arts, media and publishing sector - around 9,400 jobs – creative skills are deployed across a wide variety of other sectors. Its contribution to employment is therefore underestimated in this analysis. Arts, media and publishing courses are the second most popular subject area among HE students (14%) and the third most popular choice among young people in FE (when excluding 'unknowns'). It is not a subject area typically associated with apprenticeships. On the basis of these figures, it would appear that there is an over-supply of arts, media and publishing courses delivered locally, given local demand for these courses. However, many students reading these subjects within HEIs locally may be anticipating employment within the Capital which is a major hub for creative employment (for example, in television, journalism and publishing). Creative skills also contribute to a wider range of sectors and are important in supporting innovation, so the supply of these skills is important beyond the creative sector.

Figure 30: Arts, media and publishing



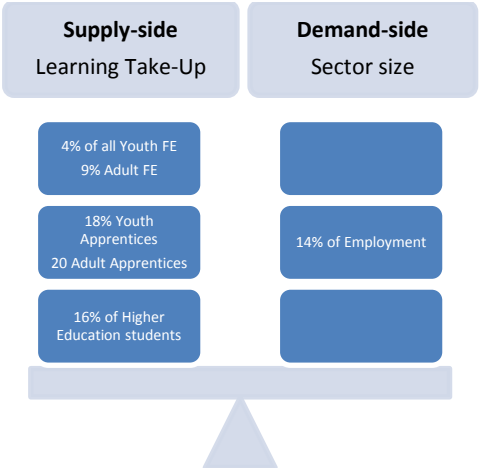
Source: SFA Data Cube (2012/13); HESA (2011/12); BRES, ONS (2012)

7.7.2 Business, administration, finance and law

☺ Broadly balanced

This sector accounts for 14% of employment in the Solent LEP area. It includes a broad range of activities including financial services (such as banking, insurance and pensions), real estate, law, the operation of head-offices and business services (such as advertising and market research). The data suggests a close alignment between the share of Apprentices and HE students studying related subjects and the share of employment in this sector. However, rather fewer adult and, in particular, youth FE starts are in subjects related to this sector. This will reflect, to a certain extent, typical routes of entry into the sector which, due to high levels of professionalization (for example, in law and accountancy), are at the higher end of the qualifications spectrum. Opening up entry points into, and ladders within, the sector for both young people and adults is an important challenge.

Figure 31: Business, administration, finance and law



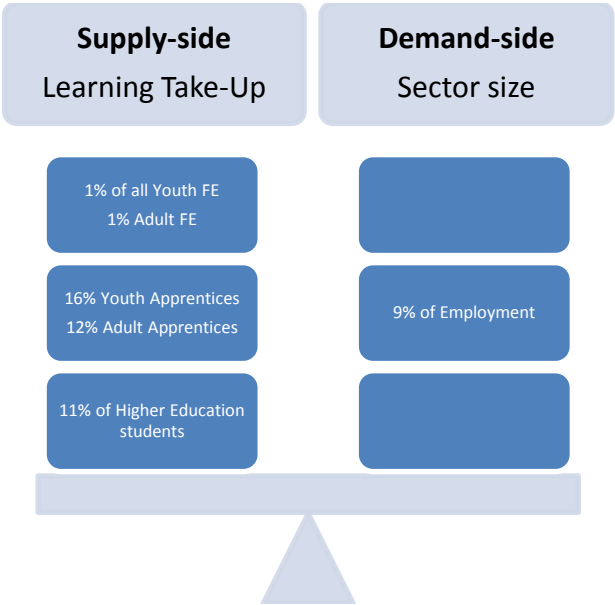
Source: SFA Data Cube (2012/13); HESA (2011/12); BRES, ONS (2012)

7.7.3 Engineering and manufacturing technologies

☺ Broadly balanced

Manufacturing accounts for 9% of employment across the Solent LEP area although many of these roles will be in support functions (for example, finance and marketing) and therefore this over-estimates somewhat employment in engineering and manufacturing technologies. The supply of apprentices and HE students in this subject area is broadly balanced with supply although FE starts in this subject are uncommon. This may because Apprenticeships have a long tradition in this industry, and are a more established early route-way into the industry.

Figure 32: Engineering and manufacturing technologies



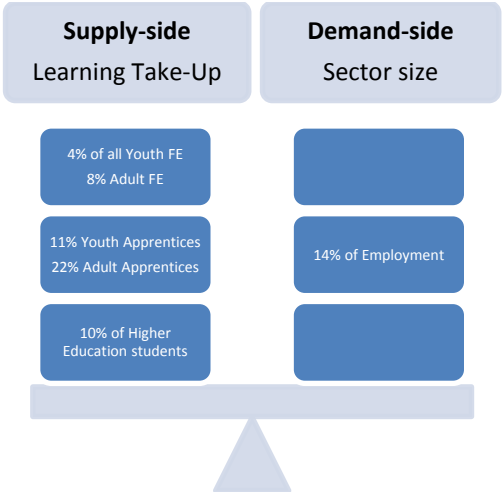
Source: SFA Data Cube (2012/13); HESA (2011/12); BRES, ONS (2012)

7.7.4 Health and care

☺ Broadly balanced

The Health and care sector accounts for 14% of employment within the Solent LEP area. Around half of employment in this sector is in activities related to human health with the remainder broadly evenly split between residential care activities and social work. Health and social care is a popular subject area among learners, particularly adult learners on apprenticeships. Medicine and Subject Allied to Medicine are also popular among HE students, accounting for 10% of students on HE courses locally. Given the importance of the sector now and in the future, there may be further opportunities to promote this sector among young people.

Figure 33: Health and care



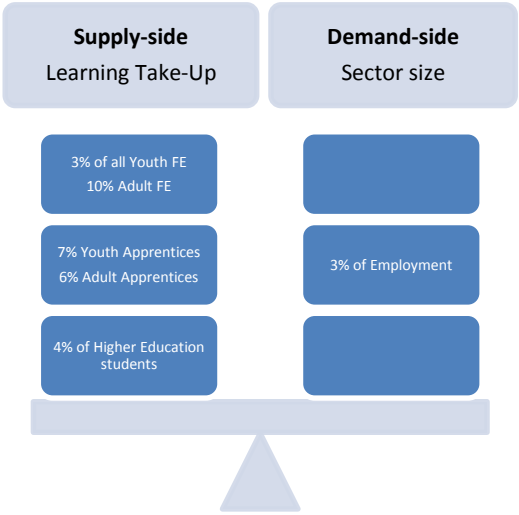
Source: SFA Data Cube (2012/13); HESA (2011/12); BRES, ONS (2012)

7.7.5 Information and communication technology

☺ Broadly balanced

The ICT 'sector' is relatively small, accounting for 3% of employment in the Solent LEP area. The share of starts and students on ICT-related courses is rather higher than the sector's share of employment but this does not necessarily imply an over-supply of these subjects, since ICT capabilities are valued across a wide range of sectors.

Figure 34: Information and communication technology



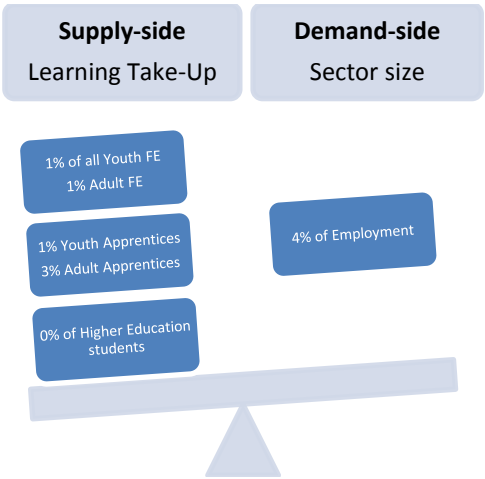
Source: SFA Data Cube (2012/13); HESA (2011/12); BRES, ONS (2012)

7.7.6 Logistics & transport

☹ Under supply of learners

Logistics & transport is a small but significant employment sector locally. Most employment in this sector locally is in warehousing but transport and postal and courier activities are also important. Few learners are studying subjects allied to this sector although some may be studying Wholesaling as part of combined course with Retailing. It is not a subject area offered by local HEI institutions.

Figure 35: Logistics and transport



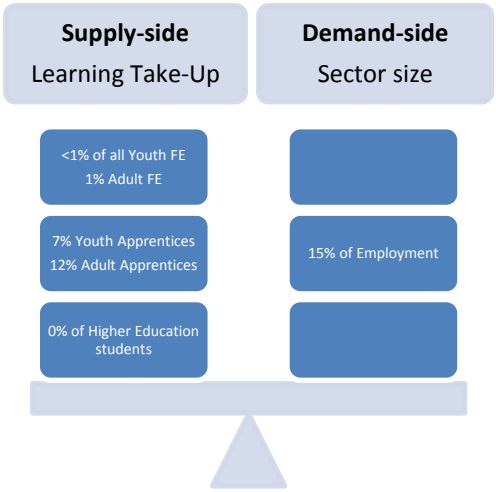
Source: SFA Data Cube (2012/13); HESA (2011/12); BRES, ONS (2012)

7.7.7 Retail, wholesale & customer services

☹ Under supply of learners

Retail, wholesale & customer services is the largest sector in the Solent LEP area, providing 15% of total employment in the sub-region. The sector is also closely aligned to the Transport & logistics sector which accounts for a further 4% of employment[16]. Uniquely, among large sectors, it accounts for very few FE and HE starts, although it is more popular among apprentices and, particularly, adult apprentices. HE courses relevant to this sector are more broadly concerned with business administration, marketing or advertising and are therefore analysed elsewhere.

Figure 36: Retail, wholesale and customer services



Source: SFA Data Cube (2012/13); HESA (2011/12); BRES, ONS (2012)

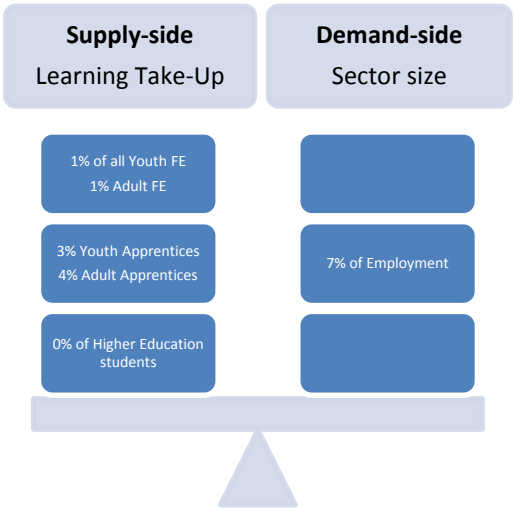
7.7.8 Hospitality and catering

☹ Under supply of learners

Hotels and restaurants, an approximation to the Hospitality & catering sector, accounts for 7% of employment locally. The sector and allied subject areas are closely related to the Leisure and tourism sector, which accounts for a further 2% of employment. Hospitality and Catering is not a particularly popular subject choice among young people or adults on FE courses or Apprenticeships. HE courses are, however, available in Leisure and Tourism (accounting for 2% of all students).

[16] A further 2% of employment is in the wholesale, retail and repair of motor vehicles.

Figure 37: Hospitality and catering



Source: SFA Data Cube (2012/13); HESA (2011/12); BRES, ONS (2012)

7.8 Higher Education

The section looks at engagement with various subjects in HE at a fairly broad level, with a particular interest in STEM subjects, defined as the following JACS subject headings:

- Medicine & Dentistry
- Subjects Allied to Medicine
- Biological Sciences
- Veterinary Science
- Agriculture & related subjects
- Physical Sciences
- Mathematical Sciences
- Computer Science
- Engineering & Technology
- Architecture, Building & Planning

We look at both at the provision offered by local HEIs and that taken by local people.

In terms of local provision, there are four HEIs in the Solent LEP area:

- University of Southampton
- University of Portsmouth
- Southampton Solent University

- University of Winchester

7.8.1 Local HE provision

In 2011/12, there were 66,710 students studying at the Solent LEP's HEIs. In the same years, there were 53,450 people domiciled from the wider Solent area (including the whole of Hampshire) who were students in HEIs across the UK. The Solent LEP area is, therefore, a net importer of around 13,300 students[17]. This HE presence is a major strength for the Solent area.

Table 30 shows that 28,035 of these students studying at Solent's four HEIs were studying STEM subjects, equivalent to 42.0% of all students. This is the same proportion of students studying STEM subjects as is found across the UK (42.0%), though there are major differences between individual HEIs.

The proportion of students in STEM subjects varies from 11.1% at the University of Winchester to 56.4% of students at the University of Southampton.

Table 30 also shows that HEIs have specific subject strengths. The University of Southampton has large numbers of students studying Medicine and the Physical Sciences, for example, while the University of Portsmouth has strengths in Computer Science.

It is interesting to note that the proportion of students studying Engineering and technology is significantly higher than the UK average (6.5%) at each of the Universities of Portsmouth (10.0%), Southampton (12.9%) and Southampton Solent (14.8%). This is a clear local strength.

Across the LEP, in 2011/12, the leading STEM subjects, in terms of student numbers, were:

- Engineering & Technology - 7,330 students, 11.0% of local provision v's 6.5% across UK;
- Biological Sciences - 4,860 students, 7.3% of local provision vs 8.0% across UK
- Medicine - 4,795 students, 7.2% of local provision vs 7.2% across UK
- Physical Sciences – 3,680 students, 5.5% of local provision vs 3.8% across UK
- Computer Science – 2,975 students, 4.5% of local provision vs 3.8% nationally

[17] The figure for students domiciled in the wider Solent LEP area includes students domiciled across the whole of Hampshire. Unfortunately a figure for students domiciled only within that part of Hampshire that falls within the LEP area is not available. If it were, the result would be to show that the LEP area was a net importer of a much larger volume of students.

Table 30: HE students at Solent LEP HEIs by subject (% of total), 2011/12

	The University of Portsmouth	Southampton Solent University	University of Southampton	The University of Winchester	Solent Total	**UK**
(1) Medicine & dentistry	0.0%	0.0%	6.6%	0.0%	2.4%	2.7%
(2) Subjects allied to medicine	6.6%	0.0%	13.1%	1.0%	7.2%	12.0%
(3) Biological sciences	8.6%	5.1%	6.7%	9.2%	7.3%	8.0%
(4) Veterinary science	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
(5) Agriculture & related subjects	0.1%	0.0%	0.0%	0.0%	0.0%	0.8%
(6) Physical sciences	4.0%	1.0%	10.8%	0.2%	5.5%	3.8%
(7) Mathematical sciences	1.8%	0.0%	3.1%	0.5%	1.8%	1.7%
(8) Computer science	6.4%	5.5%	3.1%	0.2%	4.5%	3.8%
(9) Engineering & technology	10.0%	14.8%	12.9%	0.0%	11.0%	6.5%
(A) Architecture, building & planning	5.0%	2.9%	0.1%	0.0%	2.3%	2.3%
(B) Social studies	14.5%	3.5%	9.2%	5.4%	9.7%	8.9%
(C) Law	2.5%	2.6%	3.6%	2.6%	2.9%	3.7%
(D) Business & administrative studies	17.8%	27.9%	7.1%	13.0%	15.4%	14.6%
(E) Mass communications & doctn	3.1%	12.8%	0.6%	7.8%	4.5%	2.2%
(F) Languages	7.3%	1.3%	5.6%	8.8%	5.7%	5.4%
(G) Historical & philosophical studies	1.3%	0.0%	5.0%	12.0%	3.4%	4.0%
(H) Creative arts & design	5.3%	20.7%	6.8%	14.5%	9.6%	7.3%
(I) Education	5.6%	2.0%	5.7%	24.0%	6.7%	8.1%
(J) Combined	0.0%	0.0%	0.0%	0.9%	0.1%	3.8%
STEM Total	**10,060**	**3,670**	**13,605**	**700**	**28,035**	**1,048,145**
All Subjects	23,710	12,540	24,140	6,320	66,710	2,496,810
STEM as a % of total	42.4%	29.3%	56.4%	11.1%	42.0%	42.0%

Source: HESA

The number of students studying STEM subjects at HEIs in the Solent LEP areas has grown by 10.2% since 2007/08. This is slightly lower than both the increase seen for all subjects locally (12.2%) and the average national growth in the number studying STEM subjects (12.4%).

Table 31 shows that there has been strong growth in some strategically important subjects, such as:

- Engineering & Technology 36% growth (equivalent to an additional 1,930 students)
- Physical Sciences 36% growth (+965 students)
- Mathematical Sciences 38% growth (+335 students)

Other subject areas that have seen significant growth include: Law (40% growth, +555 students); Languages (29% growth, +855 students); Business and Administrative Studies (20% growth, +1,735 students) and Creative Arts and Design (19% growth, +1,015 students).

The largest decline, in terms of student volumes, has been in Subjects Allied to Medicine (-1,400 students). The only other subjects to have declined are Architecture, Building and Planning and Historical and Philosophical Studies.

Table 31: Volume of HE Students at Solent LEP HEIs, Change, 2007/08 to 2011/12

Subject	2007/08	2011/12	Change 2007 - 2012	% Change 2007 - 2012
(1) Medicine & dentistry	1,430	1,595	165	12%
(2) Subjects allied to medicine	6,195	4,795	-1,400	-23%
(3) Biological sciences	4,325	4,860	535	12%
(4) Veterinary science	0	0	0	
(5) Agriculture & related subjects	10	30	20	200%
(6) Physical sciences	2,715	3,680	965	36%
(7) Mathematical sciences	880	1,215	335	38%
(8) Computer science	2,690	2,975	285	11%
(9) Engineering & technology	5,400	7,330	1,930	36%
(A) Architecture, building & planning	1,800	1,555	-245	-14%
(B) Social studies	5,750	6,440	690	12%
(C) Law	1,405	1,960	555	40%
(D) Business & administrative studies	8,515	10,250	1,735	20%
(E) Mass communications & documentation	2,640	2,990	350	13%
(F) Languages	2,940	3,795	855	29%
(G) Historical & philosophical studies	3,070	2,280	-790	-26%
(H) Creative arts & design	5,400	6,415	1,015	19%
(I) Education	4,210	4,490	280	7%
(J) Combined	55	55	0	0%
Total	**59,430**	**66,710**	**7,280**	**12%**

Table 32 shows the subject choices of local residents compared with the level of provision being offered locally in each subject. It suggests that there are very few areas of demand from local people that are not being met by the current local HE offer. Those studying Veterinary science and Agriculture travel outside the area to do so. Local HEIs do not offer much in the way of 'combined' degrees.

The table also shows that Solent's strengths in Business & Administrative Studies and Engineering & Technology draw in large numbers of students from outside the Solent LEP boundary.

Table 32: Solent LEP students compared with LEP-based provision by subject area, 2011/12

Subject	Solent LEP Domiciled	Solent LEP Provision	Difference
(1) Medicine & dentistry	1,320	1,595	275
(2) Subjects allied to medicine	5,775	4,795	-980
(3) Biological sciences	4,905	4,860	-45
(4) Veterinary science	155	0	-155
(5) Agriculture & related subjects	385	30	-355
(6) Physical sciences	2,385	3,680	1,295
(7) Mathematical sciences	1,010	1,215	205
(8) Computer science	1,745	2,975	1,230
(9) Engineering & technology	3,355	7,330	3,975
(A) Architecture, building & planning	995	1,555	560
(B) Social studies	4,725	6,440	1,715
(C) Law	1,810	1,960	150
(D) Business & administrative studies	6,005	10,250	4,245
(E) Mass communications & doct'n	1,220	2,990	1,770
(F) Languages	3,035	3,795	760
(G) Historical & philosophical studies	2,645	2,280	-365
(H) Creative arts & design	4,790	6,415	1,625
(I) Education	4,655	4,490	-165
(J) Combined	2,530	55	-2,475
Grand Total	**53,445**	**66,710**	**13,265**

Source: HESA.

7.9 Employer-sponsored learning

7.9.1 Staff development issues

Turning to issues around workforce development, it may be informative to look at overall levels of training being arranged and/or funded by employers. Table 33 shows that in 2011, Solent LEP compared favourably with the all-England average, with 70% of employers having funded or arranged training for staff in the 12 months prior to the survey, compared with 66% nationally. The data suggests that local employers are marginally more likely to have offered employees opportunities to undertake both off-the-job and on-the-job training.

Table 33: Proportion of employers offering training, Solent LEP vs England, 2011

Type of training	Solent	England
Off-job and on-job training	37%	34%
Off-job training only	14%	13%
On-job training only	19%	19%
Do not train	30%	34%
Any Training	70%	66%

Source: UKCES Employer Skills Survey, 2011.

National data suggests that there has been a slight fall in the incidence of training since the 2009 survey, particularly in the level of off-the-job training being arranged. The fall has been most prominently in the smallest establishments employing 2-4 people (falling from 55% in 2009 to 52% in 2011) suggesting that the impact of the recession on training has hit smallest establishments the hardest.

The survey estimated that a total of 365,600 employees in the Solent LEP had received training in the last year, equating to 56% of the workforce. This was above the national average, where 51% of the workforce received training.

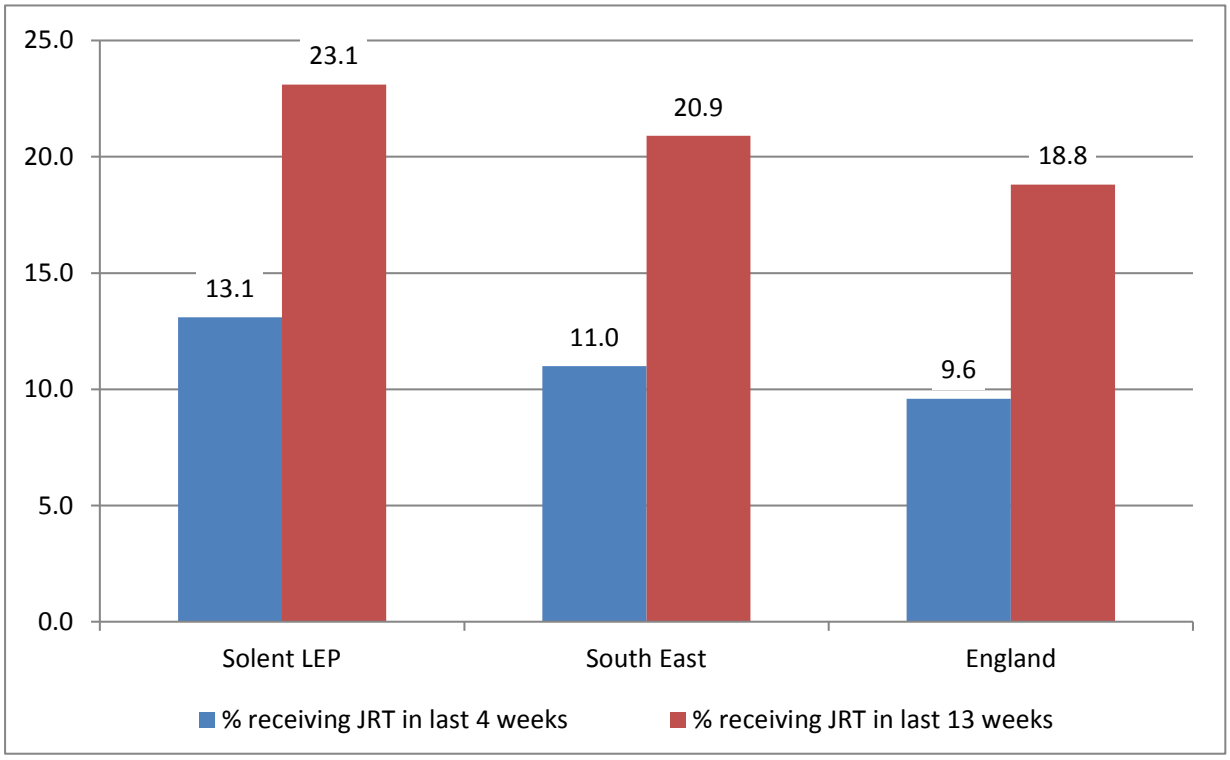
Approximately 86,000 (23%) of these studied towards a nationally-recognised qualification, just below the national average of 24%.

In terms of employers having staff development policies in place, Solent LEP was broadly in line with the national practice with 64% of employers having a business plan; 42% having a training plan; and just 34% having a training budget. Almost a third (29%) of enterprises adopted none of these practices at all.

7.9.2 Job-related training

The APS also allows us to look at the proportion of the workforce who have recently undertaken job-related training, although this is not necessarily funded or arranged by the employer. Figure 38 shows that levels of job-related training are relatively high in the Solent LEP area compared with regional and national averages, with round 13% of 16-64 year olds in the area having undertaken training the last four weeks, and 23% having done so in the last 13 weeks.

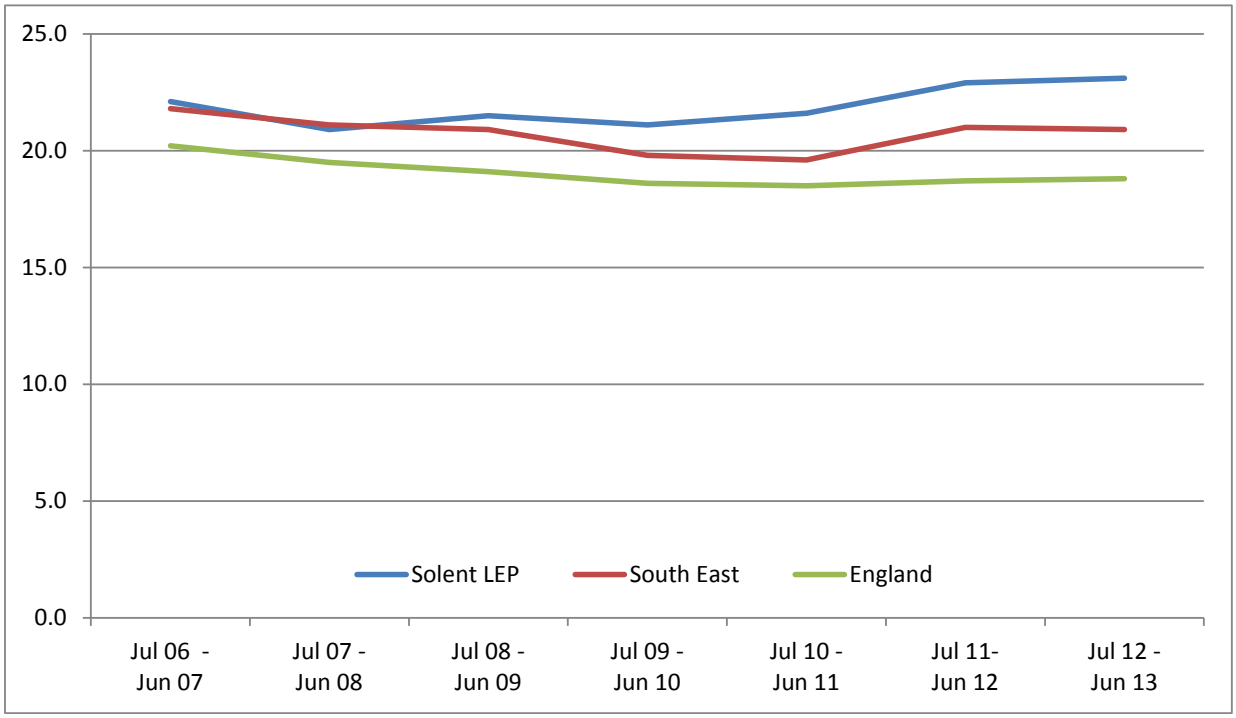
Figure 38: Proportion of working age population receiving work-related training in past 4 & 13 weeks, Solent LEP vs South East and England, June 2012-June 2013



Source: Annual Population Survey

It is a concern that, over the years, the level of job-related training appears to be in decline (Figure 39). Why this should be happening is unclear. Employers may be turning to less formal and easily identifiable forms of staff development. The availability of ICT and improvements in e-learning may be having an effect. Encouragingly, the data suggests that the Solent LEP area has managed to maintain and even increase its levels of job-related training throughout the economic downturn, suggesting a high level of recognition among local employers and individuals of the importance of skills and training.

Figure 39: Proportion of working age population receiving work-related training in past 13 weeks, Solent LEP vs South East and England, 2006-2013



Source: Annual Population Survey

8. SOLENT PRIORITY SECTORS

Solent LEP – A Strategy for Growth stresses the importance of developing local strategic sectors and clusters. There is a particular emphasis on supporting the Marine and maritime sector, which extends into each of the three broad sectors set out below.

1. Advanced Manufacturing – supporting the Marine sector and related aerospace, defence, advanced manufacturing and engineering activities.
2. Hospitality sector - establishing the Solent as a hub for leisure marine and the visitor economy.
3. Transport and logistics - establishing the Solent as a business gateway, at local and international levels.

In this section, we review the some of the skills challenges facing each of these sectors.

8.1 Advanced Manufacturing

- Advanced Manufacturing – supporting the Marine sector and related aerospace, defence, advanced manufacturing and engineering activities.

The Government's *Plan for Growth*[18] places Advanced Manufacturing at the heart of its strategy for economic recovery.

Research by BIS suggests that the future of Advanced Manufacturing and Engineering will be shaped by five major dynamics, the most significant of which will be continued growth in the extent and complexity of global value chains. Allied to this, firms will focus on product differentiation and investment in: new technology; intangibles, such as design, branding and Research and Development (R&D); and in people and skills. Similarly, Semta Sector Skills Council identifies the introduction of new technologies, the development of new products and services, and increasingly complex supply chains as being the key drivers of new skills requirements.

The general consensus is that mass production is likely to continue to drift east to developing economies, particularly China and India, resulting in a continued shift to higher-level occupations and higher skills within domestic industry. This structural shift, particularly the decline in employment among less skilled occupations, will cause some on-going hardship. However, it could also be broadly regarded as a positive dynamic, associated with investment in capital, R&D and enterprises adopting higher-value added product market positions.

[18] The Plan for Growth, HM Treasury and BIS (2011)

8.1.1 Technological development

Perhaps the most important challenge facing the sector is keeping up to date with technological developments – initiating the continuous improvements in products and production processes that are essential to the success of modern industry. For many enterprises, this requires continuous investment in R&D and taking time to understand how relationships with external partners, such as HEIs, might help them in developing new products and techniques. The importance of R&D to the sector is evident in the fact that, of approximately £16 billion invested in R&D by UK businesses in 2008, approximately £12 billion was by manufacturing businesses[19].

8.1.2 Supply chains

Increasingly, enterprises neither manufacture nor develop products alone. Managing supply chain relationships; negotiating and meeting continuously improving quality standards (e.g. no fault/just in time production); and fostering cultures of innovation across multiple enterprises are all essential to the success of the sector and a key challenge for the future.

8.1.3 Management and leadership skills

Small companies, which make up the majority of engineering enterprises, need strategic management skills if they are to prosper and grow. For some, the day-to-day practicalities of running a business make it difficult to look over the horizon at the changes in their sector and to dedicate time to developing a strategic response. Delivering growth strategies requires leadership and expertise in a wide range of areas. It requires knowledge of how external agencies, such as the Manufacturing Advisory Service and UKTI, might help. Managers of growing enterprises will also encounter a time when they need to bring in specialist expertise in areas such as finance, human resources, R&D or marketing. Finding the right support at the right time to manage these transitions can be a challenge for some organisations.

8.1.4 Higher-level skills shortages

Workforce ageing, particularly the retirement of highly-skilled engineers, is generating a short-fall in the supply of technicians and engineers trained to Levels 3/4. Within this, a variety of highly-specific skills shortages occur across the sector.

While it is beyond the scope of this paper to try to detail each of these, the Migration Advisory Committee's 'Shortage Occupation List' highlights a significant number of engineering-related occupations where a lack of resident workers entitles employers to sponsor migrants to perform the skilled work. The prevalence of engineering skills shortages in the nuclear, aerospace, automotive, nuclear, electronics and waste management industries is notable

[19] "Manufacturing in the UK: An economic analysis of the sector". Department for Business, Innovation & Skills.

8.1.5 Talent retention

It has been estimated that 70% of engineers who are made redundant never work in engineering again. Enabling highly-skilled staff to remain in jobs within the sector is recognised as a clear challenge for the sector.

8.1.6 Graduate Retention

STEM skills, (e.g. numeracy, problem-solving, scientific thinking etc) are central to Advanced Manufacturing. They are also highly valued across other parts of the economy. The difficulty that manufacturers face in matching wages offered by competing sectors (such as Financial services) results in a significant proportion of STEM graduates taking up work in other sectors. Engineering UK suggests that just over half of those qualifying in Aerospace engineering (58%) go into an engineering and technology occupation, compared with nearly three-quarters (72%) who graduated in Civil engineering[20]. There is a need to take steps to ensure the sector can attract and retain the talent it needs.

8.1.7 Skills development

Technological advances are changing the occupational make-up of employment in the sector, resulting in a fall in the number of Machine operative jobs and a growing need for graduates and post-graduates with highly specialist skills relevant to their area of industry. Employees are increasingly being asked to take on higher levels of responsibility and greater autonomy, while the rapid development of new techniques and processes is generating a continuous need to up-skill existing staff.

8.1.8 Attracting young people into the industry

There remains a need to update both young people's and the public's perceptions of manufacturing. Too often these remain rooted in the past, with the result that employment in the sector is viewed as noisy, dirty and precarious. It is important to address these misconceptions by exposing young people to the industry and by highlighting the opportunities and careers available in the sector.

8.1.9 Gender bias

A significant gender bias is still seen in many occupations. For example, 83% of the workforce in Aerospace is male[21]. As a result, the sector draws on a restricted labour pool. It should benefit from drawing upon a wider range of talent.

[20] Engineering UK, Annual Report, 2009/10 , cited in Guest, J. Aerohub Skills Plan: Aerospace Sector Research, TBR 2012

[21] *Reach for the Skies. A Strategic Vision for UK Aerospace*, BIS, July 2012

8.1.10 Raising interest in careers in advanced manufacturing

Employers consistently argue that there is a need to address out-dated perceptions of engineering and manufacturing and to raise young people's interest in careers in science-related industries.

Research shows that:

- there is a positive relationship between the number of employer contacts an individual has in school (e.g. career talks or work experience) and their confidence at ages 19 to 24 in progressing towards their career goals, their not being NEET[22], and their earnings;
- young people overwhelmingly agree that contacts with external professionals help in career making[23];
- careers IAG within schools is of variable quality, with only 18% of students being satisfied with the STEM-related IAG[24];
- while the majority of children enjoy science at school, '*most young people's science aspirations and views of science are formed during the primary years and have solidified by age 14, by which point the idea of science as 'not for me' becomes very difficult to change*'[25].

Solent LEP could take steps to promote links between employers and schools/colleges, encouraging employers to: provide careers talks and sponsor/participate in STEM Fairs; act as STEM Ambassadors; offer site visits and participate in initiatives such as *See Inside Manufacturing*.

These activities should start from an early age and also focus on addressing the gender imbalance and growing the number of young women with an interest in the sector.

8.1.11 Science and maths teaching

Manufacturing employers frequently express concerns about the adequacy of young people's maths, pointing out that inadequate maths can act as a barrier to career progression, particularly as the number of higher-level technical jobs in the sector grows. Initiatives could be taken, such as employing experienced maths teachers to work across groups of schools, to help to address this.

Employers can make an important contribution to the continuing professional development of teachers and technicians, particularly in vocational education. Teacher Professional Development Placements, organised by Education Business Partnerships, give teachers the

[22] NEET = Not in Education, Employment or Training

[23] Good Timing Implementing STEM careers strategy in secondary schools, Isinglass Consultancy Ltd, 2011

[24] Educating the next generation of scientists, National Audit Office, 2010

[25] Ten Science Facts and Fictions, Aspire Project, Kings College London, 2012.

opportunity visit a company and provide ‘real-world’ context to their teaching practice, while the Industrial Trust also provides in-company experiences for teachers[26].

The LEP could encourage employers and schools to come together in curriculum development projects. These link science teaching to local industry needs and encourage schools to access support from initiatives such as the national network of Science Learning Centres[27] and the Stimulating Physics Network which promote the uptake of existing good practice.

8.1.12 The availability and take-up of science subjects at GCSE

Pupils who study three physical sciences separately (‘triple science’) at GCSE are more likely to choose and to succeed at science subjects at A and degree levels[28]. DfE policy aims to ensure that all pupils (who would benefit) have the opportunity to study triple science. Solent LEP could monitor the take-up of triple science at GCSE level and should work to ensure that it is available to all young people across the LEP area.

8.1.13 Ensuring access to state-of-the-art equipment and facilities

The National Audit Office[29] identifies the quality of teaching equipment as having an important role in shaping young people’s attitudes to education. It is also concerned that cuts in the education budget may disproportionately affect sciences, engineering and design and technology courses, as these require expensive consumable items.

Industry can make an important contribution through donating equipment and supporting its acquisition through public/private partnerships. The LEP could work in partnership with manufacturers to ensure that facilities and equipment used for training is reflective of industry standards in their area.

8.1.14 Apprenticeships

Apprenticeships are central both to enabling employers to access the skills they need and for providing entry into employment for young people.

Encouraging advanced manufacturers to grow the number of Advanced and Higher Apprenticeship opportunities should be a clear priority. There is a need to encourage more enterprises, and to make it easier for small companies to get involved, for example, through financial incentives to employers recruiting apprentices for the first time. Larger enterprises can adopt the strategy of ‘over-recruiting’ with a view to selecting the most capable apprentices at

[26] http://www.industrialtrust.org.uk/teachers.html

[27] The National and regional network of Science Learning Centres aim to help teachers, schools and colleges to continuously improve teaching and learning and to inspire pupils by providing them with a more exciting, intellectually stimulating and relevant science education, thus enabling them to gain the knowledge and the understanding they need - both as the citizens and as the scientists of the future.

[28] Educating the next generation of scientists, National Audit Office, 2010

[29] Educating the next generation of scientists, National Audit Office, 2011

the end of their training. This approach could increase the pool of skilled labour available to the sector as a whole and be helpful to smaller companies.

Employers also need to work together to raise awareness of the rewarding careers and progression routes that are available via Apprenticeships within the sector.

8.1.15 Higher-level skills

The Government provides fully-funded training for qualifications at Level 2 for people who do not already hold a Level 2 qualification. Young people aged 19 to 24 are also fully funded for learning at Level 3, provided they do not already hold such a qualification. If they do, Level 3 qualifications are co-funded. From 2013/14, people aged 25 and over will need to take out a loan to cover the cost of Level 3 learning, both classroom and work-based.

Where learning is not funded, loans will be made available to individuals to cover the costs of their training. For Advanced and Higher Apprenticeships, the loan to individuals will be up to a maximum of 50% of the rate for the relevant Apprenticeship framework, reflecting an assumed employer contribution towards the rest of the cost of the provision. Many large employers feel that responsibility for securing the skills their organisation requires lies entirely with them and, as a result, fully fund Apprenticeships and other forms of learning, with no employee contribution.

Skills levels in Advanced manufacturing are rising. Solent LEP should continuously review take-up of skills at Level 3 and above and, where these are lacking, make the case for targeting resources at delivering Level 3/4 skills required in Advanced engineering.

8.1.16 Progression to HE

HEIs are under pressure to reach out and improve HE participation among under-represented groups of students. Universities offer a growing range of campus visits, mentoring, master-classes, summer schools and work experience. They may also provide bursaries and financial assistance to disadvantaged young people[30]. Evidence suggests that outreach activity needs to start early and that sustained activity is the key to success.

Solent's Universities should be encouraged to work in partnership with local schools and colleges, developing programmes which guarantee interviews or award UCAS points to pupils completing HE-preparation programmes in STEM subjects.

8.1.17 STEM graduate retention

Solent's HEIs have notable strengths in STEM subjects. The LEP should build on this strength by encouraging the development of programmes that promote graduate retention by linking STEM graduates with advanced manufacturers in the local area.

[30] Have Bursaries Influenced Choices Between Universities?, Office for Fair Access 2010

8.1.18 Redundancy and re-deployment

The amount of time that a skilled employee needs to become proficient at a new workplace is normally much less than that required to bring new entrants up to competence. Where engineers are made redundant, very few return to their industry, with the result that these unused skills atrophy and die. The national Talent Retention Solution (TRS) puts skilled individuals facing redundancy in touch with companies searching for new employees. It has a particular focus on meeting the recruitment needs of the Advanced Engineering sector and Aerospace. Additional programmes can help by providing funds for re-training and up-skilling people facing redundancy. In the event of large-scale closures or redundancies, Solent LEP should aim to ensure skilled employees are re-deployed within the sector and given support with re-training, should this be necessary.

8.1.19 Business Support

As stated, small companies, which make up the majority of engineering enterprises, may need to acquire the management skills required to prosper and grow. Of those Manufacturing employers that train, the proportion that offer management training (27%) and supervisory management training (27%) is below the all-sector averages of 34% and 32% respectively.

Keeping up to date with technological developments is a major challenge for enterprises in Advanced Manufacturing. Staying on the cutting edge requires continuous R&D investment and taking time to understand how external centres of expertise, such as the national High-Value Manufacturing Catapult centres, can help.

A wide range of business support agencies exist that assist enterprises in the sector, such as the Manufacturing Advisory Service (which provides assistance with lean production) or UK Trade and Investment (which provides export advice).

Employers also attach particular value to employer-to-employer networking, while large companies support events for organisations that are, or might wish to become, part of their supply chains.

Solent LEP should focus on bringing business schools, business support organisations and sector support bodies together, through the Solent Business Hub. It should support opportunities for collaboration and information sharing within the sector and aim to bring employers together, through innovation networks, to raise their awareness of the wide range of innovation and business support that is available in the local area and beyond.

8.2 Hospitality Sector

- Hospitality sector - establishing the Solent as a hub for leisure marine and the visitor economy.

8.2.1 Staff Recruitment

Perhaps the biggest challenge facing the sector is recruitment of high-quality staff.

This is evident in the findings of the 2011 Employer Skills Survey, which showed that 6% of employers in Hospitality and tourism had a vacancy that was hard to fill compared with 4% across the UK economy as a whole. A further survey by People 1st put the figure substantially higher, suggesting that 11% of employers in the sector had vacancies that were hard to fill[31]. Although low wages or poor terms and conditions of employment were cited by 18% of employers as contributing to their recruitment difficulties, a much higher proportion (32%) attributed the problem to there being low numbers of applicants with the required skills and experience and to a lack of applicants with the required attitude, motivation or personality (cited by 21% of employers). Skills that are often cited as missing are a lack of interpersonal skills, such as communication skills, standards of personal appearance and turning up on time. As People 1st noted, this is partly due to the people the sector attracts. Some 36% of businesses in the sector and 47% of hotels had employed people in the last 12 months who had previously been unemployed, while 27% had recruited college leavers and 22%, school leavers.

In the current economic climate, Tourism has an important role in providing job opportunities for people who are vulnerable and at the fringes of the labour market. This is evident from the large numbers of vacancies in the sector that are advertised via Jobcentre Plus. Many larger employers have demonstrated a commitment and ability to recruit from this labour pool and to developing the skills of formerly unemployed people, thereby supporting economic and social inclusion. Employers within the industry could be challenged to spread this approach.

It is also the case that the large volume of applications received for jobs can be difficult for many, particularly small employers, to process. There are a range of external organisations, such as Jobcentre Plus, Service Academies and Work Programme providers, who can help screen applicants, provide pre-employment training, arrange work-trials and ensure that employers recruit capable applicants. Employers could be encouraged to explore the benefits of working in partnership with these organisations and to identify gaps and improvements required in the availability of pre-employment support.

The advantages of this kind of collaboration are being promoted through initiatives such as People 1st's 'Act NOW!' campaign, designed to encourage:

- employers to provide pre-employment training to unemployed people, to recruit unemployed people who have undertaken pre-employment programmes, and provide Apprenticeships and career development opportunities;
- unemployed people to undertake pre-employment training, or sign up for an Apprenticeship and undertake a career in the sector;
- providers to work with People 1st and employers to provide quality pre-employment training and Apprenticeships.

[31] People 1st, *State of the Nation Report*, 2013

Solent LEP could encourage partners to support programmes such as Act NOW! in the local area.

Finally, as the number of 20-24 year olds in the population declines and the demographic profile of customers ages, employers could also be encouraged to broaden their recruitment profile and embrace the talent and experience of older workers, those seeking a career change and women returning to work.

8.2.2 Staff turnover

Many businesses in the visitor economy are affected by high rates of staff turnover and the loss of experienced and skilled staff. The latest data suggests that staff turnover rates across the Hospitality and Tourism sector are currently around 20%, significantly down from 31% in 2009, due to the employment insecurities caused by the recession. However, the seasonal nature of demand does result in high staff turnover being endemic to many businesses, which cope by employing transient and temporary workers. Leisure and theme parks employ large numbers of students over the busy summer months, for example. Although this approach provides flexibility, which is important in a fluctuating business environment, it does also result in a range of skills challenges. Many staff do not stay in their role long enough to become fully proficient, contributing not only to skills gaps, but also to reduced productivity. Employers also end up incurring significant costs associated with recruiting and training large volumes of new employees.

There is considerable evidence to show that effective employee engagement (through good communication, flexible working, staff appraisals, training, involving staff in decision-making, financial incentives and other measures) does a great deal to reduce staff turnover and improve organisational performance in terms of productivity, innovation, reduced turnover, sickness and absenteeism. While some employers may see the presence of large numbers of transient workers as a reason for not engaging or training staff, others recognise that by offering transient workers the same flexibility and career progression pathways enjoyed by permanent workers, they are more likely to stay within the organisation for longer. Good HR practice - recruiting properly, training properly, motivating and rewarding staff – can do much to reduce staff turnover.

8.2.3 Careers advice

The People 1st argues that: *'There are very few industries that can offer eager and talented staff such rapid advancement to more senior positions and we should all be zealous in promoting these fantastic opportunities'*[32]. They point to the fact that managers within the sector are comparatively young and argue that there is a need to dispel misconceptions about the sector not being a 'career choice' and to highlight the possibilities for rapid progression and rewarding careers in the sector.

[32] People 1st, State of the Nation, 2011

Employers need to work together to improve perceptions of the industry, not just in the eyes of students, but also in those of careers advisers, teachers and parents, e.g. through creating greater dialogue with schools and opportunities for work-experience.

8.2.4 Apprenticeships

Apprenticeships play a central role in both the Government's skills development and its strategy for engaging young people following the rise in the participation age for remaining in education and training.

While the number of apprentices within the sector has been growing, research also shows that just 5% of businesses in the Tourism and hospitality sector currently employ anyone on a government-approved Apprenticeship programme[33]. The sector needs to encourage more employers to get involved in Apprenticeship delivery, pointing out the benefits and how, with the take-off of the Higher Apprenticeship in Hospitality Management, Apprenticeships increasingly represent an effective means of filling management vacancies while retaining talent within a business. The fact that 28% of employers in the sector said that they were likely to employ an apprentice in the future suggests that there is scope to improve take-up rates and that efforts focused on doing so could prove fruitful. Alongside this, the sector needs to promote Apprenticeships to young people, as a way of gaining qualifications while working and progressing into higher-skilled roles.

8.2.5 Customer service

Skills gaps are common in the Hospitality and tourism sector, being reported by 21% of employers, compared with 13% of employers across all sectors[34]. When asked why skills gaps occur and what skills need improving, 61% of employers identified customer-handling skills. When People 1st asked employers what skills they expected to be most important to their business in the next three to five years, 88% of employers stated customer service skills.

Employers in the sector are clear: the quality of the people who provide their services is central to their customers' experiences and future customer loyalty. Employers believe that customers' expectations will continue to rise and that there will need to be an increased focus on differentiating and personalising services for specific types of customer. If front-line staff lack the fundamental inter-personal skills and soft communication skills that customers expect, it is unlikely that their business objectives will be met.

Some employers believe that the ability to communicate appropriately with customers, sometimes over long hours, owes as much to character as it does to training and is best addressed through recruiting the right people. Good recruitment is undoubtedly part of the solution, as is good management, workplace culture and training.

[33] People 1st, State of the Nation, 2013
[34] ESS 2011

8.2.6 Chefs

There is a particular need for chefs, many of whom enter the industry without the basic craft skills to cook 'from scratch'. Restrictions on migration from outside the EU are creating particular problems for restaurants serving Asian, Indian and other ethnic foods. As a result, this is the occupation with the highest proportion of HtFVs in the sector, with 39% of all chef vacancies proving hard to fill. Continued growth in the restaurant industry and the rise of the 'gastro-pub' is predicted to fuel a continuing shortage, which might be addressed by encouraging more women to enter this traditionally male-dominated occupation[35].

8.2.7 Language skills/cultural awareness

Migrant workers make up 26% of employees in Hotels and 18% in Travel services, compared with 14% across the economy as a whole. Although employers identify migrants as having high levels of motivation, employability and customer service skills, the prevalence of migrant workers in the sector also creates a need for English language skills.

8.2.8 Higher Education

Currently, a large number of students are studying sector-specific courses in HE which, People 1st has argued, offer less well-developed pathways into work than those found in some other industries. Unfortunately, many of the graduate trainee programmes that operated in the past have also disappeared because of cost-cutting. Employers in the sector could encourage students on these courses to enter the sector by providing structured development opportunities that will widen their skills and experience while studying.

8.2.9 Managerial skills

The sector faces difficulties in recruiting managers and significant skills gaps among managerial staff. When asked to identify what skills would be particularly important in the next three to five years, 69% of businesses identified management and leadership skills. Only customer service skills (identified by 88% of employers) were identified as being more important.

This emphasis on leadership and management skills may partly derive from the fact that employers recognise that customer service owes as much or more to work-place culture as it does to skills or knowledge. High rates of labour turnover combined with rapid progression means that managers in the sector are comparatively young and may lack the higher-level skills and experience to excel in these positions. Supervisory management skills, particularly for first-time line managers, are a particular need, alongside generic management skills such as communication, team work and problem-solving.

The fact that 57% of the sector workforce is female, yet only 32% of senior managers in the sector are female, suggests that some employers may not be optimising the managerial potential of their staff.

[35] 80% of chefs are male.

8.2.10 Technology

New technology is having a major impact on the Tourism and leisure sector, enabling enterprises to raise their profile, to trade and take bookings and payments online. There is considerable scope for more businesses, particularly smaller ones, to use technology to reach out, attract and maintain relationships with customers, including through the use of social media.

Businesses in rural areas that use the internet are particularly well placed to benefit from the roll-out of superfast broadband.

8.2.11 Business support

Just under half of employers across the Hospitality and Tourism sector engage in business planning activity or have a business plan. Only 22% had received or accessed any form of business support in the last 12 months. Those who do have a business plan were also found to be significantly more likely to have trained staff in the last 12 months (57%) compared with those who did not (27%). Links were also found to exist between business planning, training activity, and reports of increased sales and turnover[36].

Since the closure of Business Link offices, business support services have become increasingly fragmented.

Given the high volumes of start-ups and failures in the sector, improving awareness and ensuring the availability of affordable specialist advice and business support for the sector could be a priority for the LEP. This could usefully be extended to those who are considering or starting to set up businesses in the sector, very few of whom currently seek or receive advice, either because they were unaware of what is available or do not believe they need it.

8.2.12 Business skills

Owner-managers of small companies have a range of skills needs, such as financial management skills, IT user skills and internet marketing skills. They could also benefit from understanding how they might benefit by reducing their carbon emissions and how to respond to changes in consumer ethics and behaviours, e.g. relating to local sourcing.

Businesses could also benefit from working collaboratively, with their local authority and LEP, to identify how they can:

- encourage longer stays, with an accompanying increase in per capita expenditure;
- encourage expenditure on locally-sourced services and on local products;
- develop year-round motivations to visit, such as events and festivals;
- spread the impact of tourism by developing the appeal of less obvious areas; and

[36] People 1st, 2012 Employer Survey

- give visitors a more diverse experience of attractions, shopping and entertainment.

8.3 Transport and Logistics

- Transport and Logistics - establishing the Solent as a business gateway, at local and international levels.

The Logistics sector covers the flow of goods between the point of origin and consumption. As with the Transport sector, which concerns the flow of people, it covers road, rail, air and sea. The sector also encompasses a range of activities within the supply chain, such as cargo-handling, warehouse and storage, freight forwarding, courier services and so on. As well as being a major sector in its own right, it also has a critical role in supporting the efficient running of the rest of the economy.

The sector has been prioritised in part due to the role of the Port of Southampton as a major economic influence in the area. It is estimated that the Port supports around 10% of the city's workforce.

There is a connection between increasing activity in the Port and the intensification of activity in the surrounding urban areas. The use of technologies in supply chain integration, for stock reduction and the growth of on-line shopping is driving growth in the logistics sector and creating opportunities for the growth of economic activity around ports focused on breaking bulk shipments into individual orders for distribution across the UK. The intensification of the Port estate is such that subsidiary activities such as transport depots, open storage, warehouses and distribution depots have progressively been excluded from the Port estate, and need to be relocated elsewhere within the surrounding area. This is a theme picked up in the Strategy Economic Plan. Below we focus on some of the key skills issues relating to the Transport and Logistics sector.

8.3.1 Training

There is a significant link between skills and competitiveness in the Logistics sector. Research by Skills for Logistics suggests that trained workers can be 23% more productive than untrained workers, that training is both essential to profitability and linked to survival during periods of economic downturn.

The National Employer Skills Survey reports that 62% of English logistics companies provided some form of training or development, though size was a key factor in the likelihood of training taking place. Less than half of companies with five or fewer staff provided training, while nearly all enterprises with more than 100 staff did so. Skills for Logistics suggests that, compared with our international competitors, the proportion of employees who are trained is weak and that, according to The World Economic Forum, the UK's logistics sector was only the 13th most competitive internationally.

8.3.2 Workforce

The sector is a major provider of lower-skilled employment. According to Working Futures, 21.4% of the workforce is employed in Managerial, Professional or Associate professional occupations, compared with 34% across the workforce as a whole. The sector offers significant numbers of Administrative and secretarial jobs (10.2% of total employment). However, employment is concentrated among Process, plant & machine operatives (33.0% of employment, compared with 5% across the whole economy) and Elementary occupations (17.7% compared with 10.5% across the whole economy).

Elementary occupations include large numbers of jobs in warehouse operations, postal services and courier companies.

Looking forward, employment in the sector is expected to grow in the Solent area by around 8% between 2010 and 2020. The total net recruitment requirement, which includes the requirement to replace retirees and those leaving the sector for other reasons, is expected to be 49%, i.e. the equivalent of replacing half the current workforce, over a period of 10 years.

While these are not the largest occupations within the sector, future jobs growth, as a proportion of existing employment, is expected to be particularly high among Managerial and Sales and customer services staff.

8.3.3 Demography

One reason for the high levels of replacement demand in the sector is that, nationally, 44% of the workforce are over 45 and only 9% are under 25. The proportion over the age of 45 rises to 54% in 'Services incidental to water transport', which includes terminal facilities like harbours, navigation, pilotage and berthing. Replacement demand in this sector is likely to be particularly high.

The low numbers of younger employees in some parts of the sector can be explained by age restrictions on driving or the difficulties that young drivers can have in finding affordable insurance.

8.3.4 Sector perceptions

Skills for Logistics, the SSC for the sector, is concerned that the sector has a poor image among young people, who can view it as offering a lack of diversity and limited opportunities for career progression. 76% of employees in the logistics sector nationally are male.

Although wages and working conditions in some parts of the sector can be poor[37], there is a need to raise awareness of the significant number of the high value, high productivity and highly-skilled activities that exist within the sector. Many Port operational jobs tend to be well

[37] See for example BBC Panorama, The truth behind the click at http://www.bbc.co.uk/programmes/b03k5kzp

paid and, according to the Port of Southampton Master Plan 2009–2020, are well aligned with previous policies focused on 'smart' growth within the area.

There is, Skills for Logistics argue, a need to engage business in raising awareness of the sector among young people in schools and to highlight the range of rewarding career opportunities that are available. Business could also be better engaged in developing curriculum and career-related materials and existing materials, such as *'Made in China',* a maths and enterprise curriculum for 14-16 year olds focused on the journey of an i-pod from a factory in China to retail in the UK.

8.3.5 Regulation

The sector is highly regulated, with regulation acting as a major driver for skills acquisition.

Technical training is required by law in large parts of the sector. Licenses are required to drive a range of goods vehicles, while the Health and Safety Executive expects lift truck operators to have been trained and to hold relevant certificates.

The introduction of the Driver Certificate of Professional Competence (CPC), which is a requirement of EU law, will require new and existing drivers to complete a total of 35 hours of periodic training within five years. This new legislation will impact on around 257,000 professional drivers of vehicles over 3.5 tonnes in England, and is expected to lead to a major training requirement in the sector.

8.3.6 Self-employment

Large parts of the sector, e.g. large goods vehicles and some areas of passenger transport, are characterised by high levels of self-employment. The cost of training and of taking the time off work to train can both be a barrier for this section of the workforce.

8.3.7 Environment

The transport sector accounts for 21% of the UK's domestic greenhouse gas emissions, with freight transport accounting for 31% of all transport greenhouse gas output. Fuel economy and shifting to low carbon technologies is a major driver for the sector. It is also a driver for skills acquisition. The Department for Transport has suggested that if 90% of LGV drivers were trained in eco-driving, this would save up £300m in fuel costs per annum[38].

8.3.8 Technology

The use of technology in the sector is continually evolving, as employers seek to find ever more efficient solutions. The use of GPS and radio-frequency identification in tracking and aiding the movement of goods is increasingly common. Technologies are being used to control stocks, to

[38] DfT 2009, Low Carbon Transport: A Greener Future.

enable supply chains to become better integrated, in warehousing to increase the speed and efficiency of ‘picking’. This is driving a need for periodic up-skilling among staff.

Technologies have also reduced the need for stamina and strength in controlling equipment and vehicles, opening occupations to a wider labour pool.

8.3.9 Customer service skills

The sector has identified a need for customer service skills driven, in part, by a rise in on-line shopping, home delivery and customer interaction.

8.3.10 Apprenticeship

There is a strong tradition of Apprenticeships in parts of the sector. In the part of the sector covering harbours, navigation, pilotage and berthing, 8% of employees identify themselves as having a trade apprenticeship, a figure twice as high as that seen across all sectors. There is scope to build on this tradition and to extend it to wider parts of the sector.

8.3.11 Managers

Managers make up around 21% of the workforce. However, only around half of all managers in the sector hold qualifications at Level 3 or above. There is a need for supervisory management skills as well as functional management and business skills, particularly in the large number of small enterprises that characterise the sector.

9. TRANSFORMING THE LABOUR MARKET

The evidence base to date has focused on the analysis of trends in the data and an analysis of the implications of this for the Solent economy, both now and in the future. In the previous section, we also looked at some of the trends in a small number of sectors, arising from a review of Sector Skills Council reports on skills trends. Policy on skills tends to focus on the supply of skills and how the supply side can respond. Yet equally important is the demand side and the way that this shapes employers' demands for skills[39].

A large body of evidence suggests that employers' skill needs are influenced by their product market strategies and the extent to which their skill strategies or policies are encompassed within those product market strategies, or whether they are expected to respond as and when various skills demands emerge.

Thus the demand side is influenced by the environment for business development.

9.1 Employer investment in skills

UKCES estimates that £49 billion pounds was invested by employers in training in the last year across the UK. About half of that was the cost of training and half was employee wages. £13.5 billion (27% of total spend) of this is on the cost of training with £3.9 billion spent on payments to external providers. Thus only 8% of overall spend by employers is going to external training providers such as colleges and independent training providers.

The proportion spent on internal direct costs, such as management of training, is higher in smaller businesses, thus there is the scope to benefit from greater collaboration to save on costs, strengthening the case for Group Training Associations and similar partnerships.

Of all the employees undertaking training paid for by their employers, only 23% were training towards a qualification (this equates to 12% of all employees). Larger firms were more likely to provide training leading to qualifications. If qualifications are a good indicator of quality, does this imply that the quality of a lot of the training being undertaken by businesses is not of the highest level, or is it a reflection that current qualifications are not meeting business needs? However, they are the currency which allows employees to move from one employer to another, allowing flexibility and job mobility.

There is substantial evidence showing that training raises firm survival rates (SSDA Research Report 20). Overall, it is estimated that one fifth of the annual growth in the UK economy from 1975 to 2002 was driven by an increase in workforce skills[40].

For the Coalition, this signals two things:

[39] Mason, 2003; Wilson et al., 2003

[40] UKCES presentation

- the central role that employers must play in developing the skills that they and the UK as a whole need to remain competitive; and

- the scope that exists for growing employer-responsive training, compensating for the fact that government spending on skills is due to fall by 25% over the 2011/12 to 2014/15 Spending Review period.

The fact that just 2% of FE income is also contributed by employers is further cited as evidence of a mismatch between the content of provision and the needs of employers[41]. If this alignment could be improved, financial savings need not come at the cost of reduced training levels. The emphasis of policy, until the recent Heseltine Review, was therefore placed on 'reducing bureaucracy; removing unnecessary interference from intermediary agencies, whether local, regional or national; …removing unnecessary regulation; and introducing new freedoms and flexibilities'[42]; in short, on cutting the supply side free to deliver programmes that employers and individuals either want or need.

Successive Governments have argued, rightly, that society, individuals and employers all benefit from investments in skills and learning and that they should therefore share responsibility for bearing the costs. The balance of where the benefits lie varies, depending on the type and level of the training, generating a central policy question: 'how much of that responsibility should sit with whom and for what kinds of programme?'

Today, this question is being asked in the shadow of the Coalition austerity programme, which means that individuals and employers are being asked to take growing responsibility for investing in training, particularly in areas where the individual and institutional returns are clearest.

From 2013/14, people aged 25 and over will need to take out a loan to cover the cost of learning at Level 3 and above. As with loans for HE, these will be repaid once the learner is earning more than £21,000 a year. For Advanced and Higher Apprenticeships, loans to individuals will be capped at 50% of the Apprenticeship costs, reflecting an assumption that employers will contribute the rest, though this is for negotiation between individual employers and their employees.

Fully-funded training is being focused on: learners with very low levels of skills; young people aged 19 up to 24 working towards full qualifications up to Level 3; literacy and numeracy skills; and adults on benefits who need training to Level 2 to help them find work[43].

Adults re-training towards Level 2 qualifications in the classroom or at work (e.g. via Intermediate Apprenticeships) will be 'co-funded', with the Government sharing the cost with individual employees and/or their employers.

[41] No Stone Unturned in Pursuit of Growth – The Heseltine Review, BIS, 2012

[42] *Investing in Skills for Sustainable Growth - Further Education New Horizon*, Nov 2010, BIS, p.2.

[43] Adults on benefits who are aged 24 and over will need to take out a Learning Loan for training at Level 3 or above.

This growing use of loans and 'co-funding'[44] is not just a way of saving money. Putting purchasing power in the hands of employers and individuals is also consciously designed to encourage greater supply-side responsiveness. This is most evident in the Employer Ownership Pilot, which will shift £340m of SFA funding over to the demand side by 2015/16. Applications will only be funded if they: are made by employers (with support from LEPs, ESBs and providers); lever in additional employer investment; and align directly to employer needs at local or sectoral level.

9.2 Skills utilisation

But skills development and investment is only a part of the equation. It is also important to create the demand for greater utilisation of skills. A frequently cited reason for the lack of demand for skills is that businesses are stuck in low-value product strategies. To grow and be more productive, they need to raise their game, thus in turn raising the demand for skills

Skills utilisation as a concept encompasses a range of high performance work practices with a focus on "creating a working environment in which employee talents can be deployed for the optimal mutual benefit of themselves and their employer" (UKCES).

Our stock of skills and their optimal deployment fare relatively poorly when compared internationally according to Skills Utilisation measures such as labour productivity and levels of qualifications among different workforce groups. Access to opportunities for skills acquisition is uneven as are their impacts and a number of reasons are provided for this, often deriving from Human Capital Theory (Becker, 1964).

For businesses, underinvestment in skills may be a rational response in the face of risks such as the poaching of trained workers and those who cannot see the impact of the investment. Others wishing to invest in skills may lack capacity or capability to manage the process, do not know where to find appropriate provision, or generally lack understanding of how to deploy the skills that they have effectively.

A body of work which looks at the role of High Performing Workplaces (HPW) provides an important means to stimulate businesses to: review their business strategies; move up the value chain raise their demand for high skills; reorganise their work; and by so doing, improve skills utilisation in the workplace and, hence, firm performance.

9.3 Leadership and Management Skills

Leadership and management has a greater impact on skills utilisation than any other factor. The choices that managers make and the working environments that they create influence the opportunities and motivations for skills to be used and the extent to which employers invest in skills.

[44] 'Co-funding' is used to refer to programmes for which employers and individuals pay for part of the training costs.

Leadership and management skills play a significant role in influencing business performance and enhancing business competitiveness. Evidence[45] shows that investment in leadership and management and improvements in management structures, resource planning and staff training and development can have a positive impact on 'bottom line' business performance.

Leadership and management skills are strongly correlated to business growth and success. Business planning skills are important in accessing finance, both from banks and public sources such as the Regional Growth Fund.

There is scope to improve these skills in the Solent, especially in SMEs with growth potential. Many of the businesses that need to develop these skills may, however, not recognise that, so incentives and peer support businesses are likely to be important. There are valuable assets in the Solent including the Universities that can be better utilised in this regard. There is also scope to focus on skills for boosting overseas trade, including developing better awareness for market opportunities, overseas contacts and export strategy.

9.4 Entrepreneurship

Entrepreneurship is important for future economic growth. Thus, a further strand of raising business investment in skills is raising entrepreneurial activity, which leads to new business development. Entrepreneurs make a considerable contribution to the UK economy and society. New and existing SMEs help drive economic growth by raising competition and stimulating innovation. Those that grow make a disproportionately large contribution to job creation[46].

The contribution of entrepreneurship to the European Union's economy has been acknowledged in the Lisbon Strategy (2000-2010) as well as in the recent Europe 2020 Strategy.

> *'... an individual's ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports individuals, not only in their everyday lives at home and in society, but also in the workplace in being aware of the context of their work and being able to seize opportunities, and is a foundation for more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promoting good governance'.*[47]

A recent evaluation of entrepreneurship education[48] found that, while the proportion of the working age population involved in starting or running a business in the UK compares favourably with many of our international competitors, levels of enterprise ambition compare

[45] *West Midlands Regional Skills Partnership Cross Cutting Issues 2006: Leadership and Management*, West Midlands Observatory, 2006.

[46] Anyadike-Danes and Hart (2011) Job Creation and Destruction in the UK: 1998 – 2010, October 2011

[47] *Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning*, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006H0962:EN:NOT

[48] Enterprise Education Impact in Higher Education and Further Education, Department of Business, Innovation and Skills.

less favourably. It concludes that addressing the ambition gap requires early intervention to provide young people with hands-on enterprise experience.

It also found that experience of enterprise through education is key to this and helps give people the knowledge and awareness of what it means to run a business and the skills they will need in order to pursue new opportunities. Engaging young people in activities which help increase awareness of entrepreneurship and the realities of running a business are vital to increasing the proportion of those actively starting a business. Currently, government provides funding for a range of enterprise and entrepreneurship education initiatives[49].

The evaluation supported the policy of encouraging and enabling students in FE and HE to participate in enterprise and entrepreneurship education which is both formal and informal learning. It suggests that learning by doing (such as projects, placements and learning enterprises) should be included in all enterprise and entrepreneurship education courses since these seem to increase the outcomes and impacts for students, especially those in FE. It found that, while enterprise and entrepreneurship education appears to be strengthening, it is not yet widely embedded in the full range of vocational learning where students are likely to be working in SMEs or self-employed, since there are many such courses which do not appear to have any embedded enterprise and entrepreneurship education.

Questions remain about whether it should be largely available only to those who are pre-disposed (through their choice of a full qualification or course with enterprise and entrepreneurship education or participation in non-formal learning activities). Comparisons with Wales suggest that the Welsh Government's Youth Enterprise Strategy, which makes enterprise education an entitlement for every student and is building the capacity to provide enterprise and entrepreneurship education in schools, is effective in increasing positive attitudes to entrepreneurial activities.

9.5 Innovation

NESTA[50] describes innovation as the:

"process by which new ideas turn into practical value in the world: new products, services, or ways of doing things. It is not just about new technologies or about scientific R&D"[51].

NESTA research shows that:

- clusters and regional specialisation are associated with higher levels of innovation and prosperity;
- innovating firms grow significantly faster than those not undertaking innovation; and
- between 2002 and 2008, a small number of fast-growing businesses generated the lion's share of employment growth in the UK.

[49] Enterprise Education Impact in HE and FE - Final Report

[50] National Endowment for Science, Technology and the Arts

[51] *Plan I,* the case for innovation–led growth, 2012, NESTA

A substantial body of evidence exists in relation to the factors that influence innovation. This evidence points to the need to:

- Create the right conditions for innovation through adopting a clear strategic approach and strong evidence base.
- The importance of effective leadership which cuts across administrative boundaries.
- Connect innovation with the wider economy to spread the benefits through effective networking.

Plan I: The Case for Innovation-led Growth[52]*,* highlights the fact that the benefits of innovation are widespread, and that it often brings more benefits to its adopters than to its creator. Research undertaken by the European Commission has identified that clusters and regional specialisation are associated with higher levels of innovation and prosperity[53].

The NESTA report, *Measuring Sectoral Innovation*[54]*,* further highlights the importance of innovation to economic growth. The research suggested that innovating firms grow significantly faster than those not undertaking innovation in each of the nine sectors surveyed. They also experienced four times the sales growth of non-innovators within the same sector.

In 2009, NESTA research, *The Vital 6 Per Cent*, highlighted the importance of the small number of fast-growing businesses that between 2002 and 2008 generated the lion's share of employment growth in the UK. High growth businesses come from all sectors, include start-ups and established firms and include small businesses.

More recent research[55] by NESTA has looked again at these businesses and concluded that they remain vital to the economy. It identified several conditions associated with innovation and growth that should be priorities for economic policymakers, including:

- Removing the obstacles to growth – e.g. land use planning.
- Ensuring access to finance to support growth, especially venture capital and expansion capital.
- Investing in a skilled and creative workforce.
- Using research and university funding to support strong networks between researchers and businesses.
- Harnessing government procurement to provide a market for innovation.

[52] Plan I, the case for innovation–led growth, 2012, NESTA.

[53] *Innovation clusters in Europe: A statistical analysis and overview of current policy support*, 2007, European Commission.

[54] Measuring sectoral innovation capability in nine areas of the UK economy, Report for NESTA, Innovation Index project, Nov 2009, NESTA.

[55] *Vital* growth: The Importance of High-Growth Businesses to the Recovery, 2011, NESTA.

Further research by NESTA looks at the contribution of the Creative sector to innovation[56]. The findings support the research hypothesis that supply chain linkages to the creative industries are positively related to innovation elsewhere in the economy. Thus, it concludes that efforts to enable knowledge transfer should also support the exchange of new ideas between creative businesses and firms in other sectors of the economy.

In its report, *History Matters*[57], NESTA looks at conditions and trajectories of different areas in terms of innovation. It suggests that, in terms of support for local innovation, the "common thread has often been under-delivery"[58]. Whilst analysis of failure had implicated a range of causes including: lack of institutions, lack of ambition, and lack of skilled policymakers, the NESTA research explores the extent to which an area's history matters to its economic success. It raises questions for areas like Solent, which are seeking to improve their performance in terms of innovation. The research concludes that:

> *Developing new 'pathways' for economic development depends considerably on a region's innovation system. However, individual policy interventions are likely to have little impact on economic development if they do not take into account previous economic structures and their legacy.*
>
> *Simmie et al, 2008, p4*

This research suggests that local economies' capacity to absorb new knowledge, grow and regenerate is developed over time and that four main strands are important in understanding an area's history and capacity for innovation: sectoral development pathways; the knowledge assets; the nature of the local innovation systems; and new path creation. One of the key benefits of cities is that they allow the exchange of knowledge and information between economic actors. They thus: create the conditions for entirely new innovations to emerge, and it may allow firms to learn innovations for those nearby[59].

Research has found urban firms are more likely to produce both product and process innovations than those outside[60]. The advantage for product innovation potentially derives from both effects, but the advantage for process innovation is explained entirely by learning effects - urban areas facilitate the sharing of information, which allows firms to mimic one another. A key question is whether the Solent has the right support structures for entrepreneurs who develop radical product innovations?

How innovative is the Solent?

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[56] Bakhshi H, McVittie E and Simmie J, *Creating Innovation: Do the Creative Industries Support Innovation in the Wider Economy*, 2008, NESTA

[57] Simmie J, Carpenter R, Chadwick A and Mar R, *History Matters: Path dependence and innovation in British City Regions,* 2008, NESTA

[58] p3, Simmie J, Carpenter R, Chadwick A and Mar R, *History Matters: Path dependence and innovation in British City Regions,* 2008, NESTA

[59] Lee N and Rodríguez A, *Innovation, learnt innovation and cities: Evidence from UK SMEs,* Papers in Evolutionary Economic Geography # 12.23
http://econ.geog.uu.nl/peeg/peeg.html

[60] ibid

For Solent to thrive and transform its economy, innovation will be a major driver. Solent benefits from a number of related innovation advantages including:

- The four universities based in Solent are a major economic asset, providing a source of highly-skilled employment, generating new businesses, supporting existing businesses and bringing significant revenues to the local economy. Innovation and the exploitation of new knowledge by the private sector is fundamental to future growth and Solent is fortunate that three of its HEIs have strengths in its strategic sectors that, if harnessed, can anchor knowledge-intensive economic activity and employment in the area, as prioritised by the *Solent LEP - Strategy for Growth*.

- Innovation centres, science parks.

- Knowledge-intensive businesses and skilled workers that drive successful innovation.

Although residents of the Solent LEP area register more patents per 100,000 people (18.9 in 2009) than the national average (13.0), the level of patent registration locally is considerably lower than in leading LEPs, many of which are in the surrounding area, such as Enterprise M3 (46.3), Oxfordshire (46.2), Swindon and Wiltshire (38.1), Thames Valley Berkshire (35.3) and Coast to Capital (29.3). Solent's industrial base and strategic assets are such that it should perform better and there is scope and a strong case for improving performance.

The levels of interaction between Solent universities and business are relatively high. The University of Southampton has high levels of interaction with businesses as measured by the income from businesses: the total value of Intellectual Property (IP), research and consultancy contracts is £56.5 million. The value of business interactions at the University of Portsmouth (£11 million) and Southampton Solent University (£6.7 million) was far lower but not insignificant in 2010/11. Income from business interactions was lower still at the University of Winchester in 2010/11 at £2 million, although the majority of these interactions are with local businesses.

Research by the Centre for Cities shows that the University of Southampton has high levels of interaction with businesses, generating £56.5m from Intellectual Property (IP), research and consultancy contracts in 2011/12. The University of Portsmouth generates £11 million and Southampton Solent University £6.7 million. However, nearly three-quarters of the University of Southampton's business income was generated through interactions with firms outside the South East. The figure for the University of Portsmouth is lower, at 54%. We understand that top Universities have a national and international outlook. However, we must also find ways of focusing the resources and expertise of these institutions on creating local growth.

The investment of £120 million in a new campus hosting Lloyds Register and the Southampton Marine and Maritime Institute (SMMI) will result in a new, world-leading centre for innovation, business and maritime engineering opening in the heart of the Solent in 2014, designed to serve as a catalyst for future maritime developments. It is essential that Solent's Maritime cluster is aware of, has affordable access to and harnesses the expertise, facilities and technical support available through SMMI and other local centres of excellence. SMMI adds and complements many existing strengths, such as the University of Portsmouth's Marine laboratory and access

to a towing tank, wave generator, survey vessel and other facilities through Southampton Solent University.

Yet, at the same time, Solent faces some notable challenges:

- Lower levels of knowledge-intensive employment compared with other areas. Knowledge-intensive businesses are key drivers of innovation.

- Solent's skills profile is relatively weak because a less highly-skilled population is less likely to facilitate the creation and transmission of knowledge and ideas and to be able to use knowledge effectively, factors crucial to successful innovation.

- There is substantial variation in skills profiles between different local authorities within the Solent area, particularly higher-level skills.

Improving the innovation ecosystem will require:

- Investment in the creation of an innovation ecosystem which enables universities, businesses and individuals to exchange ideas and generate innovation more effectively.

- Support innovation networks.

- Invest in supporting links between businesses and universities, providing financial support for projects explicitly seeking to link universities and SMEs for innovation purposes and identifying funding opportunities, emerging markets or emerging research with the potential for business application.

Solent does not have a specific innovation strategy although through the consultative process for the EU SIF, innovation has been identified as a separate priority:

Some of the activities that it might be supported could include:

- Joint investment in seed capital funds and business loans.

- Joint support of career opportunities for national and international graduates by businesses, universities.

- Joint provision of business services by the colleges, universities and research centres.

- Raising the international profile of the Solent as a centre of excellence in the Marine and maritime sector linking to new developments at the Universities.

- Investing in innovation grants and vouchers through the EU SIF.

10. KEY ISSUES AND RECOMMENDATIONS

In addition to the data analysis and literature review which comprise the main section of this report, we conducted interviews with eight organisations and received 34 responses to an online survey. We also had a substantial body of evidence and views from the EU SIF consultation process which pre-dates and overlapped the skills plan development process. As much of that consultation also considered skills and employment issues in detail, we have drawn on a further 47 interviews and 49 online survey responses. There was indeed a good deal of consensus on: the challenges facing the Solent and the nature of the priorities in terms of actions and investment.

The consultation process identified four strategic themes:

- Develop world-class skills.
- Transitions to employment.
- Raise business investment in skills.
- Develop a responsive skills and employment system.

Underpinning this will be a need to measure success.

The key issues are explored below in line with these themes.

10.1 Develop World-Class Skills

Solent's growth ambitions require a world-class workforce. The combined efforts of employers together with Solent's schools, colleges, universities and other educational institutions working together will be needed to: drive up GCSE attainment in core and STEM subjects; improve provision and take-up of Apprenticeships; raise participation in higher-level skills; and improve the alignment between the needs of business and skills delivery.

10.1.1 Raise higher level skills in the economy

In terms of the proportion of the workforce with higher-level skills (Level 4+), there is a significant gap when matched against the national average and Solent's competitor economies in the South East. At the same time, Solent has below average resident participation in HE.

Improving graduate retention - in the short term, improving graduate retention can start to make strides to closing this gap. In terms of retention of graduate labour, proximity to London is a factor as graduates are drawn to opportunities in the Capital. Solent is currently a net importer of students and there is high competition for vacancies in the Solent region, with insufficient graduate opportunities. More graduates would wish to stay within the region if there were the appropriate opportunities, but they often have to relocate taking their newly acquired

skills to other parts of the country. There needs to be a good supply of graduate-level vacancies, and graduates need to be encouraged to consider opportunities offered by SMEs and the opportunity for start-ups. Linking graduates with support for business start-ups and linking them with SMEs via Innovation Vouchers[61] may open up new opportunities.

Raising resident participation rates in HE - in the medium to long term, addressing poor HE participation rates will be essential. Lack of participation in HE amongst the resident population is a direct consequence of earlier attainment deficiencies. This issue clearly needs to be addressed if, in the long term, the trends in HE participation are to be reversed. Building on best practice in linking HEIs with schools will be essential if Solent's young people are to aspire to higher-level skills.

Improving vocational pathways to higher-level skills - such as through Higher Apprenticeships is also important. It will be necessary to consider whether the Solent has appropriate pathways to higher-level skills for those whose attainment at earlier stages has been impeded. Solent LEP is fortunate in being home to a number of large, reasonably well-differentiated education and training providers. Although some competition is inevitable, it is important that providers collaborate to ensure that the right pathways are created across the provider network, particularly in provision which will support strategically-important sectors. More FE/HE partnerships may be required to facilitate this.

10.1.2 Raise the level of STEM skills in the economy to create a world-class-skilled labour pool

Foster links between employers in Solent and local schools - so that young people better understand and take advantage of growing employment opportunities available which require STEM skills. Adults to need to better engage with STEM provision.

Employers need to be proactive in promoting interest in engineering, aerospace and marine-focused careers and in encouraging the acquisition of the STEM skills their industries require.

There is a need to develop programmes to address the gender imbalance in the sector and raise the number of young women who have an interest in careers in engineering. Making STEM education interesting, fun and relevant to the lives and aspirations of young people, both male and female, must also start at an early age.

A wide range of recommendations emerged from the Solent Enterprise Zone in relation to STEM and these are equally applicable to the wider Solent area. Recommendations included:

- providing careers talks highlighting the career opportunities in their business/sector and the 'real-life' application of science;
- developing case studies of jobs on offer in the local area;
- working with schools to develop industry-led projects that fit with the curriculum;

[61] Proposed within the EU SIF

- sponsoring or participating in after-school STEM clubs organised by individual schools;
- encouraging staff to act as STEM Ambassadors;
- offering site visits for young people and their teachers;
- participating in initiatives such as *See Inside Manufacturing;*
- providing work experience and work placements for young people.

The range of projects and programmes focused on promoting STEM learning is extremely broad. There are also many ways in which employers can get involved with local schools and colleges, outside the structured programmes listed above. Large employers, such as BAE Systems, appreciate the importance of this agenda and already work with schools on a range of early stage careers activities. However, more needs to be done, more employers need to be engaged and it is a potentially complex environment to understand and engage with, especially for SMEs.

Public sector partners (such as STEMNET, the local EBPs) should work together to provide a coherent package of information and support for employers in the Solent, particularly in priority sectors, demonstrating the benefits and opportunities that exist for employers wishing to be active in improving the flow of skills into their sector.

Employers can make an important contribution to the CPD of teachers and technicians, particularly in vocational education. Curriculum enrichment projects that deliver the Science and Maths curriculum through projects jointly designed with industry, making the learning relevant to local employment, can help to engage young people in subjects and skills that might otherwise appear 'academic' or irrelevant. Teacher Professional Development Placements, organised by Education Business Partnerships on behalf the Royal Academy of Engineering, give teachers the opportunity to visit a company, meet people who work in industry and provide a 'real-world' context to their teaching practice. The Industrial Trust also provides in-company experiences for teachers[62].

Employers are being encouraged to develop qualifications that meet the needs of their industry. This could extend to the development of a qualification focused on the specific functional maths skills needed in the aerospace sector.

Research shows that Careers IAG within schools is of variable quality, with only 18% of surveyed students being satisfied with the STEM-related IAG and half reporting that they were not aware of having received any IAG at all[63].

While the majority of children enjoy science at school, '*most young people's science aspirations and views of science are formed during the primary years and have solidified by age 14, by which point the idea of science as 'not for me' becomes very difficult to change'*[64].

[62] http://www.industrialtrust.org.uk/teachers.html
[63] **E**ducating the next generation of scientists, National Audit Office, 2010
[64] Ten Science Facts and Fictions, Aspire Project, Kings College London, 2012.

A report by the NAO[65] suggests that the availability and quality of teaching equipment plays an influential role in young people's education but raises concerns that, at the current rate of progress, the 2010 target for all school laboratories to be of excellent standard would not be met until at least 2021. There are further concerns that cuts in the education budget may disproportionately affect sciences, engineering and design and technology courses, because they require experiments, which require expensive consumable items.

Employers have a role in donating or sponsoring the purchase of equipment which could be used directly for the delivery of training that meets the needs of their organisations. Solent LEP should clearly work to support this partnership and towards securing appropriate equipment, e.g. aircraft/components required for 'Type Training' appropriate for the Virgin fleet. Yet there is a balance that must be struck in assessing when public sector investment in new facilities is appropriate. Employer willingness to co-fund any investment or willingness to buy into an agreed volume of training that uses new capital equipment will be the best measure of 'market readiness'.

Solent LEP should set up a STEM Task and Finish Group to develop a cross-LEP approach to improving STEM skills, mapping STEM assets, engaging STEM employers and developing a programme of support, in conjunction with organisations such as STEMNET to provide impetus to the Solent's STEM activities.

10.1.3 Improve achievement at GCSE to address achievement gaps against the national average and particularly in STEM

Key Stage 3 and GCSE results for Solent young people are below the national and regional averages and there is a particularly low achievement in STEM subjects. This bodes ill for the skills of the future workforce and will have a detrimental effect on the flow of skills into the economy in the medium and longer term. There is also a notable diversity of performance within the Solent area with some areas, particularly the cities and Isle of Wight, performing especially poorly.

The divergence of performance in relation to Key Stage 3 and GCSE attainment indicates that area-specific initiatives are needed to understand both the nature of the attainment gaps and the possible causes. A joint LEP, local authority and schools campaign should be established to address attainments gaps where required, supported by business. Build on best practice both within Solent and outside to develop bespoke local initiatives, aimed at improving attainment.

10.1.4 Increase take-up of Apprenticeships, particularly in technical/STEM subjects and at Advanced and Higher levels

Partners interviewed as for both the Skills Strategy and the EU SIF were clear that Apprenticeships must be a clear focus of the *Solent Skills Strategy*. Apprenticeships are

[65] Educating the next generation of scientists, National Audit Office, 2011

recognised as having a critical function, both in enabling employers to deliver the skills required by their businesses and for providing entry into employment for young people locally.

Although the area has a strong tradition of STEM Apprenticeship, partners continue to highlight a shortfall in the supply of engineers and technicians. Perspectives of where the difficulties lie vary[66], with employers citing recruitment difficulties and skills shortages both at:

- Level 3/4 – where posts might typically be filled by those trained as craft/Advanced Apprenticeships; and at
- Level 4/5 – posts for which training to technician/Higher Apprenticeship level with progression to University would be more appropriate.

Ensuring that engineering employers offer sufficient Apprenticeships (including sufficient Advanced and Higher Apprenticeships) to meet the needs, not just of their own organisation but of the sector as a whole, is a clear priority. There is a need to spread the load, to engage more enterprises in Apprenticeship delivery and to make it easier for small companies to get involved.

Alongside this, employers need to work together to raise awareness of the opportunities that Apprenticeships provide, for rewarding careers and progression in an exciting industry.

It is also essential to build the pipeline of skills, generating interest in these new higher-level and technical occupations and to develop progression routes that allow people to move along a pathway, from the age of 14, through Advanced and Higher Apprenticeships, undergraduate and post-graduate study into the jobs that employers are looking to fill, today and tomorrow.

From August 2013, people aged 24 and over will need to take out a loan covering 50% of the cost of learning at Level 3 and 4, including Advanced and Higher Apprenticeships. The impact of this policy is uncertain, and there needs to be flexibility to respond to any market failure that results and, if necessary, to be able to drive demand for the higher-level skills that are critical to our strategic sectors, particularly among employees of SMEs, where the employer contributions towards the cost of higher-level learning will be less forthcoming.

Recent announcements in the Chancellor's Autumn Statement 2013 may indicate further support for Higher Apprenticeships and Solent should seek to be actively engaged in any new initiatives arsing from this. Providers should review their capability of delivering a greater number of higher-level Apprenticeships.

10.1.5 Address sector-specific employer responsive skills – with provision that better reflects the needs of a knowledge economy and supports new emerging high growth sectors and service industries.

Skills shortages and gaps, whilst below the national averages, have a serious impact on employers in terms of business performance and measures should be taken to understand better the nature of the gaps and how they should be met. Some providers are actively

[66] This is not surprising and is likely to be a reflection of the different products and production techniques deployed.

recording instances where provision is unavailable to meet employer needs. This practice should be adopted across the provider network and intelligence shared to allow provision to be revised and developed to meet needs. This could be trialled as part of the Skills for Growth Fund operation (see below).

Technological advances and changes to the occupational structure are driving up skills levels and requirements in Solent's priority sectors. Workforce ageing and retirement is generating a shortfall in technicians and highly-skilled engineers. 70% of engineers who are made redundant never work in engineering again.

Research by the British Marine Federation suggests that 20% of employers in the Marine sector have difficulties filling a vacancy. The vacancies that they found most difficult to fill are identified as being marine engineers, although significant numbers of employers also have difficulty filling vacancies for 'electrical and electronic fitters, laminators, spray painters, commercial controllers, sales and marketing, apprentices and skippers'[67].

It is essential that that the skill supply responds, not just to the changing needs of established sectors, but also to the needs of emerging sectors.

Solent LEP is committed to working with partners to identify how the current skills system can be refined to enable employers to take greater ownership of skills and to enable provision to become ever more responsive to need. Particular focus has been given to encouraging the development of collaborative approaches to meeting the skills needs of our strategic sectors; Advanced engineering, Marine and maritime, Aerospace and defence.

To extend these models for collaboration, the Southampton and Portsmouth City Deal will see the creation of a new tripartite skills investment vehicle, the Solent Skills for Growth Fund. This fund will be used to lever private sector investment from employers, individually and collectively, and to align skills provision across the eight major colleges in the Solent LEP area.

In keeping with national strategy, employers (individually and collectively) will co-own and co-design initiatives supported by the through this Activity, ensuring that it meets industry standards. The focus will be on delivering the skills needed by our strategic sectors and on driving the quality, relevance and value of provision.

Adults now form a lower proportion of learner starts as a direct consequence of changes in government policy. Investment from the EU SIF and the City Deal will go some way to enhancing provision, and further opportunities should be sought within the Local Growth Deal.

A very small proportion of employer investment in skills is delivered through public sector providers. One reason for this is a lack of understanding about what is on offer. Brokerage services which link business to learning providers should be delivered as part of the Business Hub offer.

[67] Industry Trends Results, British Marine Federation, November 2011 – May 2012

10.2 Transition to Employment

10.2.1 Improve employability skills – interviewees were clear that there needs to be a greater focus on work-readiness of school, college and university leavers, including work ethic, positive attitude, team-work, problem-solving, customer service and communication skills. The analysis of recruitment of young people shows that employability skills are critical in terms of securing employment for the future workforce.

Employability skills are a critical issue for businesses recruiting in the Solent LEP area. Lack of work-readiness in potential recruits is a major barrier for employers, even in areas and sectors where no specific skills gaps and shortages have been reported. At the same time, there are an interconnected set of factors and problems faced in tackling the issue of work-readiness. The significant reduction in public sector funding across local authorities, FE and HE has a direct impact on the capacity of those agencies to resource activity which supports employability.

Addressing employability skills should be a clear focus for learning providers, schools and employers alike.

10.2.2 Information Advice and Guidance (IAG) - to improve the scale and quality of impartial information, advice and guidance provision for young people and adults - within schools from Year 8 or below.

In order for the LEP to have a significant and sustained impact on skills development, it must look beyond the immediate skill needs of those in employment or near to entering the world of work. It will be critical to instil in young people the skills, attitudes and aspiration to work and help inform them of the opportunities and benefits of different careers.

Too often young people are unaware of the diversity of jobs available in different sectors of the economy, which leads them to develop aspirations that are neither determined by their own ability nor based on a comprehensive understanding of the types of jobs available.

> *FE learners do not find it easy to access people who have experience of the careers or education they would like to pursue. As a result, their understanding of particular sectors is often restricted to only the most visible roles and jobs, for instance in law - barrister; in television – an actor. FE learners who decide to pursue law, or broadcasting, consequently direct their energies into attaining the most desirable, competitive and visible jobs in these disciplines as they are the only jobs they know of*[68].

The report, *Nothing in common: The career aspirations of young Britons mapped against projected labour market demand,* recently found absolutely no relationship between young

[68] Norris, E. 2011. Not enough capital. Exploring Education and Employment Progression in Further Education. London: Royal Society of Arts

people's career goals and employers' projected needs. This mismatch is a significant contributor to youth unemployment.

A clear point to emerge from the consultation to date is the need to raise young people's interest in careers in a range of sectors such as Engineering and science-related industries. Employers wish to address out-dated perceptions of their industries, and there is concern that Apprenticeships and work-based learning routes are still not being promoted by schools and colleges. It is also important to foster links between employers and local schools, so that young people can better understand and take advantage of growing employment opportunities.

The statutory responsibility for careers guidance and wider IAG has now moved from local authorities to schools. This change coincided with a shift towards greater autonomy for schools, with over 40% nationally now having converted to Academies augmented by the creation of new University Technical Colleges, Studio Schools and Free Schools, examples of which are in planning or started locally. The shift to school autonomy makes managing the consistency of IAG more problematic, with the potential that large numbers of young people may fail to get quality access to guidance on all of the training and career options open to them. In order for the full range of training options to be made available to young people in schools, a partnership approach will be required with input from universities, skills providers, schools and employers.

Research suggests that:

- There is a significant positive relationship between the number of employer contacts an individual has in school (such as career talks or work experience) and their confidence at ages 19-24 in progressing towards their career goals; their not being NEET[69]; and their earnings.
- Young people are 'especially attentive' to the views of professionals they come into contact with in educational settings and overwhelmingly agree that contacts help in career making[70].

Thus, engaging employers and schools in this task will be essential.

Partners across the LEP have been clear during the consultation process - we need to do more to help young people to access work, by improving the provision of IAG and encouraging the take-up and availability of traineeships and Apprenticeships.

Raising of the participation age may, perversely, result in pressure to run more courses that young people find engaging. A better match must be achieved by raising young people's understanding of the labour market and the range of employment opportunities available.

People aged 19 and over can now access face-to-face guidance via the Adult Careers Service. This support is not available to young people aged 16-18, who must rely on the support provided by schools and colleges. A recent House of Commons Education Committee

[69] NEET = Not in Education, Employment or Training

[70] Good Timing Implementing STEM careers strategy in secondary schools, Isinglass Consultancy Ltd, 2011

expressed '*concerns about the consistency, quality, independence and impartiality of careers guidance now being offered to young people',* citing *'a worrying deterioration in the overall level of provision'* and a need for *'Urgent steps… to ensure that young people's needs are met.'*[71]

Solent LEP proposes to target ESF to:

- improve young people's understanding of the local labour market and the variety of job opportunities it offers, particularly in the Solent's priority sectors; and
- provide more intensive IAG to support young people, particularly those who are NEET, as they make learning and career choices and prepare to enter the labour market.

This will be done by fostering closer links between employers, schools and colleges through activities such as:

- getting more employers involved in delivering IAG;
- extending the availability of workplace visits;
- creating more opportunities for work experience;
- supporting STEM enhancement and enrichment activities;
- encouraging employers to act as STEM Ambassadors.

Solent should also enhance the face-to-face guidance available to young people aged 16-18, who are not in education and who, by virtue of their age, are not entitled to support via the National Careers Service (for Adults).

10.2.3 Increasing youth employment options to combat high levels of unemployment amongst 16-24 year olds and supporting better recruitment processes with employers.

The recent recession and ongoing sluggish economic recovery has had a particular impact on youth unemployment, which increased more sharply from the start of 2008 compared with any other age group. Yet youth unemployment is a structural issue which has been compounded by the impact of the recession.

In 2012, 7.8% of 16-18 year olds in Portsmouth were NEET, 6.3% in Southampton, 4.8% in Hampshire and 4.7% on the Isle of Wight.

In May 2013, 6,200 18-24 year olds were claiming JSA in Solent. Although the number of young JSA claimants has fallen in the last four years, from 8,300 in May 2009, youth unemployment remains much higher than it was before the recession. In 2006 and 2007 around 4,500 young people were claiming JSA.

[71] Careers guidance for young people: The impact of the new duty on schools http://www.publications.parliament.uk/pa/cm201213/cmselect/cmeduc/632/632.pdf

Furthermore, youth unemployment is 'hardening'. In May 2013, 2,365 people aged 18- 24 in the Solent had been unemployed for longer than six months, compared with just 670 in May 2008. We are concerned that the proportion of young people claiming JSA for six months or longer (38%) was higher in May 2013 than at any point during the recession. We need to prevent these young people from becoming permanently detached from the labour market.

Employer recruitment of young people varies considerably across sectors. Many employers are reluctant to recruit young people and have a poor perception of their abilities and skills. Recruitment of young people has fallen in recent years. With the onset of recession and the subsequent upsurge in unemployment, employers have had a larger pool of labour to recruit from at the same time as actually creating fewer job vacancies. Both of these factors have influenced the fall in recruitment of young people.

To do this it will be important to address employers' concerns about young people lacking the right skills and attitudes for work or an Apprenticeship[72]. Too many have little or no experience of seeking, or being in, work. At a time when they are competing for jobs against adults with more skills and experience, young people are too often passed over. Traineeships and Apprenticeships are invaluable in helping young people to make the often difficult transition from education to work, simultaneously addressing both youth unemployment and employers' skills needs. Employers who take on young people often rate them highly, valuing their ability to be moulded (cited by 32% of employers), their enthusiasm (30%), and willingness to learn (20%)[73].

More needs to be invested in preparing young people for Apprenticeships. August 2013 saw the launch of the national Traineeships[74] programme. Solent should build on the Pre-Apprenticeships development in the Isle of Wight recently extended across the Solent[75], in which 16 and 17 year olds were paid the minimum Apprenticeship wage while on a work placement lasting up to 26 weeks. A proposal contained within the EU SIF to expand opportunities in this regard will support this agenda. This will:

- enable Traineeship providers to reach out and engage greater numbers of employers, creating more Traineeships opportunities for young people in the Solent;
- increase the flexibility of the Traineeship offer; and
- provide a payment [76] to young people aged 16 and 17 who are NEET and wish to undertake a Traineeship but are unable to do so because of lack of finance.

[72] National Employer Perspectives Survey, UKCES, 2012

[73] National Employer Perspectives Survey, UKCES, 2012

[74] Traineeships help 16 to 24 year olds to develop the skills they need for employment and Apprenticeships by combining a defined core (work preparation, a work-placement of up to 26 weeks and English & Maths) with a high degree of flexibility

[75] The extended Solent Programme was launched in December 2012. So far it has helped 42 young people into placements. Early signals are promising, but as 31 of young people remain in placements it is too early for a proper evaluation.

[76] This is equivalent to the Jobseekers Allowance that is, very rarely, paid to young people aged sixteen and seventeen. At this age, young people are expected to be supported by their parents. Traineeships that feel like work without pay may be a barrier to participation.

Additional support may also be required to ensure that all young people have access to Apprenticeships and are able to take them up. The Solent LEP, in its *Strategy for Growth,* has identified the *'Promotion of the apprenticeship agenda, including… Apprenticeships Grants for Employers'* as a priority.

Solent LEP will use EU SIF to manage the supply of Apprenticeships, prioritising technical and higher-level frameworks (at Levels 3 and 4) and areas where there are identified skills shortages. Our precise investment plans will depend on future national policy (i.e. whether the current national AGE programme is extended) and the results of both the AGE and the London Apprenticeship Grant programmes.

Solent LEP should support a dialogue between learning providers and schools in relation to the raising of the participation age to ensure that there is a sufficient choice of provision available at the local level. This could take the form of a post-16 prospectus for all students.

10.2.4 Promoting talent retention and job mobility for those unemployed and faced with redundancy.

Solent remains reliant on public sector employment and this is likely to continue. Solent LEP has a high level of employment in sectors that are vulnerable to public sector employment cuts. The 2010 Strategic Defence Review has committed the MOD to budget cuts of 8%, resulting in fewer surface warships. Further job losses announced in shipbuilding will have a significant impact on parts of the sub-region, in terms of both public sector jobs and the knock-on effects on private sector jobs. There will need to be active support to retrain those being made redundant and ensuring talent retention in the area will be critical. EU funding should be used to support a coordinated response to redundancies and downsizing, to support development activities within the pre-redundancy or closure period.

Response to Redundancy provision is currently ESF funded. It can be highly effective. The ESF-supported multi-agency taskforce working at the Ford plant in Swaythling has recently helped to ensure that, of 700 people who received assistance, just 29 signed on for redundancy. Therefore, as well as supporting those who have recently lost their jobs, Solent LEP will use ESF to provide flexible skills and job-search support for people who are threatened with redundancy.

Using ESF to provide training opportunities for people who: are under consultation or notice of redundancy; have been notified by their employer that they are likely to be directly affected by downsizing or company closure locally; or have recently been made unemployed as a result of such a closure, will be a clear priority.

Funding should be used to enable a coordinated response to redundancies and downsizing, to support development activities within the pre-redundancy or closure period.

Interventions should be focused on up-skilling or re-skilling individuals to improve their employment opportunities, in line with the needs of employers offering recruitment opportunities.

Talent retention programmes, which seek to retain the skills of workers in the sector, should be established, building on best practice established in many parts of the country during the recession.

10.2.5 Improving the opportunities and skills of the unemployed

Whilst claimant unemployment is relatively low, there remain significant numbers of workless people in the Solent area and for the long-term unemployed, the consequences are significant over their lifetime. Solent LEP is concerned to prevent the recession leaving a legacy of exclusion and long-term unemployment. Providing support for unemployed people seeking work is, therefore, critical.

In May 2013, 6,000 people across the LEP had been claiming JSA for over a year. In addition, there were 10,600 people in the LEP area who had been on Incapacity Benefit or the Employment Support Allowance (ESA) for over a year.

The Work Programme provides support for long-term JSA claimants and ESA claimants who are capable of work. The latest outcomes data, released in June 2013, shows that, since it started in 2011, 132,000 people have found sustained jobs through the Work Programme, a success rate of 13.4%. Outcomes for some groups remain extremely low. For example, just 5.5% of people who have been moved to the programme from ESA found work. These are some of the most disadvantaged members of our community, who require intensive support.

The current situation in Solent suggests some areas where there is a mismatch between the skills of the unemployed and those skills currently needed by local employers. There is also evidence of unfilled vacancies present in some sectors alongside jobseekers with previous experience in the sector. A key challenge in terms of the local growth agenda will be ensuring that opportunities that become available are accessible to unemployed people in the Solent LEP area, supporting employers and the unemployed with recruitment and more effective job matching.

Better understanding of the scale and nature of vacancies combined with knowledge of previous experience and skills of jobseekers should enable skills provision to be more directly targeted to meet needs.

Solent LEP is committed to opening up economic growth and opportunity to people who are socially excluded and who face multiple barriers to finding and sustaining work. This includes people on Incapacity Benefit and ESA and the very long-term unemployed, including those who have left the Work Programme without finding employment.

It will be important to tackle the barriers faced by people in this group in a holistic way, which may include support with caring responsibilities, drug or alcohol dependency, life skills, debt management or homelessness. We also recognise that, for some, conventional job-search will have failed and that more needs to be done in order to enable them to attain the confidence and employability skills required to compete in the open labour market.

The Solent Jobs Pilot will provide intensive integrated support to people on Incapacity Benefit, the ESA and the very long-term unemployed. It will comprise three main elements: pre-employment support, IAG and employability training; a subsidised job, for up to 25 hours per week over six months; and intensive post-placement support.

The Solent Jobs Pilot was proposed in the recent Solent City Deal negotiation document. It has been positively received by the Cabinet Office and is subject to on-going discussions. EU SIF has been included in the budget to extend delivery to the Isle of Wight and other 'rural' areas within the Solent. The project will be delivered from 2014 to 2018, in line with our agreement with Government and the profiled matched-funding. Match funding will be provided by the Government, through our City Deal agreement.

Solent LEP proposes to adopt a socially innovative approach to the delivery of much of its ESF activity through aligning the work to the 'Solent Talent Bank', which will use the leverage available through procurement to secure best economic value for partners across the Solent. This will create opportunities for work experience, traineeships, apprenticeships and supported employment under the Solent Jobs Pilot via public authority tendering and contracting procedures.

10.3 Raise Business Investment in Skills

10.3.1 Support greater business engagement in skills and skills brokerage - to increase the pool of employers engaging with schools, colleges, universities and other learning providers and providing work placements.

Solent LEP has experienced a fall in the number of businesses, compared with muted growth in the number of businesses nationally. This declining business base raises questions about levels of entrepreneurship and new business formation. There has also been a significant fall in the number of new businesses starting locally. Starting a business in these challenging economic conditions may mean an increasing need for business and enterprise skills to improve the chances of business survival. New models of business financing should be explored to support growth. The Business Hub will offer a range of services to business and this should include support with understanding skills needs and accessing local provision where appropriate through a skills brokerage service.

Increase and co-ordinate employer engagement - to increase the pool of employers engaging with schools, colleges, universities and other learning providers and providing work placements, there needs to be better co-ordination of links with employers. The Skills for Growth Fund could provide the basis for better collaboration on employer engagement.

Sector dialogues – business should be engaged in a dialogue with providers from FE and HE through a series of Sector-based dialogues, bringing together key players to discuss key issues and curriculum development.

Skills Brokerage - the Business Hub will offer a range of services to businesses and this should include support with understanding skills needs and accessing local provision where appropriate through a skills brokerage service.

Raise employer awareness of the commercial benefits of learning - Employer awareness of the commercial benefits of developing higher-level skills could be strengthened, as could employer/employee knowledge of the new 24+ Advanced Learning Loan arrangements and the opportunities that they offer. Share materials and case studies. Promote awareness campaigns with trade associations and chambers of commerce.

10.3.2 Improve leadership and management skills to promote better employer investment in skills of existing workforce

Leadership and management skills requirements are apparent across all sectors though the nature of the leadership and management requirement vary considerably by sector. In some sectors there are challenges laid down by the changing needs of the sector, such as legislation, risk management and technological change. Leadership and management skills are strongly correlated to business growth and success. Business planning skills are important in accessing finance.

Self-employment and small company structures predominate in many sectors and this poses challenges in terms of strategic management capabilities. The content and delivery of leadership and management skills needs to be reviewed to ensure that the sector needs can be met.

Support for leadership and management is key in terms of investment in skills of the wider workforce. Solent LEP is proposing a new leadership and management programme through the Local Growth Deal. There is scope to improve these skills in the Solent area, especially in SMEs with growth potential. Many of the businesses that need to develop these skills may, however, not recognise that, so incentives and peer support businesses are likely to be important. There are valuable assets in the area, including HEIs, that can be utilised in support of this.

The LEP is keen to grow export activity. Developing the skills needed to achieve such growth, especially amongst SMEs, is likely to require targeted and sector-specific training interventions with a degree of subsidy.

10.3.3 Promote entrepreneurship skills

A wide range of enterprise activity is taking place in schools, FE colleges, work-based learning providers and HEIs, although little is known about the scale and nature of provision. As part of the strategy of supporting graduate retention, the development of enterprise skills to support business development and self-employment will be critical.

The Solent Young Entrepreneur Fund will support young people wanting to set up new businesses. Existing initiatives, if successful with a recognised brand, provide an ideal platform

to further develop the skills and aspirations of new entrepreneurs through mentoring and other support arrangements.

A Solent Enterprise Education Task Group should be established to:

- ensure that providers can benefit from good practice and lessons elsewhere;
- review and better understand the impacts of the different approaches to enterprise education;
- develop opportunities for joint working;
- promote mentoring for new entrepreneurs.

10.3.4 Support for Innovation

Evidence suggests a strong causal inter-relationship between the supply of higher levels of education, training and skills and increased demand for and supply of technical and organisational innovation. Making the most of available skills for innovation depends in part on workplace organisation. Concepts such as employee engagement, high performance working and learning organisations are being more widely studied; they include features such as job flexibility, delegation of authority and incentives for innovation. The evidence shows a link between management of human resources and innovation. Through the Business Hub and Solent Innovation, Solent should seek to improve the innovation ecosystem and ensure that links between business and learning providers, particularly HEIs, is working effectively, to create higher-level skilled jobs in the economy.

There is significant evidence from the analysis of sectors that networking and business support will be critical in supporting many sectors with their growth and development.

Partners see a need for Solent's Universities to work together, to pool resources, and to reach out and support a greater number of enterprises, in line with their specific institutional strengths.

EU funds will be used to develop and deliver a single innovation strategy that enables enterprises to access the full range of expertise, facilities and support offered by Solent's HEIs (the 'knowledge base') as well as national centres of excellence. This strategy will result in the creation of a new innovation network, led by Solent's HEIs, tasked with reaching out and engaging business in partnership with the Solent Business Hub and sector networks, such as Marine South East and British Marine Federation.

This approach is driven both by experience and by research[77] which identifies that innovation occurs at the point where people come together across departments, disciplines, institutions,

[77] BIS Economics Paper No. 15, Innovation and Research - Strategy for Growth, Dec 2011
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32445/11-1386-economics-innovation-and-research-strategy-for-growth.pdf

sectors, industries and borders, to solve particular problems that are beyond the capacity of the department or firm itself.

'The Best innovation systems', the research argues, *'are intensively networked. Within these systems Government takes an active leadership role ... strengthening connections between actors in the innovation system, supporting those who identify business innovation opportunities and marshalling investment resources to help business respond to global innovation challenges.*[78]*'*

10.4 Develop a responsive skills and employment system

The four universities based in Solent are a major economic asset, providing a source of highly-skilled employment, generating new businesses, supporting existing businesses and bringing significant revenues to the local economy. Innovation and the exploitation of new knowledge by the private sector is fundamental to future growth and Solent is fortunate that three of its HEIs have strengths in its strategic sectors that, if harnessed, can anchor knowledge-intensive economic activity and employment in the area.

The presence of a network of excellent FE and sixth form colleges also provides an opportunity to support skills development and creating the environment that enables businesses to develop and train their workforces, to access the support they need to succeed and to recruit from a workforce of local residents equipped to take up the new jobs that they offer.

A key issue is how to make the publicly-funded learning provision more responsive to the needs of employers and learners.

10.4.1 Provide better access to business and labour market intelligence

Effective provision will require access to up-to-date and rigorous consultation processes. In addition to robust labour market intelligence, FE colleges should work towards agreed data sharing to support the planning of provision.

Solent should consider investing in a regular business survey which can underpin its analysis of the demand and supply of skills to ensure that provision is meeting needs and there is a clear understanding of gaps and capacity.

10.4.2 Joint planning arrangements

A joint FE/LEP Group has already been established and is working towards a range of joint activities in support of a more responsive system. As this rolls out and demonstrates value for the Solent area and its providers, consider extending the arrangements.

[78] BIS, Op Cit, p. 4

10.4.3 Investing in the skills and employment infrastructure

Both the University of Portsmouth and Southampton Solent University are making significant investment (in excess of £20m) in new teaching facilities supporting the delivery of creative industry-related courses. It is likely that a percentage of the graduates from these courses will be encouraged to consider establishing their own businesses. There will probably be a further expansion of the work of the University of Southampton and related hi-tech spin-out companies. There is the potential to host pilot lines in key enabling technologies including photonics and nanotechnology supported by the European Commission. The developments in the HEIs are exemplified by the work of the University of Southampton in constructing a £150m new engineering campus. This is creating a number of jobs associated with the design and construction. As part of the development, Lloyd's Register is moving its global technology centre from London and relocating it on this campus, bringing 400 highly-skilled jobs in marine and maritime engineering to the Solent region. Separately, as the University of Southampton increases its student numbers, it is constructing two major new student residences in Southampton, which is also bringing jobs associated with the design and construction.

Developing a responsive skills and employment system is a keys strategic priority for the Solent area. Solent is home to eight FE colleges, a number of sixth form colleges and four Universities. In many ways, it is well served but the evidence base indicates that there is scope for additional capital development to support the existing estate. To achieve this, Solent is looking for a balanced mix of innovative investment and ongoing support for colleges to ensure 21st century facilities for the area's learners and the employers they serve.

The primary governmental driver has been to help the FE college sector achieve the position where all colleges operate with estate which is in at least 'Good' condition, which is fit for purpose, and is versatile enough to efficiently accommodate changes in curriculum, social and economic needs and/ or educational delivery. Between 2001 and the present day, Solent FE colleges have received a significant ongoing investment in skills capital amounting to in excess of £86m.

In all, 28% of the Solent LEP's FE buildings//infrastructure are in categories C and D[79], some 42,234 square metres (m2), in line with the national average. Two colleges have a proportion of category C and D buildings/infrastructure above 50%. Two have 30% or more category C and D, whereas one college has none. Past funding for skills capital infrastructure has varied between institutions, between £124 and £946 per square metre. This will require investment in excess of £66m.

Solent LEP should establish a programme to support capital requirements for FE based on an assessment of need and in order to maintain their estate. A Skills Capital Investment Plan and Fund will form part of the Local Growth Deal, which will support the FE estate and support flagship investments which support its strategic objectives.

[79] Category A – **As New** - Gross Internal Area (m2) typically built in last 5 years, or may have undergone a major refurbishment within this period. Category B – **Sound** – Operationally safe and exhibiting only minor deterioration. Category C– **Operational** – Major repair or replacement needed in the short to medium term (within 3 to 5 years) Category D – **Inoperable** – space at serious risk of major failure or breakdown, requiring immediate upgrade to continue service

The LEP will commit to seting aside a reasonable amount of its capital allocation, consistent with current levels, to ensure that Skills Capital Infrastructure becomes a resource to which FE, in partnership with others, can bid. The amount should be sufficient to at least ensure that the LEP can provide a reasonable resource to cover the upgrading of the current category D buildings (plus the category C buildings likely to enter category D over the lifetime of the plan) within the LEP over the next 10 years.

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Contact:
Marchmont Observatory
University of Exeter
Rennes Drive
Exeter
EX4 4RN
01392 264850