Southampton Strategic Assessment

Southampton Economic Assessment

7. Skills and qualifications

Last Updated September 2017
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7. Skills and qualifications

7.1 Qualifications of the resident population

This section explores the skills levels of both the residents and workforce and whether they meet the needs of employers. The Annual Population Survey (APS) records the qualifications of working age residents classified into a number of NVQ and equivalent levels; these levels are summarised below:

- NVQ Level 4+: Certificate of Education (level 4) through Diplomas/Degrees (Level 5), Honours Degrees (Level 6), Postgraduate qualification (Level 7) and Specialist awards such as Doctorates (Level 8).
- NVQ Level 3: A-Levels (at least 2 A-Levels or 4 AS Levels or equivalents. Seen as entry to Higher Education).
- NVQ 2: At least 5 A*-C GCSEs or equivalent.
- NVQ 1: At least one GCSE or equivalent.
- Trade Apprenticeship
- Other qualifications (covering a wide range, including those gained outside the UK)
- No qualifications

Figure 7.11 provides an overview of the level of qualifications for Southampton’s working age population for the January 2016 to December 2016 period. This illustrates that Southampton has 38.1% of the population (48,800 people) with an NVQ Level 4 (equivalent to degree level) or above; this is lower than both the England (42.4%) and South East (44.9%) average. Figure 6.52 shows that Southampton ranks about mid-way amongst its statistical neighbours, but lags behind areas such as Bristol (54.9%) and Newcastle (45.2%). This is perhaps a little surprising, given that there are two large universities in the city and may raise questions about graduate retention rates.

The large number of undergraduate students in the city may be one reason why Southampton stands out as having a relatively large proportion of the population with qualifications up to NVQ Level 3 at

<table>
<thead>
<tr>
<th>Region name</th>
<th>% NVQ 4 or higher</th>
<th>% NVQ 3 only</th>
<th>% NVQ 3 or higher</th>
<th>% NVQ 2 only</th>
<th>% NVQ 2 or higher</th>
<th>% NVQ 1 only</th>
<th>No qualifications</th>
<th>% NVQ 1 or below</th>
<th>Trade Apprenticeships</th>
<th>Other qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>42.4</td>
<td>17.3</td>
<td>59.7</td>
<td>15.2</td>
<td>74.9</td>
<td>10.3</td>
<td>4.8</td>
<td>15.1</td>
<td>3.2</td>
<td>6.7</td>
</tr>
<tr>
<td>South East</td>
<td>44.9</td>
<td>17.2</td>
<td>62.1</td>
<td>15.0</td>
<td>77.1</td>
<td>10.6</td>
<td>3.6</td>
<td>14.2</td>
<td>3.1</td>
<td>5.7</td>
</tr>
<tr>
<td>Southampton</td>
<td>38.1</td>
<td>22.9</td>
<td>61.0</td>
<td>13.9</td>
<td>74.9</td>
<td>11.7</td>
<td>4.3</td>
<td>14.2</td>
<td>4.2</td>
<td>6.7</td>
</tr>
<tr>
<td>Portsmouth</td>
<td>37.4</td>
<td>18.7</td>
<td>56.1</td>
<td>17.1</td>
<td>73.2</td>
<td>11.7</td>
<td>5.4</td>
<td>17.1</td>
<td>3.8</td>
<td>6.0</td>
</tr>
<tr>
<td>Isle of Wight</td>
<td>32.1</td>
<td>21.8</td>
<td>53.9</td>
<td>18.2</td>
<td>72.1</td>
<td>15.2</td>
<td>4.0</td>
<td>19.2</td>
<td>4.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Hampshire County</td>
<td>40.5</td>
<td>20.9</td>
<td>61.4</td>
<td>15.1</td>
<td>76.5</td>
<td>11.7</td>
<td>3.1</td>
<td>14.8</td>
<td>3.5</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Figure 7.11: NVQ Level qualifications of working age population (aged 16-64) - % of all: ONS Annual Population Survey (APS) January 2016 to December 2016

The large number of undergraduate students in the city may be one reason why Southampton stands out as having a relatively large proportion of the population with qualifications up to NVQ Level 3 at
22.9% (29,300 people); this is significantly higher than the England (17.3%) and South East (17.2%) average, and the highest amongst the city’s statistical neighbours. Consequently the total share of residents qualified to at least NVQ Level 3 in Southampton is 61%; this is above the England average of 59.7%, although slightly lower than that for the South East at 62.1% (see figure 7.12).

**Figure 7.12:**

NVQ Level 4 and above qualifications are often taken as a prerequisite for active participation in the high value-added knowledge economy, whereas Level 3 is generally regarded as the entry point to higher education and therefore future engagement with knowledge intensive activities in the economy. Level 2 is often the basic entry point into employment. Overall, almost three quarters (75%) were qualified to NVQ Level 2 or higher. This is the same as the England average, although 2.2% points lower than the South East (77.1%).

**Figure 7.13:**
At the other end of the skills spectrum, 4.3% of residents in Southampton have no qualifications (5,600 people), which is lower than the England average of 4.8%, but higher than the South East (3.6%). In fact, amongst the comparator cities, only Bristol has a lower proportion of the population with no qualifications at 3.5% (see figure 7.13). The second chart in figure 7.13 shows that 14.2% of Southampton’s economically active population have no or low qualifications (NVQ Level 1 or below), which is the same as the South East and below the England average.

**Figure 7.14:**

Proportion of economically active population aged 16 to 64 with NVQ level 4 qualification or higher - Southampton, England and South East trend: 2004 to 2016

![Graph showing trend](image)

Source: Annual Population Survey, Office for National Statistics

Figure 7.14 shows the trend in the proportion of the working age population qualified to NVQ Level 4 or above for Southampton, England and the South East for the period 2004 to 2016. Over the entire period, the proportion in Southampton has increased from 29.2% in 2004 to 38.1% in 2016; an 8.9% point increase. The trend is similar for both England and the South East, although the rise has been greater at 13.2% points and 15.7% points respectively. This has resulted in a gradual gap opening up over time between Southampton and the national average; the gap in 2016 was 4.3% points, compared to 0.1% points in 2004.

Figure 7.15 shows that over the same period, the proportion of the working age population with no qualifications has fallen from 10.0% in 2004 to 4.3% in 2016 in Southampton; a fall of 5.7% points. This is a similar trend to both England and the South East, which have seen reductions of 5.9% points and 4.7% points respectively over the same period. Throughout the period, the Southampton rate has generally been below the England average, yet above the South East. However, the differences are not statistically significant in any one year.
Overall, the trends suggest an improvement in human capital in Southampton over time, although there is some way to go to match the South East average; in particular increasing the proportion of the economically active population with qualifications at NVQ Level 4 or above is important if the city and residents are to fully exploit knowledge intensive industries and occupations. In addition, despite improvements, economically active residents with low or no qualifications are still a key group, especially reflecting the need to raise skill levels to improve the human capital necessary to remain competitive in a global economy.

### 7.2 School attainment

Figure 7.21 shows the proportion of year 11 pupils who achieved 5 or more GCSEs at grades A* to C including English and Maths in Southampton and comparator cities. 52.2% of pupils in Southampton achieved this level, which is below the England (53.5%) and South East (60.3%) average, and fifth lowest amongst comparator cities.

Figure 7.22 illustrates how GCSE results had improved dramatically between 2009/10 and 2012/13, with the proportion achieving the standard rising from 47.5% to 58.1%. However, in 2013/14 the proportion fell once more to 51%; this is similar to the overall trend for England over this period. Over the past three years, the trend has stabilised somewhat, although there are some signs of improvement. Between 2013/14 and 2015/16, there was a 1.2% point improvement in Southampton, whilst the England rate remained stable, showing a 0.1% point improvement over the same period.
7.3 Higher Education institutions

The Higher Education Statistics Authority (HESA) collect data on students in higher education. Higher education students for the purpose of HESA’s data collection are those students on courses for which the level of instruction is above that of Level 3 (i.e. courses at the level of Certificate of Higher Education and above). These figures therefore do not include the several thousand Further Education...
students in the city. Figure 7.31 shows the total number of higher education students by level of study at the University of Southampton and Southampton Solent University between 2011/12 and 2015/16. In 2015/16, there were 36,160 higher education students in Southampton, with just under 70% studying at the University of Southampton; for post-graduate students this figure rises to almost 95%. Between 2011/12 and 2014/15, the overall number of students in the city fell by 4.3%; this equates to 1,565 fewer students, the majority of which came from Southampton Solent (1,225). There was a 3% increase recorded in 2015/16, but the overall numbers are still less than 2011/12, although they are slightly higher for the University of Southampton.

Figure 7.31:

<table>
<thead>
<tr>
<th>University</th>
<th>Category</th>
<th>2011/12</th>
<th>% change</th>
<th>2012/13</th>
<th>% change</th>
<th>2013/14</th>
<th>% change</th>
<th>2014/15</th>
<th>% change</th>
<th>2015/16</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Southampton</td>
<td>Postgraduate</td>
<td>7325</td>
<td>N/A</td>
<td>7060</td>
<td>-3.6%</td>
<td>7840</td>
<td>11.0%</td>
<td>7645</td>
<td>-2.5%</td>
<td>7390</td>
<td>-3.3%</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>16805</td>
<td>N/A</td>
<td>16055</td>
<td>-4.5%</td>
<td>16195</td>
<td>0.9%</td>
<td>16150</td>
<td>-0.3%</td>
<td>17485</td>
<td>8.3%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24135</td>
<td>N/A</td>
<td>23115</td>
<td>-4.2%</td>
<td>24040</td>
<td>4.0%</td>
<td>23795</td>
<td>-1.0%</td>
<td>24875</td>
<td>4.5%</td>
</tr>
<tr>
<td>Southampton Solent University</td>
<td>Postgraduate</td>
<td>665</td>
<td>N/A</td>
<td>575</td>
<td>-13.5%</td>
<td>440</td>
<td>-23.5%</td>
<td>355</td>
<td>-19.3%</td>
<td>405</td>
<td>14.1%</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>11865</td>
<td>N/A</td>
<td>11515</td>
<td>-2.9%</td>
<td>11285</td>
<td>-2.0%</td>
<td>10950</td>
<td>-3.0%</td>
<td>10885</td>
<td>-0.6%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>12530</td>
<td>N/A</td>
<td>12090</td>
<td>-3.5%</td>
<td>11725</td>
<td>-3.0%</td>
<td>11305</td>
<td>-3.6%</td>
<td>11285</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Southampton Total</td>
<td>Postgraduate</td>
<td>7990</td>
<td>N/A</td>
<td>7635</td>
<td>-4.4%</td>
<td>8280</td>
<td>8.4%</td>
<td>8000</td>
<td>-3.4%</td>
<td>7795</td>
<td>-2.6%</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>28670</td>
<td>N/A</td>
<td>27570</td>
<td>-3.8%</td>
<td>27480</td>
<td>-0.3%</td>
<td>27100</td>
<td>-1.4%</td>
<td>28370</td>
<td>4.7%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>36665</td>
<td>N/A</td>
<td>35205</td>
<td>-4.0%</td>
<td>35765</td>
<td>1.6%</td>
<td>35100</td>
<td>-1.9%</td>
<td>36160</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

The majority of undergraduates in Southampton studied on a full-time basis (94%) in 2015/16, with the proportion for postgraduates lower at 78%, although these figures varied between institutions. With close to 80%, the University of Southampton had a much higher proportion of post-graduates studying full-time, compared to only 43% at Southampton Solent.

Figure 7.32:

Southampton HE students by domicile and institution: 2015/16
Figure 7.32 illustrates how the majority of undergraduate students studying in Southampton come from the UK (83%), with very little variation between institutions. However, just over half (53.5%) of post-graduate students are non-UK domicile and mostly non-European (45%). There is significant variation between institutions here, with over 70% of Solent postgraduate students coming from the UK, compared to only 45% at the University of Southampton. Foreign students are more likely to be studying on a full-time basis at postgraduate level, and the likely explanation or the disparity in full-time study between institutions. Despite the high proportion of postgraduate students with a non-UK domicile, the universities in Southampton still offer a significant resource for the higher education of local residents.

7.4 Employer skills

The UK Commission’s Employer Skills Survey 2015 examined the experiences and practices of over 91,200 employers in the UK and is a source of intelligence on the skills challenges employers across the UK are facing and their response in terms of investment in skills and training.¹ The survey did include some local data, although it is not reported in any great detail. The findings are summarised in figure 7.41.

Figure 7.41: UKCES Employer Skills Survey 2015 – responses from establishments in Hampshire

<table>
<thead>
<tr>
<th>Region name</th>
<th>% with any vacancies</th>
<th>% with a skills shortage vacancy</th>
<th>% of vacancies which a due to a skills shortage</th>
<th>% with any staff not fully proficient</th>
<th>% of workforce not fully proficient</th>
<th>% with any staff difficulties retaining staff</th>
<th>% training staff over last 12 months</th>
<th>% of total staff no. trained as a % of total staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>20%</td>
<td>6%</td>
<td>23%</td>
<td>14%</td>
<td>5%</td>
<td>8%</td>
<td>66%</td>
<td>63%</td>
</tr>
<tr>
<td>South East</td>
<td>22%</td>
<td>7%</td>
<td>26%</td>
<td>14%</td>
<td>5%</td>
<td>9%</td>
<td>67%</td>
<td>61%</td>
</tr>
<tr>
<td>Southampton</td>
<td>25%</td>
<td>9%</td>
<td>19%</td>
<td>16%</td>
<td>4%</td>
<td>6%</td>
<td>67%</td>
<td>76%</td>
</tr>
<tr>
<td>Portsmouth</td>
<td>23%</td>
<td>5%</td>
<td>18%</td>
<td>22%</td>
<td>4%</td>
<td>10%</td>
<td>76%</td>
<td>64%</td>
</tr>
<tr>
<td>Isle of Wight</td>
<td>19%</td>
<td>3%</td>
<td>16%</td>
<td>18%</td>
<td>5%</td>
<td>3%</td>
<td>62%</td>
<td>53%</td>
</tr>
<tr>
<td>Hampshire County</td>
<td>21%</td>
<td>7%</td>
<td>28%</td>
<td>16%</td>
<td>5%</td>
<td>10%</td>
<td>70%</td>
<td>66%</td>
</tr>
</tbody>
</table>

Nationally, the survey reported an increase in vacancies (employers active in the recruitment market) between 2013 and 2015 which reflected the recovery period after the recession. Across England 20% of employers reported they had at least one vacancy; in Southampton this figure was higher at 25%. However, within this buoyant labour market, skill-shortage vacancies presented a growing challenge for employers in filling their vacancies. 6% of all employers had at least one skill-shortage vacancy nationally, a significant increase from the 4% reported in 2013. In Southampton this was even higher at 9% compared to an average of 7% across the South East, suggesting a particular skills shortage in the city. However, in terms of the density of skills shortage i.e. the proportion of all vacancies that are hard to fill due to a skills shortage, Southampton at 19% was lower than both England (23%) and the South East (26%).

The UK Commission report that across England, over two-thirds of employers that had difficulty filling their vacancies solely as a result of skill shortages had experienced a direct financial impact through either loss of business to competitors, increased operating costs, or having to outsource work, or some combination of the three. Skill-shortage vacancies were caused by a number of people and personal skills and technical and practical skills lacking amongst applicants. Skills related to operational aspects of the role, as well as complex analytical skills, were the main technical and practical skills lacking. The main people and personal skills lacking pertained to time management, management and leadership, and sales and customer skills.

The vast majority of employers reported that they had a fully proficient workforce. However, 16% of employers in Southampton reported skills gaps within their existing workforce, which is higher than both the England (14%) and South East average (14%). However, the density (i.e. proportion of total workforce not fully proficient) in Southampton was lower at 4% compared to 5% nationally. Nationally, the most common skills deemed to be lacking among existing staff were people and personal skills relating to workload management and teamwork. Specialist, job-specific skills were also widely considered to be lacking, along with complex analytical skills, especially among those in high-skill occupations such as Managers and Professionals.

Eight per cent of establishments in England reported that there were specific jobs in which they had difficulties retaining staff, more commonly in larger establishments and those in the Hotel and Restaurants, Public Administration, Education and Health and Social Work sectors. This ‘talent loss’ can lead to increased recruitment costs as employers seek to continuously replace staff who leave, often due to characteristics of the job itself. Despite having a heavy presence of these sectors, the proportion of establishments in Southampton reporting difficulties retaining staff was lower at 6%.

Over two thirds (67%) of employers in Southampton had funded or arranged training or development for their staff over the last 12 months, similar to the national average (66%). Nationally there was increase in the volume of training (in terms the number of training days provided). This increase largely reflected a combination of increased levels of employment and increased recruitment activity. As a proportion of the total workforce, 76% of staff in Southampton were trained in the last 12 months, which is much higher than the England (63%) and South East (61%) average.

The UK Commission reported that around 90% of the current labour force have the potential to be active in the labour market a decade from now. Therefore, the economy cannot rely on initial education alone to ensure people have the continuously changing skills that are needed; the workplace is a vital location to develop these skills. Given the importance of skilled people as a global currency, it is vital that businesses invest significant resources in training to enable the UK economy to take advantage of opportunities, capitalise on innovation and secure growth in performance and productivity.²

7.5 Summary of key points

- In 2016, 38% of Southampton’s working age resident population were qualified to NVQ Level 4 (degree level) or above, which is lower than both the England (42.4%) and South East (44.9%) average. Southampton ranks about mid-way amongst its statistical neighbours, but lags behind areas such as Bristol (54.9%) and Newcastle (45.2%). Although the proportion qualified to this level in Southampton has gradually increased, it has not been at the same pace as England and the South East meaning that the gap in high end skills has developed and is widening. This is perhaps a little surprising given that the city has two universities, producing a ready supply of graduates each year. Graduate retention data was not available for this report, but it may be an area for further investigation.

- However, Southampton does have a relatively large proportion of the population with qualifications up to NVQ Level 3 at 22.9% (29,300 people); this is significantly higher than the England (17.3%) and South East (17.2%) average, and the highest amongst the city’s statistical neighbours. This is likely to be because of the large number of undergraduate students in the city for which qualification at this level is often a prerequisite for entry into higher education.

- At the other end of the skills spectrum, 14.2% of Southampton’s economically active population have no or low qualifications (NVQ Level 1 or below), which is the same as the South East and below the England average (15.1%). In fact, amongst the comparator cities, only Bristol and Sheffield have a lower proportion. Similar to the national trend, the proportion with no qualifications in Southampton fallen over time from 10% in 2004 to 4.3% in 2016.

- Despite some signs of improvement in recent years, school attainment at GCSE level continues to be below average for Southampton pupils. In 2015/16, 52.2% of pupils achieved 5 or more GCSEs at grades A* to C (including English and Maths) compared to the England (53.5%) and South East (60.3%) average. Raising school attainment is important in order to improve life chance of young people in the city, particularly with regards to finding skilled employment on leaving school. This is especially important for children from the most deprived areas of the city, where school attainment is poor and unemployment and benefit claimant rates high.

- The two universities in Southampton are clearly valuable assets, both in terms of employment and in terms of improving the skills of the (potential) workforce and supporting knowledge based industries in the city. In 2015/16, there were 36,160 higher education students in Southampton, with just under 70% studying at the University of Southampton. Although there have been reduction in the number of higher education students in recent years, a 3% increase in 2015/16 might suggest that this trend is reversing.

- In addition to educational attainment and qualifications, employers in the city are reporting issues with finding workers with the level of skills they need in a growing economy. Skill-shortage vacancies are presenting a growing challenge for employers in filling their vacancies. In Southampton, 9% of all employers have at least one skill-shortage vacancy nationally which is higher than the 6% reported nationally. In addition, 16% of employers in Southampton
reported skills gaps within their existing workforce, which is higher than both the England (14%) and South East average (14%). However, there appear to be fewer problems retaining staff in Southampton.

- Therefore, the economy cannot rely on initial education alone to ensure people have the continuously changing skills that are needed in a global economy. The workplace is a vital location to develop these skills and it is therefore vital that businesses invest significant resources in training. As a proportion of the total workforce, 76% of staff in Southampton were trained in the last 12 months, which is much higher than the England (63%) and South East (61%) average.

- Overall, the trends suggest an improvement in human capital in Southampton over time, although there is some way to go to match the South East average; in particular increasing the proportion of the economically active population with qualifications at NVQ Level 4 or above is important if the city and residents are to fully exploit knowledge intensive industries and occupations. In addition, despite improvements, economically active residents with low or no qualifications are still a key group, especially reflecting the need to raise skill levels to improve the human capital necessary to remain competitive in a global economy.