Regional Skills Assessments (RSAs)
First launched in 2014, the RSA’s purpose is to provide a robust evidence base to support partners in strategic skills investment planning. They have evolved over time based on an independent review carried out in 2015 and feedback from partners.

To ensure an inclusive approach to their development, dissemination and utilisation, RSAs are produced by Skills Development Scotland (SDS) in partnership with Highlands and Islands Enterprise, Scottish Enterprise, Scottish Government, the Scottish Funding Council (SFC), the Scottish Local Authorities Economic Development Group and the South of Scotland Economic Partnership.

RSAs include the use of published data sets. Inevitably, when using published data there is a time lag but the data contained is the most up to date available at the time of writing. The section on the Supply of People in the region is an exception to this rule. Whilst 2018 estimates exist, we have used data for 2016 for consistency with the 2016 based population projections which are the latest available.

RSAs also include forecast data that has been commissioned through Oxford Economics. A number of caveats need to be applied when using forecast data. The Technical Note\(^1\) provides full detail on this but broadly it should be noted that forecasts are based on what we know now and include past and present trends projected into the future. Their value is in identifying likely directions of travel rather than predicting exact figures. The more disaggregated they become, especially at smaller geographical units, the less reliable they are likely to be. Standard occupational classifications (SOC) and standard industrial classifications (SIC) are used to define occupations and industries. ONS has useful SIC\(^2\) and SOC\(^3\) hierarchy tools that can be used to understand the classifications in more detail.

In addition, we provide analysis by Key Sector. Key Sectors are central to our Skills Investment Planning approach. Each Key Sector has a tailored Skills Investment Plan (SIP) which gives a picture of the economic and labour market situation, trends in skills and qualification supply and employers’ perspectives on the big skills issues affecting sector growth. Regional SIPs have also been developed. SIPs and RSIPs are available on the SDS website\(^4\).

This year’s RSA is in three parts:
1. This report outlining Demand for Skills; Supply of People; and Skills Mismatches;
2. An infographic detailing key data for the area; and
3. A new interactive RSA Data Matrix\(^5\) that was launched in August 2019 that provides more detailed data.

Finally, in the sections which follow, the numbers and figures in the body of the text are rounded for ease of reference and readability and therefore may differ slightly from:
- The Oxford Economics data in the RSA Data Matrix; and
- The accompanying charts in the report which are also based on the Oxford Economics data.

This RSA report is for Edinburgh and South East Scotland City Region, which covers the East Lothian, City of Edinburgh, Fife, Midlothian, Scottish Borders and West Lothian local authorities.

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1 https://www.skillsdevelopmentscotland.co.uk/what-we-do/skills-planning/regional-skills-assessments/
5 https://www.skillsdevelopmentscotland.co.uk/what-we-do/skills-planning/regional-skills-assessments/
Introduction
**Introduction**

We live in a world that is complex and is constantly evolving. Scotland’s businesses and people need the skills, knowledge and capabilities, not just to cope with this change but to thrive in it and influence it.

**Scotland’s Economy**

The latest ‘State of the Economy’ reported that Scotland’s economy continued its recent pattern of strong performance at the start of 2019 with the unemployment rate falling to record lows and strong growth in exports and output. Output growth increased in the first quarter to 0.5 per cent but this was driven partly due to temporary factors such as stockpiling and firms completing orders in anticipation of the original end March Brexit deadline. Short term outlooks for the economy will be dominated by Brexit uncertainty with the likelihood of subdued growth and the potential for more exposure to downturns in international demand and growth.

Labour productivity grew by 0.5 per cent in Q4 2018 and by 3.8 per cent in 2018 as a whole – its fastest pace of growth since 2010. Whilst positive, Scotland’s ranking among Organisation for Economic Co-operation and Development (OECD) countries is 16th of 37 countries, placing it in the second quartile. This ranking of 16th place has been unchanged since 2007. Scottish Government has the aspiration of improving Scotland’s productivity to match the performance of the top quartile of OECD countries.

**Boosting productivity is vital for our long-term prosperity**

**Scotland’s People**

Scotland’s population has grown and is projected to grow in future. National Records of Scotland (NRS) confirms that Scotland’s population in 2018 was 5,438,100 and is expected to grow to 5.58 million in 2026 and to 5.69 million by 2041. This estimate for growth is based on a continuation of EU migration at pre-Brexit levels which is not guaranteed.

Despite this past and projected growth, Scotland is facing an ageing demographic structure. Based on the population in 2016, just under one in five people (18 per cent) were aged 65 and over but by 2041, one in four people (25 per cent) are projected to be in this age group.

If we examine dependency ratios for Scotland’s population this shows a growing dependency ratio at Scotland level and indeed some areas – particularly some of Scotland’s rural areas – having much higher rates of dependency than the national average. At Scotland level, the dependency ratio will increase from 55 per cent in 2016 to almost 70 per cent in 2041. Put simply, for every 100 people of working age there will be 70 people dependent by 2041.

This suggests that the supply of labour might contract over the longer term if projections are realised. This points to a tighter labour market and greater competition for skilled labour in the future. Uncertainty regarding the implications of Brexit also remain, and any decisions taken on the free movement of people could exacerbate this further.

A tight labour market will result in more competition for skilled labour – Brexit could exacerbate this
Although we are seeing record levels in relation to high employment and low unemployment and relative economic prosperity since the recession, not everyone is benefitting equally in this prosperity:

- The gender pay gap for women working full-time in Scotland was 5.7 per cent in 2018.12
- The unemployment rate was 4.2 per cent for working age people in Scotland, but this increases to 9.9 per cent for 16-24 year olds and to 10.8 per cent for males aged 16-24.13
- The employment rate for people aged 16-64 was 74.5 per cent, but 57.4 per cent for people from an ethnic minority and 45.9 per cent for disabled people.14

There are disparities in regional performance across Scotland. Based on an assessment of employment growth, productivity, earnings and unemployment, recovery since the recession has been stronger in Scotland’s urban areas and weaker in rural areas.

Since the recession we have seen a rise in ‘nonstandard’ jobs (such as part time and temporary employment), low wage growth and continued ‘in work’ poverty:

- Self-employment has risen by 22 per cent, compared to one per cent for full-time employment since the recession.15
- Median weekly earnings (gross) grew by 19 per cent in the five years leading up to the financial crash in 2008. A slower rate of 11 per cent has occurred over the past five years.16
- More than half a million (550,000) people in Scotland were living in relative poverty (after housing costs) in a household where at least one adult was in paid employment.17

Both people and place are considerations when working towards a more inclusive labour market.

**Our growth needs to be inclusive**

**Scotland’s Response to the Climate Emergency**

In April 2019, Scotland’s First Minister declared a climate change emergency with targets being set to reduce greenhouse gas emissions to net-zero by 2045. In May 2019, Scotland’s Climate Change Secretary set out Scotland’s response to the climate change emergency including action such as:

- A change in approach to airport departure tax;
- Funding to strengthen the rail freight industry and reduce the amount of freight that travels by road; and
- A new farmer-led initiative to drive low-carbon, environmentally sustainable farming practices.

The Cabinet Secretary for Environment, Climate Change and Land Reform confirmed that Scottish Government will be “placing climate change at the heart of everything we do” and this is at the core of the recently published Programme for Government.

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13 Annual Population Survey (April 2018-March 2019)
14 Annual Population Survey (April 2018-March 2019), EA core disabled has been used for the employment rate of disabled people.
All parts of Government will be expected to play a role in achieving these ambitious targets and SDS is to develop a Climate Emergency Skills Action Plan, as outlined in the Programme for Government. The development of appropriate skills will have a significant part to play in enabling this transition to a low carbon economy.

**Our growth needs to be sustainable**

**Scotland’s Resilience**
The world of work is constantly changing and the rate of change is rapid. Technological and societal disruptions are occurring at an increasing pace. Whilst we cannot predict the future, we can prepare for a future that is increasingly unpredictable. SDS has developed a Skills 4.0 model that focuses on developing ‘meta-skills’ to equip people with skills in resilience to thrive in a complex and ever-changing world (see Figure 1).

**We need skills for resilience to thrive in a complex and ever-changing world**

![Figure 1: Skills 4.0](https://www.skillsdevelopmentscotland.co.uk/what-we-do/skills-planning/skills4-0)
**Issues and Challenges**
A fit for purpose, skilled workforce will be essential to address the challenges facing Scotland (see Figure 2).

The development of skills that are fit for Scotland now and in the future is essential to achieving a high performing, inclusive and sustainable labour market. To meet these challenges, a step change in how we align skills provision to meet labour market demand is planned.

**Figure 2:** 
Drivers for change

<table>
<thead>
<tr>
<th>Scotland’s Economy</th>
<th>Scotland’s People</th>
<th>Scotland’s Climate Change Emergency</th>
<th>Scotland’s Resilience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boosting productivity is vital for our long-term prosperity</td>
<td>A tight labour market</td>
<td>Our growth needs to be sustainable</td>
<td>We need skills for resilience to thrive in a complex and ever-changing world</td>
</tr>
</tbody>
</table>

**Scotland’s Skills Issues**
- We need innovative workspaces and skills to boost productivity with employers and employees as active participants in the skills system
- We need to maximise Scotland’s indigenous talent and attract new talent to fill jobs in future. We need to enable all of Scotland’s people to share in the nation’s prosperity
- We need to develop fit for purpose skills to enable Scotland to achieve its ambitious target for greenhouse gas emissions
- We need to develop sector specific skills for the economy and skills for resilience – ‘meta skills’

**To support this we will need:**
- Greater flexibility and responsiveness in skills provision to better align with the needs of employers and the Scottish economy
- Investment in upskilling and reskilling throughout individual’s careers to respond to a rapidly changing environment
- More personalised, relevant and flexible work-based pathways

Source: Skills Development Scotland
Scotland’s Skills Alignment Ambition
Skills Alignment (one of the workstreams in the Scottish Government’s Future Skills Action Plan) is focused on improving the skills system in Scotland.

Its purpose is “to ensure that Scotland’s people and businesses are equipped with the right skills to succeed in the economy, not just now but in the future.” To achieve this end, a new joint planning process is in development to align the relevant functions of SDS and the SFC (see Figure 3).

To lead this process a Director of Skills Alignment has recently been appointed and three pilot projects have been established to test approaches in:
• Regions – Glasgow College region; and
• Sectors – Early Years and Child Care and Financial and Professional Services.

Having a robust evidence base is crucial if we are to ensure a fit for purpose skills system. SDS and partners are working to develop evidence on the key strategic issues and challenges for Scotland. This and the evidence contained in the RSAs will help inform Step 1 of this model – the Demand Assessment.

Figure 3: Five-step Skills Alignment model

1. Demand Assessment
2. Provision Planning
3. Outcome Agreements/Commissioning
4. Performance Management/Monitoring
5. Review and Evaluation

Source: Skills Development Scotland
The Edinburgh and South East Scotland City Region Economy
The Edinburgh and South East Scotland City Region Economy

Current Economic Performance
Gross Value Added (GVA) is a measure of the value of goods and services produced in an area and is an indicator of the economy’s health.

GVA in Edinburgh and South East Scotland in 2019 was £41bn, 30 per cent of Scotland’s output (£138.8bn).

In 2019, the highest value sectors in the City Region were:
- Financial and Insurance Activities, £5.4bn;
- Real Estate Activities, £4.8bn;
- Wholesale and Retail Trade, £4.0bn;
- Human Health and Social Work, £3.4bn; and
- Manufacturing, £3.3bn.

Past Economic Performance
From 2009 to 2019 the Edinburgh and South East Scotland economy, measured by GVA, grew by 1.7 per cent on average each year. This was a faster rate of growth than Scotland, which over the same period experienced 1.4 per cent growth on average each year.

Future Economic Performance
GVA in Edinburgh and South East Scotland is forecast to grow by 2.0 per cent on average each year from 2019 to 2029. This rate of growth would be above that of Scotland (1.7 per cent) and in line with the UK (2.0 per cent). It would also be greater than the average annual growth rate that Edinburgh and South East Scotland experienced from 2009 to 2019.

Economic growth across Scotland is expected to be relatively modest in the short term, as businesses show their reluctance to invest while operating under Brexit-related uncertainties. Slower GVA growth in Scotland is largely explained by its industrial mix, and specifically, the most dynamic sectors such as high value business services and digital sectors being underrepresented in Scotland compared to the UK.

GVA growth in Edinburgh and South East Scotland is expected to be driven by the dominant Real Estate sector from 2019 to 2029, the GVA produced by the sector is expected to increase by £1.4bn. The GVA output from the Real Estate sector is however inflated by owner-occupier imputed rent. Imputed rent captures, economically, the value of the service homeowners are providing to themselves by owning and living in their own home\textsuperscript{19}.

In addition to Real Estate, sectors forecast to have the greatest increases in GVA output are:
- Professional, Scientific and Technical Activities, £1.2bn;
- Financial and Insurance Activities, £1.0bn;
- Wholesale and Retail Trade, £0.8bn;
- Human Health and Social Work, £0.8bn; and
- Information and Communication £0.5bn.

When compared to GVA output in 2019, most of the sectors that had the greatest GVA output in 2019 are expected to have the greatest actual growth from 2019 to 2029.

Percentage change provides an alternative viewpoint for considering the future GVA contribution from sectors. This approach captures sectors that might make smaller GVA contributions but are forecast to grow at a faster rate. The larger Professional, Scientific and Technical Activities sector is expected to have a greatest rate of GVA growth from 2019, averaging 3.2 per cent each year up to 2029. The Administrative and Support Service Activities sector is also expected to have a fast rate of growth from 2019 to 2029. This was smaller sector in 2019 (in economic terms) but it is forecast to have average annual growth rate of 3.1 per cent.
Fiscal policy is likely to remain tight over the forecast period and, as a result, will weigh on the economic growth prospects for the Public Sector. Public Administration and Defence Activities is expected to contract each year from 2019 to 2029 in Edinburgh and South East Scotland. The forecast average annual rate of contraction is -0.1 per cent. However, Education and Human Health and Social Work sectors are forecast to have GVA growth, growing by 0.9 per cent 2.1 per cent per year over the forecast period respectively (see Figure 4). Growth in Human Health and Social Work is expected to be as a result of increased demand for these services due to changes in the region’s population structure.

**Figure 4**
Forecast average annual GVA change by Industry (%) (2019 - 2029), Edinburgh and South East Scotland City Region

Source: Oxford Economics
The key sectors contributing most to GVA growth in Edinburgh and South East Scotland from 2019 to 2029 are expected to be Financial and Business Services, Health and Social Care, Engineering, Construction and Digital (see Figure 5). These sectors are expected to have a higher overall contribution to growth as they have a relatively large presence in the regional economy already.

Figure 5
Forecast absolute GVA growth by Key Sector (£m) (2019 - 2029), Edinburgh and South East Scotland City Region

- Financial and business services: £1,687.1
- Health and social care: £771.3
- Engineering: £666.3
- Construction: £525.1
- Digital: £506.1
- Creative industries: £459.6
- Tourism: £331.9
- Life sciences: £296.2
- Energy: £252.5
- Food and drink: £117.6
- Child-day care activities: £111.1
- Chemical sciences: £42.7

Source: Oxford Economics
Looking instead at percentage change for the key sectors for 2019 to 2029, Child-Day Care Activities is forecast to be the fastest growing. It is forecast to grow 4.6 per cent each year on average. This strong outlook reflects the Scottish Government’s childcare policy to double the number of hours of funded childcare by 2020. However, its small size in absolute terms means that its impact on overall growth is limited.

Relatively fast growth is also forecast in the Life Sciences, Creative Industries and Digital sectors. However, like Child-Day Care Activities, the overall contribution of Life Sciences and Creative Industries will be lower due to their smaller size relative to the much larger, dominant key sectors in the region currently (see Figure 6).
Productivity

Productivity is the measure of goods and services produced per unit of labour input. Productivity has been calculated by dividing total regional GVA by total regional employment (measured by jobs).

The productivity of a region is influenced by the industrial mix that is present. Within the same industries productivity may differ from business to business.

Office for National Statistics (ONS) analysis tells us that:

GVA per worker [productivity] is generally lower in the accommodation and food service activities, administrative and support services activities, and wholesale and retail trade industries than in most other industries. The production sector, by contrast, has relatively high productivity.

Among the service sectors, the professional, scientific and technical activities, financial and insurance activities, and the information and communication sector also tend to have relatively high-productivity. Therefore, a relatively high aggregate productivity in a region may sometimes be a reflection of a relatively large share of more productive industries in that location.

In 2019, productivity in Edinburgh and South East Scotland was £56,900. This was higher than the Scottish average of £50,400 (see Figure 7).

From 2009 to 2019, productivity in Edinburgh and South East Scotland grew by 1.2 per cent on average each year. This rate of growth was slower than what occurred across Scotland. Average annual productivity growth across Scotland was 1.3 per cent over the period. The equivalent for the UK was 0.8 per cent.

Productivity in Edinburgh and South East Scotland is forecast to grow at an average of 1.4 per cent per year from 2019 to 2029. This is in line with the growth rate expected for Scotland as a whole (1.4 per cent), and below that of the UK (1.5 per cent).

<table>
<thead>
<tr>
<th>Region</th>
<th>Productivity (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glasgow City Region</td>
<td>£45,000</td>
</tr>
<tr>
<td>Inverness and Highland City-Region</td>
<td>£46,700</td>
</tr>
<tr>
<td>Scotland</td>
<td>£50,400</td>
</tr>
<tr>
<td>Stirling and Clackmannashire City Region</td>
<td>£51,300</td>
</tr>
<tr>
<td>Edinburgh and South East Scotland City Region</td>
<td>£56,900</td>
</tr>
</tbody>
</table>

Source: Oxford Economics

ONS (2019) Understanding spatial labour productivity in the UK
Employment in the Edinburgh and South East Scotland City Region
Employment in the Edinburgh and South East Scotland City Region

Current Employment

Total employment in Edinburgh and South East Scotland (measured by jobs) was estimated to be 720,000 in 2019, 26 per cent of Scottish employment.

The employment rate for the working age population (aged 16-64) in Edinburgh and South East Scotland was 76.7 per cent, which was above the rate for Scotland (74.5 per cent). Compared to Scotland, the City Region had above average employment rates for:

- Young people (aged 16-24), 61.3 per cent compared to 58.3 per cent;
- Males, 82.3 per cent compared to 78.1 per cent;
- Females, 71.4 per cent compared to 71.1 per cent;
- Disabled people, 51.1 per cent compared to 45.9 per cent; and
- Ethnic minorities, 59.1 per cent compared to 57.4 per cent.

The City Region’s overall employment rate means that approximately one in four of Edinburgh and South East Scotland’s working age population were unemployed (4.1 per cent) or economically inactive (20.0 per cent). Inactivity includes people who are studying, retired or looking after their family or home.

Across Scotland and within the region full-time jobs were most numerous, 498,700 jobs (69 per cent) were full-time in Edinburgh and South East Scotland in 2019. This was a higher percentage share compared to Scotland where 68 per cent of jobs were full-time.

Within the region almost two thirds of full-time jobs (316,600; 63 per cent) were held by males, and approximately one third (182,100; 37 per cent) were held by females.

Part-time jobs accounted for a smaller percentage share of employment in the region compared to Scotland, 31 per cent compared to 32 per cent. Overall there were 221,200 part-time jobs in Edinburgh and South East Scotland, females accounted for almost three quarters (156,000; 71 per cent). Whilst males accounted for 29 per cent, 65,200 jobs (see Figure 8).

Figure 8

Employment by gender and full-time/part-time (2019), Edinburgh and South East Scotland City Region

Source: Oxford Economics

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21 Equalities Act (EA) Core Disabled
22 Employment rate figures from Annual Population Survey, April 2018 – March 2019
23 Employment rate, unemployment rate and economic inactivity rate may not sum to 100 due to rounding.
In Edinburgh and South East Scotland, the largest employing sectors, and their regional share of employment, in 2019 were (see Figure 9):

- Human Health and Social Work, 14 per cent;
- Wholesale and Retail Trade, 14 per cent;
- Education, nine per cent;
- Professional, Scientific and Technical Activities, eight per cent;
- Accommodation and Food Services, eight per cent;
- Administrative and Support Service Activities, seven per cent; and
- Public Administration and Defence, seven per cent.

Financial and Insurance Activities, the sector that made the greatest GVA contribution in 2019 accounted for a small share of regional employment. The sector accounted for 38,300 jobs, a five per cent share. Real Estate Activities, the sector that made the second greatest GVA contribution in 2019 (irrespective of the imputed rent consideration) also accounted for a small share of regional employment. The sector accounted for 9,000 jobs, a one per cent share.

Figure 9
Employment by Industry and share of total employment (2019), Edinburgh and South East Scotland City Region

Source: Oxford Economics
Large sectors are an important source of jobs; however regions also have sectoral strengths that make them unique. It means that smaller sectors can be more important than their size suggests as they are more concentrated in the region compared to the national average. In Edinburgh and South East Scotland, Financial and Insurance Activities were the greatest specialism with the percentage of employment in this sector almost two times greater than the Scottish average. Other sectors that had above average concentrations in Edinburgh and South East Scotland were Information and Communication (1.5 times more concentrated) and Education (1.2 times more concentrated). The attraction of Edinburgh and South East Scotland as a destination for tourists is also likely to have contributed to the increased presence of the Art, Entertainment and Recreation sector in the region. The sector was 1.2 times more concentrated in the region.

Of the key sectors, Health and Social Care, as might be expected given the sectoral insight above, was the largest in Edinburgh and South East Scotland in 2019. The sector accounted for 99,300 jobs. Financial and Business Services was the second largest with a total of 80,700 jobs (see Figure 10).

**Figure 10**
Employment by Key Sector and share of total employment (2019), Edinburgh and South East Scotland City Region

- Health and social care: 99,300 jobs (14%)
- Financial and business services: 80,700 jobs (11%)
- Tourism: 57,300 jobs (8%)
- Construction: 50,200 jobs (7%)
- Engineering: 39,000 jobs (5%)
- Creative industries: 33,900 jobs (5%)
- Digital: 33,200 jobs (5%)
- Food and drink: 16,500 jobs (2%)
- Energy: 8,000 jobs (1%)
- Child-day care activities: 7,900 jobs (1%)
- Life sciences: 6,500 jobs (1%)
- Chemical sciences: 1,500 jobs (0%)

Source: Oxford Economics
Sectors tell us about the industries that people work in, and occupations provide insight on the type of jobs people do. In 2019, almost half of all occupations (48 per cent) in Edinburgh and South East Scotland were ‘higher level’, 28 per cent were ‘mid-level’ and 24 per cent were ‘lower level’. Compared to Scotland, the occupational structure of Edinburgh and South East Scotland had a greater percentage of the workforce in ‘higher level’ and ‘mid-level’ occupations. Scotland had a greater percentage in ‘lower-level’ (30 per cent) occupations but fewer in ‘higher level’ (30 per cent) and ‘mid-level’ (25 per cent) occupations.

A detailed look at the occupational structure shows that the largest occupations in the region in 2019 were (see Figure 11):

- Clerical and Services Elementary Occupations, nine per cent;
- Science and Technology Professionals, eight per cent;
- Administrative Occupations, eight per cent; and
- Caring Personal Service Occupations, seven per cent;
- Business and Public Service Professionals, seven per cent; and
- Business and Public Service Associate Professionals, seven per cent.

### Figure 11

**Employment by occupation and share of total employment (2019), Edinburgh and South East Scotland City Region**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment</th>
<th>Share of Total Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerical and Services Elementary Occupations</td>
<td>65,400</td>
<td>9%</td>
</tr>
<tr>
<td>Science and Technology Professionals</td>
<td>58,800</td>
<td>8%</td>
</tr>
<tr>
<td>Administrative Occupations</td>
<td>52,600</td>
<td>8%</td>
</tr>
<tr>
<td>Caring Personal Service Occupations</td>
<td>51,600</td>
<td>7%</td>
</tr>
<tr>
<td>Business and Public Service Professionals</td>
<td>48,300</td>
<td>7%</td>
</tr>
<tr>
<td>Corporate Managers</td>
<td>47,500</td>
<td>7%</td>
</tr>
<tr>
<td>Teaching and Research Professionals</td>
<td>40,400</td>
<td>6%</td>
</tr>
<tr>
<td>Sales Occupations</td>
<td>39,900</td>
<td>6%</td>
</tr>
<tr>
<td>Health Professionals</td>
<td>38,000</td>
<td>5%</td>
</tr>
<tr>
<td>Skilled Construction and Building Trades</td>
<td>33,000</td>
<td>5%</td>
</tr>
<tr>
<td>Customer Service Occupations</td>
<td>24,000</td>
<td>3%</td>
</tr>
<tr>
<td>Transport and Mobile Machine Drivers and Operatives</td>
<td>22,400</td>
<td>3%</td>
</tr>
<tr>
<td>Science and Technology Associate Professionals</td>
<td>20,300</td>
<td>3%</td>
</tr>
<tr>
<td>Skilled Metal and Electrical Trades</td>
<td>17,000</td>
<td>2%</td>
</tr>
<tr>
<td>Leisure and Other Personal Service Occupations</td>
<td>16,900</td>
<td>2%</td>
</tr>
<tr>
<td>Health and Social Welfare Associate Professionals</td>
<td>15,400</td>
<td>2%</td>
</tr>
<tr>
<td>Managers and Proprietors in Agriculture and Services</td>
<td>14,700</td>
<td>2%</td>
</tr>
<tr>
<td>Textiles, Printing and Other Skilled Trades</td>
<td>14,500</td>
<td>2%</td>
</tr>
<tr>
<td>Process, Plant and Machine Operators</td>
<td>14,300</td>
<td>2%</td>
</tr>
<tr>
<td>Secretarial and Related Occupations</td>
<td>13,000</td>
<td>2%</td>
</tr>
<tr>
<td>Culture, Media and Sports Occupations</td>
<td>12,400</td>
<td>2%</td>
</tr>
<tr>
<td>Protective Service Occupations</td>
<td>11,200</td>
<td>2%</td>
</tr>
<tr>
<td>Trades, Plant and Storage Elementary Occupations</td>
<td>9,300</td>
<td>1%</td>
</tr>
<tr>
<td>Skilled Agricultural Trades</td>
<td>9,300</td>
<td>1%</td>
</tr>
<tr>
<td>Skilled Construction and Building Trades</td>
<td>5,400</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: Oxford Economics
Past Employment

Employment in Edinburgh and South East Scotland increased by 4.4 per cent from 2009 to 2019. This was largely caused by growth in prominent, large employing sectors including:

- Public Administration and Defence, 11,800 jobs;
- Professional, Scientific and Technical Activities, 8,200 jobs; and
- Administrative and Support Service Activities, 7,600 jobs.

Whilst these sectors experienced growth, other sectors contracted. The greatest absolute contraction occurred in the Financial and Insurance Activities sector in Edinburgh and South East Scotland. Compared to 2009, there were 9,700 fewer jobs in the sector in 2019. Decreases also occurred in Manufacturing (-4,300 jobs) and Construction (-3,600 jobs).

Beyond the sectors, other shifts in the region’s labour market have occurred. Full-time and part-time employment increased by 7,700 jobs and 22,500 jobs from 2009 to 2019 respectively. Male and female employment also increased by 28,800 jobs and 1,400 jobs respectively.

Employment Forecast

The employment growth that has occurred in Edinburgh and South East Scotland in the past is forecast to continue. From 2019 to 2029 employment growth of 6.5 per cent is forecast in the region. This equates to 0.6 per cent employment growth year to year, and 47,100 jobs in total over the forecast period. Compared to Scotland, this is a faster rate of growth and more than double what is expected across Scotland. A three per cent increase in employment, or 0.3 per cent growth annually, over the forecast period is expected for Scotland. The growth rate for the UK is also slower than the City Region, a five per cent increase, or 0.5 per cent annual change, is forecast.

The employment forecast for the local authorities within Edinburgh and South East Scotland shows a positive outlook. The City of Edinburgh and Midlothian local authorities are forecast to have the greatest net increase in the number of jobs over the forecast period. Both are expected to have an annual average increase of 0.9 per cent. East Lothian and West Lothian are forecast to have annual average increases of 0.5 per cent each, whilst Scottish Borders and Fife are expected to have smaller annual average increases of 0.2 per cent and 0.1 per cent respectively.

Over the period to 2029, full-time employment is expected to increase in Edinburgh and South East Scotland with 29,700 more full-time jobs in 2029 compared to 2019. Both male and female full-time employment will increase, by 17,700 and 12,000 jobs respectively. Part-time employment is also expected to increase by 17,400 jobs. Both male and female part-time employment will increase, by 7,200 and 10,300 jobs respectively (see Figure 12).

Figure 12
Forecast employment change, by gender and full-time/part-time (2019 - 2029), Edinburgh and South East Scotland City Region

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>Part-time</td>
</tr>
<tr>
<td>17,700</td>
<td>7,200</td>
</tr>
<tr>
<td>12,000</td>
<td>10,300</td>
</tr>
</tbody>
</table>

Source: Oxford Economics
Although employment is forecast to increase in Edinburgh and South East Scotland from 2019 to 2029, sectors will have varying performance. The greatest growth in jobs is forecast in the Professional, Scientific and Technical Activities sector, with 10,400 more jobs expected in the sector by 2029 compared to 2019. Other sectors forecast to have growth in excess of 9,000 jobs over the forecast period are Administration and Support Services (9,300 jobs) and Human Health and Social Work Activities (9,100 jobs).

Employment growth is also forecast in Edinburgh and South East Scotland’s public services sector. Public Administration and Defence forecast to contract by 2,000 jobs over the forecast period due to continued pressure on public finances. However, this will be offset by the growth mentioned in the Health and Social Work sector and a further 4,400 jobs in Education by 2029.

Job losses in Edinburgh and South East Scotland are also forecast, notably in the production sector. Manufacturing is the sector forecast to have the greatest number of job losses from 2019 to 2029. During the forecast period a decline of 6,100 jobs is anticipated. This reflects the general trend of more capital intensive and higher value-added activity in the sector, which requires less labour-intensive methods (see Figure 13).

---

**Figure 13**

Forecast employment change by Industry (2019 - 2029), Edinburgh and South East Scotland City Region

<table>
<thead>
<tr>
<th>Industry</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional, scientific and technical activities</td>
<td>10,400</td>
</tr>
<tr>
<td>Administrative and support service activities</td>
<td>9,300</td>
</tr>
<tr>
<td>Human health and social work</td>
<td>9,100</td>
</tr>
<tr>
<td>Construction</td>
<td>5,500</td>
</tr>
<tr>
<td>Accommodation and food service activities</td>
<td>5,000</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>4,800</td>
</tr>
<tr>
<td>Education</td>
<td>4,400</td>
</tr>
<tr>
<td>Arts, entertainment and recreation</td>
<td>3,800</td>
</tr>
<tr>
<td>Transportation and storage</td>
<td>1,500</td>
</tr>
<tr>
<td>Other service activities</td>
<td>1,500</td>
</tr>
<tr>
<td>Information and communication</td>
<td>1,100</td>
</tr>
<tr>
<td>Real estate activities</td>
<td>1,100</td>
</tr>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>1,100</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>1,100</td>
</tr>
<tr>
<td>Water supply, sewerage and waste management</td>
<td>-100</td>
</tr>
<tr>
<td>Electricity, gas and steam</td>
<td>-200</td>
</tr>
<tr>
<td>Financial and insurance activities</td>
<td>-300</td>
</tr>
<tr>
<td>Public administration and defence</td>
<td>-400</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-1,400</td>
</tr>
<tr>
<td>-6,100</td>
<td>-2,000</td>
</tr>
</tbody>
</table>

Source: Oxford Economics

25 Comprising Public administration and defence, Education, and Human health and social work.
The growth and contraction of employment by sector means that private services\(^2\) are expected to account for a larger share of jobs in Edinburgh and South East Scotland over the forecast period. The percentage is forecast to rise from 57 per cent in 2019 to 58 per cent in 2029. In 2019 the Construction sector accounted for five per cent of employment and this share is expected to increase by one percentage point in 2029. Primary industries accounted for two per cent of employment and this share is expected to be maintained in 2029. The share that the public services and Manufacturing sectors each account for is expected to decline by one percentage point over the forecast period to 29 per cent and five per cent in 2029 respectively.

Looking ahead, the outlook for the key sectors largely echoes the broad sector trends summarised above – with Health and Social Care forecast to have the greatest growth (9,100 jobs). Construction is forecast to grow by 6,600 jobs from 2019 to 2029 in the City Region.

A number of other key sectors will experience jobs growth over the forecast period, including:
- Financial and Business Services, 6,400 jobs;
- Tourism, 6,100 jobs
- Child-Day Care Activities, 3,300 jobs; and
- Creative Industries, 2,400 jobs.

Food and Drink is the key sector forecast to have the greatest employment decline in Edinburgh and South East Scotland, with 600 fewer jobs in 2029 compared to 2019 expected (see Figure 14).

Figure 14
Forecast employment change by Key Sector (2019 - 2029), Edinburgh and South East Scotland City Region

Source: Oxford Economics

\(^2\) N.B. ‘private services’ comprise the following sectors: wholesale and retail trade; transportation and storage; accommodation and food services; information and communication; financial and insurance activities; real estate activities; profess., scientific and technical activities; administrative and support services; arts, entertainment and recreation; and other service activities.
By occupation, Business and Public Service Professionals are forecast to experience the greatest increase in employment in Edinburgh and South East Scotland from 2019 to 2029 (of 5,900 workers). Growth in these occupations is closely related to the forecast rise in employment in the Financial and Business Services. An additional 4,700 workers are expected to be required in Caring Personal Service Occupations, driven by expansion in the Health and Social Care sector. Other occupations anticipated to have an increase that is relatively large for the region are:

- Clerical and Services Elementary Occupations, 4,600 workers;
- Business and Public Service Associate Professionals, 4,500 workers;
- Science and Technology Professionals, 3,900 workers; and
- Corporate Managers, 3,600 workers.

Occupations likely to contract over the next decade tend to be those most closely associated with Manufacturing and Public Administration and Defence, reflecting the declining numbers of jobs in each of these sectors. Examples include Skilled Metal and Electrical Trades (-500 people) and Protective Service Occupations (-400 people) (see Figure 15).

Source: Oxford Economics
Total Labour Market Requirement in the Edinburgh and South East Scotland City Region
In the previous sections we presented what has happened, is happening and what is forecast to happen in Edinburgh and South East Scotland economy and labour market. When looking at the labour market, we have until this section focused on how many jobs there will be in any given year and how that compares to another year. However, the labour market is more complex than this.

In this section, we provide greater insight on job openings. To do this we consider the jobs that will be created or lost due to expansion or contraction in the labour market and the jobs that will arise due to people leaving the labour market. People leave the labour market and jobs become vacant for a variety of reasons, retirement being the most common cause. This is called the replacement requirement.

In Edinburgh and South East Scotland, 306,600 job openings are forecast from 2019 to 2029. In the region, and as shown in the previous chapter, 47,100 jobs are forecast to be created in Edinburgh and South East Scotland from 2019 to 2029 due to expansion in the labour market. A further 259,500 job openings will arise due to the replacement requirement.

These opportunities are expected to be concentrated in a small number of sectors, with four sectors in Edinburgh and South East Scotland forecast to account for more than half (56 per cent) of the requirement. These are (see Figure 16):

- Wholesale and Retail Trade, 61,100 jobs;
- Administrative and Support Service Activities, 39,200 jobs;
- Human Health and Social Work Activities, 36,100 jobs; and
- Accommodation and Food Services, 35,700 jobs.

These were some of the largest employing sectors in the region in 2019.
Figure 16
Forecast net requirement by Industry (2019 - 2029), Edinburgh and South East Scotland City Region

Source: Oxford Economics

Please note that due to rounding, data in Figure 16 may differ to the narrative on page 26.
To fill these jobs, and others, there is a forecast requirement for 292,800 people in the region from 2019 to 2029. The difference between the people and job requirements is due to some people having more than one job, for example someone who has two part-time jobs. The number of people working is expected to increase by 43,500 in Edinburgh and South East Scotland over the forecast period. There will also be a replacement requirement of 249,400 people.

By occupation, the greatest number of people are forecast to be required in (see Figure 17):
- Clerical and Service Elementary Occupations, 40,500 people;
- Teaching and Research Professions, 33,700 people;
- Science and Technology Professionals, 26,500 people;
- Sales Occupations, 25,100 people; and
- Business and Public Service Professionals, 24,200 people.

### Figure 17
**Forecast net requirement by occupation (2019 - 2029), Edinburgh and South East Scotland City Region**

- Clerical and Services Elementary Occupations: Expansion 4,600, Replacement 3,900, Total 35,900
- Teaching and Research Professionals: Expansion 1,500, Replacement 22,600, Total 32,200
- Science and Technology Professionals: Expansion 3,900, Replacement 23,900, Total 22,600
- Sales Occupations: Expansion 1,200, Replacement 18,400, Total 13,500
- Business and Public Service Professionals: Expansion 5,900, Replacement 13,800, Total 16,400
- Caring Personal Service Occupations: Expansion 4,700, Replacement 600, Total 14,900
- Corporate Managers: Expansion 3,600, Replacement 13,500, Total 17,100
- Science and Technology Associate Professionals: Expansion 600, Replacement 600, Total 1,200
- Administrative Occupations: Expansion 600, Replacement 600, Total 1,200
- Health Professionals: Expansion 3,000, Replacement 12,100, Total 15,100
- Skilled Construction and Building Trades: Expansion 2,700, Replacement 4,900, Total 7,600
- Textiles, Printing and Other Skilled Trades: Expansion 500, Replacement 7,000, Total 7,500
- Business and Public Service Associate Professionals: Expansion 4,500, Replacement 2,700, Total 7,200
- Transport and Mobile Machine Drivers and Operatives: Expansion 800, Replacement 5,800, Total 6,600
- Trades, Plant and Storage Elementary Occupations: Expansion 1,000, Replacement 6,700, Total 7,700
- Culture, Media and Sports Occupations: Expansion 2,000, Replacement 4,600, Total 6,600
- Leisure and Other Personal Service Occupations: Expansion 1,300, Replacement 3,700, Total 5,000
- Secretarial and Related Occupations: Expansion 200, Replacement 2,900, Total 3,100
- Skilled Agricultural Trades: Expansion 500, Replacement 2,500, Total 3,000
- Skilled Metal and Electrical Trades: Expansion 1,100, Replacement 300, Total 1,400
- Managers and Proprietors in Agriculture and Services: Expansion 1,100, Replacement 300, Total 1,400
- Health and Social Welfare Associate Professionals: Expansion 800, Replacement 1,100, Total 1,900
- Protective Service Occupations: Expansion -400, Replacement 1,100, Total 700
- Customer Service Occupations: Expansion 700, Replacement 500, Total 1,200
- Process, Plant and Machine Operatives: Expansion -600, Replacement 500, Total 100

Source: Oxford Economics
Supply of People in the Edinburgh and South East Scotland City Region
Supply of People in the Edinburgh and South East Scotland City Region

Projection of Total Population

NRS produce population estimates for Scotland biennially. Their 2016 based forecasts cover the period up to 2041, so in this chapter we present a longer forecast period than the previous chapters.

In 2016, the population of Edinburgh and South East Scotland was 1,364,900, 25 per cent of Scotland’s population.

By age, the largest group in Edinburgh and South East Scotland were people of working age (16-64 years). There were 890,700 people in this age group, 65 per cent of the region’s population. People of working age across Scotland accounted for the same share of the population overall (65 per cent).

The number of people of working age compared to those of non-working age has implications for the City Region’s dependency ratio. The dependency ratio is important when considering the demand for public services, for example schools and healthcare services, and the funds available to provide these services, the income from taxes and National Insurance. In 2016, the dependency ratio in Edinburgh and South East Scotland was 53 per cent. This means that for every 100 people of working age, there were 53 people of non-working age. Across Scotland it was 55 per cent.

Of those who were in age groups thought to be dependent, the oldest age group was the largest. There were 242,300 people aged 65 or older who accounted for 18 per cent of the region’s population. Across Scotland those aged 65 or older also accounted for 18 per cent of the population too. This suggests the population breakdown of the region was the same as Scotland in 2016.

Children and young people (0-15 years) accounted for the remaining 17 per cent, there were 231,900 individuals in this age group (see Figure 18).

Brexit has placed an increased focus on the nationality of people living and working in the UK. It has the potential to discourage EU migrants from coming to the UK to live and work, either through choice or eligibility. Migration is important to Scotland as without it the population would be declining. In Edinburgh and South East Scotland, there were 88,000 people who were born in the EU and a further 78,000 from the rest of the world in 2018. The EU born population accounted for six per cent of the region’s population, and six per cent of the region’s population were born elsewhere in the world.

Figure 18
Population by age (2016), Edinburgh and South East Scotland City Region and Scotland

Source: National Records of Scotland
Compared to Scotland a greater percentage of the region’s population were born in the EU or elsewhere in the world. Across Scotland four per cent of the population were born in the EU, and four per cent were born in other countries outside of the EU.

From 2016 to 2041, the population of Edinburgh and South East Scotland is projected to increase by approximately 157,400 people. Equating to a 12 per cent increase, while Scotland’s projected growth rate of five per cent is forecasted over the same period.

The age structure of the region’s population is projected to change over the coming decades. Those of working age are expected to continue to account for the majority of the population, although decreasing to a 60 per cent share. The number of people of working age is expected to increase, from 890,700 people in 2016 to 915,400 people in 2041 (an increase of 24,700 people), as a percentage of the overall population, it nonetheless represents a decrease.

The largest increases are expected in the 65 or older age groups, with an 88 per cent increase projected for those aged 75+ (an additional 93,600 people) and 24 per cent among those aged 65-74 (an additional 32,100 people). Taken together, the increase in the 65+ age groups (125,700 people in total) is greater than the increase in the working age population (24,700 people).

The only age group forecast to decline over the period is those aged 16-29, with a four per cent (-10,700 people) decline forecast.

These shifts suggest that the region could have a larger and generally older population by 2041. This has implications for the region’s dependency ratio. Brexit may also affect the population structure and exacerbate any challenges. By 2041, the region’s dependency ratio is expected to increase to 66 per cent.

Ranging across the region from 51 per cent in the City of Edinburgh (the third lowest of all local authorities) to 95 per cent in the Scottish Borders. West Lothian and Midlothian are forecast to have a dependency ratio of 71 per cent and 70 per cent. Whereas, East Lothian and Fife are expected to be higher (79 per cent and 78 per cent respectively). Across Scotland the dependency ratio is expected to rise to 70 per cent (see Figure 19).

**Figure 19**

**Dependency ratio (2016 and 2041)**

Source: National Records of Scotland
Skills Shortages, Gaps and Challenges in Edinburgh and the South East Scotland City Region
Skills Shortages, Gaps and Challenges in Edinburgh and the South East Scotland City Region

The Employer Skills Survey (ESS) gathered information on the skills challenges that employers encountered when recruiting, and any challenges that they had within their existing workforces. It is the primary source for this insight as it has taken a consistent approach across sectors and regions. The survey covered:

- Recruitment and skill-shortage vacancies;
- Skills gaps in the existing workforce;
- Skills under-utilisation;
- Upskilling - the need for staff to acquire new skills or knowledge;
- Training and workforce development; and
- High Performance Working practices.

The insight presented here is from the 2017 ESS which covered Scotland, England, Wales and Northern Ireland. The next ESS will be published in 2020 and unlike previous years, Scotland’s results will be published by the Scottish Government. Future ESS results for England, Wales and Northern Ireland will still be available and will be published by the UK Government.

Data is available for Regional Outcome Agreement (ROA) regions in the ESS. For the purpose of this City Region RSA report, ESS data for has been created for the region based on data for the Borders, Edinburgh, East and Midlothian, Fife and West Lothian. However, when talking about the recruitment of people from the EU or elsewhere in the world to address skills shortages, and the recruitment of EU nationals to address skills gaps, Edinburgh, East and Midlothian ROA data has been used as it is not possible to create data specific for the City Region.

Skills Shortages

Skills shortages are challenges that arise when employers are recruiting but are unable to find applicants with the required skills. When a vacancy cannot be filled due to a shortage of skills it is a skill-shortage vacancy (SSV). SSVs impact on the workplace and workforce in a number of ways, including:

- Increasing the workload for other staff;
- Creating difficulties when trying to meet customer service objectives; and
- Increasing operating costs.

In 2018, skills shortages were estimated to have cost Scottish employers £361.3 million, roughly £17,000 per organisation.\(^{28}\)

To understand the scale of the challenge that they present we can consider their incidence (how many employers are experiencing the challenge) and their density (how many vacancies are affected).

In 2017, the number of employers reporting at least one SSV in Edinburgh and South East Scotland was six per cent, the same percentage as across Scotland. This suggests that the scale of the challenge is similar in the City Region as it is across Scotland. The incidence of SSVs in the region was higher in 2015 (seven per cent), whereas across Scotland the incidence of SSVs has remained the same (six per cent) from 2015 to 2017.

Density, which indicates how many vacancies were SSVs, was lower in Edinburgh and South East Scotland than Scotland in 2017 and 2015. In 2017, density in the region was 22 per cent in 2017 and 2015. Across Scotland, density was 26 per cent in 2015 and 2017. Whilst lower than Scotland, this suggests that employers in the City Region were facing difficulties across a number of roles (see Figure 20).
Across Scotland, to overcome SSVs, the most common responses employers took were to:

- Increase their expenditure on advertising and recruitment;
- Use new recruitment methods; and
- Redefine existing jobs.

Skills are not the only reason employers can find it difficult to fill vacancies. Other factors like hours and location, can make it hard to fill vacancies.

In Edinburgh, East and Midlothian, 52 per cent of employers tried to recruit non-UK nationals to overcome hard to fill vacancies, compared to 41 per cent across Scotland. Of these employers and compared to employers across Scotland, a smaller percentage in Edinburgh, East and Midlothian sought to recruit EU nationals as a response to recruitment challenges (72 per cent, compared to 89 per cent). Any changes to migration policy as a result of Brexit will affect all regions in Scotland and challenges might be greatest for employers who are reliant on sourcing talent from overseas.

Most employers took action to overcome SSVs, however 11 per cent of Scottish employers in 2017 took no action.
**Skills Gaps**

Skills gaps arise when existing employees are not fully proficient as they do not have all the skills necessary for their role—these can be people, personal, practical and/or technical skills. Similar to skills shortages, we consider the incidence (how many employers have at least one person not fully proficient) and density (how many employees are not fully proficient). Skills gaps have similar impacts to SSVs and can slow down innovation in the workplace. Across Scotland, the most common causes of skills gaps were:

- Employees being new to their role, or training being incomplete;
- A lack of staff motivation; and
- An inability to recruit staff with the required skills, creating a need to upskill employees/recruits.

In 2017, the number of employers who reported a skills gap in at least one employee was 17 per cent in Edinburgh and South East Scotland, which was higher than Scotland (16 per cent). Since 2015, the incidence of skills gaps in the region has increased. In 2015, 14 per cent of employers experienced a skills gap—greater than the percentage across Scotland (13 per cent).

Overall, 4.3 per cent of the workforce in Edinburgh and South East Scotland had a skills gap in 2017. This was an increase from 4.2 per cent in 2015, and below the Scottish rate of 4.9 in 2015 and 5.0 per cent in 2017. This, alongside the insight on incidence, suggests more employers in Edinburgh and South East Scotland experienced skills gaps compared to those across Scotland, however, the concentration of skills gaps in the workforce was lower in the City Region (see Figure 21).

Across Scotland employers responded to skills gaps by:

- Increasing their expenditure on training, expanding trainee programmes and/or increasing training activity;
- Implementing more staff supervision; and
- Implementing a mentoring or buddy scheme.

**Figure 21**

*Skills Gaps (2015 and 2017), Edinburgh and South East Scotland City Region*

<table>
<thead>
<tr>
<th>Percentage of the workforce with a Skills Gap</th>
<th>Percentage of employers with a Skills Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3%</td>
<td>14%</td>
</tr>
<tr>
<td>4.2%</td>
<td>17%</td>
</tr>
</tbody>
</table>

Source: Employer Skills Survey
Most employers in Edinburgh and South East Scotland acted to overcome skills gaps, and 13 per cent sought to recruit non-UK nationals as a response, compared to 15 per cent across Scotland. Of these employers and compared to employers across Scotland, a greater percentage in Edinburgh, East and Midlothian region sought to recruit EU nationals as a response to skills gaps challenges (99 per cent, compared to 93 per cent).

Most employers took action to overcome SSVs, however 15 per cent of Scottish employers took no action in 2017. The number of employers reporting skills under-utilisation in their workforce was lower in Edinburgh and South East Scotland in 2017 compared to Scotland, 34 per cent and 35 per cent respectively. Whilst lower, this still suggests that more than one third of employers in the region had skills and talent going unused. Skills under-utilisation decreased in the region from 2015 to 2017, from 35 per cent. Whilst it has increased across Scotland, from 32 per cent.

The proportion of staff under-utilised has increased in the region, from 6.2 per cent in 2015 to 8.3 per cent in 2017. This suggests that whilst fewer employers in the region are experiencing skills under-utilisation, some employers are experiencing greater levels of under-utilisation in their workforce. Across Scotland, the percentage of staff under-utilised increased from 7.9 per cent to 9.2 per cent which suggests a skills challenge that is growing in the City Region and across Scotland (see Figure 22).

**Skills Under-Utilisation**

Employees are under-utilised if they have skills and qualifications more advanced than what is needed for their role. Addressing skills under-utilisation is important. In 2012 the economic cost to the UK of skills under-utilisation was estimated to be between £12-25bn. If skills-utilisation was on a par with the levels observed in Germany or France, UK GDP would be £5-9bn higher. There are implications for individuals too, having their skills under-utilised can impact on their income, health and wellbeing.

Similar to SSVs and skills gaps we can understand the incidence (how many employers have under-utilised employees) and density of the challenge (how many employees are under-utilised).

Upskilling
Skills are gained throughout life, and a need to upskill can arise due to:
• New legislative or regulatory requirements;
• The introduction of new technologies, equipment or working practices;
• Increased competitive pressure;
• The development of new products and services; and more recently
• The UK’s decision to leave the EU.

A need to upskill employees in the next 12 months was anticipated by 70 per cent of employers in Edinburgh and South East Scotland (as of 2017). This was higher, but close, to the percentage of employers across Scotland who anticipated a need to upskill (69 per cent). Within the region, operational and digital skills were the most commonly mentioned development area. More than half of the employers who identified development needs mentioned these (57 per cent and 55 per cent respectively). The need to upskill operational skills was the same in the region as in Scotland (57 per cent), whilst the expected need to upskill digital skills was higher in the region than across Scotland (49 per cent). More employers in the region expected a need to upskill the complex analytical skills of their employees (50 per cent) compared to Scotland (44 per cent). The evidence suggests that employers in Edinburgh and South East Scotland expect to upskill their workforce in the next twelve months across a number of skill areas. The upskilling requirement of employers in the region looks to be greater than the requirement across Scotland (see Figure 23).

Figure 23
Employers anticipating a need to upskill by type of skill (2017), Edinburgh and South East Scotland City Region and Scotland

Source: Employer Skills Survey
Conclusion
Conclusion

In 2019 Edinburgh and South East Scotland made a GVA contribution to the Scottish economy of £41bn, 30 per cent of Scotland’s output (£138.8bn). Looking ahead, the economy is forecast to grow by 2.0 per cent on average each year up to 2029. This would be faster growth than what is forecast across Scotland, it would also be greater than the average annual growth rate that Edinburgh and South East Scotland experienced from 2009 to 2019. The forecast however reflects a point in time and the high levels of economic uncertainty could change the outlook.

Total employment in Edinburgh and South East Scotland (measured by jobs) was estimated to be 720,000 in 2019; 26 per cent of Scottish employment. Employment in the region increased from 2009 to 2019 and the forecast suggests that growth will occur in the future from 2019 to 2029. The three sectors forecast to have the greatest jobs growth are:

- Professional, Scientific and Technical Activities, 10,400 jobs;
- Administration and Support Services, 9,300 jobs; and
- Human Health and Social Work Activities, 9,100 jobs.

As the region’s share of Scotland’s GVA was higher in 2019 than its share of employment, productivity performance was above average. Productivity was £56,900 in the City Region compared to £50,400 across Scotland.

The employment growth forecast will create 47,100 jobs in the region and the need to replace workers leaving the labour market will create further 259,500 opportunities. Vacancies arising due to the replacement requirement far outweigh those created by growth.

To fill these jobs, and others, there is a forecast requirement for 292,800 people in the region from 2019 to 2029. The difference between the people and job requirements is due to some people having more than one job, for example someone who has two part-time jobs.

By occupation, the greatest number of people are forecast to be required in:

- Clerical and Service Elementary Occupations, 40,500 people;
- Teaching and Research Professions, 33,700 people;
- Science and Technology Professionals, 26,500 people;
- Sales Occupations, 25,100 people; and
- Business and Public Service Professionals, 24,200 people.

Whilst there will be demand for people to fill jobs, the population projection suggests that Edinburgh and South East Scotland could have a larger and generally older population by 2041. This presents a number of challenges:

- Skills challenges could be exacerbated by a deficit of talent, created due to the growth of people reaching retirement age being greater than growth of the working age population;
- Pressures on public finances and services could increase due to a growing dependency ratio, the region’s dependency ratio is expected to reach 66 per cent by 2041, up from 53 per cent in 2016; and
- Migration has been a driver of population growth across Scotland and an important source of skilled labour. With 12 per cent of the region’s population born outside of the UK, changes to migration policy arising from Brexit could adversely affect future migration to the region and also impact on those who have already settled.

To address the current and future challenges in the labour market, and to make the most of the region’s strengths SDS is working in partnership with others on a range of actions.
The Edinburgh and South East Scotland City Region Deal is worth £1bn and the governance structures for the Deal are now in place. The key decision-making body is the Joint Committee which is comprised of councilors, Local Authority Chief Executives and other senior representatives from partner organisations. The private sector is represented through the Regional Enterprise Council, with an Executive Board sitting below the Joint Committee. In addition to this there is a Directors’ Group, Finance Directors’ Group, Innovation Advisory Group, a Higher and Further Education group and five Delivery Boards. The Delivery Boards cover Data Driven Innovation, Integrated Regional Employability and Skills, Transport Appraisal, Culture and Regional Housing.

Integrated Regional Employability and Skills (IRES) Board leads on seven key work streams and is worth £25m. This underpinning private, public and third sector partnership is a key way in which partners intend to embed Inclusive Growth practices in the region’s labour market and evolving policy and practice. The projects include Integrated Knowledge Systems; Integrated Employer Engagement; Intensive Family Support; Labour Market Analysis and Evaluation; Data Driven Innovation Skills Gateway; Housing and Infrastructure Skills Gateway and Workforce Mobility.

The Edinburgh and South East Scotland Regional Skills Investment Plan (RSIP) was launched in October 2017 has seven underpinning actions. These focus on building capacity and an evidence base to underpin regional skills planning and investment; ensuring skills opportunities are maximised across all City Region workstreams; establishing clear well-articulated pathways into key sectors and occupations; up-skilling support for region’s residents in digital skills; enhancing leadership and management and entrepreneurial skills support; addressing transport barriers to employment progression and supporting graduates and older workers to use more effective use of their skills and talent.

The Regional Skills Assessment for the Edinburgh and South East Scotland City Region highlights the current challenges facing the regional economy. However, these challenges are being addressed through the City Region Deal and the RSIP. It is anticipated that the actions agreed across the partnership groups will address inequality, promote inclusive economic growth and provide pathways into and through employment for residents whilst removing barriers such as access to transport and the skills required for the world of work.

Contact Us: If you have any feedback or comments on this report, please email rsa@sds.co.uk

31 http://www.acceleratinggrowth.org.uk/ires