

Regional Skills Assessment Glasgow College Region Summary Report 2019



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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 Note¹ 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 SIC² and SOC³ 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 website⁴. 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 Matrix⁵ 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 the Glasgow College Region which covers the East Dunbartonshire, East Renfrewshire and Glasgow City local authorities.

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

² ONS, UK Standard Industrial Classification (SIC) Hierarchy. https://onsdigital.github.io/dp-classification-tools/standard-industrial-classification/ONS_SIC_hierarchy_view.html

³ ONS, Standard Occupational Classification (SOC) Hierarchy. https://onsdigital.github.io/dp-classification-tools/standard-occupational-classification/ONS_SOC_hierarchy_view.html

⁴ SDS, Skills Investment Plans. http://www.skillsdevelopmentscotland.co.uk/what-we-do/skills-planning/skills-investment-plans/

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 by 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 growth⁶.

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 2010⁷. 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 2007⁸. 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 Scotland⁹ (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 2041¹⁰. 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 ratios¹¹ 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

11 Dependency ratio is calculated by (a) the number of children aged 0-15 years, plus (b) The number of people of pension age and above – and comparing this total vis-à-vis the working age population

⁶ Scottish Government (June 2019) Office of the Chief Economic Adviser State of the Economy, p2

⁷ Scottish Government (June 2019) Office of the Chief Economic Adviser State of the Economy, p5

⁸ Scottish Government (February 2019) International Comparators of Productivity – Economy Indicator 2017

⁹ National Records of Scotland (April 2019) Mid-2018 population estimates Scotland

¹⁰ All population projections in this RSA are based on 2016. 2018 based projections for Scotland are available from the NRS website. We have used 2016 to maintain consistency with what is available at sub-Scotland level. 2018 Based sub-Scotland estimates are expected to be published by NRS in March 2020.

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 fulltime in Scotland was 5.7 per cent in 2018¹².
- 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 16-24¹³.
- 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 people¹⁴.

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 recession¹⁵.
- 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 years¹⁶.
- 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 employment¹⁷.

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"¹⁸ and this is at the core of the recently published Programme for Government.

¹² Scottish Parliament (2018). The Gender Pay Gap: Facts and Figures – 2018. https://digitalpublications.parliament.scot/ResearchBriefings/Report/2019/2/4/The-gender-pay-gap--facts-and-figures--2018

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.

¹⁵ Annual Population Survey (April 2008-March 2009) (April 2018-March 2019)

¹⁶ Annual Survey of Hours and Earnings. Median weekly earnings gross (2003-2008, 2013-2018).

¹⁷ ScotPHO (2019). Income and employment: working-age and in-work poverty (data for 2017/18) https://www.scotpho.org.uk/life-circumstances/income-and-employment/data/working-age-poverty/

¹⁸ https://www.gov.scot/publications/global-climate-emergency-scotlands-response-climate-change-secretary-roseanna-cunninghams-statement/

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



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:





Glasgow College Region's Economy

Glasgow College Region's 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 the Glasgow College Region in 2019 was £22.4bn, 16 per cent of Scotland's output (£138.8bn).

This share of GVA ranks the Glasgow College Region as the second largest contributing RSA region to the Scottish economy.

- In 2019, the highest value sectors in the Glasgow College Region were:
- Real Estate Activities, £3.3bn;
- Human Health and Social Work, £2.9bn;
- Financial and Insurance Services, £1.9bn;
- Wholesale and Retail, £1.8bn; and
- Professional, Scientific and Technical Activities, £1.6bn.

Past Economic Performance

From 2009 to 2019 the Glasgow College Region economy, measured by GVA, grew by 1.5 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 the Glasgow College Region is forecast to grow by 2.1 per cent on average each year from 2019 to 2029. This this rate of growth is forecast to be above that of Scotland (1.7 per cent) and the UK (2.0 per cent).

Economic growth across Scotland is expected to be relatively modest in the short term, as businesses show their reluctance to invest while operating under Brexitrelated 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 the Glasgow College Region is expected to be driven by the dominant Real Estate sector from 2019 to 2029, the GVA produced by the sector will increase by £886.8m. 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 home¹⁹. In addition to Real Estate, sectors forecast to have the greatest increases in GVA output are:

- Human Health and Social Work, £555.8m;
- Professional, Scientific and Technical Activities, £547.2m; and
- Financial and Insurance Services, £494.5m.

When compared to GVA output in 2019, it can be seen that 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. In the Glasgow College Region, Professional, Scientific and Technical Activities and Administrative and Support Services are expected to have the greatest rate of GVA growth from 2019 to 2029 (three per cent growth in both sectors). Real Estate Activities, which made the largest of all GVA contributions in 2019, and Information and Communication are also expected to have fast growth rates from 2019, averaging 2.4 per cent each year up to 2029. 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 by -0.3 per cent each year from 2019 to 2029 in the Glasgow College Region. However, Education and Human Health and Social Work are forecast to have GVA growth, growing by 0.5 per cent and 1.8 per cent per year over the forecast period respectively (see **Figure 4**). For Human Health and Social Work, this will be 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), Glasgow College Region



The key sectors contributing most to GVA growth in the Glasgow College Region from 2019 to 2029 are expected to be Financial and Business Services, Health and Social Care, Digital, Construction and Creative Industries (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), Glasgow College Region



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 4.3 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 Financial and Business Services, Digital and Creative Industries sectors. As these are some of the most prominent sectors in the region's economy their contribution to overall GVA will be much greater (see **Figure 6**).

Figure 6

Forecast average annual GVA growth by Key Sector (%) (2019 - 2029), Glasgow College Region



Productivitu

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 that²⁰:

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.

20 ONS (2019) Understanding spatial labour productivity in the UK https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork /labourproductivity/articles/understandingspatiallabourproductivity intheuk/2019-05-03

In 2019, productivity in the Glasgow College Region was £44,700. This was lower than the Scottish average of £50,400 (see Figure 7).

From 2009 to 2019, productivity in the Glasgow College Region grew by 1.3 per cent on average each year. This rate of growth was in line with the Scottish Average. The equivalent for the UK was lower, 0.8 per cent.

Productivity in the Glasgow College Region 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), but below that of the UK (1.5 per cent).



Figure 7 **Productivity (2019)**

Source: Oxford Economics

Employment in Glasgow College Region



Employment in Glasgow College Region Current Employment

Total employment in the Glasgow College Region (measured by jobs) was estimated to be 501,500 in 2019, 18 per cent of Scottish employment.

The employment rate for the working age population (aged 16-64) in the region was 68.0 per cent, which was below the rate for Scotland (74.5 per cent). Compared to Scotland, the region had below average employment rates for:

- Young people (aged 16-24), 45.2 per cent compared to 58.3 per cent;
- Males, 71.3 per cent compared to 78.1 per cent;
- Females, 65.0 per cent compared to 71.1 per cent;
- Disabled people²¹, 40.3 per cent compared to 45.9 per cent; and
- Ethnic minorities, 50.8 per cent compared to 57.4 per cent²².

The region's overall employment rate means that three in ten of the region's working age population were unemployed (5.1 per cent) or economically inactive (28.3 per cent)²³. Inactivity includes people who are studying, retired or looking after their family or home.

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.

Across Scotland and within the region full-time jobs were most numerous, 342,000 jobs (68 per cent) were full-time in the Glasgow College Region in 2019. This was in-line with the Scottish average. Within the region more than half of full-time jobs (207,300; 61 per cent) were held by males, and the remaining one third (134,700; 39 per cent) of full-time jobs were held by females. The percentage of part-time jobs within the Glasgow College Region was in line with the Scottish average (32 per cent). Overall there were 159,500 part-time jobs in the Glasgow College Region, females accounted for more than two thirds (106,900; 67 per cent). Whilst males accounted for 33 per cent, 52,500 jobs (see **Figure 8**).

Figure 8 Employment by gender and full-time/part-time (2019), Glasgow College Region



Source: Oxford Economics

In the Glasgow College Region, the largest employing sectors, and their regional share of employment, in 2019 were (see **Figure 9**):

- Human Health and Social Work, 17 per cent;
- Wholesale and Retail Trade, 12 per cent;
- Administrative and Support Service Activities, 12 per cent;
- Education, eight per cent; and
- Professional, Scientific and Technical Activities, also eight per cent.

Real Estate Activities, the sector that made the greatest GVA contribution in 2019 (irrespective of the imputed rent consideration) accounted for a small share of regional employment. The sector accounted for 10,400 jobs, a two per cent share.

Figure 9 Employment by Industry and share of total employment (2019), Glasgow College Region



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 the Glasgow College Region, Financial and Insurance Activities was the greatest specialism with the percentage of employment in this sector almost twice the Scottish average. Other sectors that had above average concentrations in the Glasgow College Region were Administrative and Support Service Activities (1.6 times more concentrated), Real Estate Activities (1.5 times more concentrated) and Information and Communication (1.5 times more concentrated).

Of the key sectors, Health and Social Care, as might be expected given the sectoral insight above, was the largest in the Glasgow College Region in 2019. The sector accounted for 86,200 jobs. Financial and Business Services was the second largest with a total of 60,500 jobs (see **Figure 10**).

Figure 10 Employment by Key Sector and share of total employment (2019), Glasgow College Region



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 (49 per cent) in the Glasgow College Region were 'higher level', 27 per cent were 'mid-level' and 24 per cent were 'lower level'. Compared to Scotland, the occupational structure of the Glasgow College Region had a smaller percentage of the workforce in 'lower-level' occupations and greater elsewhere.

Scotland had a smaller percentage in 'higher level' (45 per cent) and 'mid-level' (25 per cent) occupations but more in 'lower-level' (30 per cent) occupations. A detailed look at the occupational structure shows that the largest occupations in the region in 2019 were (see **Figure 11**):

- Administrative Occupations, nine per cent;
- Clerical and Service Elementary Occupations, also nine per cent; and
- Business and Public Service Associate Professionals, eight per cent.

Figure 11 Employment by occupation and share of total employment (2019), Glasgow College Region



Source: Oxford Economics

Past Employment

Employment in the Glasgow College Region increased by two per cent from 2009 to 2019. This was largely caused by growth in prominent, large employing sectors including:

- Human Health and Social Work Activities, 16,700 jobs;
- Education, 5,600 jobs; and
- Information and Communication, 5,200 jobs.

Whilst these sectors experienced job growth, other sectors contracted. The greatest absolute decline occurred in the Professional, Scientific and Technical Activities sector in the Glasgow College Region. Compared to 2009, there were 7,900 fewer jobs in the sector in 2019. Decline also occurred in Wholesale and Retail Trade (-4,000 jobs) and Manufacturing (-3,800 jobs).

Beyond the sectors, other shifts in the region's labour market have occurred. Part-time employment increased by 15,300 jobs, whilst full-time employment declined by 5,400 jobs from 2009 to 2019. Female employment also declined by 6,000 jobs whilst male employment increased by 15,900 jobs.

Employment Forecast

The employment growth that has occurred in the Glasgow College Region in the past is forecast to continue. From 2019 to 2029 employment growth of 6.8 per cent is forecast in the region. This equates to 0.7 per cent employment growth year to year, and 34,000 jobs

in total over the forecast period. Compared to Scotland, this is a faster rate of growth. 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 expected to be greater than Scotland but lower than the region, a five per cent increase, or 0.5 per cent annual change, is forecast.

The employment forecast for the local authorities within the Glasgow College Region shows a positive outlook. All three local authorities in the region (Glasgow, East Renfrewshire and East Dunbartonshire) are forecast to have a net increase in the number of jobs over the forecast period. Glasgow is expected to have an annual average increase of 0.7 per cent, the third largest annual increase of all local authorities. East Renfrewshire and East Dunbartonshire are forecast to have an increase of 0.6 per cent and 0.3 per cent respectively.

Over the period to 2029, full-time employment is expected to increase in the Glasgow College Region with 20,900 more full-time jobs in 2029 compared to 2019. Both male and female full-time employment will increase, by 12,900 and 8,000 jobs respectively. Part-time employment is also expected to increase by 13,100 jobs. Female part-time employment is forecast to increase by 7,800 jobs, as well as male part-time employment which is forecast to increase by 5,300 (see **Figure 12**).

Figure 12

Forecast employment change, by gender and full-time/part-time (2019 - 2029), Glasgow College Region



Source: Oxford Economics

Although employment is forecast to increase in the Glasgow College Region from 2019 to 2029, sectors will have varying performance. The greatest growth in jobs is forecast in Administration and Support Services, with 11,500 more jobs expected in the sector by 2029 compared to 2019. Other sectors forecast to have growth in excess of 5,000 over the forecast period are Professional, Scientific and Technical Activities (6,800) and Human Health and Social Work Activities (5,800).

Employment growth is also forecast in the Glasgow College Region's public services sector²⁴. Public Administration and Defence is forecast to contract by 1,500 jobs over the forecast period due to continued pressure on public finances. However, the growth in Human Health and Social Work mentioned above and 1,300 additional jobs in Education from 2019 to 2029 are expected to offset this.

Job losses in the Glasgow College Region are also forecast in some sectors, 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 3,100 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), Glasgow College Region



24 Comprising Public administration and defence, Education, and Human health and social work.

The growth and contraction of employment by sector means that private services²⁵ are expected to account for a larger share of jobs in the Glasgow College Region over the forecast period. The percentage is forecast to rise from 58 per cent in 2019 to 60 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 is forecast to account for one percent of employment in 2029, the same percentage share as 2019. 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 30 per cent and three per cent in 2029 respectively.

Looking ahead, the outlook for the key sectors generally echoes the broad sector trends summarised above – with Financial and Business Services to have the greatest growth (6,900 jobs). Health and Social Care, the second largest key sector in 2019 is forecast to have growth second only to Financial and Business Services, growing by 5,800 jobs from 2019 to 2029 in the Glasgow College Region.

25 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. A number of other key sectors will experience growth over the forecast period, including:

- Construction, 5,400 jobs;
- Child-Day Care Activities, 2,800 jobs;
- Tourism, 2,300 jobs;
- Creative Industries, 1,200 jobs; and
- Engineering, 700 jobs.

Food and Drink is the key sector forecast to have the greatest employment decline in the Glasgow College Region, with 500 fewer jobs in 2029 compared to 2019 expected (see **Figure 14)**.

Figure 14

Forecast employment change by Key Sector (2019 - 2029), Glasgow College Region



By occupation, Business and Public Service Associate Professionals are forecast to experience the greatest increase in employment in the Glasgow College Region from 2019 to 2029 (of 3,900 workers). Growth in these occupations is closely related to the forecast rise in employment in the Financial and Business Services sector. An additional 3,600 workers are expected to be required in Clerical and Service Elementary Occupations, driven by growth across a number of sectors. Other occupations anticipated to have an increase that is relatively large for the region are:

- Business and Public Service Professionals, 3,200 workers;
- Corporate Managers, 2,800 workers;
- Caring Personal Service Occupations, 2,500 workers; and
- Science and Technology Professionals, 2,400 workers.

The only two occupations forecast to contract over the next decade are closely associated with Manufacturing and Public Administration and Defense, reflecting the declining number of jobs in each of these sectors. The two occupations are Protective Service Occupations (-400 people) and Skilled Metal and Electrical Trades (-200 people) (see **Figure 15**).

Figure 15

orecast employment change by occupation (2019 - 2029), Glasgow College Region





24



Total Labour Market Requirement in Glasgow College Region

Total Labour Market Requirement in Glasgow College Region

Total Requirement

In the previous sections we presented what has happened, is happening and what is forecast to happen in the Glasgow College Region 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 openings²⁶. 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 the Glasgow College Region, 230,900 job openings are forecast from 2019 to 2029²⁷. In the region, and as shown in the previous chapter, 34,000 jobs are forecast to be created in the Glasgow College Region from 2019 to 2029 due to expansion in the labour market. A further 196,800 job openings will arise due to the replacement requirement.

These opportunities are expected to be concentrated in a small number of sectors, with three sectors in the Glasgow College Region forecast to account for over a half (54 per cent) of the requirement. These are (see **Figure 16**):

- Administrative and Support Service Activities, 50,900 jobs;
- Wholesale and Retail Trade, 41,900 jobs; and
- Human Health and Social Work, 31,000 jobs.

²⁶ Job openings can be full or part time and the job openings forecast could be higher or lower in reality. Please note that throughout this section totals may not equal the sum of constituent parts due to rounding.

²⁷ Figures are rounded to the nearest 100 and as a result totals may not equal the sum of the constituent parts.

Figure 16 Forecast net requirement by Industry (2019 - 2029), Glasgow College Region



To fill these jobs, and others, there is a forecast requirement for 221,000 people in the region from 2019 to 2029²⁸. 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 in the Glasgow College Region is expected to increase by 32,300 over the forecast period. There will also be a replacement requirement of 188,800 people.

By occupation, the greatest number of people are forecast to be required in (see **Figure 17**):

- Clerical and Service Elementary Occupations, 30,500 people;
- Teaching and Research Professions, 21,300 people;
- Sales Occupations, 19,200 people;
- Science and Technology Professionals, 16,800; and
- Administrative Occupations, 15,900 people.

Figure 17 Forecast net requirement by occupation (2019 - 2029), Glasgow College Region

Clerical and Services Elementary Occupations **Teaching and Research Professionals** Sales Occupations Science and Technology Professionals Administrative Occupations Health Professionals Business and Public Service Professionals **Corporate Managers Caring Personal Service Occupations** Science and Technology Associate Professionals Culture, Media and Sports Occupations Transport and Mobile Machine Drivers and Operatives Business and Public Service Associate Professionals Skilled Construction and Building Trades Textiles, Printing and Other Skilled Trades Trades, Plant and Storage Elementary Occupations Leisure and Other Personal Service Occupations Secretarial and Related Occupations Skilled Metal and Electrical Trades Managers and Proprietors in Agriculture and Services **Customer Service Occupations** Skilled Agricultural Trades Protective Service Occupations Health and Social Welfare Associate Professionals Process, Plant and Machine Operatives



28 Figures are rounded to the nearest 100 and as a result totals may not equal the sum of the constituent parts.

Source: Oxford Economics

Expansion Replacement

Supply of People in Glasgow College Region



Supply of People in Glasgow College 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 the Glasgow College Region was 816,400, 15 per cent of Scotland's population.

By age, the largest group in the Glasgow College Region were people of working age (16-64 years). There were 554,900 people in this age group, 68 per cent of the region's population. People of working age across Scotland accounted for a smaller 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 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 the Glasgow College Region was 47 per cent. This means that for every 100 people of working age, there were 47 people of non-working age. Across Scotland it was 55 per cent. Of those who were in age groups thought to be dependent, the youngest age group was the largest. There were 136,000 people aged zero to 15 who accounted for 17 per cent of the region's population (in line with the Scottish average). Those aged 65 and over accounted for the remaining 15 per cent, there were 125,500 individuals in this age group, which was lower than the percentage share across Scotland (18 per cent). This suggests the region has a younger population compared to the Scottish average (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 the Glasgow College Region, there were 35,000 people who were born in the EU and a further 74,000 from the rest of the world in 2018. The EU born population accounted for four per cent of the region's population, and nine per cent of the region's population were born elsewhere in the world.

Figure 18

Population by age (2016), Glasgow College Region and Scotland



Source: National Records of Scotland

The percentage of the region's population born in the EU was the same as the Scottish average, but a greater percentage were born in the rest of the world. Across Scotland, four per cent of the population was born in the EU, and four per cent in the rest of the world.

From 2016 to 2041, the population of the Glasgow College Region is projected to increase by approximately 70,800 people. Equating to a nine per cent increase, this is greater than the national projected growth rate of five per cent over the same period.

The age structure of the region's population is projected to change over the coming decades, with the percentage of the population who are of working age expected to fall from 68 per cent (554,900 people) in 2016 to 64 per cent (564,000 people) in 2041. However, the actual number is expected to increase by 9,000 people. The decrease in the percentage share and the increase in absolute number is due to strong population growth in those aged 65 and over.

The greatest growth is forecast in the 65+ age groups, with a 64 per cent increase projected for those aged 75 and over (an additional 37,700 people) and a 25 per cent increase expected among those aged 65-74 (an additional 16,600 people). This is a combined increase of 54,300 people in the 65+ age groups in comparison to a more modest increase of 9,000 people in the working age group.

The 16-29 age group is the only one expected to decline in the region from 2016 to 2041. The projection suggests there could be 15,100 fewer people of this age by 2041.

These shifts suggest that the region could have a larger but 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 57 per cent, whilst higher, it is expected to be the lowest dependency ratio of all the RSA regions. The ratio is expected to range across the region from 51 per cent in Glasgow City (the second lowest of all local authorities) to 79 per cent in East Renfrewshire and 83 per cent in East Dunbartonshire. Across Scotland the dependency ratio is expected to rise to 70 per cent (see **Figure 19**).





Skills Shortages, Gaps and Challenges in Glasgow College Region

Skills Shortages, Gaps and Challenges in Glasgow College 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.

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 skillshortage 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 \pounds 361.3millon, roughly \pounds 17,000 per organisation²⁹.

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 percentage of employers reporting at least one SSV in the Glasgow College Region was eight per cent, compared to six per cent for Scotland. This suggests a challenge that extends further across the region's labour market compared to Scotland's. The incidence of SSVs in the region was lower 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 higher in the Glasgow College Region than Scotland in 2017 and 2015. In 2017, density in the region was 28 per cent, down from 32 per cent in 2015. Across Scotland, density was 24 per cent in 2017 and 2015. This suggests that employers in the region are facing difficulties across a number of roles, with greater challenges than employers across Scotland (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 the Glasgow College Region, 30 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 the Glasgow College Region sought to recruit EU nationals as a response to recruitment challenges (88 per cent, compared to 89 per cent). Changes to migration policy as a result of Brexit will affect all regions in Scotland, and the high percentage of employers who sought to recruit EU nationals suggests that any changes that affect supply could have adverse effects.

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

Figure 20

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 18 per cent in the Glasgow College Region, compared to 16 per cent for Scotland. Since 2015, the incidence of skills gaps in the region has increased. In 2015, 11 per cent of employers in the region experienced a skills gaps which at the time was a smaller percentage than Scotland (13 per cent).

Overall, 5.7 per cent of the workforce in the Glasgow College Region had a skills gap in 2017. This was an increase from 3.6 per cent in 2015, and above the Scottish rate of 5.0 per cent in 2017 and 4.9 per cent in 2015. This, alongside the insight on incidence, suggests that whilst skills gaps are not as far reaching in the Glasgow College Region, there are employers that have a greater concentration of skills gaps in their workforce (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.





Most employers in the Glasgow College Region acted to overcome skills gaps, and 19 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 the Glasgow College Region sought to recruit EU nationals as a response to recruitment challenges (97 per cent, compared to 93 per cent). Again, changes to migration policy as a result of Brexit will affect all regions in Scotland, but the evidence suggests that the Glasgow College Region may be more adversely affected if the changes affect supply.

Most employers took action to overcome SSVs, however 15 per cent of Scottish employers took no action in 2017.

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 higher³⁰. There are implications for individuals too, having their skills under-utilised can impact on their income, health and wellbeing³¹.

30 Holmes, C. (2012). *The cost of skill underutilisation in the UK*. UK Government office for Science.

 Various within Keep, E. (2016). Improving Skills Utilisation in the UK
– Some Reflections on What, Who and How? SKOPE Research Paper No. 123. 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).

The number of employers reporting skills underutilisation in their workforce was greater in the Glasgow College Region in 2017 compared to Scotland, 38 per cent and 35 per cent respectively. This suggests that almost two fifths of employers in the region had skills and talent going unused. The percentage of employers

Source: Employer Skills Survey

reporting skills mismatch has risen and skills underutilisation increased in the region and across Scotland from 2015 to 2017, from 36 per cent and 32 per cent respectively.

The proportion of staff under-utilised has decreased in the region, from 9.4 per cent in 2015 to 9.5 per cent in 2017. Across Scotland, the percentage of staff underutilised increased from 7.9 per cent to 9.2 per cent which suggests a skills challenge that is present in the region and growing across Scotland (see **Figure 22**).

Figure 22 Skills Under-Utilisation (2015 and 2017), Glasgow College Region



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 68 per cent of employers in the Glasgow College Region (as of 2017). This was smaller, but close, to the percentage of employers across Scotland who anticipated a need to upskill (69 per cent). Within the region, operational skills and complex analytical skills were the most commonly mentioned development areas (61 per cent and 50 per cent respectively). The need for these skills was greater in the region compared to Scotland (57 per cent and 44 per cent respectively). A greater percentage of employers in the region expected a need to upskill the digital skills of their employees (46 per cent) compared to Scotland (44 per cent) (see **Figure 23**).



Figure 23 Employers anticipating a need to upskill by type of skill (2017), Glasgow College Region and Scotland



Conclusion

Conclusion

In 2019 Glasgow College Region made a GVA contribution to the Scottish economy of £22.4bn, 16 per cent of Scotland's output (£138.8bn). Looking ahead, the economy is forecast to grow by 2.1 per cent on average each year up to 2029. This would be faster growth than what is forecast across Scotland, and above the average annual growth rate that the region 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 the Glasgow College Region (measured by jobs) was estimated to be 501,500 in 2019, 18 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:

- Administration and Support Services, 11,500 jobs;
- Professional, Scientific and Technical Activities, 6,800 jobs; and
- Human Health and Social Work, 5,800 jobs.

As the region's share of Scotland's employment was higher in 2019 than its share of GVA productivity performance was below average. Productivity was £44,700 in the Glasgow College Region compared to £50,400 across Scotland. The employment growth forecast will create 34,000 new jobs in the region and the need to replace workers leaving the labour market will create further 196,800 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 221,000 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, 30,500 people;
- Teaching and Research Professions, 21,300 people;
- Sales Occupations, 19,200 people;
- Science and Technology Professionals, 16,800; and
- Administrative Occupations, 15,900 people.

Whilst there will be demand for people to fill jobs, the population projection suggests that the region 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 57 per cent by 2041, up from 47 per cent in 2016; and
- Migration has been a driver of population growth across Scotland and an important source of skilled labour. In Glasgow College Region 13 per cent of the region's population were 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 Glasgow City Region Partnership, which covers the Glasgow College Region, was established in 2018 and brings together senior representatives from the UK and Scottish Governments and business with the chief executives from SDS, Scottish Enterprise and the eight local authorities within the City Region. The Partnership provides leadership and governance for City Region strategies and their delivery.

Two major sub-committees of the partnership inform the City Region's approach to education and skills:

- The West Partnership is Glasgow City Region's Education Improvement Collaborative. It brings together the eight directors of education from across the City Region. Its initial focus is on improvement, early learning and childcare, and the learner journey.
- Glasgow City Region's Economic Delivery Group brings together the Scottish Government and its enterprise and skills agencies with the eight directors of economic development from across the City Region. It is responsible for the development and implementation of the regional economic strategy.

There are also eight City Region portfolio groups which develop regional policy approaches around specific subjects of interest to the City Region and as a result the Glasgow College Region. The Skills and Employment Portfolio Group brings together skills and employability lead from across the eight local authorities with SDS, the West Partnership, college representatives and the Department for Work and Pensions (DWP). This group has developed, and will monitor, progress on the Glasgow City Region Skills Investment Plan. There are Community Planning Partnerships in each of the local authority areas – Glasgow, East Dunbartonshire and East Renfrewshire – which seek to address local Outcome Improvement Plans.

The Glasgow Partnership for Economic Growth (GPEG) is chaired by the Leader of Glasgow City Council and brings together partners from the local authority, enterprise and skills agencies, colleges, universities, transport partners, the business community and the third sector. An Employment and Skills Hub operates as a sub-group of GPEG.

The Glasgow City Region Economic Strategy and Action Plan was published in 2017 with a vision for 2035 of:

"A strong, inclusive, competitive and outward-looking economy, sustaining growth and prosperity with every person and business reaching their full potential"

There are 11 objectives contributing to delivering this ambition ranging from talent attraction and skills supply through to supporting business growth and inward investment.

Progress on the strategy will be reported to the Glasgow City Region Partnership early in 2020.

An updated Glasgow City Region Skills Investment Plan was published in 2019 and launched by the Minister for Public Finance and the Digital Economy. Its mission for 2035 is:

"To create a skills system which underpins a strong, inclusive, competitive and outward-looking economy (which will be) agile and resilient, adapting to challenges and opportunities emerging from global technological and economic trends"

The six strategic outcomes are:

- City Region alignment and working across education and skills bodies and geographies in the norm for skills planning, investment and provision;
- Reduce percentage of employers reporting skill shortages and skill gaps;
- Reduce percentage of working age population with no qualifications; and/or economically inactive due to health or disability to below Scottish average;
- Increase productivity; increase job density; increase percentage of standard jobs; increase average earnings above Scottish average;
- Reduce inequalities in pay and employment access by gender, disability, ethnicity, care experience and other protected characteristics to below Scottish average; and
- Halve gaps in education, skills and employment outcomes between SIMD10 and Glasgow City Region average.

Progress on the Regional Skills Investment Plan will be reported annually to the Glasgow City Region Partnership.

An updated Glasgow City Economic Strategy is due to be published in November 2019.

Glasgow College Region is one of Scotland's economic powerhouses, it is home to more than one tenth of Scotland's people and it is second only to Edinburgh, East and Midlothian in its contribution to the Scottish economy. Glasgow City is at the heart of this metropolitan region and the area has been buoyed by recent developments across a range of sectors. Including Scotland's largest ever inward investment, by Barclays; by Channel 4's location of one of its creative hubs; and by JP Morgan Chase's new home to 2,000 technology professionals.

Glasgow College Region has seen year on year improvements in economic indicators such as GVA and productivity growth, but significant challenges remain. There remains a continuing high level of economic inactivity due to disability and ill-health and the employment rates for young people, males, females and ethnic minorities are below average compared to Scotland. Glasgow College Region is the geographical pilot for Skills Alignment which will see the skills system become even more responsive to industry needs, with changes to the curriculum that meet the needs of a growing economy.

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

Skills Development Scotland, Evidence Base Team. October 2019 www.skillsdevelopmentscotland.co.uk