

# Scotland's Demographic Challenge

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# Introduction and Context

### **Introduction and Context**

Much is spoken of Scotland's ageing demographic structure and its implications for policy. The National Records for Scotland point to key implications for public policy:

**“the ageing population may place increased demand on public services such as the NHS, whereas reductions or slower growth in the working age population may impact tax revenues and economic growth.”<sup>1</sup>**

In addition to this wider policy perspective the ageing demographic structure is important in the context of Scotland's labour market. Scotland's Labour Market Strategy has a vision of:

**“A strong labour market that drives inclusive, sustainable economic growth, characterised by growing, competitive businesses, high employment, a skilled population capable of meeting the needs of employers, and where fair work is central to improving the lives of individuals and their families.”<sup>2</sup>**

1 National Records of Scotland (August 2018) Scotland's Population. The Registrar General's Annual Review of Demographic Trends 2017, p30

2 Scottish Government (2016) Scotland's Labour Market Strategy, p5

To achieve this vision, there will require to be a skilled supply of people to meet labour market demand, which could be a challenge given Scotland's ageing demographic structure.

Looking to labour market demand, the most recent forecasts by Skills Development Scotland (SDS) point to there being almost one million job openings for people over the next ten years (Figure 1.1).<sup>3</sup>

- 79,500 openings will arise due to growth. However, the majority of job openings will arise due to replacement demand - churn in the labour market including retirement – that will result in 903,200 openings. Because of this labour market churn, openings will occur across all occupations and regions and most industries including those that are expected to see lower levels of employment in the future.
- Industries with the highest requirement for people will be Wholesale and Retail Trade (214,200), Administrative and Support Services (153,200), Human Health and Social Work (127,300) and Accommodation and Food Service activities (114,800).
- Occupations with the highest requirement will be elementary clerical & service occupations (145,400) and sales occupations (98,700). Workers in these two occupations tend to hold qualifications towards the lower end of the spectrum. There will also be a large number of openings in occupations that are characterised as being filled by workers with higher qualifications. Most notable are teaching & research professionals (97,200 openings in Scotland over the next decade) and science & technology professionals (64,700).
- At sub Scotland level, the highest requirement will arise in Scotland's urban centres with the highest numbers in Edinburgh and Lothians (193,800), Glasgow (188,800), Lanarkshire (91,000) and Aberdeen City and Shire (84,400).

<sup>3</sup> Data presented is based on Oxford Economics datasets commissioned by SDS – current and projections 2019-29

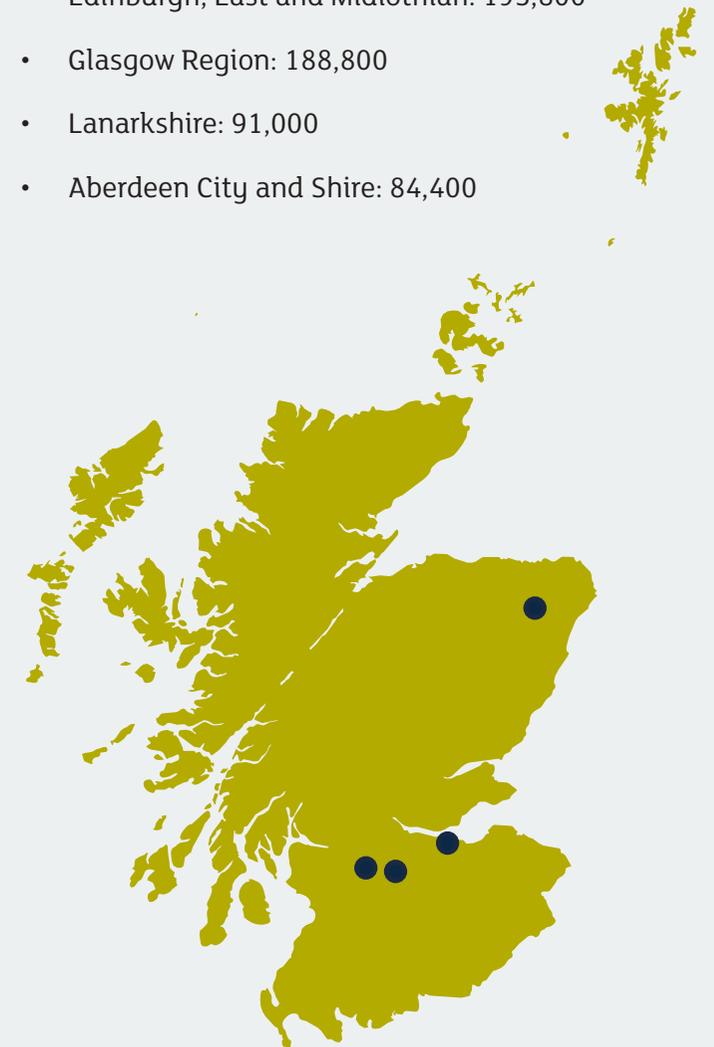
**Figure 1.1**  
**Job Openings 2019-2029**

**Total requirement 2019-2029**



**Top 4 regions**

- Edinburgh, East and Midlothian: 193,800
- Glasgow Region: 188,800
- Lanarkshire: 91,000
- Aberdeen City and Shire: 84,400



**Top 4 Industries**

-  Wholesale and retail trade: 214,200
-  Admin and support services: 153,200
-  Human Health and Social Work: 127,300
-  Accommodation and food services: 114,800

**Top 4 Occupations**

-  Elementary occupations: 145,400
-  Sales occupations: 98,700
-  Teaching and research prof: 97,200
-  Science and technology prof: 64,700

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# Supply of Labour

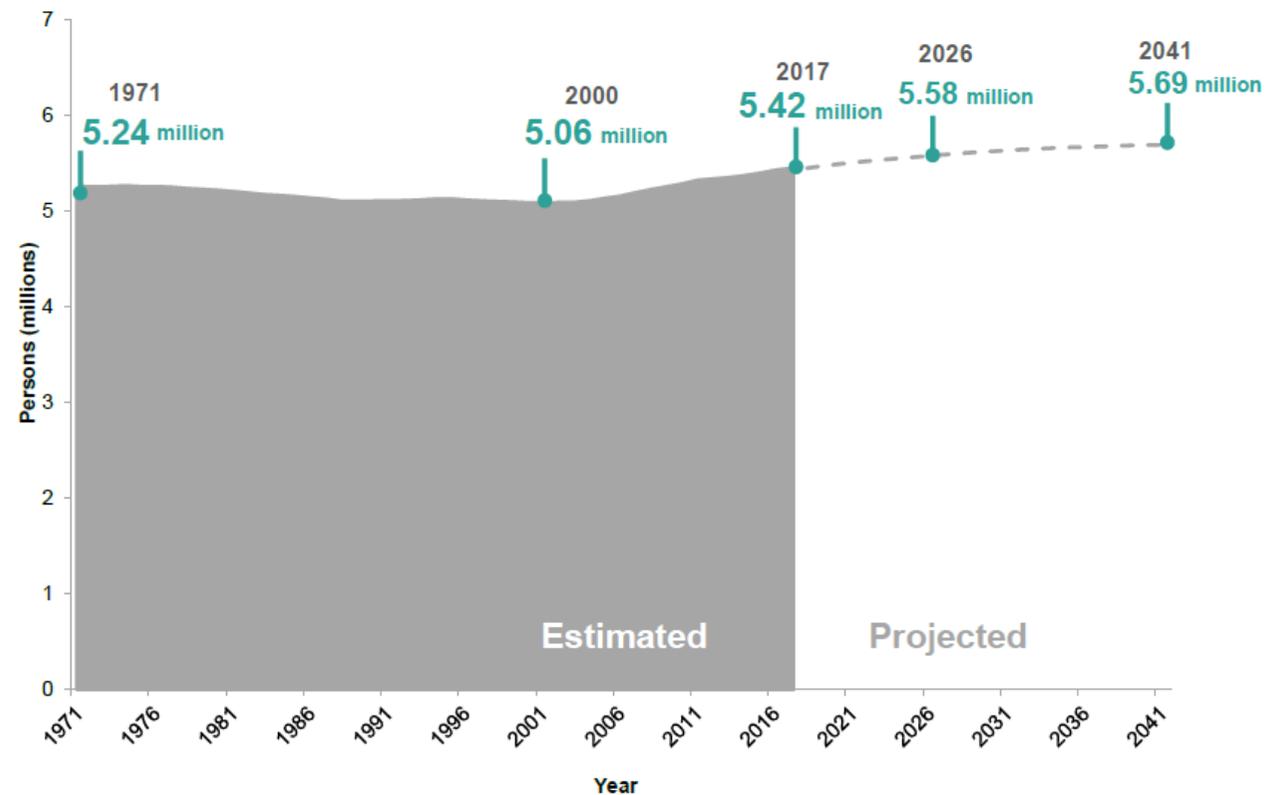
### Supply of Labour

With around 1 million jobs to fill over the next ten years it is important to explore what the supply of labour will look like in the future.

#### Scotland's population has grown and is projected to grow in future

The most recent report by the National Records of Scotland<sup>4</sup> confirms that Scotland's population has grown between 2000-2017 and, as at 2017, the population was 5,424,800. Scotland's population is expected to grow to 5.58 million in 2026 and to 5.69 million by 2041 (Figure 2.1).

**Figure 2.1**  
Population of Scotland, actual and projected figures, mid-1971 to mid-2041

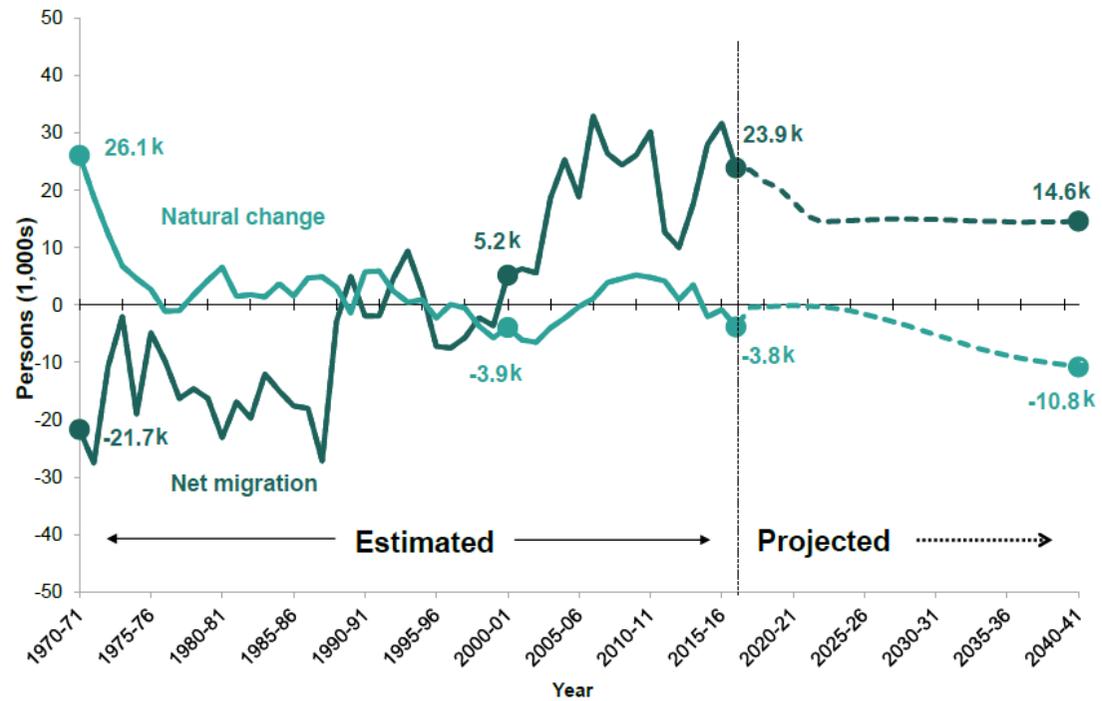


<sup>4</sup> National Records of Scotland (August 2018) Scotland's Population. The Registrar General's Annual Review of Demographic Trends 2017

Source: National Records of Scotland, August 2018

There are two main components which drive change in the population - natural change (births minus deaths) and changes in long term migration. Past and future population growth will be driven primarily by net migration (Figure 2.2).

**Figure 2.2**  
National change in net migration, 1970/71 to 2040/41

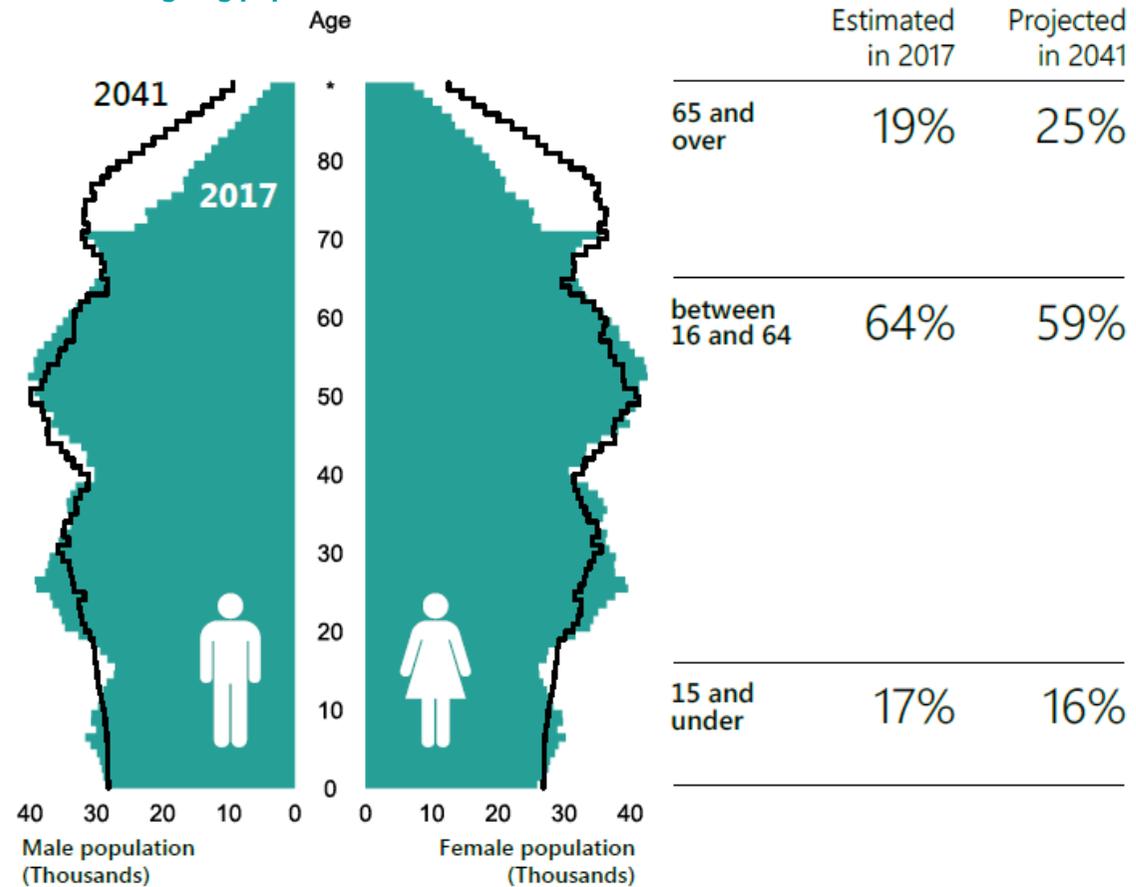


Source: National Records of Scotland, August 2018

“Over the past 15 years Scotland’s population has grown and aged, and is projected to continue doing so”<sup>5</sup>

Despite this past and projected growth, Scotland is facing an ageing demographic structure that will have implications for our ability to fill job openings in the future. In the year to mid-2017, just under one in five people (19%) were aged 65 and over but by 2041, one in four people (25%) are projected to be in this age group (Figure 2.3).

**Figure 2.3**  
Scotland’s ageing population, 2016-2041



5 National Records of Scotland (August 2018) Scotland’s Population. The Registrar General’s Annual Review of Demographic Trends 2017, p23

The fastest growing age group in Scotland is projected to be those aged 75 and over, increasing by 79% over the 25 year period between 2016 and 2041. This is followed by those aged 65 to 74, projected to grow by 17% over the same period. In contrast, the population of all other groups (below age 65) are projected to decline over the 25 year period to 2041.

If we examine dependency ratios for Scotland's population this shows a growing dependency ratio at Scotland level and indeed some areas – particularly in Scotland's rural areas – having much higher rates of dependency than the Scottish level.

Dependency ratio is calculated by:

1. The number of children aged 0-15 years, plus
2. The number of people of pension age and above
3. Comparing the above vis a vis the working age population.

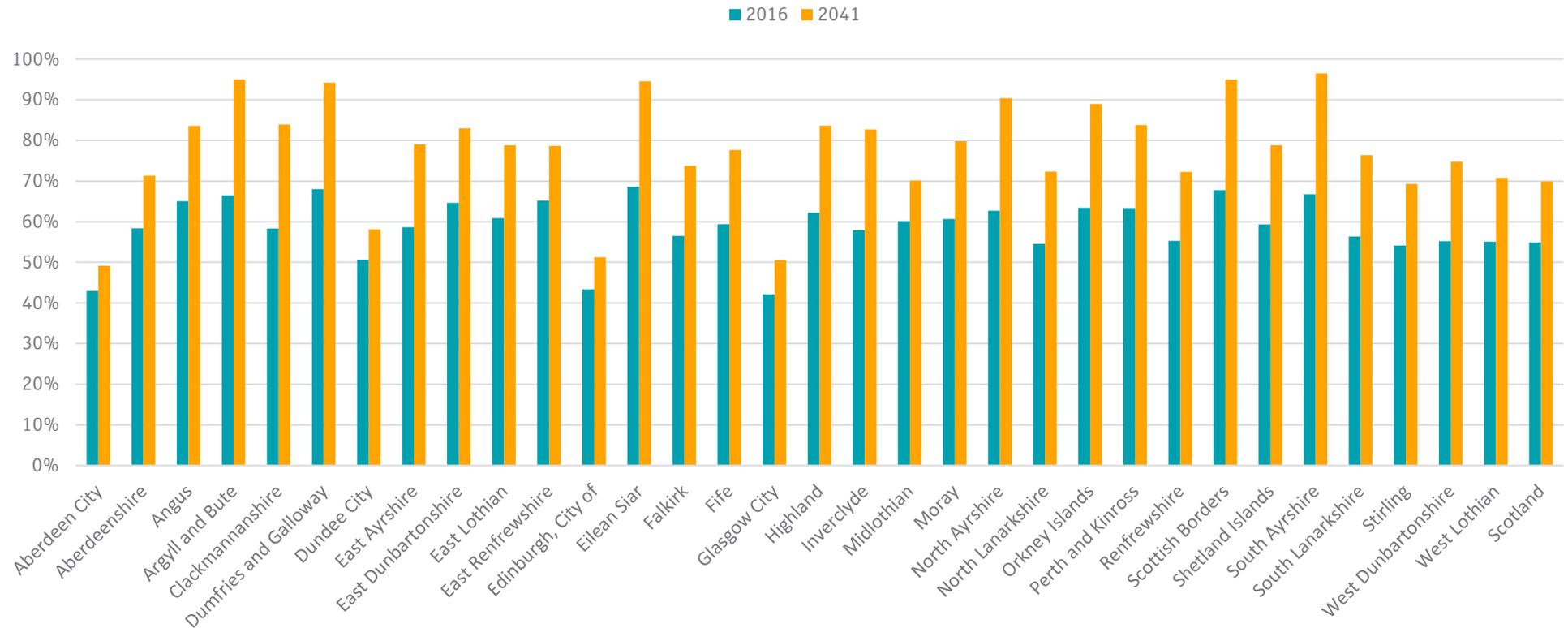
As the National Records of Scotland report states, it is important to note that:

- Not all people in the 'dependent' category are actually dependent on people of working age – e.g. some may be in employment; and
- Not everybody of working age will be actually working, e.g. some people may be studying, unemployed or economically inactive.

Nonetheless it is a useful tool to be able to assess changes in the working age vis a vis the non working age population.

Figure 2.4 on the next page details dependency ratios for each of Scotland's local authorities and the Scotland total in 2016 and then projected into 2041.

**Figure 2.4**  
Scotland's dependency ratios, 2016 and 2041



Source: National Records of Scotland, August 2018

The effect of the ageing demographic can be observed here. At Scotland level, the dependency ratio will increase from 55% to almost 70% in 2041. Put simply, for every 1,000 people of working age population there will be a further c700 dependents by 2041. In some of Scotland's more rural areas the dependency ratio is higher than Scotland. In Argyll and Bute, Dumfries and Galloway, Eilean Siar, Scottish Borders and South Ayrshire, dependency ratios are 95% and above. This means that for every 1,000 people of working age population there will be 950+ dependents by 2041.

**By 2041, in some of Scotland's rural areas, for every 1,000 people of working age there will be 950+ dependents**

In addition to what is projected now, there is also the potential for Brexit to exacerbate the demographic challenge that is faced.

At the time of writing another extension has been agreed to enable the UK Government to negotiate its exit from the European Union (EU) so there remains uncertainty on what any potential deal may contain. One of the main challenges facing Scotland's labour market could be any changes to free movement of labour. Analysis by SDS highlights those sectors, occupations and local authorities that have the highest concentration of EU nationals employed vis a vis total workforce, and therefore, face particular challenges with any changes in rules on free movement. Indeed, this may have wider implications for population projections which assume high levels of net migration.

The top three occupations with highest concentration of EU nationals employed are:



Accommodation & food services  
Total EU employees: **22,987**  
% of total workforce: **14.6%**



Mining & quarrying  
Total EU employees: **6,063**  
% of total workforce: **9.9%**



Manufacturing  
Total EU employees: **16,770**  
% of total workforce: **8.6%**

The top three local authorities with highest concentration of EU nationals employed are:



Textiles printing & other skilled trades  
Total EU employees: **8,980**  
% of total workforce: **16.8%**

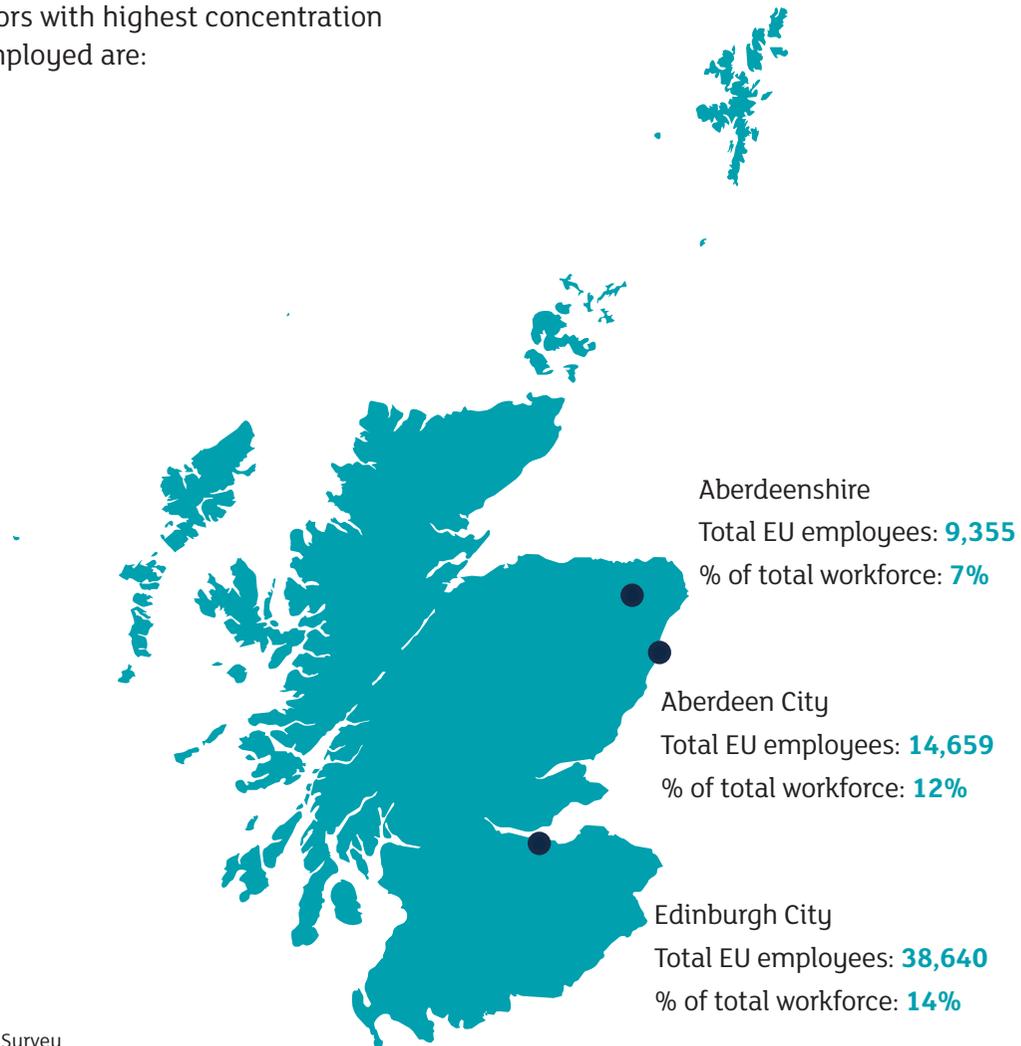


Process plant & machine operatives  
Total EU employees: **8,974**  
% of total workforce: **12.5%**



Elementary trades & related  
Total EU employees: **4,980**  
% of total workforce: **11.7%**

The top three sectors with highest concentration of EU nationals employed are:



# 3

Conclusions and  
Responding to the  
Challenge

**Conclusions and Responding to the Challenge**

The demographic challenge facing Scotland gives rise to numerous challenges in the labour market that require to be met. As Figure 3.1 illustrates these include Scotland's:

**Sectors**

- Ensuring a fit for purpose Health and Social Care sector to meet the needs of an ageing population

**Regions**

- Given the sub Scotland variations in demography, ensuring a regional response based on regional needs

**People and business**

- Maximising the productivity of our indigeneous people and businesses for a productive and inclusive labour market
- Attracting new talent from outside Scotland to meet our labour market needs

In addition, an agile response to Brexit through the Brexit Response Steering Group, Joint Action Plan and Prepare for Brexit campaign supports Scotland's sectors, regions and people.

**Table 3.1**  
**The Challenge**

The Challenge				
A fit for purpose Health and social care sector	Achieving a productive and inclusive labour market (indigeneous)	Attracting new talent (exogeneous)	An agile response to Brexit	A spatial focus - regional response

SDS is working with partners to address these challenges through a range of measures.

### **Health and social care**

Significant changes have been made in the context and delivery of health and social care and Scottish Government has led on a range of initiatives to ensure a fit for purpose health and social care sector including:

- Publication of the Health and Social Care Delivery Plan in December 2016 to enhance health and social care services focused on integration of services.
- Three national workforce plans to further improve workforce planning. The overall aim of these is to support organisations which provide health and social care services to identify, develop and put in place the workforce they need to deliver safe and sustainable services.
- An Integrated Digital Health and Social Care Strategy in April 2018. The strategy emphasises development and strengthening of digital skills of staff for successful uptake and use of digital technologies in the health and social care sector.

On skills, SDS is working with partners to ensure a robust evidence base for the sector and is engaged in the implementation of recommendations which focus on the key themes of: training, recruitment and retention in National Health and Social Care Workforce Plans.

### Indigenous labour market

SDS works in collaboration with partners to achieve Scotland's ambition for a productive and inclusive indigenous labour market. Examples include:

- Demand led skills provision – developing evidence on demand to inform investment in skills provision. We are also working with the Scottish Funding Council on developing the new Skills Alignment model (one of the key recommendations of the Enterprise and Skills Review) that has a vision for “skills services to be fully aligned to deliver the learning and skills necessary for sustainable and inclusive economic growth” (Figure 3.2 over the page).
- Career Management Skills - Career Management Skills empower people to take control of their career by acquiring a set of skills that lead to lifelong successful career planning. It supports economic growth by putting the right people in the right jobs connecting the needs of people and businesses.
- Apprenticeships - SDS administers Scottish Apprenticeships on behalf of Scottish Government, which incorporates Foundation

Apprenticeships, Modern Apprenticeships and Graduate Apprenticeships. Scottish Apprenticeships continue to expand in line with the Scottish Government's Youth Employment Strategy ambition to reach 30,000 apprenticeship starts annually by 2020.

- Innovative workplaces - With a reducing working age population in the future, it will be important to work with business to identify business models that achieve improved productivity. To this end, we will work with Scotland's enterprise and skills agencies in implementing the actions outlined in the Strategic Board's action plan relating to improving business models, work place innovation and Fair Work to enhance productivity, equality, wellbeing and sustainability.
- Skills 4.0 – Resilient people - We cannot predict the future but we can prepare for a future that is increasingly unpredictable. Scotland's people need the skills not only to cope with the change but to thrive in it, as well as to take advantage of change and create it themselves. SDS has been leading a programme of work to understand what these changes mean for the workplace, and the

employers are prepared for this complex future. Entitled **Skills 4.0** this programme highlights the importance of equipping people with meta-skills to ensure resilience in a changing world (Figure 3.1).

**Figure 3.1**  
**Skills 4.0**



**Figure 3.2**  
**Five Step Model**



### Talent attraction

The Scottish Government, SDS and Scotland's other Enterprise and Skills Agencies are working collaboratively to ensure a cohesive approach to identifying skills shortages and talent attraction (from the rest of the UK, Europe and the Rest of the World). This work builds on existing strategies and initiatives such as Scotland is Now, TalentScotland and The Talent Attraction Strategy for the Highlands and Islands. Whilst at an early stage, the collaborative approach will further develop existing activity, strengthen shared understanding of Scotland's labour market challenges and inform future efforts to attract talent to Scotland.

### An agile response to Brexit

The Brexit Response Steering Group (BRSBG) brings together Scotland's enterprise and skills agencies (SDS, Scottish Enterprise, Highlands and Islands Enterprise and Scottish Enterprise), Scottish Government and Business Gateway to coordinate their responses to Brexit.

One specific practical initiative arising from this work is the **Prepare for Brexit** campaign aims to stimulate many more companies to actively plan for Brexit, supporting business and wider

economic resilience in the face of significant change (Figure 3.7).

**Figure 3.7**  
**Prepare for Brexit**



### Regional response

Given the variations in needs of areas at sub national level, SDS plays its part in developing responses to specific regional needs and challenges. We are members of regional strategic partnerships across Scotland including City Regions and Growth Deal areas. We also lead on developing regional responses to specific skills issues. One example of how we do this is in developing Regional Skills Investment Plans. Plans are in place in Aberdeen City and Shire, Edinburgh and the South East and the Highlands and Islands (currently being updated). Plans are in development in the remainder of Scotland with the following due for release imminently:

- Glasgow and Clyde Valley
- Tay Cities
- South of Scotland

In the Highlands and Islands Skills Investment Plan, the demographic challenge is clearly articulated. One proactive response is happening in Argyll and Bute where SDS is working with Argyll and Bute Council and Highlands and Islands Enterprise on a pilot project to develop a cross sectoral/occupational workforce plan for the future.

## Case study

Argyll and Bute is facing one of the highest dependency ratios in Scotland – reaching 95% by 2041.

The area has workforce challenges now, and there is a need to understand how these may change, grow or subside in the future. By understanding the challenges, action can be taken to address them. This will help to ensure that employers have access to the right skills at the right time, people have the right skills and confidence to engage in the local labour market and skills development and talent attraction strategies are focused on the areas and locations of need.

The plan will go beyond an extrapolation of existing trends and have regard to significant national (that apply locally) and local developments and opportunities. For example, the planned maritime change programme at HMNB Clyde (Faslane), changes in health and social care needs and the national expansion of early learning and childcare to 1140 hours per annum.

The outlook for the local authority is concerning when placed in the context of local evidence that suggests that there are already recruitment challenges. Brexit adds another layer of complexity which could impact on the migrant workforce and exacerbate challenges in the short to long term too.

The workforce plan for the future will:

- Be a synthesis of existing research and analysis that is available on the current and future labour market situation in Argyll and Bute
- Identify critical points in time where demand for labour may surpass supply – and identify how big the gap is between the number of people needed and the people available
- Identify occupations and sectors where challenges are, or might be, more acute
- Advise on the needed alignment of local Further Education, Higher Education and Work-Based Learning to expected future economic need

- Identify national, occupational, sectoral and local factors that might exacerbate the challenges faced e.g. Brexit, talent attraction, impact of long-term depopulation, wages, rurality etc.
- Identify key actions that will address the most pressing labour market challenges and provide an evidence base that will help guide policy and investment in regional economic growth and immigration.

The plan will be in place by the summer of 2019 and will help provide a model for addressing demographic challenges in other areas.

In Summary, SDS is working with partners to address these challenges through a range of measures (Table 3.2).

**Table 3.2**  
**Addressing Challenges**

Health and Social Care	Indigenous Labour Market	Talent Attraction	Agile Brexit Response	Regional Response
<ul style="list-style-type: none"> <li>• A partnership approach to sector development</li> <li>• Fit for purpose workforce</li> </ul>	<ul style="list-style-type: none"> <li>• Demand led skills provision</li> <li>• Career Management Skills</li> <li>• Apprenticeships</li> <li>• Innovating workplaces</li> <li>• Resilient people</li> </ul>	<ul style="list-style-type: none"> <li>• National partnership</li> <li>• National and Regional response</li> </ul>	<ul style="list-style-type: none"> <li>• Brexit Response Steering Group</li> <li>• Joint Action Plan</li> <li>• Prepare for Brexit</li> </ul>	<ul style="list-style-type: none"> <li>• Regional partnerships</li> <li>• Regional Skills Investment Plans</li> <li>• Argyll and Bute case study</li> </ul>

