| Regional Skills Assessments               | 3 |
| Introduction                             | 4 |
| West Lothian’s Economy                   | 10|
| Employment in West Lothian               | 16|
| Total Labour Market Requirement in West Lothian | 25|
| Supply of People in West Lothian         | 29|
| Skills Shortages, Gaps and Challenges in West Lothian | 32|
| Conclusion                               | 38|
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 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 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 and SOC 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.

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 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 West Lothian which covers the West Lothian local authority.

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

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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.
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.
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\(^\text{12}\).

• 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\(^\text{13}\).

• 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\(^\text{14}\).

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\(^\text{15}\).

• 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\(^\text{16}\).

• 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\(^\text{17}\).

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

**Our growth needs to be inclusive**

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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

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**Figure 1:**
Skills 4.0

https://www.skillsdevelopmentscotland.co.uk/what-we-do/skills-planning/skills4-0/
**Regional Skills Assessment**

**Introduction**

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.

**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 Economy

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

### Scotland’s People

- **A tight labour market**
  - Our growth needs to be inclusive

### Scotland’s Climate Change Emergency

- **Our growth needs to be sustainable**

### Scotland’s Resilience

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

### Scotland’s Skills Issues

- We need innovative workplaces 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
West Lothian’s Economy
West Lothian’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 West Lothian in 2019 was £4.5bn, three per cent of Scotland’s output (£138.8bn).

This share of GVA ranks West Lothian as the third smallest contributing RSA region to the Scottish economy.

In 2019, the highest value sectors in West Lothian were:
- Wholesale and Retail, £0.8bn;
- Manufacturing, £0.6bn;
- Real Estate Activities, £0.4bn;
- Construction, £0.4bn; and
- Professional, Scientific and Technical Activities, also £0.4bn.

Past Economic Performance
From 2009 to 2019 the West Lothian economy, measured by GVA, grew by 1.6 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 West Lothian is forecast to grow by 1.9 per cent on average each year from 2019 to 2029. This rate of growth is forecast to be above that of Scotland (1.7 per cent) and below 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 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 West Lothian is expected to be driven by the dominant Wholesale and Retail Trade sector from 2019 to 2029, the GVA produced by the sector is expected to increase by £149.2m.

In addition to Wholesale and Retail Trade, sectors forecast to have the greatest increases in GVA output are:
- Professional, Scientific and Technical Activities, £131.3m.
- Real Estate, £128.8m;
- Manufacturing, £78.6m;
- Information and Communication, £74.9m; and
- Construction, £74.6m.

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. Administration and Support Service Activities is expected to have one of the greatest rates of GVA growth from 2019 to 2029 in West Lothian. This was one of the smaller sectors in 2019 (in economic terms) but it is forecast to have an average annual growth rate of 3.1 per cent. The larger Professional, Scientific and Technical Activities sector is expected to have the greatest rate of growth from 2019, averaging 3.1 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 West Lothian. However, Education and Human Health and Social Work are forecast to have GVA growth, growing by 0.5 per cent and 1.7 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), West Lothian

Source: Oxford Economics
The key sectors contributing most to GVA growth in West Lothian from 2019 to 2029 are expected to be Engineering, Construction, Life Sciences 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), West Lothian

<table>
<thead>
<tr>
<th>Sector</th>
<th>GVA Growth (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>£119.8</td>
</tr>
<tr>
<td>Construction</td>
<td>£89.4</td>
</tr>
<tr>
<td>Life sciences</td>
<td>£74.2</td>
</tr>
<tr>
<td>Digital</td>
<td>£70.6</td>
</tr>
<tr>
<td>Creative industries</td>
<td>£53.0</td>
</tr>
<tr>
<td>Health and social care</td>
<td>£47.6</td>
</tr>
<tr>
<td>Financial and business services</td>
<td>£43.1</td>
</tr>
<tr>
<td>Food and drink</td>
<td>£23.9</td>
</tr>
<tr>
<td>Tourism</td>
<td>£15.2</td>
</tr>
<tr>
<td>Energy</td>
<td>£11.5</td>
</tr>
<tr>
<td>Chemical sciences</td>
<td>£9.1</td>
</tr>
<tr>
<td>Child-day care activities</td>
<td>£7.2</td>
</tr>
</tbody>
</table>

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 4.3 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 Energy, Life Sciences and Creative Industries sectors. However, other than Life Sciences, their overall contribution will be lower due to their smaller size relative to the much larger, dominant key sectors in the region currently (see Figure 6).

**Figure 6**
Forecast average annual GVA growth by Key Sector (%) (2019 - 2029), West Lothian

- Child-day care activities: 4.3%
- Energy: 2.7%
- Life sciences: 2.7%
- Creative industries: 2.5%
- Financial and business services: 2.2%
- Digital: 2.1%
- Engineering: 1.8%
- Health and social care: 1.7%
- Construction: 1.7%
- Food and drink: 1.7%
- Tourism: 1.7%
- Chemical sciences: 1.5%

Source: Oxford Economics
**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\(^\text{19}\):

- \textit{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.}

- \textit{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 West Lothian was £52,500. This was higher than the Scottish average of £50,400 (see Figure 7).

From 2009 to 2019, productivity in West Lothian grew by 1.8 per cent on average each year. This rate of growth was faster 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 West Lothian 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).

\[\text{\footnotesize Source: Oxford Economics}\]

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Employment in West Lothian
Employment in West Lothian

Current Employment

Total employment in West Lothian (measured by jobs) was estimated to be 85,900 in 2019, three per cent of Scottish employment.

The employment rate for the working age population (aged 16-64) in West Lothian was 76.7 per cent, which was above the rate for Scotland (74.5 per cent). Compared to Scotland, the region had above average employment rates for:

- Young people (aged 16-24), 66.4 per cent compared to 58.3 per cent;
- Males, 82.6 per cent compared to 78.1 per cent;
- Disabled people\(^{20}\), 46.4 per cent compared to 45.9 per cent; and
- Ethnic minorities, 61.7 per cent compared to 57.4 per cent.

The region’s overall employment rate means that approximately one in four of West Lothian’s working age population were unemployed (3.6 per cent) or economically inactive (20.4 per cent)\(^{22}\). 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. 59,600 jobs (69 per cent) were full-time in West Lothian in 2019. This was a higher percentage share compared to Scotland where 68 per cent of jobs were full-time. Within the region over two thirds of full-time jobs (39,900; 67 per cent) were held by males, and the remaining one third (19,800; 33 per cent) were held by females\(^{23}\).

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 26,300 part-time jobs in West Lothian, females accounted for almost three quarters (19,200; 73 per cent). Whilst males accounted for 27 per cent, 7,100 jobs (see Figure 8).

Figure 8

Employment by gender and full-time/part-time (2019), West Lothian

![Bar chart showing employment by gender and full-time/part-time in West Lothian in 2019](chart.png)

Source: Oxford Economics

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\(^{20}\) Equalities Act (EA) Core Disabled

\(^{21}\) Employment rate figures from Annual Population Survey, April 2018 – March 2019

\(^{22}\) Employment rate, unemployment rate and economic inactivity rate may not sum to 100 due to rounding.

\(^{23}\) Figures are rounded to the nearest 100 and as a result totals may not equal the sum of the constituent parts.
In West Lothian, the largest employing sectors, and their regional share of employment, in 2019 were (see Figure 9):

- Wholesale and Retail Trade, 21 per cent;
- Human Health and Social Work, ten per cent;
- Administration and Support Service Activities, nine per cent;
- Manufacturing, also nine per cent; and
- Construction, eight per cent.

Wholesale and Retail Trade was also the largest sector in region in economic terms in 2019, which highlights its importance to the West Lothian economy and labour market.

![Figure 9](image-url)
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 Scottish average. In West Lothian, Information and Communication was the greatest specialism with the percentage of employment 2.5 times greater than the Scottish average. Other sectors that had above average concentrations in West Lothian were Wholesale and Retail Trade and Transportation and Storage (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 West Lothian in 2019. The sector accounted for 8,900 jobs. Construction was the second largest with a total of 8,300 jobs (see Figure 10).

**Figure 10**
Employment by Key Sector and share of total employment (2019), West Lothian

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, two fifths of all occupations (40 per cent) in West Lothian were ‘higher level’, 27 per cent were ‘mid-level’ and 33 per cent were ‘lower level’. Compared to Scotland, West Lothian had a smaller percentage of the workforce in ‘higher-level’ occupations and greater elsewhere. Scotland had a lower percentage in ‘mid level’ (25 per cent) and ‘lower-level’ (30 per cent) occupations but greater in ‘higher-level’ (45 per cent) occupations.

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

- Transport and Mobile Machine Drivers and Operatives, nine per cent;
- Corporate Managers, eight per cent;
- Clerical and Services Elementary Occupations, also eight per cent;
- Administrative Occupations, seven per cent; and
- Caring Personal Service Occupations, also seven per cent.

![Figure 11](image-url)
Past Employment
Employment in West Lothian decreased by 1.7 per cent from 2009 to 2019. This was largely caused by contraction in prominent, large employing sectors including:
- Construction, -2,500 jobs;
- Manufacturing, -2,400 jobs; and
- Financial and Insurance Activities, -1,000 jobs.

Whilst these sectors experienced job losses, other sectors grew. The greatest absolute growth occurred in the Professional, Scientific and Technical Activities sector in West Lothian. Compared to 2009, there were 1,500 more jobs in the sector in 2019. Growth also occurred in Public Administration and Defence (1,300 jobs) and Administration and Support Services (1,100 jobs).

Beyond the sectors, other shifts in the region’s labour market have occurred. Part-time employment increased by 3,300 jobs, whilst full-time employment declined by 4,800 jobs from 2009 to 2019. Female employment also declined by 3,600 jobs whilst male employment increased by 2,000 jobs.

Employment Forecast
The employment decline that has occurred in West Lothian in the past is not forecast to continue. From 2019 to 2029 employment growth of 5.6 per cent is forecast in the region. This equates to 0.5 per cent change year to year, and 4,800 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 comparable to the region, a five per cent increase, or 0.5 per cent annual change, is forecast across the UK.

Over the period to 2029, full-time employment is expected to increase in West Lothian with 2,900 more full-time jobs in 2029 compared to 2019. Both male and female full-time employment will increase, by 1,700 and 1,300 jobs respectively. Part-time employment is also expected to increase by 1,900 jobs. Female part-time employment is forecast to increase by 1,000 jobs, as well as male part-time employment which is forecast to increase by 800 (see Figure 12).

Figure 12
Forecast employment change, by gender and full-time/part-time (2019 - 2029), West Lothian

<table>
<thead>
<tr>
<th></th>
<th>Full-time</th>
<th>Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1,700</td>
<td>800</td>
</tr>
<tr>
<td>Female</td>
<td>1,300</td>
<td>1,000</td>
</tr>
</tbody>
</table>

Source: Oxford Economics

24 Figures are rounded to the nearest 100 and as a result totals may not equal the sum of the constituent parts.
Although employment is forecast to increase in West Lothian from 2019 to 2029, sectors will have varying performance. The greatest growth in jobs is forecast in Administrative and Support Service Activities with 1,600 more jobs expected in the sector by 2029 compared to 2019. Other sectors forecast to experience the greatest growth in the region are Construction (1,200 jobs) and Professional, Scientific and Technical Activities (800 jobs).

Employment growth is also forecast in West Lothian’s public services sector. Public Administration and Defence is forecast to contract by 200 jobs over the forecast period due to continued pressure on public finances. However, this will be offset by growth of 600 jobs in the Health and Social Work sector and a further 100 jobs in Education by 2029.

Job losses in West Lothian 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 1,000 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](image_url)

**Figure 13**  
**Forecast employment change by Industry (2019 - 2029), West Lothian**

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

Source: Oxford Economics
The growth and contraction of employment by sector means that private services are expected to account for a larger share of jobs in West Lothian over the forecast period. The percentage is forecast to rise from 60 per cent in 2019 to 61 per cent in 2029. The Construction sector is also forecast to increase from eight per cent to nine per cent over the forecast period. In 2019 public services and primary industries accounted for 22 per cent and one per cent of employment respectively. This share is expected to be maintained in 2029. Manufacturing is expected to decline by two percentage points over the forecast period to from nine per cent to seven per cent by 2029.

Looking ahead, the outlook for the key sectors largely echoes the broad sector trends summarised above – with Construction forecast to have the greatest growth (1,200 jobs). Financial and Business Services and Health and Social Care are both forecast to grow by 600 jobs each from 2019 to 2029 in West Lothian. A number of other key sectors will experience growth over the forecast period, including:

- Tourism, 300 jobs;
- Child-Day Care Activities, also 300 jobs;
- Creative Industries, 200 jobs;
- Life Sciences, 100 jobs; and
- Energy, also 100 jobs.

Engineering is the key sector forecast to have the greatest employment decline in West Lothian, with 300 fewer jobs in 2029 compared to 2019 expected (see Figure 14).

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26 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, Corporate Managers are forecast to experience the greatest increase in employment in West Lothian from 2019 to 2029 (of 700 workers). This is driven by growth across a number of sectors. An additional 600 workers are expected to be required in Clerical and Services Elementary Occupations. Other occupations anticipated to have an increase that is relatively large for the region are:

- Caring Personal Service Occupations, 500 workers;
- Skilled Construction and Building Trades, 400 workers;
- Business and Public Service Professionals, 300 workers;
- Business and Public Service Associate Professionals, 300 workers; and
- Transport, Mobile Machine Drivers and Operatives, 300 workers.

Occupations likely to contract over the next decade tend to be those most closely associated with Manufacturing, reflecting the declining numbers of jobs in the sector. Examples include Process, Plant and Machine Operatives (-100 people) and Skilled Metal and Electrical Trades (-700 people) (see Figure 15).

![Figure 15](image_url)

**Figure 15**
Forecast employment change by occupation (2019 - 2029), West Lothian

Source: Oxford Economics
Total Labour Market Requirement in West Lothian
Total Labour Market Requirement in West Lothian

Total Requirement

In the previous sections we presented what has happened, is happening and what is forecast to happen in West Lothian 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 West Lothian, 33,800 job openings are forecast from 2019 to 2029. In the region, and as shown in the previous chapter, 4,800 jobs are forecast to be created in West Lothian from 2019 to 2029 due to expansion in the labour market. A further 28,900 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 West Lothian forecast to account for more than half (56 per cent) of the requirement. These are (see Figure 16):

- Wholesale and Retail Trade, 9,400 jobs;
- Administration and Support Service Activities, 5,800 jobs; and
- Transportation and Storage, 3,800 jobs.

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.
Figure 16
Forecast net requirement by Industry (2019 - 2029), West Lothian

Source: Oxford Economics
To fill these jobs, and others, there is a forecast requirement for 31,900 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 in West Lothian is expected to increase by 4,500 over the forecast period. There will also be a replacement requirement of 27,400 people.

By occupation, the greatest number of people are forecast to be required in (see Figure 17):
- Clerical and Service Elementary Occupations, 4,200 people;
- Teaching and Research Professions, 3,700 people;
- Sales Occupations, 3,500 people;
- Corporate Managers, 3,000 people; and
- Transport and Mobile Machine Drivers and Operatives, 2,700 people.

Figure 17
Forecast net requirement by occupation (2019 - 2029), West Lothian

Source: Oxford Economics
Supply of People in West Lothian

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 West Lothian was 180,100, three per cent of Scotland’s population.

By age, the largest group in West Lothian were people of working age (16-64 years). There were 116,200 people in this age group, 64 per cent of the region’s population. Whilst it was the largest group, people of working age across Scotland accounted for a larger 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 West Lothian was 55 per cent. This means that for every 100 people of working age, there were 55 people of non-working age. Across Scotland it was 55 per cent too.

Of those who were in age groups thought to be dependent, the youngest age group was the largest. There were 35,300 people aged 0-15 who accounted for 20 per cent of the region’s population (above the Scottish average of 17 per cent). Those aged 65 and over accounted for the remaining 16 per cent (28,600 people), 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 West Lothian, there were 9,000 people who were born in the EU and a further 6,000 from the rest of the world in 2018. The EU born population accounted for five per cent of the region’s population, and three per cent of the

![Figure 18](image)

Population by age (2016), West Lothian and Scotland

Source: National Records of Scotland
The largest increases are expected in the 65 or older age groups, with a 120 per cent increase projected for those aged 75+ (an additional 13,900 people) and 35 per cent among those aged 65-74 (an additional 5,900 people). Taken together, the increase in the 65+ age group (19,800 people in total) is greater than the increase in the working age population (2,800 people).

No age group is forecast to decline in West Lothian, the number of people aged 0-15 will increase by 400 people (one per cent) and the number aged 16-29 will stay the same.

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 71 per cent. Across Scotland the dependency ratio is expected to rise to 70 per cent (see Figure 19).

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 decrease from 64 per cent in 2016 to 59 per cent in 2041.

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 59 per cent share. The number of people of working age is expected to increase, from 116,200 people in 2016 to 118,900 people in 2041 (an increase of 2,800 people), as a percentage of the overall population, it nonetheless represents a decrease.
Skills Shortages, Gaps and Challenges in West Lothian
Skills Shortages, Gaps and Challenges in West Lothian
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 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 West Lothian was nine 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 (four 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 West Lothian than Scotland in 2017 and 2015. In 2017, density in the region was 38 per cent, up from 33 per cent in 2015. Across Scotland, density was 24 per cent in 2015 and 2017. 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. Across Scotland, 41 per cent of employers tried to recruit non-UK nationals to overcome hard to fill vacancies, equivalent data is not available for West Lothian. Most employers within Scotland who sought to recruit non-UK nationals considered EU nationals (89 per cent). Whilst equivalent data for West Lothian is not available any changes to migration policy as a result of Brexit will affect all regions in Scotland.

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 21 per cent in West Lothian, compared to 16 per cent for Scotland. Since 2015, the incidence of skills gaps in the region has increased. In 2015, 17 per cent of employers experienced a skills gap—greater than the percentage across Scotland (13 per cent).

Overall, 6.2 per cent of the workforce in West Lothian had a skills gap in 2017. This was an increase from 4.0 per cent in 2015. This was above the Scottish rate of 5.0 per cent in 2017, which increased from 4.9 per cent in 2015. This, alongside the insight on incidence, suggests that more employers in West Lothian experience skills gaps and also 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.

### Figure 21
**Skills Gaps (2015 and 2017), West Lothian**

![Skills Gaps Chart](chart)

Source: Employer Skills Survey
Most employers in West Lothian acted to overcome skills gaps, and 17 per cent sought to recruit non-UK nationals as a response, compared to 15 per cent across Scotland. Across Scotland, most employers (93 per cent) who sought to recruit non-UK nationals considered EU nationals, equivalent data for West Lothian is not available.

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 higher\(^9\). There are implications for individuals too, having their skills under-utilised can impact on their income, health and wellbeing\(^10\).

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 under-utilisation in their workforce in West Lothian was in line with Scotland in 2017 (35 per cent). This suggests that more than one third of employers in the region had skills and talent going unused. The percentage of employers reporting skills mismatch has risen and skills under-utilisation increased in the region and across Scotland from 2015 to 2017, from 32 per cent in both.

The proportion of staff under-utilised has declined in the region, from 6.2 per cent in 2015 to 3.9 per cent in 2017. This suggests that whilst more employers in the region are experiencing skills under-utilisation, in general the number of their employees under-utilised has declined. 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 across Scotland (see Figure 22).

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**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 67 per cent of employers in West Lothian (as of 2017). This was lower than the percentage of employers across Scotland who anticipated a need to upskill (69 per cent). Within the region, complex analytical skills were the most commonly mentioned development area (56 per cent). The need to upskill digital skills was higher in the region compared to Scotland (55 per cent compared to 49 per cent), whilst the expected need to upskill operational skills was lower (44 per cent compared to 57 per cent) (see **Figure 23**). The evidence suggests that more employers in West Lothian expect to upskill their workforce in the next twelve months compared to employers across Scotland, with the greatest need in the region for complex analytical skills and digital skills.

**Figure 23**

Employers anticipating a need to upskill by type of skill (2017), West Lothian and Scotland

Source: Employer Skills Survey
Conclusion
Conclusion
In 2019 West Lothian made a GVA contribution to the Scottish economy of £4.5bn, three per cent of Scotland’s output (£138.8bn). Looking ahead, the economy is forecast to grow by 1.9 per cent on average each year up to 2029. This rate of growth is forecast to be above that of Scotland (1.7 per cent) but below the UK (2.0 per cent). The forecast however reflects a point in time and the high levels of economic uncertainty could change the outlook.

Total employment in West Lothian (measured by jobs) was estimated to be 85,900 in 2019, three per cent of Scottish employment. Employment in the region declined from 2009 to 2019, but 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, 1,600 jobs;
- Construction, 1,200 jobs; and
- Professional, Scientific and Technical Activities, 1,000 jobs.

Whilst both were three per cent, the region’s share of Scotland’s GVA was marginally higher in 2019 than its share of employment. As a result, productivity performance was slightly above average. Productivity was £52,500 in West Lothian compared to £50,400 across Scotland.

The employment growth forecast will create 4,800 new jobs in the region and the need to replace workers leaving the labour market will create further 28,900 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 31,900 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, 4,200 people;
- Teaching and Research Professions, 3,700 people;
- Sales Occupations, 3,500 people;
- Corporate Managers, 3,000 people; and
- Transport and Mobile Machine Drivers and Operatives, 2,700 people.

Whilst there will be demand for people to fill jobs, the population projection suggests that West Lothian 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 71 per cent by 2041, up from 55 per cent in 2016; and
- Migration has been a driver of population growth across Scotland and an important source of skilled labour. With eight 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 West Lothian Economic Partnership Forum (EPF) has been established to understand, support and strengthen all activity related to the twin objectives below:

• Ensuring that the local economy has the optimum approaches to providing employment opportunities which are accessible and fair with an equitable range of career escalators to high quality, well-paid jobs; and

• Ensuring that the approaches above compliment, and are complimented by, the current and future supply of available skills and talent.

The EPF functions as the West Lothian Community Planning Partnership’s forum for investment, business development and skills and lifelong learning. The forum also supports two of the outcomes in the Local Outcomes Improvement Plan (LOIP) around improved access to learning and employment opportunities and ensuring that the economy is diverse and dynamic, and West Lothian is an attractive place for doing business.

There is a regional Developing the Young Workforce West Lothian group, which comprises mainly private sector with some public sector representation.

West Lothian is also part of the Edinburgh and South East Scotland City Region Deal.

The West Lothian Economic Growth Plan is a £29m partnership approach to developing the West Lothian economy. It was developed by West Lothian Council, in partnership with the Scottish Government and Scottish Enterprise. The main areas of focus are immediate support for people; community regeneration; and enterprise area; and long terms innovation and development.

The Local Outcomes Improvement Plan\textsuperscript{31} is a 10 year strategic plan and will focus on skills and jobs, sustainable places and improved health and wellbeing.

The Edinburgh and South East Scotland Regional Skills Investment Plan\textsuperscript{32} (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 maximized across all City Region Deal 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 West Lothian highlights the current challenges facing the regional economy. However, these challenges are being addressed through the Edinburgh and South East Scotland 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

\textsuperscript{32} https://www.skillsdevelopmentscotland.co.uk/media/43648/edinburgh-sip-2017_digital-version.pdf