Data Matrix
User guide

Contents

SDS Website

The Data Matrix is an online tool providing easier access to the latest Labour Market Information (LMI).

The Data Matrix is hosted on Skills Development Scotland's corporate website and can be accessed using the link below:

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

Full Screen Mode

To enable full functionality, please open the Data Matrix in full screen mode.

To do this, click on the expandable arrow icon in the bottom right hand corner (highlighted by the red circle).

Area Selection page

There are four area types available in the Data Matrix:

- Local Authority;
- Region (based on Regional Outcome Agreement (ROA) regions);
- City Deals; and
- Growth Deals.

You can hover your cursor over the buttons to see which Local Authorities are included in each area.

To select a region, click on the relevant button.

Choose a Region (Regional Outcome Agreement)

Aberdeen City and Aberdeenshire	Glasgow
Ayrshire	Highlands and Islands
Borders	Lanarkshire
Dumfries and Galloway	Tayside
Edinburgh, East and Midlothian	South of Scotland
Fife	West Lothian
Forth Valley	West

Clackmannanshire, Falkirk and Stirling

Data for Rural Scotland can be accessed using the 'Rural Local Authorities' button. This is based on the Scottish Government's Rural and Environment Science and Analytical Services (RESAS) classification of rural areas.

Theme Selection page

After an area has been selected, the theme selection page will open automatically.

There are three themes available and a description of each is provided:

- Skills Supply;
- Skills Demand; and
- Skills Mismatch.

To select a theme, click on the relevant button.

Skills Development Scotland

Data Matrix: Theme selection page

Choose a Theme

Skills Supply

Skills Supply refers to the supply of people within the labour market.

Topics include:
- **Population:** number of people in the selected area, broken down by age;
- **Participation rate:** the proportion of young people aged 16-19 in employment, education or training; and
- **Employment rate:** the proportion of people in the selected area who are in employment.

The data used in this theme includes:
- Employment, Unemployment and Economic inactivity rates;
- Population Estimates; and
- Scotland's Annual Particpation Measure

Skills Demand

Skills Demand refers to the demand for skills within the labour market.

Topics include:
- **Economic Output:** measured by Gross Value Added (GVA);
- **Business Base:** the number of businesses in selected area, including business survival rates; and
- **Employment Projections:** projected employment levels in the future, based on forecast data.

The data used in this theme includes:
- Oxford Economics;
- GVA by sector; and
- Number of businesses and business survival rates.

Skills Mismatch

Skills Mismatches occur when there is a gap between the demand and the supply of skills within the labour market.

Topics include:
- **Skills gaps:** when an employee does not have the skills necessary to do their job;
- **Skills shortages:** when employers struggle to recruit people with the right skills; and
- **Skills under-utilisation and upskilling:** where employers report staff are under-utilised and anticipate a need to upskill.

The data used in this theme includes:
- The percentage of businesses reporting skills gaps and/or skills shortages; and
- The percentage of employers anticipating a need to upskill existing staff.

Data only available for regions.

Topic Selection page

After a theme has been selected, the relevant topic selection page will open automatically.

There are numerous topics available for each theme.

To select a topic, click on the relevant button.

Choose a Topic

Population by Age	Employment and Unemployment by Disability Status
Population Projections and Dependency Ratios	Employment and Unemployment by Gender and Ethnicity
Net Migration and Secondary Schools	Economic Inactivity
Annual Participation Measure	Universal Credit and Claimant Count
School Leaver Destinations	Travel to Work
Employment 16-64 and 16-24	Hours Worked and Weekly Pay
Unemployment 16-64 and 16-24	Housing and Households
Part-time and Self-Employment	Scottish Index of Multiple Deprivation (SIMD)
Non-Permanent and Zero Hours Employment	

Page Layout

This page shows the key features of a page within the Data Matrix. On the following pages we provide more information on each feature.

Data Sources

Topic

Data Considerations

Information Panel

Key Figures

Skills Development Scotland

- Area Selection Page
- Theme Selection Page
- Topic Selection Page

Skills Supply

Selected Region
▼
Aberdeen & Aberdeenshire (ROA)

Selected Area
▼
Aberdeenshire
Aberdeen City

Employment 16-64 ⑦ ⚠

Employment Rate 16-64 2019	No. of employed people aged 16-64 2019
Scotland	Scotland
75%	2,564,400
Aberdeen and Aberdeenshire (ROA)	
78%	252,600
Aberdeen City	
76%	120,100
Aberdeenshire	
81%	132,500

Employment Rate 16-64 by Year

● Aberdeen and Aberdeenshire (R... ● Aberdeen City ● Aberdeenshire ● Scotland

79% 79% 79% 77% 79% 77% 79% 79% 76% 78% 78%

2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Employment 16-24 ⑦ ⚠

Employment Rate 16-24 2019	No. of employed people aged 16-24 2019
Scotland	Scotland
58%	335,100
Aberdeen and Aberdeenshire (ROA)	
65%	34,400
Aberdeen City	
63%	18,100
Aberdeenshire	
68%	16,300

Employment Rate 16-24 by Year

● Aberdeen and Aberdeenshire (R... ● Aberdeen City ● Aberdeenshire ● Scotland

73% 70% 72% 64% 72% 65% 67% 64% 69% 62% 65%
56% 56% 58% 54% 52% 54% 56% 58% 50% 58%

2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Navigation panel

Return to Contents

Page Layout: Information Panel

1. Area Selection Page

2. Theme Selection Page

3. Topic Selection Page

4. **Skills Supply**

    Selected Area
    Highlands and Islands (ROA)

5.

    Local Authority
    Argyll and Bute
    Na h-Eileanan Siar
    Highland
    Moray
    Orkney Islands
    Shetland Islands

6.

Each page in Data Matrix has an Information Panel on the left which includes buttons and relevant information, as indicated below:

1. Allows you to go back to Area Selection page.

2. Allows you to go back to Theme Selection page.

3. Allows you to go back to Topic Selection page for selected theme.

4. Shows you the theme of the current page.

5. Shows you the selected area.

6. Shows you the selected Local Authority.

Page Layout: Key Figures

Most topics in the Data Matrix have key figures at the top of the page. The key figures are colour coded for selected area (Light Blue) and Scotland (Green).

You may need use the scroll bar (highlighted in red) to display all data for your selected area.

To do so, use your cursor to hover over the key figures for selected areas till the scroll bar appears on the right hand side.

Or you can view it in full-screen (see here).

Page Layout: Data Sources

Each topic in the Data Matrix has a Source Icon indicated by question mark ⑦

Use your cursor to hover over the Source Icon to display the data source and the relevant time period.

Page Layout: Data considerations

If data is missing (!), it is deemed unreliable. This may be due to small numbers, small sample sizes or unreliable confidence intervals.

Use your cursor to hover over the Data Consideration Icon ⚠ for more information.

Moray

17%   **2,100**

Orkney Islands

!   **!**
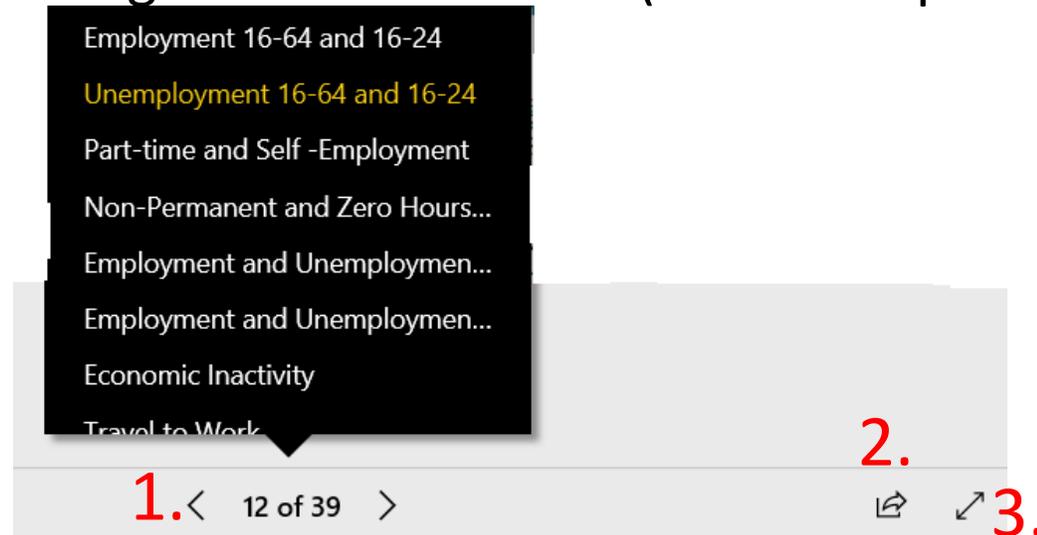
Shetland Islands

!   **!**

If data appears as an exclamation mark - **!** , it is deemed unreliable. This may be due to small numbers, small sample sizes or unreliable confidence intervals.

Page Layout: Navigation Panel

The navigation panel can be found at the bottom of each page, the functions of this panel are listed below:

1. You can use the arrows to navigate through the pages. If you click on the numbers, you will be able to see a list of all pages in the report (the current page will be highlighted in yellow).

2. You can share the Data Matrix through different platforms (e.g. email, Twitter, LinkedIn).

3. You can use this icon to enlarge the view further (useful for presentations).

Employment 16-64 and 16-24
Unemployment 16-64 and 16-24
Part-time and Self -Employment
Non-Permanent and Zero Hours...
Employment and Unemploymen...
Employment and Unemploymen...
Economic Inactivity
Travel to Work

2.

1. < 12 of 39 > 3.

User Tips and Guidance: Side Panel Filtering

Example 1

Skills Supply

Selected Area
▼
Highlands and Islands (ROA)

Local Authority
▲
Argyll and Bute
Na h-Eileanan Siar
Highland
Moray
Orkney Islands
Shetland Islands

Example 2

Skills Supply

Selected Area
▼

Local Authority
▲
Argyll and Bute
Na h-Eileanan Siar
Highland
Moray
Orkney Islands
Shetland Islands

If you select a Region, City Deal or Growth Deal, as it can be seen in **Example 1**, the navigation panel can be used to filter the data to Local Authority level.

Click on the Local Authority name under the Selected Area heading to filter the data and graphs. As can be seen in **Example 2** , the selected Local Authority then becomes highlighted.

To deselect and return to your selected Region, click on the selected Local Authority again.

User Tips and Guidance: Additional Filtering

Some pages will require additional data filtering for the visuals to display optimally.

Data Type and Years

Use the buttons (as in the picture above) to select the data type or year of interest. Your selection will be highlighted in red.

Multiple selection is available for some visuals (where relevant). To use this feature, click on all the options you are interested in.
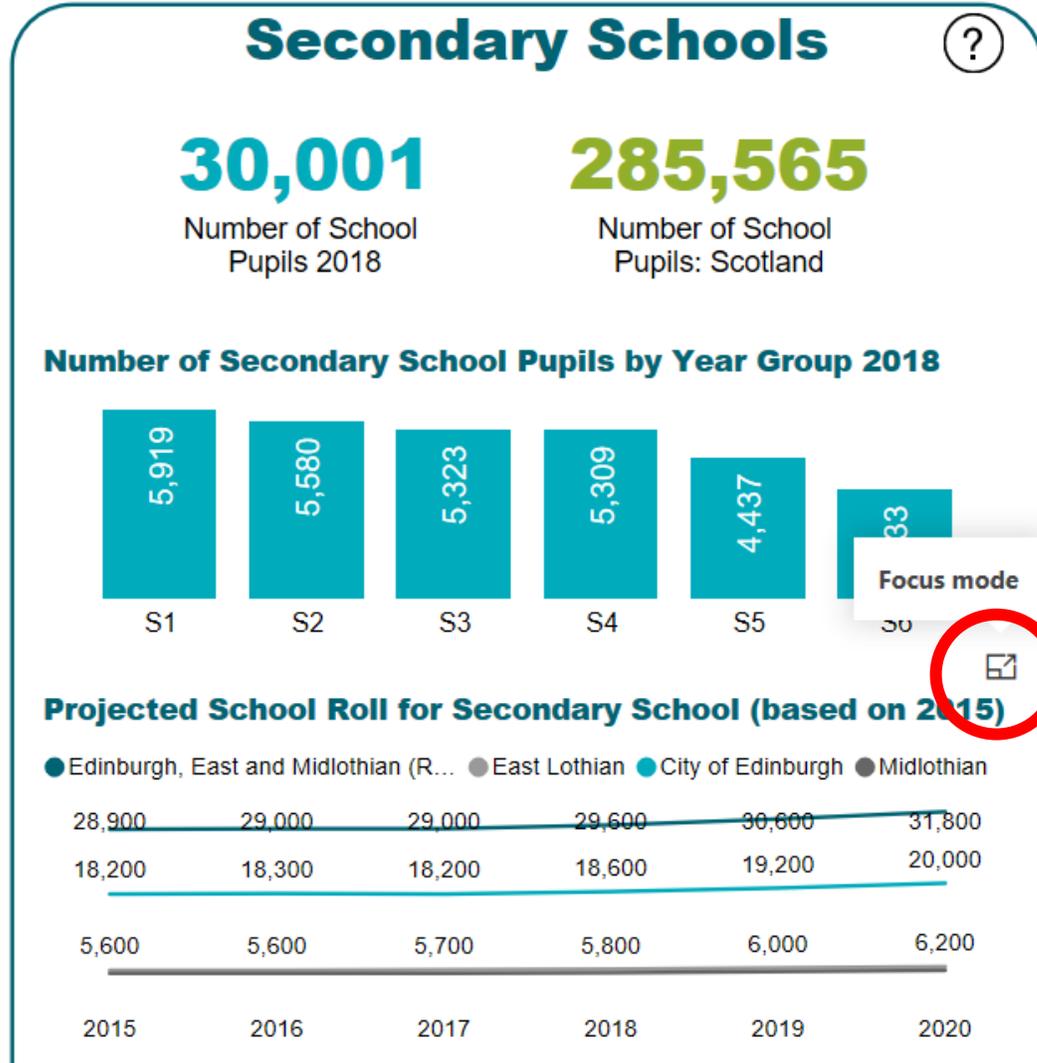
To deselect an option click on it again.

Selected Area

Use the buttons (as in the picture above) to select the area of interest. The selected area will be highlighted in red.
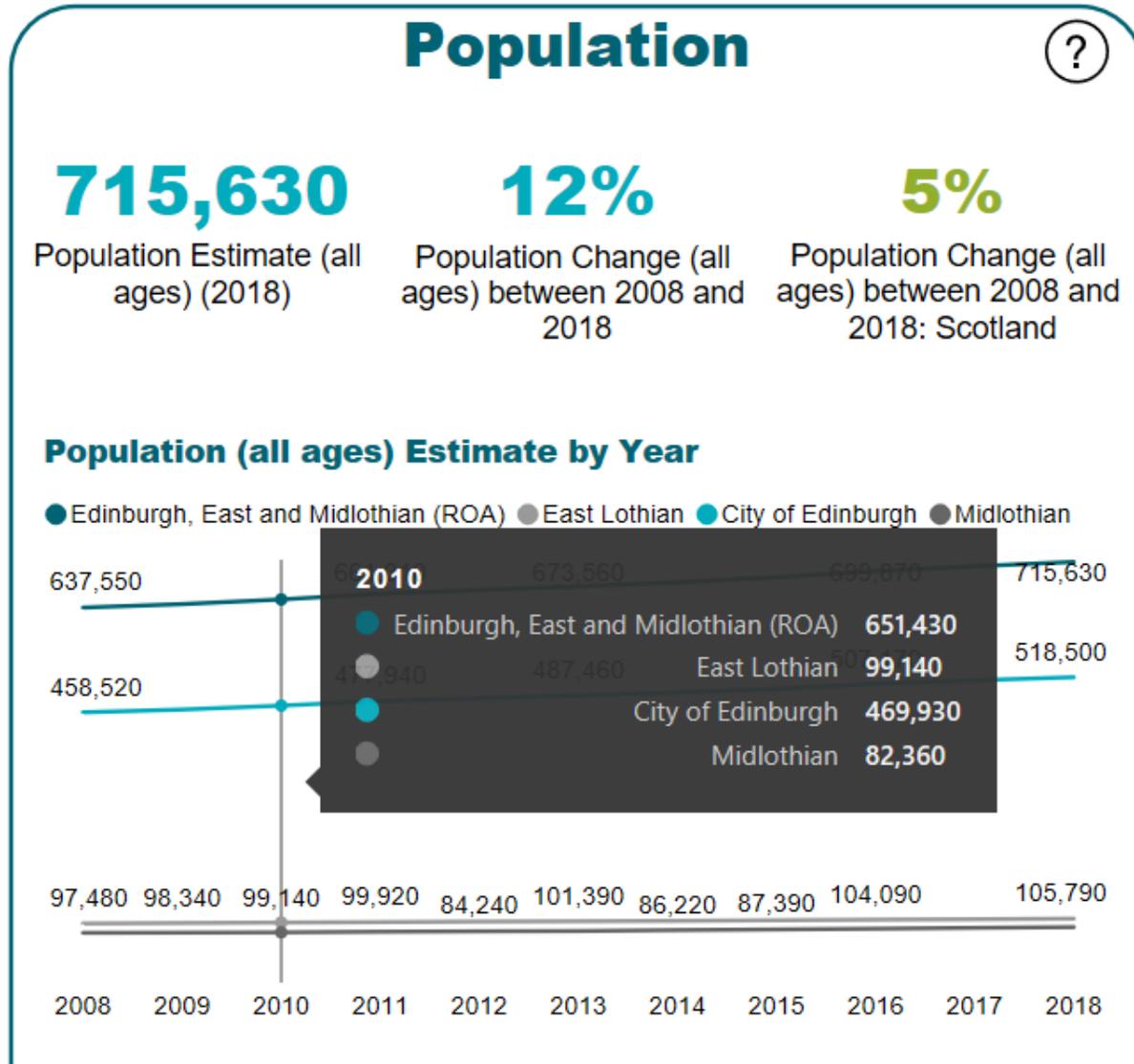
User Tips and Guidance: Focus mode

Each visualisation in the Data Matrix can be viewed in full-screen:

1. Hover over the visual if you would like to see more information.

2. Focus mode is available on the top right corner of every visual.

3. Click the icon and this will enlarge the visual to full screen.

4. To return to the report, click on the button *Back to report* in the top left corner.
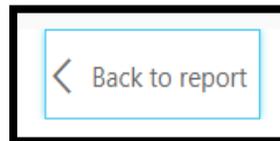
Please do not use back button on the browser.

User Tips and Guidance: Additional Information

Some of the visuals have additional information available.

If information is available, it will appear when you hover over the visual, as seen in the image on the left (black box).

User Tips and Guidance: Data Labels

In some instances, there may not be enough space for all the data labels to be displayed. There are few steps can be taken to improve their visibility:

1. Hover over the visual and the selected data point, a black box will appear with relevant information (as seen in the image on the left).

2. Open the visual in focus mode, which makes the visual bigger (see here).

User Tips and Guidance: Copying visuals

The Data Matrix allows for visualisations to be easily copied and used in reports and presentations.

To do this, you can use either:

- The *Snipping Tool* programme on your device. This programme allows you to select the area of your screen that you wish to copy, you can then save, edit or email the image.

  - For Windows users, the snipping tool is located in Windows accessories.;
  - For Mac users, press Command-Shift-4;

  or

- For Windows users, use the *"PrtSc"* function on your keyboard. This will capture the full screen, in order to crop the image to just desired visual, paste it into another application (e.g. Word, Excel, Paint).

User Tips and Guidance for Custom Area Creation: All Local Authorities
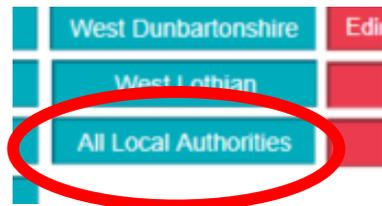
If you interested in creating your own area from different Local Authorities, you can use the *All Local Authorities* button in the Area selection page.

Then using the information panel on the left in each page select the required Local Authorities (see image on left).

You need to hold *Ctrl* for multiple selection.

Please be aware:

1. Your Local Authority selection needs to be redone on every topic page; and

2. Key figures in light blue will show the total for all 32 LAs until selection has been made.

Thank you.

Any queries, please contact rsa@sds.co.uk

Making skills work for Scotland