NHS

Interactive
Atlas Guide

HEALTH PROFILES 2011

DH Department
of Health

Contents

INTRODUCTION

This Guide explains in detail how to operate the interactive atlases that are available in the 'Maps' section of the Health Profiles website www.healthprofiles.info. It gives step by step instructions on how to select an indicator, compare the figures for one area against another, display indicator metadata and print results. It describes all the elements available on the atlas screen and explains how to make the best use of them. The elements and components of the Health Profiles interactive single map atlas are described in Figure 1.

The interactive atlases were created using InstantAtlas™ software, an internet based mapping facility developed by GeoWise Ltd and designed to present statistics in a user friendly way. For more technical documentation please visit the www.geowise.co.uk website directly.

To view any of the Health Profiles interactive atlases you will need to have the Adobe Flash viewer loaded onto your computer. If your computer is on a network you may need to be logged on as an administrator to successfully install the viewer. Please contact your local IT administrator for assistance if you are experiencing any problems with loading the application.
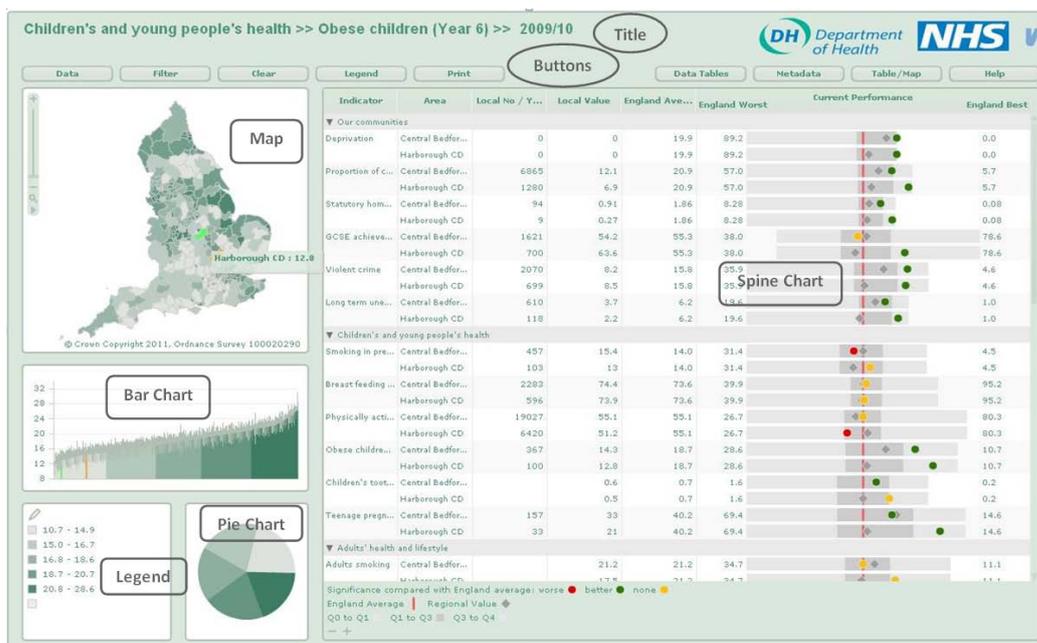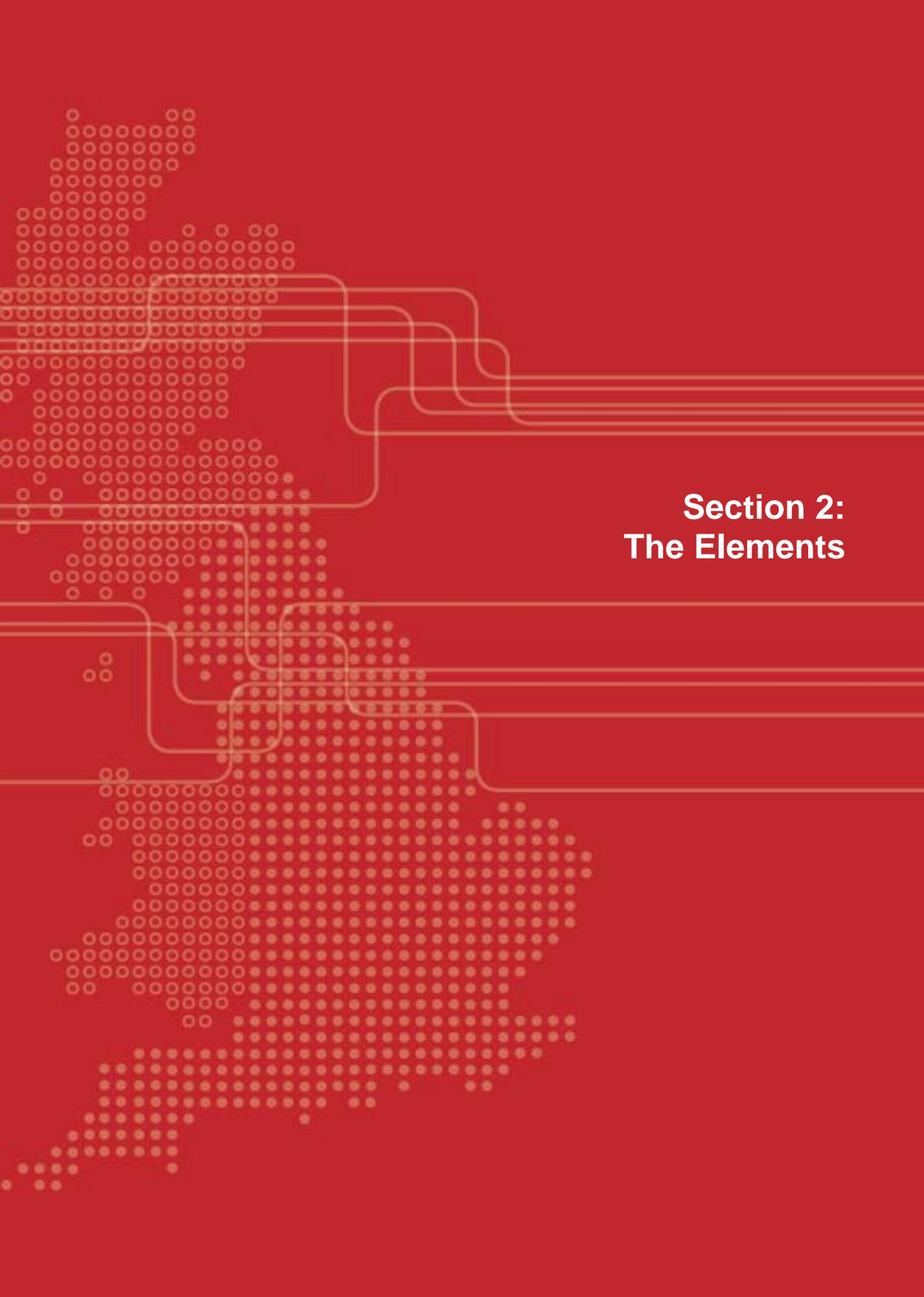

Figure 1: Health Profiles 2010 District Level Single Map InstantAtlas™

Section 2:
The Elements

TITLE

The title of the report appears at the very top of the atlas screen. It typically lists the name of the domain, the indicator and the time period being displayed. It will also display any filter that you have applied to the data as it gets updated as you select your criteria for data display.

BUTTONS

There is a number of options' buttons across the top of the screen in the atlas, directly below the title element. The buttons in the Health Profiles atlases have been customised to offer additional usability options so you may see more buttons than in a regular instant atlas, if you have used one before. The available options are described below.

Data Button

Click this button to display the available indicators in the Data Explorer. There are 32 indicators available and they are collapsed into 5 domains: Our Communities; Children's and young people's health; Adult's health and lifestyle; Disease and poor health; Life expectancy and causes of death. Once you are in the Data Explorer you can do the following:

- Click domain and indicator names to expand the list of indicators or collapse them.
- Click '+' button in the bottom right corner of the Data Explorer to expand all the available domains and indicators.
- Click '-' button in the bottom right corner of the Data Explorer to collapse all the available indicators back into the original 5 domains.
- Click the document icon for a PDF with basic information on the indicator.

Filter Button

Click this button to display the available filters in the Filter Explorer.

The Filter Explorer lists any available filters and their values. Click filter names to expand or collapse them. Clicking a filter value will filter the report so that only geographic features with the selected filter value are prominent.

Click the 'Remove Filter' option to remove all selected filters and go back to the original setup.

Clear Button

Click this button to remove any selections you have made.

Note: This button clears all the area selections but does not clear the selected filters. To remove the filters click the Filter button and use the 'Remove Filter' option.

Legend Button

Click this button to display the available colours for the maps and graphs. For the single map atlas you will also be able to choose the number of classes for your data (up to 10) and select the statistical method used to group the data, i.e. quantile, equal

interval, natural breaks, continuous, standard deviation. Further details of selecting groupings are presented in section 9: Legend. By default the atlas uses 5 classes with quantiles as classifiers.

Print Button

Click this button to display the available options for printing the page. The atlas prints best in landscape – this will print the full screen for you. If you wish to print just one of the components, e.g. the spine chart, select the 'Spine chart' option from the drop down list of the print screen.

Data Tables Button

Click this button to go to the webpage containing Excel data tables available to download.

Metadata Button

Click this button to go to the webpage containing the metadata document entitled 'The Indicator Guide Health Profiles 2011' available to download.

Table/Map Button

Click this button to alternate between the map or the list of available areas for selection.

Help Button

Click this button to go to the webpage containing the 'Health Profiles 2011 Interactive Atlas User Guide'.
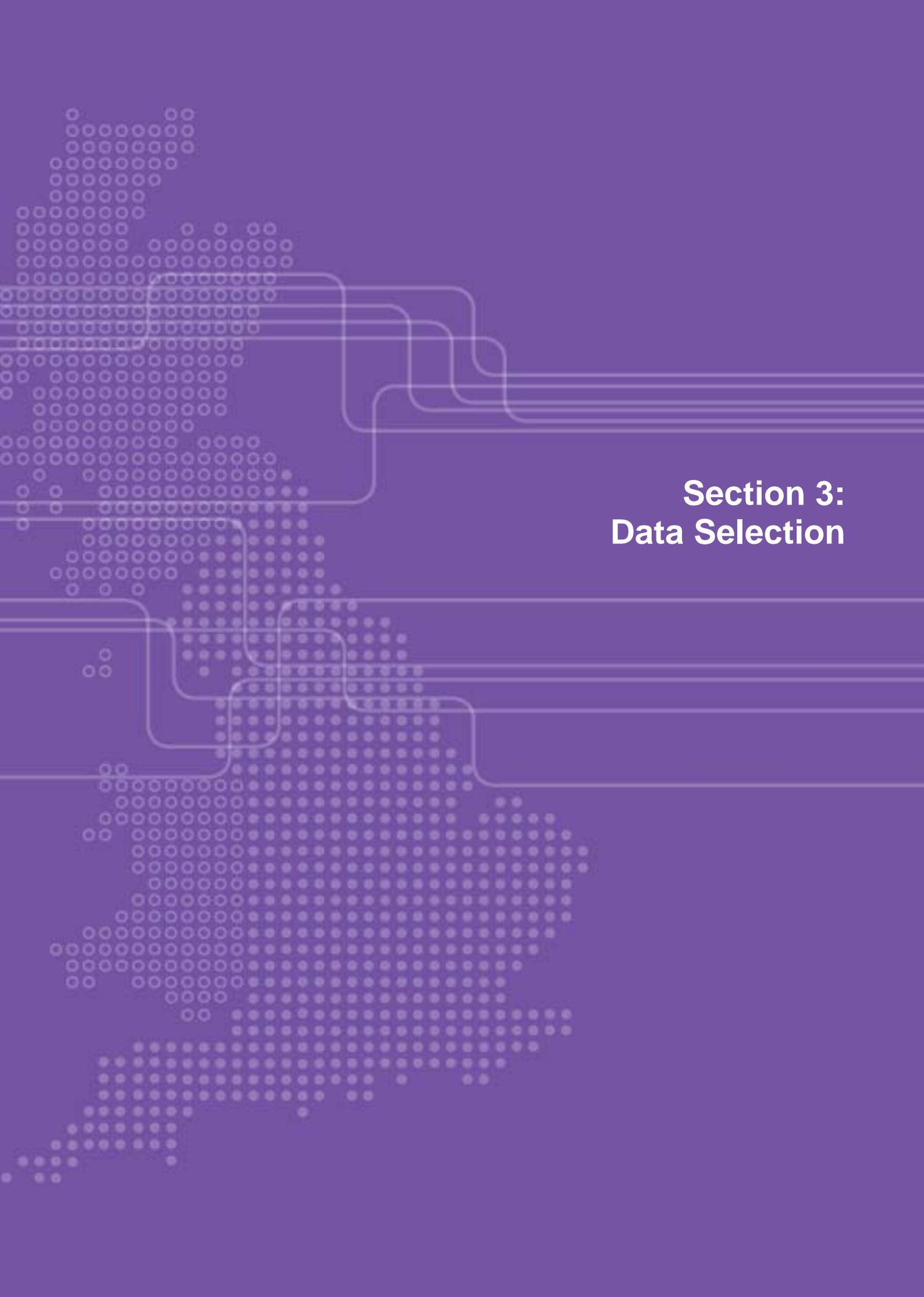
Section 3:
Data Selection

DATA SELECTION

Select features

Click the name of a geographic feature (from the map or table view) to select the feature. A selected geographic feature will be shaded in a different colour. Alternatively, hold 'Ctrl' to select multiple features or 'Shift' to select a range of features. Holding the 'Ctrl' key and clicking on a selected feature allows you to deselect it. Up to 10 different areas may be selected at one time.

Spine chart – Adjust column width

Hold your mouse pointer over the divider between column headers and lateral arrows will appear. Click and drag the divider to adjust column width.

Spine chart - Change column order

Click a column header and drag it to change the location of this column within the Data Table. E.g. if you want the notes icons to appear right of the data columns you can simply drag the whole column with the notes icons to the right border of the data table.

Table of available areas - Sort Columns

Click a column header to sort the table ascending/descending. Note that the Name column and the Indicator column of categorical indicators will sort alphabetically while the Indicator column of numeric indicators will sort numerically. Associate values (typically shown in columns to the right of indicator values) always sort as if they were text unless the administrator has defined otherwise.

Table of available areas - Magnifying Glass Icons

Click the magnifying glass icons to make the map zoom to individual geographic features. If you cannot see the map in this view drag the list of available areas to another place on the screen as it is most probably covering the map view.

Table of available areas - Notes Icons

Click these document icons to link to the 'Find your Health Profiles' web page.

Table of available areas - Legend Colours

Small circles shaded in the colour of the class which the data value of this area is within in the legend. This helps to get a better visual impression of the data.

Table of available areas – Scroll

A vertical scroll bar will be available if data cannot be viewed within the table dimensions.
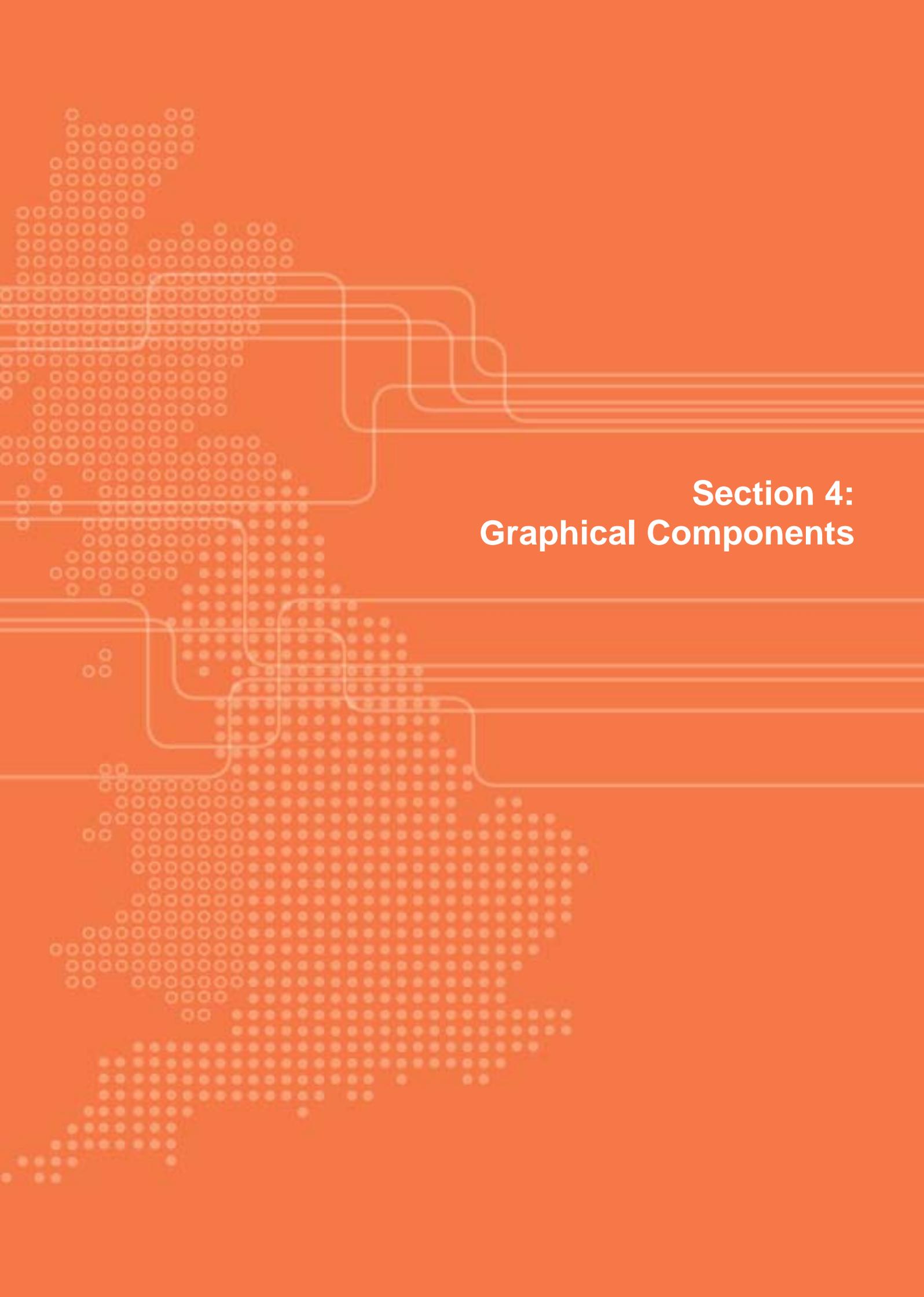
Section 4:
Graphical Components

GRAPHICAL COMPONENTS

Map

- *Shading:* Geographic features are shaded based on values in the data table according to the map legend.

- *Zooming:* Use the slider bar on the left of the map to zoom in and out. Click the zoom full icon (bottom magnifying glass) to zoom back to full extent. Alternatively, hold 'Shift' and click and drag a box on the map. The map will zoom to the area within the box drawn. You can also use the scroll wheel on your mouse to zoom in and out of the map

- *Menu:* Click on the little triangle in the map toolbar to open a menu with further options for the report. These are also available via the context menu (right click mouse button) and are explained in detail in the section Context Menu.

- *Area Selection:* 'Ctrl' and click and drag a box on the map. The map features within the box drawn will become selected.

- *Select a Geographic Feature:* Click on a geographic feature to select that feature. A selected geographic feature will be shaded orange. Hold down 'Ctrl' key to select multiple map features.

- *Tooltip:* Hold your mouse pointer over a map feature to display a tooltip with the geographic feature name and value.

Bar Chart

- *Bars:* For numeric indicator values there is a bar representing each geographic feature listed in the data table. The height of the bars is proportional to the values in the data table. Bars are displayed in the same order as the features are sorted in the data table and shading is linked to the legend.

- *Select a Geographic Feature*: Click a bar to select the corresponding geographic feature. A selected bar will be shaded differently. Alternatively, hold 'Ctrl' to select multiple bars or 'Shift' to select a range of bars. You can also drag a box to select multiple bars on the chart. Holding the 'Ctrl' key and clicking on a selected bar allows you to deselect it.

- *Error Bars:* The bar chart may display error bars representing the lower and upper confidence limits associated with indicator values. These give an indication of whether the differences between indicator values are statistically significant.

- *Comparison Values:* The bar chart can display values for comparison geographies as well as features in the base geography. Values for comparison geographies are shown using a horizontal line across the chart.

- *Tooltip:* Hold your mouse pointer over a bar to display a tooltip with the geographic feature name and value. It might also show the lower and upper confidence limit values of error bars.

Pie Chart

- *Slices:* The number of slices and shading is linked to the legend. The size of each slice is proportional to the number of geographic features in the corresponding

category. *Note: If the data groupings cannot be divided into number of groups selected the pie chart will not appear as expected.*

- *Select a slice:* Click a slice to select the corresponding geographic features. A selected slice will be seperate from the pie.

- *Tooltip:* Hold your mouse over a slice to display a tooltip with the name of the category and the proportion of geographic features in this category.

Legend

- *Legend:* The legend is displayed in the map layers list. It can be controlled by clicking on the 'pencil' icon next to the base geography name in this list. This will open the Legend Settings dialogue box.

- *Legend Settings:* The items available in the Legend Settings dialog may vary depending on the data in the report and the way the report has been configured.

- *Border colour:* The colour of the border around each geographical feature on the map.

- *Transparency:* By sliding the bar the transparency of the shaded features in the map can be altered.

- *Palette:* You can change the colour palette used to shade geographic features in the map by clicking on a new palette.

- *Reverse Palette:* By checking this box you can reverse the colour palette used to shade geographic features in the map.

- *No. Classes:* You can increase or decrease the number of classes by clicking the Increase or Decrease buttons (labelled with black arrows). The administrator may have fixed the maximum number of classes.

- *Classifiers:* Select a classifier from the drop-down. This will decide how the ranges are calculated.

- *Equal Interval:* The intervals between class breaks are equal. Class breaks are calculated on-the-fly and will update if you change the number of classes. Geographic features in the same class are given the same shade. The administrator may have configured the report so that the class breaks are the same across all indicators in the report. The advantage of the equal-interval classification is that many map users will find it simple to understand. However, a disadvantage is that only the minimum and maximum data values are used when determining class breaks for the intervals (rather than the way the data is spread).

- *Quantile:* Each class in the legend contains an approximately equal number of geographic features. Class breaks are calculated on-the-fly and will update if you change the number of classes. Geographic features in the same class are given the same shade. Two advantages of the quantile classification are that it is appropriate for ordinal data (as data are rank-ordered) and that it can help make map comparisons (assuming that the same number of classifications is used for all maps). A disadvantage of the quantile classification is that it does not consider how the data are distributed. If the data distribution is highly skewed, data observations will be forced into the same class (either the lowest or highest) where this may not be appropriate. As a result, the quantile classification may give a false impression that there is a relatively normal data distribution.

- *Natural Breaks:* This classification method is also known as Optimal Breaks and Jenks' Method. Class breaks are calculated on-the-fly and will update if you

change the number of classes. Data are assigned to classes based upon their position along the data distribution relative to all other data values. An iterative algorithm is used to assign values to classes such that the variances within all classes are minimized whereas the variances among classes are maximized. The advantage of this classification is that the data distribution is explicitly considered for determining class breaks. However, the disadvantage is that map users may not understand the classification method used and that class breaks may not be immediately intuitive.

- *Continuous:* Each geographic feature is shaded a different shade using a continuous scale. This legend type is useful for identifying extremely high or low values. Where an indicator has only a small number of unique data values (say 5 or less) this may be the most appropriate legend type to apply.

- *Standard Deviation:* Class breaks reflect the number of standard deviations from the data average (or mean). Geographic features are classified according to how many standard deviations above or below the average their indicator value falls. Geographic features in the same class are given the same shade. You cannot change the number of classes for this legend type.

- *Min Point Size:* If the data in your dynamic report is being displayed as proportional symbols (points), then you can set the size of the smallest point(s) here.

- *Max Point Size:* If the data in your dynamic report is being displayed as proportional symbols (points), then you can set the size of the largest point(s) here.

- *Highlighting and Selecting:* Hold your mouse pointer over a class in the legend to highlight the geographic features that fall into that class. Click a class to select the geographic features that fall within that class.

Comparison Geographies Table

This table lists any comparison geographies that have been included in the report. The administrator may have configured the report so that comparison values are displayed in charts when you hold your mouse pointer over a comparison geography name.

Scatterplot in the Double Map Atlas only

The scatterplot displays the relationship between data for two different indicators. Read the axis labels to see which data are being plotted. Hold your mouse pointer over a dot in the scatter plot to display a tooltip with the name and values of the geographic feature it relates to. The administrator may have configured the report to display a correlation coefficient, line of best fit and an equation for this line. The correlation coefficient is Person's Product Moment Coefficient.

Spine Chart in the single map atlas only

The spine chart displays cross-indicator information (i.e. a profile) for any selected area(s). It does this using text, symbols and proportional bars. A legend is shown at the bottom of the chart. Select a geographic feature in the map, data table or bar chart to make it appear in the spine chart. It is possible to select further features by holding down the 'Ctrl' key and clicking them. Up to 10 further areas can be selected

in this manner. The selected area(s) will be shaded orange and the geographic feature name(s) will be displayed in the spine chart.

The proportional bars represent the range of indicator values within local authority areas in England. The round dot show the point on this proportional bar for the indicator values of any area(s) selected. The diamond on the proportional bar shows the regional value (Strategic Health Authority Areas in the South East). The central red vertical line represents the English average value. For each indicator, minimum/maximum local authority areas values are shown at either side of the bar column. You can scroll the chart to see indicators that are listed further up or down. At the bottom of the spine chart you will find '-' and '+' buttons. These will collapse and expand the themes in the chart.
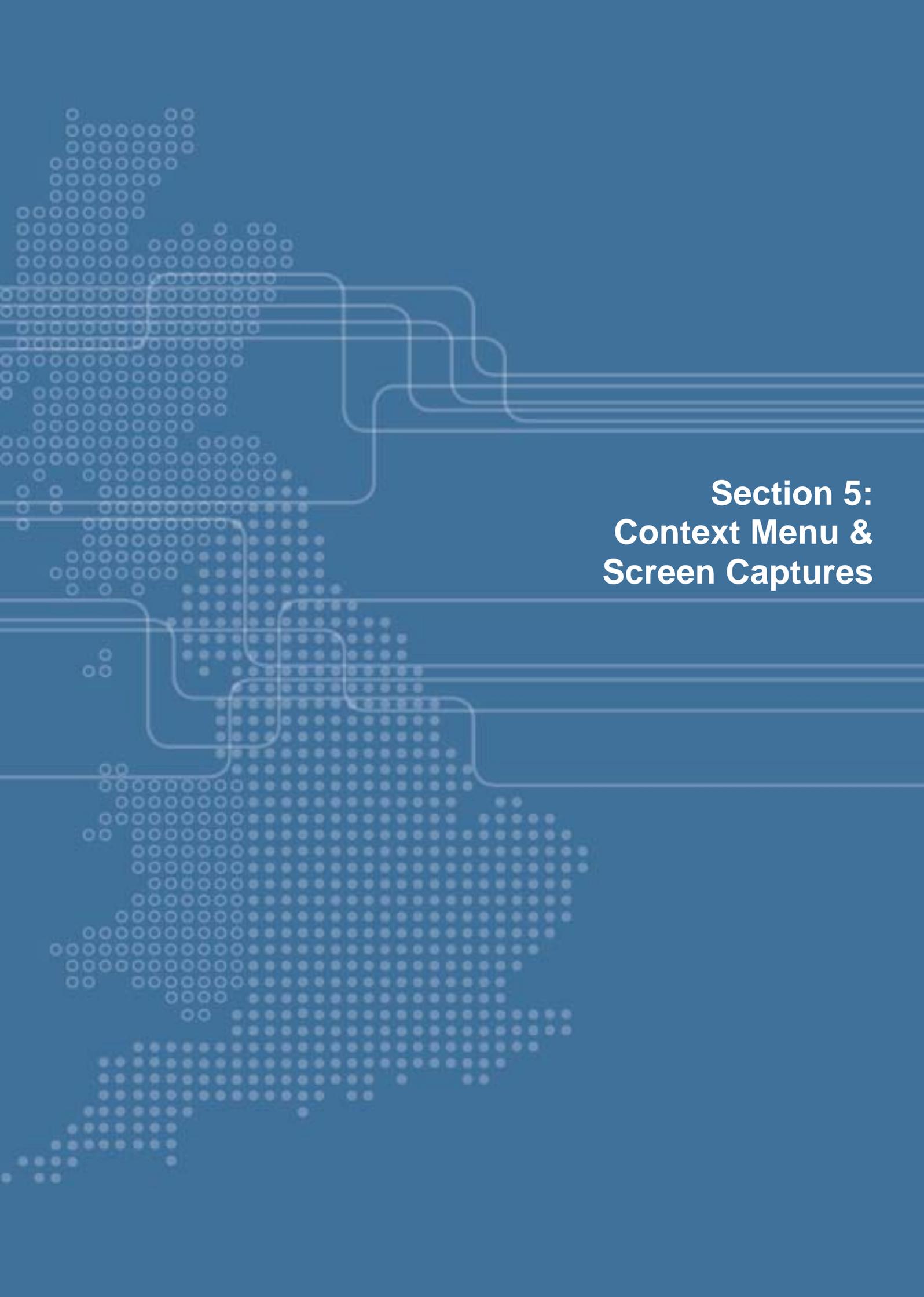
Section 5:
Context Menu &
Screen Captures

CONTEXT MENU

The Context Menu can be accessed by right-clicking on your mouse.

Clear Selection

This option allows you to deselect all geographic features that are currently selected.

Clear Comparison Selection

This option allows you to deselect all comparison geographies.

Filter Selection

This option allows you to create a filter from the geographic features that are currently selected.

Clear Filter

This option allows you to clear a filter that has been applied.

Print Preview

This option allows you to print either the full InstantAtlas™ dynamic report or individual components of the report. You can also decide if you want to print the dynamic report in Vector or Bitmap format. If you want any layers to have transparency (e.g. if you have background mapping switched on) you should choose to print in Bitmap format. If you do not require transparency of you may choose the Vector format which provides best quality.

You have the options to have the buttons within the InstantAtlas™ dynamic report showing in your printed output. You can also choose to have the images and the background appear in the printed output by checking or un-checking the respective boxes.

Export

This option allows you to export the full InstantAtlas™ dynamic report or individual components of the report in either JPEG or PNG format.

Reset Layout

This option allows you to return to the original layout of the InstantAtlas™ dynamic report.

Add Text

This option opens a text editor window that allows you to add custom text to the report. Different styles for the text can be defined before it is added. Once in the report, the text can be dragged to a different position. The 'Remove All' button of the text editor window deletes all custom text. Single text elements can get removed by selecting and pressing the 'Delete' key on your keyboard.

Add Shape

This option opens a shape editor window that allows you to add custom shapes to the report. Different styles for the shape can be defined before it is added. Once in the report, the shape can be dragged to a different position. The 'Remove All' button of the shape editor window deletes all custom shapes. Single shapes can get removed by selecting and pressing the 'Delete' key on your keyboard.

SCREEN CAPTURES

As well as printing or exporting via the Context Menu, you can capture an InstantAtlas™ report as a screen capture.

Make sure the graphics are as large as possible and then hold down Ctrl-Alt-Prnt Scrn on your keyboard. Open another application, such as Word or Power Point, and paste (hold down Ctrl-V on your keyboard) the screen grab. You can then edit the graphics (crop, resize, sharpen, etc) as required.