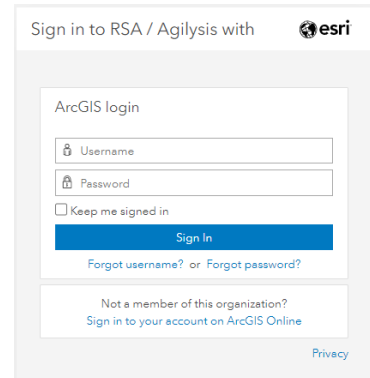
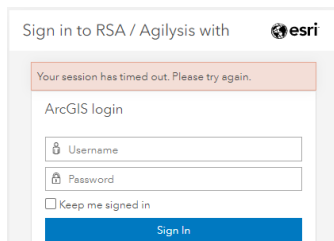


## ACCESSING SPEED COMPLIANCE DASHBOARD

The Speed Compliance Dashboard is accessed through the Esri ArcGIS Online portal using a Username and Password.



If you leave it too long before entering your log details you will get a 'Your session has timed out – Please try again' message.



## INTRODUCTION

The Speed Compliance Dashboard is designed for the interrogation of individual road sections or multiple road sections for comparison of the average recorded speeds to the National Speed limit.

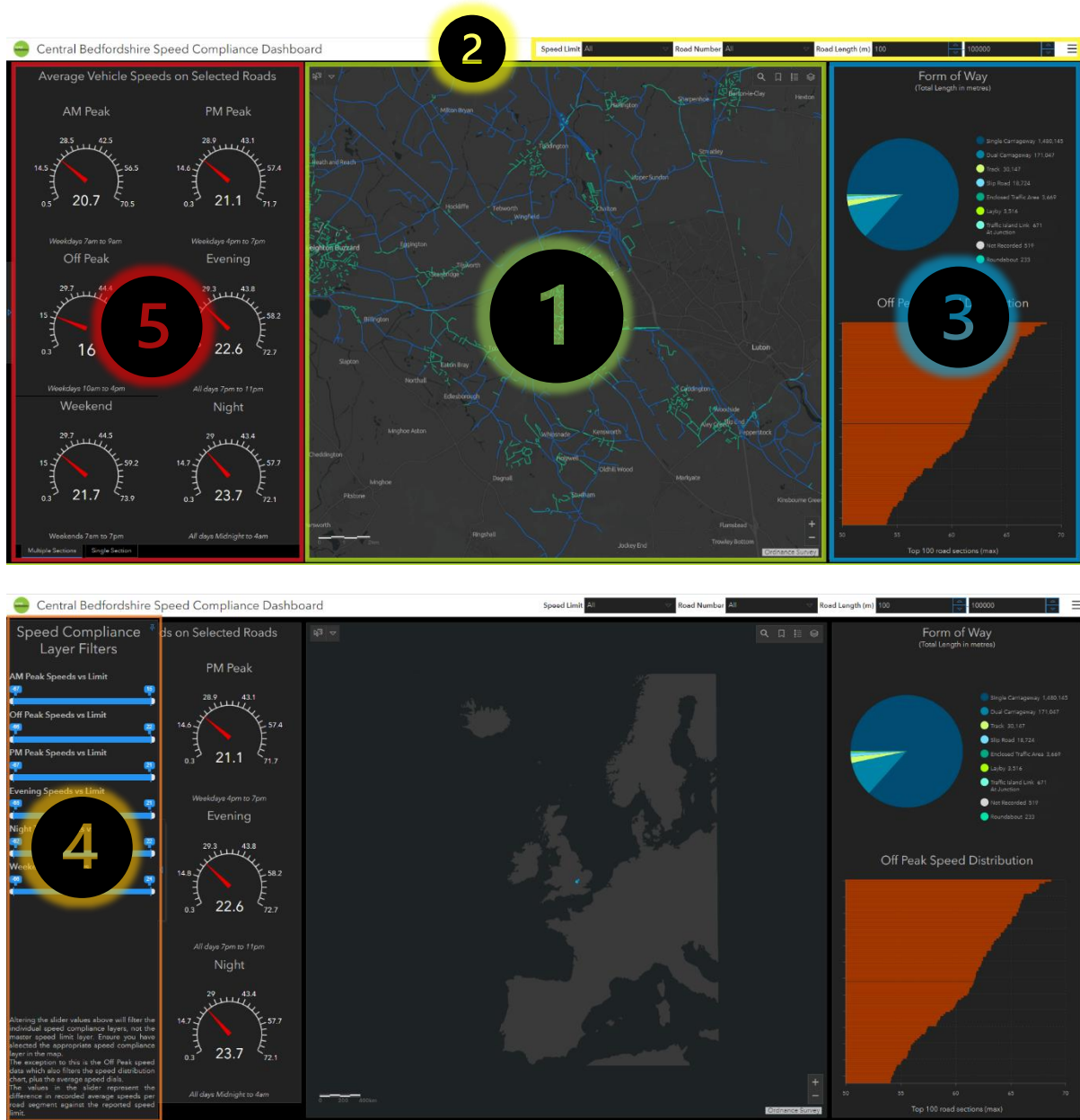
The dashboard shows speed limits for individual road segments based on the OS MasterMap Highways network, with six extra values supplied for average vehicles speeds at different times of the day and week. Coverage is widespread for the vast majority of roads

This User Guide has been created to guide you through the Dashboard.

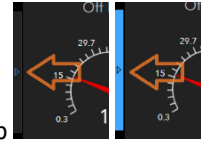
## THE DASHBOARD

### LAYOUT

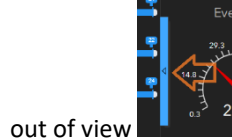
The Speed Compliance Dashboard is split into five parts.



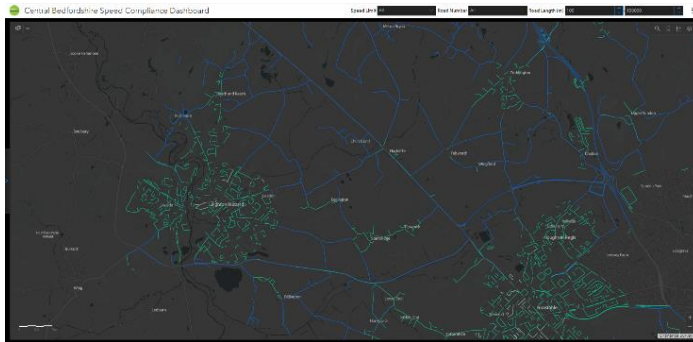
- 1 Interactive Map
- 2 Road Filtering Tools
- 3 Interactive Charts
- 4 Speed Compliance Filters
- 5 Results Indicators




Element **4** is a 'hover' panel and is hidden by default. By clicking on the tab in the centre of the right edge of the Dashboard, the panel will slide into view. Clicking on this tab again and the panel will slide



out of view. It is discussed in full in the 'Speed Compliance Filters' section.



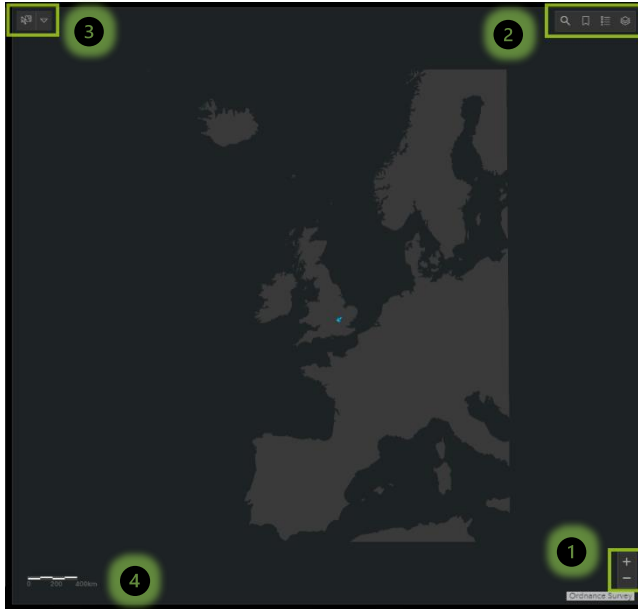
When moving the mouse pointer in elements **1**, **3** or **5** a  symbol appears at the top right, clicking on this will expand the element to fill the window, temporarily hiding the other elements.

By repeating this process the expanded element will return to it's original size and position

## INTERACTIVE MAP

1

The Map takes up the centre of the Dashboard and is used to query and select individual or multiple sections of road.



There are several buttons around the edges of the map area, highlighted by green boxes – these are explained below.

## NAVIGATION:

1

The easiest way to navigate the map is by using the mouse. You can pan around the map by clicking, holding, and dragging with Mouse button 1 and you can zoom by using the mouse wheel.

The zoom can also be changed by using the and buttons at the bottom right of the map.

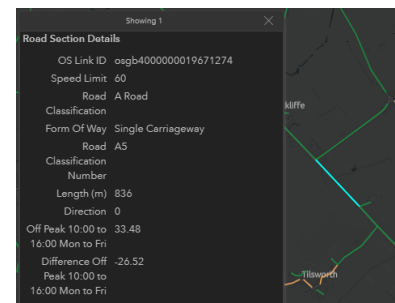
## INTERACTION

2

Clicking on a feature on the map will display a pop-up of attributes about the selected feature. The selected feature will be highlighted on the map

The pop-up can be closed by either clicking anywhere on the map or by clicking the button at the top right of the pop-up

*Note: The attributes displayed will be different for different layers*

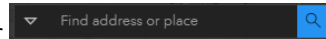



There are 4 buttons at the top right of the map .

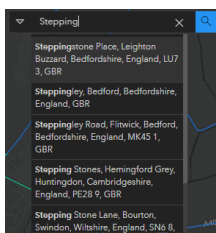
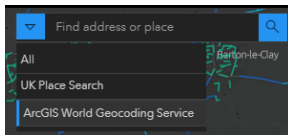
These are (left to right) 1. Search , 2. Bookmarks , 3. Legend , 4. Layer List .

## 1. Search

Clicking on the search button brings up the search bar




There are 2 options in the search bar, by clicking in the down arrow  you can choose either 'UK Place Search' which will limit the search to a street level search, or 'ArcGIS World Geocoding Service' which will perform a full postcode address level search.

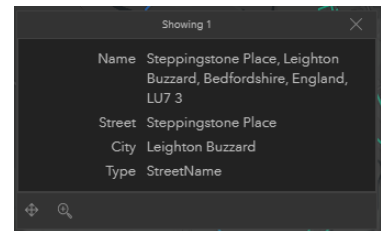


Typing in the search bar will start to display addresses, narrowing the search. As you type more details a dropdown of possible matches will be displayed.

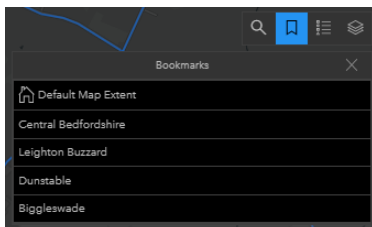
By clicking on the correct location match, the map will zoom to that location.

A small square will display showing the centre of the location  and a pop-up window will display details of the location.

Clicking anywhere on the map will make these disappear



## 2. Bookmarks



Clicking on the Bookmarks button will display a dropdown list of locations that can be zoomed to directly. By simply clicking on one of the locations in the list, the map will zoom to a predetermined extent, making it easy to locate larger urban areas on the map.


The 'Default Map Extent' will zoom to the initial Dashboard map view\*\*.

The second bookmark in the list will zoom to the extent of the area the data covers.

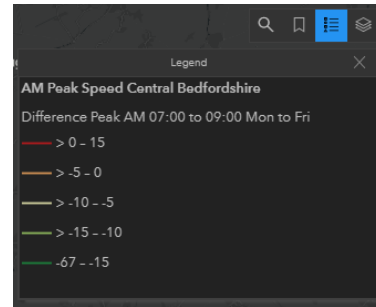
**\*\*The initial extent is currently set to the UK – this is a known limitation of the underlying software when using Ordnance Survey base-mapping.**

### 3. Legend



Clicking on the legend button will display the legend window.

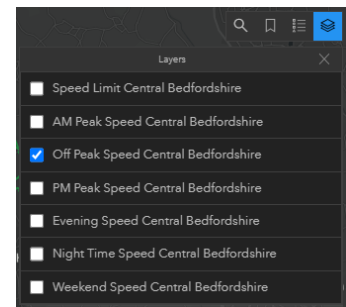
Clicking the  top right of the legend will close the window

*Note: The layers displayed in the legend are controlled by the layer list*





### 4. Layer List

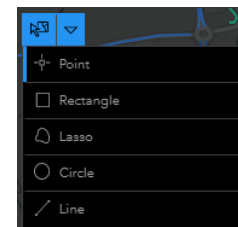
Clicking on the Layer List button opens the Layer List window. Displaying the list of available layers. Simply toggle the layer visibility by clicking the Layer On  or Layer Off  check box



### SELECTION

The final button, top left is the select tool , used to select route sections on the map. When clicking on the button it will change to blue  to show it is active.

Clicking on the down arrow  will display a dropdown list of selection methods.



There are 5 selection options –

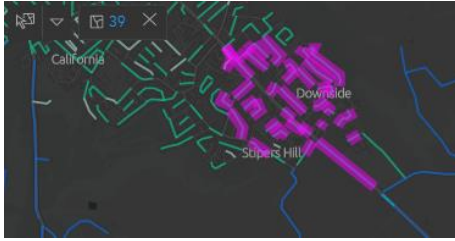
Point – the default selection method – where you click on a feature to select it.

Then Rectangle, Lasso, Circle and Line – where you click, hold & drag the mouse pointer, and then release.





The current selection method is highlighted by a blue line at the left edge .

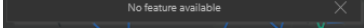
*Note: The selection tool will remember the last selection method.*



Selected features will be highlighted in pink

The number of selected features is shown in a box  to the right of the selection tool button

Clicking on the cross  next to the number of selected features will deselect these features.

If no features are found the following  is displayed below the selection tool.

*Note: The selection tool only works with the 'Speed Limit' layer*

#### SCALE BAR

4

There is a scale bar in the bottom left of the map . The value displayed will change dynamically with the map scale

#### ROAD FILTERING TOOLS

2

Along the top of the Dashboard are several category selectors. These are used to filter the number of route sections visible and selectable in the map.

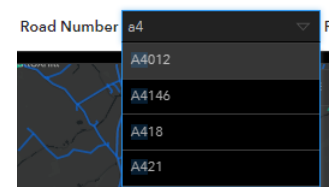
Speed Limit  All Road Number  All Road Length (m)  100  100000 

##### Speed Limit and Road Number

These are drop-down category selectors.

When you click on the box a drop down of attribute values (Speed Limit / Road Number) is displayed, you can type in the box to filter values.



Clicking on an attribute value in the drop-down list will filter the features on the map and the Interactive charts to those that meet the selected criteria.



##### Road Length (m)

The number of selectable features can be limited by recorded road length.

There are 2 input boxes for minimum and maximum road length values.

The value can be typed into the box or can be incrementally increased and decreased by 1m at a time using the  and  buttons.

As with the Speed Limit and Road Number category selectors, changing the road lengths will filter the features on the map and the Interactive charts to those that meet the selected criteria.

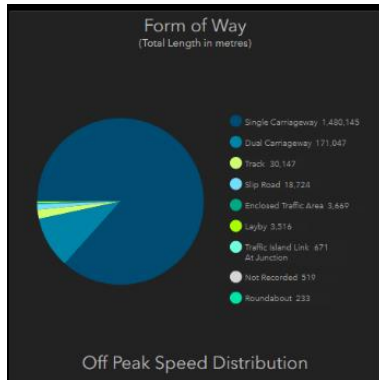
#### INTERACTIVE CHARTS

3

There are 2 interactive charts on the right side of the dashboard.

At the top, the 'Form of Way' pie chart and below, the 'Off Peak Speed Distribution' bar chart.

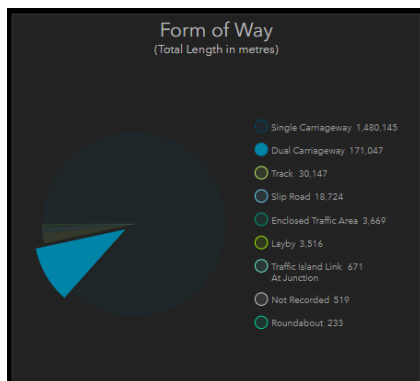
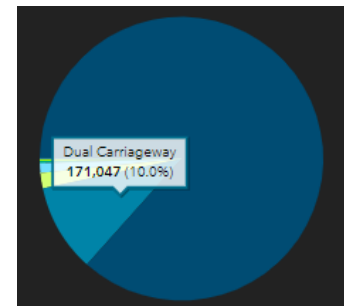
These charts effect and respond to different elements of the Dashboard.

**'Form of Way' Pie Chart**

The 'Form of Way' pie chart shows the total length in metres of the different 'Form of Way' for the road features.

The 'Form of Way' pie chart is linked to the Selection tool, and the Road Filtering tools and will limit values to those of selected roads.

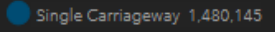
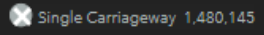
Hovering the mouse pointer over the pie chart will display information about a segment.



The pie chart can be used to filter the features on the map to show a specific 'Form of Way' by clicking on a section of the pie chart

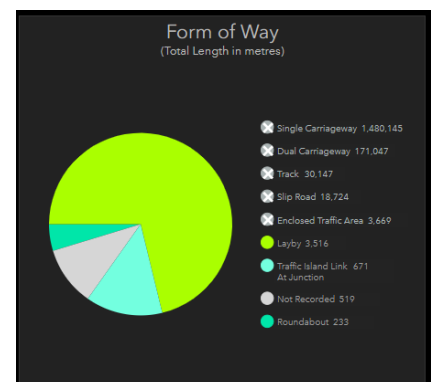
Clicking on the blank space around the pie chart will cancel the selection

The number of 'Form of Way' displayed can be filtered by clicking on the pie chart legend. This makes it easier to select smaller segments of the pie chart.

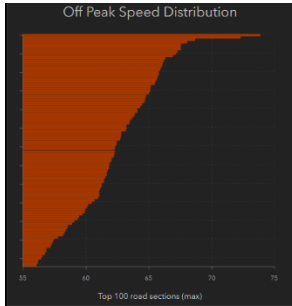
When you click on an item  in the legend it will change to a cross  and that 'form of way' will temporarily be removed from the pie chart.

Clicking on the legend item again will cancel this.

*Note: If you then click on a segment of the pie chart to filter the map, the legend will revert to its initial state*



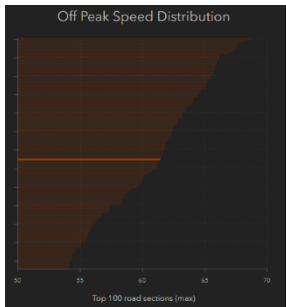
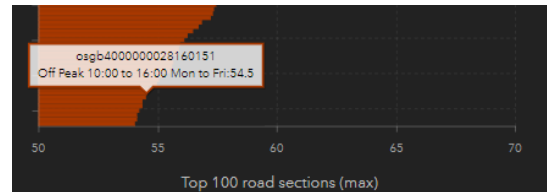
## ‘Off Peak Speed Distribution’ Bar Chart



The ‘Off Peak Speed Distribution’ bar chart shows the top road sections where Off Peak speeds are highest.

As the ‘Off Peak Speed Distribution’ bar chart is linked to the selection tool, the ‘Speed Compliance Filters and the Road Filtering tools, the number of routes displayed will change, to a maximum of 100.

As with the pie chart, hovering the mouse pointer over the bar chart will display information about the road section



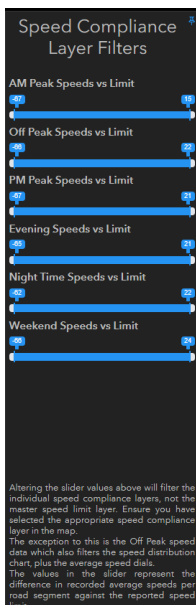
If you click on an individual value, the chart will highlight the road section and the map will zoom to the selected road section.

Clicking the area around the edge of the bar chart will reset the chart. When doing so the map will zoom out to the initial extent of the map

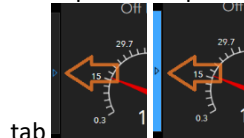
*Note: The ‘Form of Way’ pie chart and ‘Off Peak Speed Distribution’ bar chart respond to selection tool and will display only results of selected features.*

## SPEED COMPLIANCE FILTERS

4




The ‘Speed Compliance Filters’ is a hover panel that is hidden by default. By clicking on the

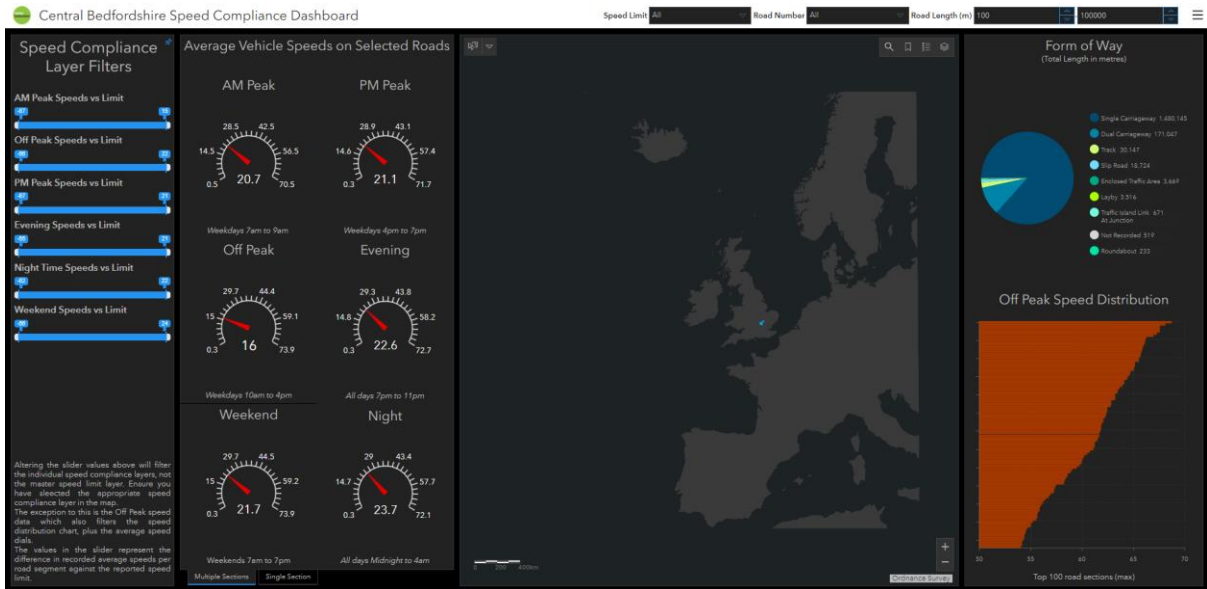



tab in the centre of the right edge of the Dashboard, the panel will slide

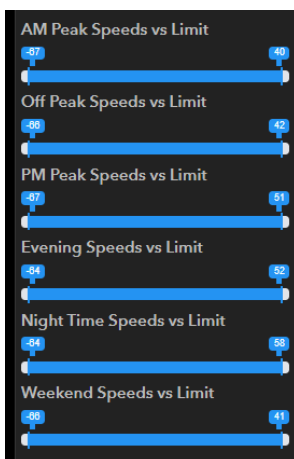


into view. Clicking on this tab again and the panel will slide out of view


The panel can be pinned in place by clicking on the  icon, at the top right of the panel to stop it obscuring the Results Indicators. The other elements will resize to fit.




Clicking on the  icon will return the panel to a 'hover' panel and it can be hidden when not needed.

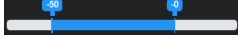


There are 6 sliders on the panel that correspond to the 6 'Peak Speed' time periods. They work in conjunction with the corresponding 'Peak Speed' layers'.

You need to make sure the correct layer is selected from the layer list .

The values in the slider represent the difference in recorded average speeds per road segment against the reported speed limit.

The sliders are adjusted by clicking, holding and dragging with the mouse pointer the blue numbered rectangles  above the slider

As the slider adjusts  the corresponding map layer adjusts the number of road sections displayed.

The 'Off Peak Speeds vs Limit' slider will also filter the 'Off Peak Speed Distribution' chart and the 'Average Vehicle Speeds on Selected Roads' dials.

*Note: There is no reset option for the sliders, so if the 'Off Peak Speeds vs Limit' slider has been changed it will effect the selection results for 'Average Vehicle Speeds on Selected Roads'.*

## RESULTS INDICATORS

5

The 5<sup>th</sup> and final element of the Dashboard are the 'Results Indicators'.

There are 2 results indicators – for single



and multiple



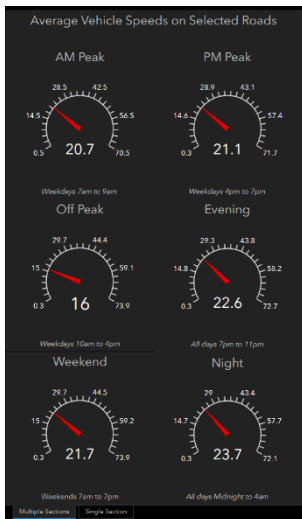
road sections.

They are selected from the tab at the bottom of the element

Multiple Sections

Single Section

### Multiple Sections – Average Vehicle Speed on Selected Roads



The 'Average Vehicle Speeds on Selected Roads' shows the average vehicle speed for multiple road sections. There is a dial for each of the 6 time periods.

By default each dial will show the average speed value for all roads.

The minimum and maximum speeds on the dials are the minimum and maximum average speeds recorded for that time period

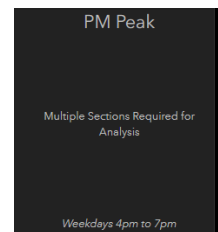
The dials will update in the following instances –

When the 'Form of Way' pie chart is used to filter 'form of way' road type.

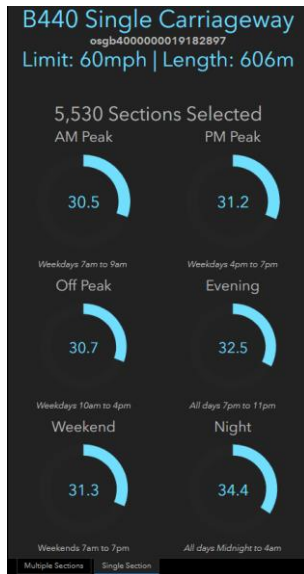
When multiple roads are selected using the selection tool

When changes are made to the 'Off Peak Speed Compliance vs Limit' Sliders

If a single road section is selected the dials are replaced by a 'Multiple Sections are Required for Analysis' message.



## Single Sections – Average Vehicle Speed on Selected Road

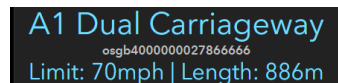


The Single Sections dials show the Average Vehicle Speeds on a Selected Road section. There is a dial for each of the 6 time periods, along with information about the road section at the top.

The dials will initially display the value of the first road section in the underlying data table

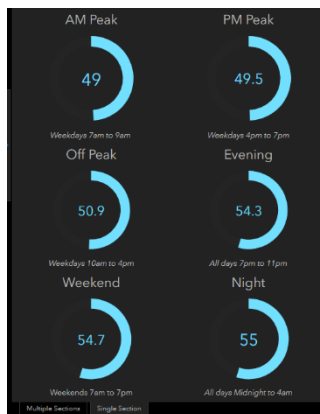
The top section will show details about the selected road section.

This will include 'Road Number' (if there is one), the Ordnance Survey code for the road section, The National Speed limit for the road section and the length of the road section in metres.



Below this is an indicator showing how many road sections have been selected.

535 Sections Selected



The lower section consists of the 6 dials. One for each 'Peak' time period

The dials will change when a road section is selected using the select tool



The 'Form of Way' pie chart and 'Off Peak Speed Distribution' bar chart will update when a road section is selected. Although the dials are not affected by

*Note: If multiple sections of road are selected, details for the road section that appears first in the underlying data table are displayed.*