# GUIDE TO USING THE MAPPING MUSEUMS DATABASE

# Introduction

You can search, browse, or visualise the museums data collected by the project. Please choose the appropriate tab from the Database drop-down menu:

**Browse** allows you to explore the museums data in a structured way according to various categories. **Search** allows you to choose your own search terms and to filter museums using any combination of categories. **Visualise** allows you to generate graphs showing numbers of museums, growth and closure patterns, and inter-relationships between pairs of categories.

Here, we have provided some examples showing you how to use Browse, Search and Visualise. There is also an online Help section available for each of Browse, Search and Visualise giving more information – that information is included also at the end of this Guide in the sections on Browse Detailed Help, Search Detailed Help, and Visualise Detailed Help.

# **Examples using Browse**

Click on the **Browse** tab in the Database drop-down menu to explore the data in a structured way according to various categories, shown in the left-hand-side panel.

For example, suppose we want to find all museums located in the North East of England. Click on Location in the left-hand-side list of terms, then on England, and then on North East. You will see displayed on the map the clusters of museums located in that part of the country. Click on one of the clusters to zoom in on individual museums. Click on the pin representing a museum to see its full details. Click on the Prev and Next arrows at the top of the details page to scroll through the full set of museums located in the North East of England.

As another example, suppose we want to find all the national museums. Click on Governance in the left-hand-side list of terms, then on Government, and then on national. You can click on a cluster to zoom in on individual museums. Click on the pin representing a museum to see its full details. (When you are using the Map view, click on + to zoom in, - to zoom out, and on the circular arrow to reset the map.)

You can also elect to see the set of national museums in the form of a List, by clicking on the List tab at the top of the page. Clicking on the Details tab allows you to scroll through these museums one by one.

As a final example, suppose we want to find all museums where the subject focus is Mining and Quarrying. Click on Subject Matter in the left-hand-side list of terms, then on industry and manufacture, and then on Mining and quarrying. Use the List and Details tabs at the top of the page to change the view.

Clicking on Browse Terms at the top of the page shows information about each of the top-level categories that are listed on the left-hand-side. For more examples of Browsing, please see the Browse Detailed Help section below.

# Examples using Search

As well as exploring the data via a selected category, you can also create your own search queries. Click on the **Search** tab in the Database drop-down menu to choose your search terms and to filter museums using any combination of categories.

For example, suppose we want to find all museums whose name contains 'Folk'. Choose Name from the Select attribute drop-down list, leave the Comparison criterion as 'Matches', and type Folk into the Value field. Press the Submit button to see the results of your search. Click on the box labelled Select output attributes if you would like to select a different attributes of museums from the default set of attributes shown in the results. Use the Details or Map tab at the top of the results to change the display from List.

Suppose now we want to see the subset of these museums which are Independent and not for profit. Click on Add Filter, choose Governance from the Select attribute drop-down list, leave the Comparison criterion as 'Matches', and select Independent:not for profit from the drop-down list in the Vale field. Press the Submit button to see the results of your search.

Suppose we are also interested in the museums that are Independent and Private. Click on Add Filter to add a third filter, choose again Governance, leave the Comparison criterion as 'Matches', and select Independent:Private from the drop-down list in the Value field. Press the Submit button to see the results. Notice that the list of museums returned now includes those whose governance is either Independent:not for profit or Independent:private.

Finally, suppose we are only interested in the museums that opened in or after 1960. Click on Add Filter, choose Year opened from the Select attribute drop-down list, choose After and including from the list of Comparison criteria, and type 1960 into the Value Field. Press the Submit button to see the subset of museums that we know *definitely* opened in or after 1960. To see the museums that *possibly* opened in or after 1960 change the Comparison criterion to Possibly After and including, and press the Submit button again – you will see a longer list of museums.

We can change the display of Search results to a Map or a Details view by selecting the Map or Details tab at the top of the page. We can remove a filter from a search by pressing on the x shown next to it (however, you cannot delete Filter 1). The results of any search can be downloaded by pressing on the Download CSV button at the top of the page. To start again with a new search query, press the Clear All button.

For more examples of Searching, please see the Search Detailed Help section below.

In addition to this facility for setting up detailed search queries, there is also a "quick search" facility that allows to you enter a search term into the Query box at the top of the left-hand pane, and then searches for occurrences of this term within the main museum attributes.

# Examples using Visualise

As well as searching the data, you can create graphs to view patterns of museum openings and closings according to different criteria. Click on the **Visualise tab** in the Database drop-down menu to generate graphs showing numbers of museums, growth and closure patterns, and interrelationships between pairs of categories.

For example, suppose we want to see the number of museums open in a particular year. Select 'open at a given time' from the list of items under Number of museums in the left-hand-side panel. Then select All to see a bar chart of the total number of museums that are open in the current year. You can change the year being viewed by using the slider beneath the chart.

You can also break down the number of open museums according to the categories listed under 'open at a given time'. For example, select Location to see the number of museums open in a given year broken down by the countries of the UK plus the Channel Islands and the Isle of Man. Again, you can use the slider beneath the chart to change the year being viewed.

Now select England (still under 'open at a given time') to see the number of museums in England open in a given year broken down by region. You can use the slider beneath the chart to change the year being viewed.

Finally select North West (still under 'open at a given time') to see the number of museums in the North West of England open in a given year broken down by county or Unitary Authority. Again, you can use the slider beneath the chart to change the year being viewed.

Suppose we now want to see the number of museums that are open over all years within one view. Select 'open over time' from the list of items under Number of museums in the left-hand-side panel. Then select All to see a line graph of the number of museums that are open in each year from 1960 to the present day. Hover the cursor over the icons in the top right-hand corner to investigate the ways that you can zoom into and explore the graph. More details about these icons and using them are given in **Exploring a line graph** in the section on Visualise Detailed Help below.

Now select Subject Matter (still under 'open over time') to see the number of museums that are open in each year broken down by Subject Matter. Select Belief and identify (still under 'open over time') to see the number of museums that are open in each year broken down by the subject subcategories of Belief and identity.

The number of museums that opened each year can be viewed by selecting 'openings over time'. The number of museums that closed each year can be viewed by selecting 'closings over time'. Selecting 'openings and closings over time' displays on one graph both the numbers of openings and the numbers of closings in each year since 1960.

Finally, the X and Y options under 'Table' in the left-hand-side panel allow correlations between pairs of categories to be explored. Click on X and then on Y to see the options available. For example, to see the number of museums of different Subject Matter that are open in each country of the UK, select Location under X and Subject Matter under Y. To drill down into Wales, select now Wales (still under X). To further drill down into Buildings, select now Buildings (still under Y). The year in question can be changed by using the slider beneath the chart.

For more examples of Visualise, please see the Visualise Detailed Help section below.

# Browse Detailed Help

The Browse option allows you to explore the museums data in a structured way. The data is organised according to a number of categories, listed on the left-hand-side of the screen:

• Accreditation

- Governance
- Size
- Subject Matter
- Location
- Year opened
- Year closed
- Geodemographic group
- Geodemographic subgroup
- Deprivation index

Please click on the Browse Terms tab for a description of each of these terms.

Clicking on one of these terms opens up its list of sub-terms. For example, clicking on Governance, we see the list

- Government
- Independent
- University
- Unknown

Clicking now on one of these sub-terms, say University, changes the display on the map to show the subset of all museums whose governance is University. The display on the map shows clusters of such museums, with the number of museums in each cluster; isolated individual museums are also indicated with a pin. Clicking on a cluster zooms in the display to show smaller clusters and pins. Hovering the cursor over a pin shows the name of that museum. Clicking on a pin allows you to click through to detailed data about the museum: scroll down to see the full list of details. For full explanations of the terms used in this detailed view, please see our Glossary.

You can use the Map, List, and Details tabs appearing at the top of the page to view the current set of museums on a map (the default); as a list; or to scroll through the museums and see full details about each one. For example, having clicked on Governance and then University, the current set is all museums whose governance is University.

In the Map view, you can click on + to zoom in, - to zoom out, and the circular arrow to reset the size of the map. You can press the Show Points button to change the display to show individual dots for each museum. You can press the Open Museums Only button to show just the museums that are currently open.

In the List view, you can click on a museum's name to see the detailed data about the museum. Once you are in the Details view, you can scroll backwards and forwards through the current set of museums using the Prev and Next buttons.

# **Examples of using Browse**

# Example 1

To see all the museums in Powys, click on Location in the left-hand-side list of terms, then on Wales, and then on Powys. You will see displayed on the map the clusters of museums in that part of the country. Click on one of the clusters to zoom in on individual museums. Click on the pin representing a museum to see its full details. Click on the Prev and Next arrows at the top of the details page to scroll through the full set of museums located in Powys.

# Example 2

To see the museums whose year of opening was 2000, click on Year opened in the left-hand-side list of terms, then on post-1960, then on 2000 (to select the decade of years 2000-2009 inclusive), and then on 2000 to select the year of opening. You will see displayed on the map the museums whose

year of opening was 2000. Click on the List tab at the top of the page to see those museums as a list, in alphabetical order of their names. Click on one of those museums to see its full details. Click on the Prev and Next arrows at the top of the details page to scroll through the full set of museums that opened in the year 2000.

Please note that for many museums we know their precise year of opening, e.g. Catton Hall opened in 2000. However, for some, we only know that they opened some time between a range of years, e.g. Boys Brigade Heritage Museum opened some time during 1990-2010. When browsing by Year opened, the mid-point of the date range is taken to be their year of opening for those museums that do not have a precise year specified. So, for example, both Catton Hall and Boys Brigade Heritage Museum appear in the set of museums that opened in the year 2000.

Browsing by Year closed works similarly.

#### Example 3

To see the museums located in regions of the country whose Deprivation index is 4, click on Deprivation index in the left-hand-side list of terms, and then on 4 to see displayed on the map clusters of those museums. Explore and drill down into this set of museums in the same way as in Examples 1 and 2.

Browsing on Geodemographic group and Geodemographic subgroup works similarly to browsing on Deprivation index: you can select museums located in regions of the country that are classified into a particular Geodemographic group/subgroup.

# Search Detailed Help

Search allows you to set up your own search queries over the museums data. Use the Select attribute drop-down list on the left hand side to choose the category that you wish to search with; a description of each category can be found by clicking on the Search Terms tab. After selecting the search attribute, enter your required search Value, and then select the Comparison criterion from the drop-down list. Finally, press the Submit button to see the results of your search.

**Changing the display to a map:** To see the museums returned by your search displayed on a map, select the Map tab at the top of the Results page. You can manipulate this Map view in the same way as in Browse.

Seeing the full data held about each museum: Select the Details tab at the top of the Results page to see the full set of data held for each museum. This allows you to scroll through the museums using the Prev and Next buttons and to examine their full details.

**Changing the output attributes in the List view:** If you are viewing the results as a list, and you wish to change the attributes displayed for each museum, click on the box labelled Select output attributes to see the possible options. Ticking the option All attributes will return the most significant attributes of the museums. Press the Submit button to reload the results and show your selected attributes.

**Narrowing your search by adding more filters:** Use the Add Filter button to narrow your search by adding filters on more categories. You can create up to 10 filters. To remove a filter, press on the x shown next to it (however, you cannot delete Filter 1).

Starting a new search: To start again with a new search query, press the Clear All button.

**Downloading the search results:** The results of any search can be downloaded by pressing on the Download CSV button at the top of the page.

**Examples of searches:** Examples of setting up filters on each category are given below. Examples of searches with multiple filters are given after that, followed by some additional search tips.

# Searching with Name

Choose Name from the Select attribute drop-down list, leave the Comparison criterion as 'Matches', and type

Folk

into the Value field. Press the Submit button to see the results of your search. You will see that these are the museums whose name contains the sequence of characters 'Folk', e.g. Castle Farm Folk Museum. Note that the search is not case-sensitive so, for example, museums whose name contains 'folk' will also be returned, e.g. Suffolk Regiment Museum.

Click on the box labelled Select output attributes if you would like to see different attributes of museums from the default set of attributes shown in the results. Use the Details or Map tab at the top of the results to change the display from List, which is the default.

To see the museums whose name does not contain the sequence of characters 'Folk', change the Comparison criterion to 'Not Matching'.

# Searching with Village, Town or City

Use this to search for museums within a particular village, town or city. For example, typing

Hull

into the Value field will retrieve all museums located in a village, town or city whose name contains the sequence of characters 'Hull'. The search is not case sensitive, so names that contain 'hull' will also be matched e.g. Solihull. Press the Submit button to see the results of your search.

To see the museums whose location does not contain the sequence of characters 'Hull', change the Comparison criterion to 'Not Matching'.

# Searching with Postcode

This is similar to Searching with Name and Searching with Village, Town or City. Type the postcode, or partial postcode, that you are interested in into the Value field, and press the Submit button to see the results of your search.

Change the Comparison criterion to 'Not Matching' to find museums whose postcode does not match this value.

# Searching with Admin area

This allows you to search for museums by their administrative area, e.g. a country, English region, unitary authority, or county council.

For example, to retrieve all the museums in Scotland, start to type the word Scotland into the Value field, and select 'Scotland' from the list of suggestions given by the system. Press the Submit button to see the results of your search.

As another example, to retrieve all museums in Cardiff, start to type the word Cardiff into the Value Field, and select 'Cardiff (Welsh UA)' from the list of suggestions given by the system.

# Searching with Accreditation

You can search for museums that are accredited or unaccredited by selecting 'Accredited' or 'Unaccredited' from the drop-down list in the Value field. Press the Submit button to see the results of your search.

Please see the Glossary for more information about professional benchmarks and the accreditation process.

# Searching with Governance

This allows you to search for museums according to their organisational structure by selecting the desired type of governance from options listed in the Value field. Click on the box next to 'Value' to open up the list of options. Press the Submit button to see the results of your search.

Please see the Glossary for more information about museums' governance.

# Searching with Size

This allows you to search for museums on the basis of their annual visitor numbers. Click on the box next to 'Value' to open up the list of options: huge (1million+), large (100,000-1million), medium (10,000-100,000), small (0-10,000) and unknown.

Please see the Glossary for more information about how museums' size is calculated.

# Searching with Subject Matter

Search for museums according to their overarching topic by selecting the desired topic from the options listed in the Value field. Click on the box next to 'Value' to open up the list of options. Press the Submit button to see the results of your search.

Please see the Glossary for more information about the classification of museums' subject matter.

# Searching with Visitor numbers data

This allows you to search for museums according to data that we have about their numbers of annual visitors. For some museums we do not have any data about their visitor numbers, so these museums will not appear in the list of results. For some museums we hold multiple historical records about their visitor numbers, in which case each record will be returned as a separate result, i.e. the same museum may appear several times in the list of search results.

For example, to find museums that have visitor number records showing annual visitors larger than and including 5000, click on the box next to 'Comparison criterion' and select 'Larger than and including' from the list of options. Type 5000 in the Value field, and press Submit to see the results of your search.

The full list of Comparison criteria for Visitor numbers data are as follows:

Smaller than
Larger than
Smaller than and including
Larger than and including
Specific number only

# Searching with Year opened

This allows you to search for museums that opened in, after or before a particular year. For some museums we know their precise year of opening e.g. Three Rivers Museum opened in 1987. For others, we only know that they opened some time between a range of years, e.g. Beeston Castle in 1980-1989, The Archaeology Centre in 1988-1993.

Click on the box next to Comparison criterion to see the full list of comparison criteria that are available to search on Year opened:

Before	Use this if you want to know which museums definitely opened before a given year. For example, if you type 1990 into the Value field, then Three Rivers Museum and Beeston Castle will be returned, but not The Archaeology Centre.
After	Use this if you want to know which museums definitely opened after a given year. For example, if you type 1988 into the Value field, then The Archaeology Centre will be returned, but not Three Rivers Museum or Beeston Castle.
Between	Use this if you want to know which museums definitely opened between a pair of years. For example, if you type 1980:1990 into the Value field, the Three Rivers Museum and Beeston Castle will be returned, but not The Archaeology Centre.
Before and including	Use this if you want to know which museums definitely opened before or in a given year. It works similarly to Before.
After and including	Use this if you want to know which museums definitely opened after or in a given year. It works similarly to After.
Specific year only	Use this if you want to know which museums definitely opened in a given year. For example, if you type 1987 into the Value field, only museums that are known to have definitely opened on that date will be returned, e.g. Three Rivers Museum.
Apart from	Use this if you want to know which museums definitely did not open in a given year. For example, if you type 1988 into the Value field, the results will include Three Rivers Museum, but not Beeston Castle or The Archaeology Centre.
Possibly Before	Use this if you want to know which museums possibly opened before a given year. For example, if you type 1990 into the Value field, then Three Rivers Museum, Beeston Castle and The Archaeology Centre will all be returned.
Possibly After	Use this if you want to know which museums possibly opened after a given year. For example, if you type 1988 into the Value field, then The Archaeology Centre and Beeston Castle will be returned, but not Three Rivers Museum.
Possibly Between	Use this if you want to know which museums possibly opened between a pair of years. For example, if you type 1980:1990 into the Value field, the Three Rivers Museum, Beeston Castle and The Archaeology Centre will all be returned.
Possibly Before and including	Use this if you want to know which museums possibly opened before or in a given year. It works similarly to Possibly Before.
Possibly After and including	Use this if you want to know which museums possibly opened after or in a given year. It works similarly to Possibly After.
Possibly Specific year only	Use this if you want to know which museums possibly opened in a given year. For example, if you type 1987 into the Value field, then museums that are known to have possibly opened on that date will be returned, including Three Rivers Museum and Beeston Castle, but not The Archaeology Centre.

Possibly Apart from	Use this if you want to know which museums possibly did not open in a given year.
	For example, if you type 1987 into the Value field, the results will include Beeston
	Castle, The Archaeology Centre but not Three Rivers Museum.

Please see the Glossary for more information on opening dates and date ranges.

#### Searching with Year closed

This allows you to search for museums that closed in, after or before a particular year. For some museums that have closed we know their precise year of closing. For others, we only know that they closed some time between a range of years.

Searching with Year closed works in the same way as searching with Year open, described above.

Please see the Glossary for more information on closing dates and date ranges.

#### Searching with Year exists

Use this to search for museums that were open in, after or before a particular year. For example,

- Beswick Museum opened in 1986 and closed in 2000; so that museum definitely existed all the years between 1986 and 2000
- Nursing History Museum opened in 1984 and closed some time between 2002-2009; so it definitely existed all years between 1984 and 2002, and possibly existed all years between 1984 and 2009
- London Fire Brigade Museum opened some time between 1960 and 1969 and closed in 2015; so it definitely existed all years between 1969 and 2015, and possibly existed all years between 1960 and 2015

The full list of Comparison criteria for Year exists are described below:

Before	Use this if you want to know which museums definitely existed before a given year (they may or may not have closed by that year). For example, if you type 1970 into the Value field, the London Fire Brigade Museum will be returned; if you type 1965, none of the above three museums will be returned; if you type 2001, all three will be returned.
After	Use this if you want to know which museums definitely existed after a given year but not earlier. For example, if you type 1985 into the Value field, Beswick Museum will be returned.
Between	Use this if you want to know which museums definitely existed during some part of the period between a pair of years. For example, if you type 1970:1985 into the Value field, Nursing History Museum and London Fire Brigade Museum will be returned.
Before and including	Use this if you want to know which museums definitely existed before or in a given year. It works similarly to Before.
After and including	Use this if you want to know which museums definitely existed after or in a given year but not earlier. It works similarly to After.

In	Use this if you want to know which museums definitely existed in a given year. For example, if you type 2008 into the Value field, London Fire Brigade Museum will be returned.
Apart from	Use this if you want to know which museums definitely did not exist in the specified year, either because they definitely closed before that year, or definitely opened after that year. For example, with a Value of 1985, Beswick Museum will be returned.
Possibly Before	Use this if you want to know which museums possibly existed before a given year (they may or may not have closed by that year). For example, if you type 1965 into the Value field, the London Fire Brigade Museum will be returned.
Possibly After	Use this if you want to know which museums possibly existed after a given year but not earlier. For example, if you type 1965 into the Value field, Beswick Museum, Nursing History Museum and London Fire Brigade Museum will be returned.
Possibly Between	Use this if you want to know which museums possibly existed during some part of the period between a pair of years. For example, if you type 1960:1980 into the Value field, London Fire Brigade Museum will be returned.
Possibly Before and including	Use this if you want to know which museums possibly existed before or in a given year. It works similarly to Possibly Before.
Possibly After and including	Use this if you want to know which museums possibly existed after or in a given year but not earlier. It works similarly to Possibly After.
Possibly In	Use this if you want to know which museums possibly existed in a given year. For example, if you type 2008 into the Value field, Nursing History Museum and London Fire Brigade Museum will be returned.
Possibly Apart from	Use this if you want to know which museums possibly did not exist in the specified year, either because they possibly closed before that year, or possibly opened after that year. For example, with a Value of 1965, Beswick Museum , Nursing History Museum and London Fire Brigade Museum will be returned.

# Searching with Notes

Additional information about individual museums has been logged by the research team within the Notes for each museum. Enter a search key into the Value field to find museums whose Notes contain your search key.

Keyword conventions that we have used within Notes are as follows:

Hybrid	We have used this keyword to record asset transfer museums i.e. museums that have outsourced the management of their collections to other bodies.
Governance change	We have used this to record museums that have changed their governance (NB this is not a complete list of such museums)

# Searching with Primary provenance of data

This allows you to search for museums according to the original source of the data that we hold about them. Click on the box next to 'Value' to open up the list of options. Press the Submit button to see the results of your search.

Please see the Glossary for more information about the provenance of the museums data.

# Searching with Deprivation index

This allows you to search for museums according to the relative deprivation of their location, with 1 being the most deprived and 10 being the least deprived.

For example, to find museums located in areas with deprivation index less than or equal to 3, click on the box next to 'Comparison criterion' and select 'Smaller than and including' from the list of options. Type 3 in the Value field, and press Submit to see the results of your search.

To find museums located in areas with deprivation index 4, select 'Specific number only' from the list of Comparison criteria and type 4 into the Value field. Press Submit to see the results of your search.

To find museums located in areas with deprivation index 2, 3 or 4, then additional filters are required: add a second filter on Deprivation index, with 'Specific number only' as the comparison criterion and 3 as the value; and then a third filter on Deprivation index, with 'Specific number only' as the comparison criterion and 2 as the value. Press Submit to see the results of your search.

This last search is an example of **Searching with multiple filters** (see below) with the search attribute being the same for all of the filters. In such a case, the results of each filter are combined (rather than being intersected, which is what happens with the results of filters on different search attributes).

Please see the Glossary for more information about the Deprivation index.

The full list of Comparison criteria for Deprivation index are as follows:

Smaller than
Larger than
Smaller than and including
Larger than and including
Specific number only
Apart from this number

# Searching with Geodemographic group / subgroup

This allows you to search for museums according to the geodemographic classification of their location.

Selecting the attribute Geodemographic group and clicking on the box next to 'Value' opens up the classification options for that attribute. Select one of these options and press Submit to see the results of the search.

Similarly, selecting the attribute Geodemographic subgroup and clicking on the box next to 'Value' opens up the classification options for that attribute ('subgroup' is a finer-grained characterisation than 'group'). Select one of these options and press Submit to see the results of the search.

Please see the Glossary for more information about the Geodemographic groups and subgroups.

# Searching with ACE Size designation

This allows you to search for museums according to the Arts Council England categories for museum size. Only museums for which ACE held this information are included in the search.

Click on the box next to 'Value' to open up the list of options. Press the Submit button to see the results of your search.

# Searching with AIM Size designation

This allows you to search for museums according to the Association of Independent Museums categories for museum size. Only museums for which AIM held this information are included in the search.

Click on the box next to 'Value' to open up the list of options. Press the Submit button to see the results of your search.

# Searching with DOMUS Subject Matter

You can search for museums according to the Digest of Museum Statistics (DOMUS) categories for museum subject matter, for those museums that DOMUS held this information.

Click on the box next to 'Value' to open up the list of options. Press the Submit button to see the results of your search.

# Searching with multiple filters

Suppose you want to find museums satisfying the following three conditions:

- the name of the museum contains the sequence of characters 'Folk'
- the name of the Village, Town or City the museum is based in contains the sequence of characters 'Nor'
- the museum is unaccredited

Set up a filter specifying the first condition. Click on Add Filter to set up a second filter specifying the second condition. Click again on Add Filter to set up a third filter specifying the third condition. Then press Submit to see the results of the search.

If you want to remove the second filter, say, press on the x shown next to it (note, however, you cannot remove Filter 1). If you want to add another filter, say to capture the condition that

• the subject matter classification is Rural Industry:Watermills

use Add Filter again to create a new filter specifying this condition.

**Multiple filters on the same attribute:** Notice that, so far, the search results are returning museums that satisfy all of the filters. This is generally how Searching works when each of the filters refers to a different attribute. However, when two or more filters refer to the same attribute, then their results are combined before then being intersected with the results of the filters on different attributes. To illustrate this, suppose we want to find the museums such that

- the museum opened before 1980, and
- the subject matter classification is Rural Industry:Watermills or the subject matter classification is Rural Industry:Windmills

To find these museums, we need three filters: one for museum opened before 1980, one for subject matter classification is Rural Industry:Watermills, and one for subject matter classification is Rural Industry:Windmills. The results of the second and third filters will first be combined. Then that set of museums will be intersected with the results of the first filter.

# Additional Tips for Search

(i) Searching is case-insensitive throughout the Search facility; so, for example, the words 'hybrid', 'Hybrid' and 'HYBRID' are regarded as being the same.

(ii) When you use two or more filters that are searching on different attributes, then the results of each filter are intersected. When you use two or more filters that are searching on the same attribute, then the results of these filters are combined before being intersected with the results of the filters on different attributes. For examples, please see **Searching with multiple filters** and **Searching with Deprivation index** above.

(iii) When you want to find asset transfer museums (i.e. museums that have delegated the management of their collections to other bodies), search on Notes with the value 'hybrid', because this is how we have recorded this information in the database. Please see **Searching with Notes** above.

(iv) When searching with Year exists, if you are interested in a specific year don't forget to change the Comparison criterion to 'In' rather than the default of 'Before'.

# Visualise Detailed Help

Visualise allows you to generate a variety of bar charts and line graphs that show the numbers of museums that are open or closed at a given time, and their growth and closure patterns. These charts and graphs are available under the Number of museums option in the left-hand-side list. The Table option in the left-hand-side list allows you to explore the inter-relationships between a pair of museum categories by generating a heatmap.

Let us look first at the charts and graphs available under Number of museums, and then at the heatmaps available under Table.

# 1. Number of museums

To explore the openings and closings of museums, select one of the options listed under "Number of museums" in the left-hand-side list. If you click on one of these options, this exposes a number of further options:

All Governance Subject Matter Size

Governance and Subject Matter are expandable into further sub-categories.

# Example 1

Select "open at a given time" and then All to see the number of museums open in a given year. Use the slider beneath the chart to change the year being viewed.

Now select Subject Matter (still under "open at a given time") to see the number of museums open in a given year, broken down by Subject Matter. Again, use the slider beneath the chart to change the year being viewed.

Now select Buildings (still under "open at a given time") to see the number of museums relating to Buildings open in a given year, broken down by different types of buildings.

Finally select Houses (still under "open at a given time") to see the number of museums relating to Houses open in a given year, broken down by different types of houses.

Selecting Governance, Size or Location under "open at a given time" works similarly, allowing the number of museums open in a given year to be broken down according to different categories.

Note that for any museum whose year of opening is recorded as a date range, the count of 1 museum is divided by the number of years in the range in order to determine its contribution to the total count for each year. For example, a museum recorded as opening during 1980-1989 contributes 0.1 to the total count of museums opening in each of the ten years 1980, 1981, ... 1989.

# Example 2

Select "that opened up to a given time" and then All to see the number of museums that opened up to a specific year (including museums that may have since closed).

Select Governance, Subject Matter, Size or Location under "that opened up to a given time" to break down these numbers according to different categories.

Use the slider beneath the chart to change the year being viewed.

For any museum whose year of opening is recorded as a date range, the count of 1 museum is divided by the number of years in the range in order to determine its contribution to the total count. For example, a museum recorded as opening during 1980-1989 contributes 0.1 to the total count of museums opening up to 1980, 0.2 to the total count of museums opening up to 1981, and so on, up to a contribution of 1 to the total count of museums opening up to 1989 (or later).

Select "that closed up to a given time" to explore similarly the number of museums that have closed up to a specific year. Museums whose year of closing is recorded as a date range are handled in the same way as in "that opened up to a given time" for to museums whose year of opening is a date range.

# Example 3

Select "open over time" and then All to see a line graph of the number of museums that are open each year since 1960.

Hover your cursor over the icons in the top right-hand corner to investigate the ways that you can zoom into and explore the graph. More details about these icons and using them are given in **Exploring a line graph** below.

Now select Governance (still under "open over time") to see the number of museums that are open in each year broken down by Governance.

Now select Independent (still under "open over time") to see the number of museums that are open in each year broken down by different types Independent museums.

Selecting Subject Matter, Size or Location under "open over time" works similarly, allowing the number of museums that are open each year to be broken down according to different categories.

# Example 4

Select "openings over time" and then All to see a line graph of the number of museums that opened in each year since 1960.

Select Governance, Subject Matter, Size or Location under "openings over time" to break down these numbers according to different categories.

Select "closings over time" to explore similarly the number of museums that closed in each year since 1960.

Select "openings and closings over time" and then All to see on one graph both the numbers of openings and the numbers of closings in each year since 1960.

# **Exploring a line graph**

Hover your cursor over the icons in the top right-hand corner to zoom into and explore the graph. Selecting one of these icons displays a blue vertical line next to it. Click on the icon again to "unselect" it. You can have a combination of icons selected at a time, so as to use concurrently their functionalities.

icon 1 (Pan) : Selecting this and then clicking on the graph allows you to move the display in any direction.

icon 2 (Box Zoom) : Selecting this, then clicking on the graph and drawing out a box allows you to zoom into the portion of the graph contained within the box.

icon 3 (Reset) : Press on this icon to reset the display to the default at any time.

icon 4 (Hover) : Selecting this allows you to hover with a cross over the graph. Positioning the cross over one of the points on the graph displays the information relating to that point.

icon 5 (Crosshair) : Selecting this allows to you move a crosshair over the graph, so as to see the x and y values associated with any given point by looking at where the crosshair meets the x and y axes.

# 2. Table

To explore the inter-relationships between different museum categories, select one of the X options and one of the Y options listed under "Table" in the left-hand-side list of options. You cannot choose the same option for X and for Y, they need to be different.

# Example 1

Select Size under X and Subject Matter under Y to see the number of museums of different sizes that there are for each subcategory of Subject Matter. Use the slider beneath the chart to change the year being viewed.

Now select Buildings (still under Y) to see the number of museums of different sizes that relate to each subcategory of Buildings.

Finally select Houses (still under Y) to see the number of museums of different sizes that relate to different types of houses.

# Example 2

Select Location under X and Deprivation index under Y to see the number of museums in England, Northern Ireland, Scotland and Wales that exist in areas with different deprivation index values. Use the slider beneath the chart to change the year being viewed. Please note that we do not have deprivation index data for the Channel Islands and the Isle of Man. (We also do not have geodemographic group or subgroup data for the Channel Islands and the Isle of Man.)

Select now Wales (still under X) to see the number of museums in each region of Wales that exist in areas with different deprivation index values. You can explore similarly England, Northern Ireland and Scotland. The England data can be further broken down for each region, and within that for each county.