

## Embedding fieldwork into the curriculum

Urban structure and the CBD are excellent topics to use to encourage students to look at their local town or city in more detail. Fieldwork in urban areas can link to a variety of topics and key skills, including:

Topics:

- The idea of place and space
- Urban sprawl, gentrification, use or Brownfield sites, Greenfield sites
- Patterns and processes within urban areas
- Urban structure
- Theory relating to reality
- Urban models
- Urban development and regeneration

Skills:

- Collecting a variety of data in different formats
- Analysing and interpreting data
- Quantifying visual environments
- Map skills
- Citizenship and social awareness

Cross curricular / Other Units in Geography NC:

- Unit 3: People Everywhere
- Unit 9: Shopping: Past, Present and Future
- Links to mathematics such as handling data, using number (ratio/proportion), shape, space and measure (coordinates)
- ICT links including using internet search engines, graphics or model prediction packages, spreadsheets
- key skills developed such as working with others
- citizenship links including topical social issues, expressing and explaining viewpoints
- history links such as work on phases of English settlement

Geography QCA Schemes of work can be found at

[http://www.standards.dfes.gov.uk/schemes2/secondary\\_geography/](http://www.standards.dfes.gov.uk/schemes2/secondary_geography/)

## Accompanying scheme of work

The scheme of work can be found under the “People Everywhere” unit:

[http://www.standards.dfes.gov.uk/schemes2/secondary\\_geography/geo03/?view=get](http://www.standards.dfes.gov.uk/schemes2/secondary_geography/geo03/?view=get)

The scheme of work which follows specifically relates to the time out on the fieldwork and work which helps to embed and support this back in the classroom. Extracts from the QCA scheme of work are used.

Topic	Key Questions	Objectives	Activity surrounding fieldwork day	Activity within fieldwork day	Possible Outcomes	Resources
People Everywhere	<p>How is land used in a town or city?</p> <p>Where are the different land-use zones found and why?</p> <p>How has the pattern developed?</p> <p>How is the pattern changing?</p> <p>How are different groups of people affected?</p>	<ul style="list-style-type: none"> <li>to use maps and secondary sources of evidence about patterns and changes in urban land use</li> <li>to collect and analyse different forms of data to construct conclusions</li> <li>to understand in detail characteristics which make up a land use zone (using the exemplar of a CBD)</li> </ul>	<p>Ask pupils to identify five to 10 different land uses on an aerial photograph of an urban area. Locate these on a 1:50,000 map (OS explorer number 155) and help pupils to draw a generalised plan of the pattern of land use evident, eg CBD, shops/services, open space, factory/work areas. After discussion ask pupils to add explanatory notes to it to suggest reasons for their relative locations.</p> <p>Show pupils a series of aerial photographs/video snippets/personal accounts which show how a settlement (or part of one) has changed over time, eg transformation of the CBD in Bristol. Then ask them to consider the advantages/disadvantages of the changes and how they will have affected different groups of people. Ask them to write about their findings/imagined responses in two paragraphs (one in favour and another against the changes).</p>	<p>Pupils carry out surveys along a transect which measure factors such as building height and use, environmental quality, pedestrian surveys, scoring locations and cost of car parking. They collect data in groups to analyse back in the classroom.</p>	<p>To produce a layered map (one base map with layers of tracing paper) which map out their results.</p> <p>To produce a group report which shows, using mapped out evidence and secondary data, where the edge of the CBD is. The title could be “An investigation into where “Broadmead*” should end.”</p> <p>*Broadmead is the name for the centre of Bristol.</p>	<p>OS map (explorer 155)</p> <p>GOAD map of Bristol – broadmead (Available through Experian) or other superplan map of Bristol.</p>

## Potential fieldwork locations

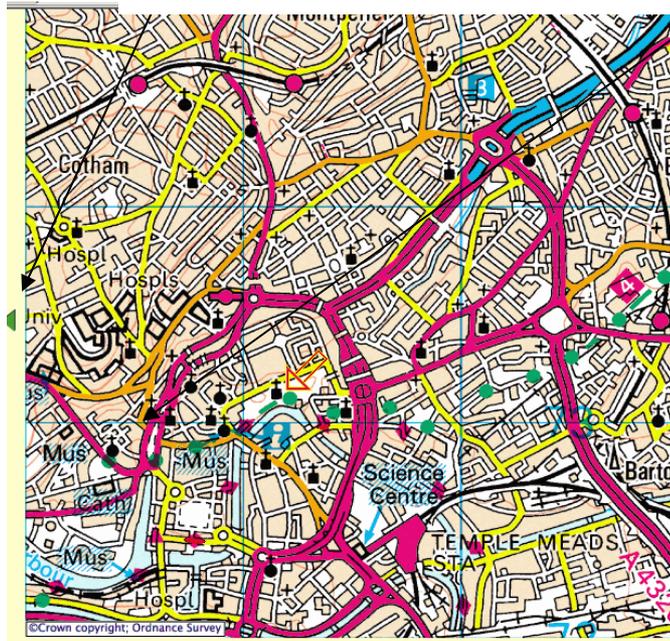
Meeting point: Castle Park (A) or Tourist Information (B)

Drop of points: Groups of pupils could be dropped off at points labelled (C) – (F) and to carry out the activities along a transect. They should then converge at Castle Park (A).

Alternatively, in groups, pupils can survey the same transect with starting times 5 minutes apart. (If there is a difference in the ability of the groups, then some could survey less of the transect).

D (Kingsdown, then down St Michaels hill and Christmas Steps)

C  
Cabot  
Tower



B  
(Tourist  
Information  
meeting  
point)

A  
(Castle  
Park  
meeting  
point)

F  
(Asda Car  
Park)

E  
(To walk through  
Queens square)

**Figure 1** Taken from [streetmap.co.uk](http://streetmap.co.uk)

A good vantage point is Cabot Tower (C on fig 1) From here groups can see the difference in height and functions in Bristol.

Ideally when planning transects there should be at least two – one going North – South and the other East-West. However do check the progress of the redevelopment of the centre of Bristol as this does make key areas not available to survey.

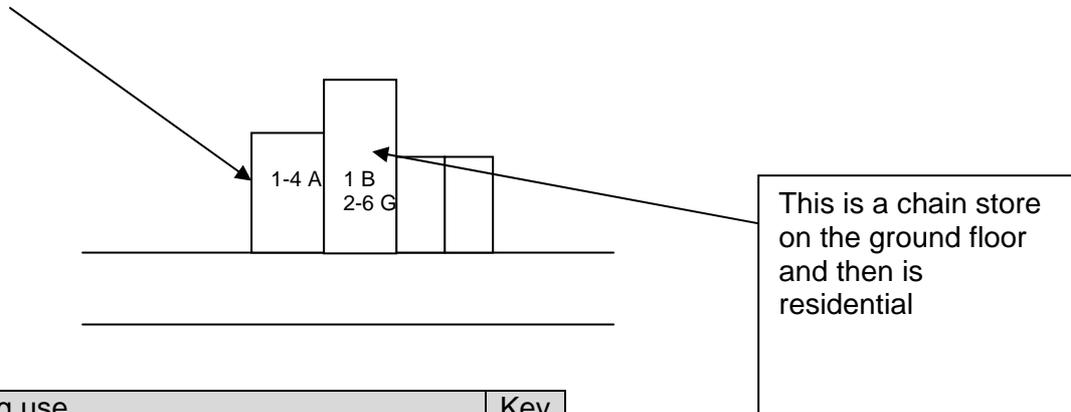
An alternative to a walking transect is to undertake this in a vehicle. This has constraints such as the central part of Broadmead is pedestrianised, and some of the major routes that could be used (eg Lewins Mead / Rupert Street) have buildings which hide some of the features that you would want pupils to see.

## Fieldwork activities

A base map (pre drawn or purchased with a scale such as 1:2500) is needed for many of these activities.

### *Use and height of building survey*

Eg this building is a total of 4 storeys and is a department store



Land / Building use	Key
Department Store	A
Chain Store	B
Supermarket	C
Specialist	D
Service	E
Office	F
Residential	G

The data could be collected on pre drawn base maps, or, the pupils could draw up what they see. Extensions could be applying a scale for shop frontage for each “box” on the diagram when they draw up the transect, and or a scale for the number of floors.

The table could also be filled in by the pupils as to how they would like to classify the buildings.

### *Pedestrian counts*

Conducting fieldwork in a large group means that a time could be set whereby each group should count the number of pedestrians that pass a certain point at a predetermined time. Points and timings need to be decided along the transects used. A simple tally chart can be drawn up as a result. Noting which way the pedestrians were walking (towards centre / away from centre) allows for flow diagrams to be compiled later on. Otherwise isolines can be plotted on a base map from the point data collected of the pedestrian counts.

This survey can be used to find out how and why pedestrian density and movement varies within the urban environment. Chose a variety of sample sites e.g. along main roads, near transport, peak and off peak times. Think about how the weather may affect the results of the survey. If multiple groups are used, all groups must sample their sites at the same time to ensure a fair comparison. Pedestrianised sites should be avoided as they show biased results. Land use and accessibility should be taken into consideration when analysing the results.

### *Area Scores*

The pupils can list features that they would expect to find in an urban area, and give a weighted score for each feature. An example is below. They carry this out at each point on their transect:

Location		
Feature	Points	Total points for area
Department store	10 per store	
Branch Store	5 per store	
Pedestrian area	10	
No residential buildings	10	
Buildings with more than 2 floors	2 per building, max 10 buildings counted	
Pedestrians (spot count)	2 points per 10 pedestrians	

Data collected in this way could be analysed through the drawing of a choropleth map.

### **Environmental Assessment**

Pupils can research problems in the environment and question whether the environmental quality declines as you move into the CBD. A simple table such as the one below can be used:

Problem	No. in site 1	No. in site 2	No. in site 3	No. in site 4	No. in site 5	No. in site 6	No. in site 7
Litter (per 5 large items)							
Vandalism							
Graffiti							
Fly posters							

### **Other ideas**

The availability and cost of car parking can be researched. For instance the cost per hour of car parking can be looked at in the multi-storey car park in “The Galleries” (in the centre of the CBD) and the on street car parking. Pupils can then ascertain whether this is further evidence as to where they would delimit the CBD.

Some pupils may further their work to see whether they would suggest that Bristol has a ‘core’ CBD, secondary CBD and a transition zone.

### **Urban transect**

By sampling 2 or more wards in the City, general comparisons can be made around the following topics:

- socio economic variations
- land use
- crime
- house type / age / value
- environmental quality
- Parking

- Population density.

### **General urban survey**

Pupils can look at drawing scattergraphs which show distance from the centre\* against factors such as shop frontage, number of storeys, pedestrian counts, and so on. An extension could be for pupils to draw an X axis of distance on graph paper and then overlay tracing paper with an appropriate scale marked on as a y axis for each factor.

\*The centre of Bristol is measured from “Bristol Bridge” when distances are shown on signposts. Pupils could extend their fieldwork to see whether this is a true reflection of the centre of Bristol today. Pupils could use this measure, or the distance to castle park / the meeting point.

A Spearman's rank can also then be used to ascertain whether the change, if any, that they see is significant. Pupils can be provided with a spreadsheet containing an Excel Macro which will carry out the calculations for them.

### **Things to think about**

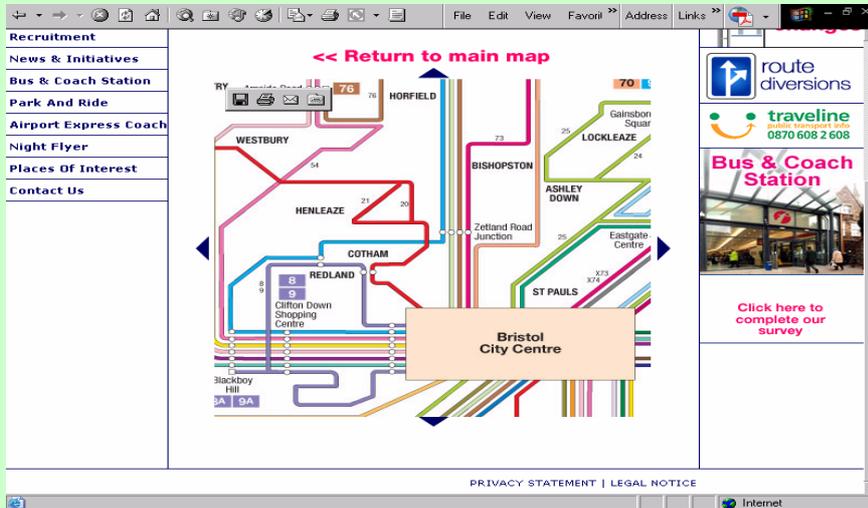
- Carrying out fieldwork in an urban area needs to be carefully planned and risks need to be considered. Basic principles, such as pupils never being in groups of less than three and so on should be adhered to.
- Broadmead is constantly changing as it is undergoing the biggest redevelopment project in the South West for 50 years. It is vital that routes are checked prior to embarking on fieldwork.
- If pupils are undertaking surveys around members of the public, ensure they have a briefing sheet in case people ask what they are doing. This should include information about the aims of the day, and how their results will be used in reports etc.
- Ensure that the areas you choose to focus on as part of the transect are sufficiently different to produce obvious variations.

## Adding value to your fieldwork with additional data

### Using bus routes

Bristol's bus routes can be seen in the website

<http://www.firstgroup.com/ukbus/southwest/bristol/map/mapindex.php>



Pupils can look into both the frequency and direction of the bus routes to further support / reject where they have delimited the CBD.

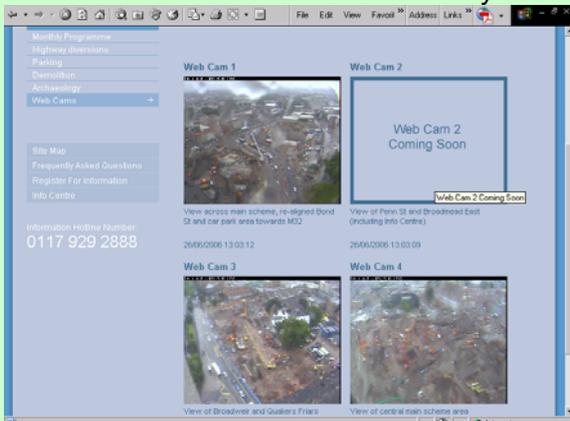
### Using business rates

<http://www.bristol-city.gov.uk/ccm/navigation/business/business-rates/>

Rateable values or business rates from the council could be investigated and again a correlation, if any, could be analysed.

### Using Bristol Alliance

<http://www.bristolcitycentre.com/default.asp?PageID=1> provides images and webcams of Broadmead – pupils can use this to investigate change that they see. They also provide education resource packs which can be used. Their website can be used as secondary data to look at whether the pupils feel that the images and impression given by the design for Broadmead are reflected in what they have seen.



## Using historical photographs

BristolHistory.com <http://www.bristolhistory.com/?pageid=46138> has a range of old historical images of Bristol and the surrounding area. These are an excellent resource for seeing how urban areas have changed over time, and can be used to look at differing functions, facilities and the development of the CBD. The site even offers a 'Then and now' section, where recent photographs have been taken from the same position as old images. An example of the old images is below, showing Hanham High Street

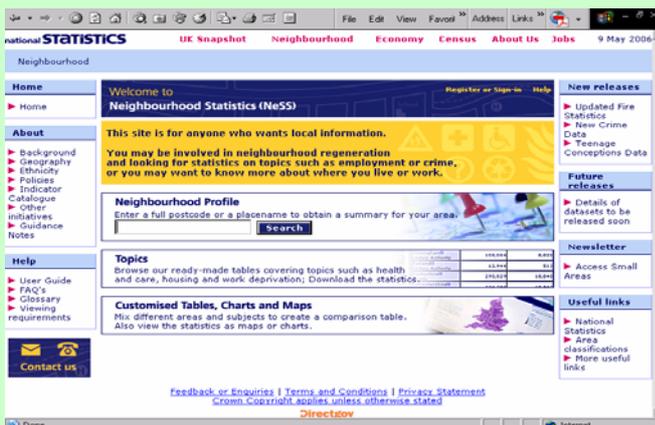


If you have access to local historical images, it is a great idea to allow students to work out the position from where these pictures were taken, then take the 'now' picture themselves. This can then be used back in the classroom to add value to any investigations, and to prompt discussion about the impact of change on residents, economics, tourism etc.

A photo collection can be used both as an introduction to the work on Bristol (sorting out the photos into each zone that they correspond to) or as an extension to the fieldwork to see whether Bristol does have a zonation of land use as expected from theory.

## Using Neighbourhood statistics

The Neighbourhood statistics website is extremely useful for a variety of topics links to urban fieldwork.



The Neighbourhood Statistics home page allows you to search for a neighbourhood profile (see above) at <http://neighbourhood.statistics.gov.uk/dissemination/>. This means that you can enter the name of any town, village or ward and their local data will be available. This will provide information such as population demographics, crime and economic activity, which can be used to compare areas within a city or to give an idea of the size and composition of a local population.

### **Using GOAD maps**

Older GOAD maps could be compared to see whether the functions of the CBD have changed or whether there are areas which have undergone a large transition. Go to <http://www.primepitch.com/goad/goad1.html> for further information about how to obtain the maps.

### **Web links**

What's happening in Bristol?

Broadmead:

<http://www.bristolbroadmead.co.uk/future/>

Bristol Alliance

<http://www.bristolcitycentre.com/alliance/index.html>

Useful contacts and teaching materials available from:

Merchants Quarter Information Centre

21 Penn Street

Broadmead

Bristol

BS1 3AU

(0117 9292888) – They have a teaching pack which supports this fieldwork.

Geographical Association work on Harbourside:

[http://www.digitalbristol.org/members/ga/harbourside\\_fieldwork/index.html](http://www.digitalbristol.org/members/ga/harbourside_fieldwork/index.html)

Other contacts, such as the Bristol Ferry Boat company can be used – they provide excellent tours with commentary.