



UIC13 - How can urban change affect the environment in Bristol?

Urban Greening - the process of increasing and preserving open space in urban areas i.e. public parks and gardens

Integrated Transport System - different forms of transport that are linked together to make it easy to transfer from one to another

Brownfield site - land that has been used, abandoned and now awaits reuse, usually in an urban area.

Greenfield site - a plot of land, often in a rural on the edge of an urban area which has not been built on before.

Bristol Harbourside

This area has been regenerated and developed. It is full of brownfield sites which have been converted into new buildings; the former workshops and warehouses are now nightclubs, restaurants, art galleries and a media and arts centre. Each year there is an annual 3 day festival which attracts around 3000 spectators.

In 2015 Bristol became the UK's first European Green Capital. By 2020 they plan to:

- > make transport improvements
- > improve energy efficiency
- > develop the use of renewable energy



Integrated Transport System (ITS) - in 2012 Bristol was the most congested city in the UK with a journey at rush hour taking 31% longer than other times of the day. The Rapid Transit Network links 3 different bus routes with the Temple Meads railway station and the city's Park and Ride sites. This opened in 2016. They are also planning the electrification of the line between Bristol and London to increase speeds.

Urban Greening- More than 1/3rd of Bristol is open space and over 90% of the population live within 350km of parkland and waterways. Queen Square used to be a dual carriageway and has now been converting into cycle routes.

27% of the city to be part of a wildlife network

objectives set for wildlife in non-natural habitats e.g. cemeteries

30% of the city to be covered with trees.



1. Define the term 'urban greening'

2. Explain the changes made to the Bristol Harbourside area of the city

3. Define the term 'Integrated Transport system'

4. Explain the goals of the Bristol 2015 European Green Capital scheme

5. Outline the ways in which the city has been improved to reduce congestion and promote wildlife



UIC14 - What are the environmental challenges in Bristol?

Brownfield site - land that has been used, abandoned and now awaits reuse, usually in an urban area.

Greenfield site - a plot of land, often in a rural on the edge of an urban area which has not been built on before.

Urban Sprawl - unplanned growth of urban areas into surrounding rural areas

Dereliction - abandoned buildings and wasteland

The main challenges in Bristol are:

- > a large number of industrial buildings which are no longer being used and become derelict
- > demand for new homes has led to urban sprawl so there are new housing developments in the rural areas on the edge of the city

Dereliction - Stoke's Croft

Problem - inner city areas of high-density housing in C19th, many empty houses had been taken over by squatters and the area suffered from riots and antisocial behaviour

Solution - Lottery grants to improve economic activity and decay, activists and artists wanted to revitalise the area through community action and public art - it's now well known for its music, independent shops, nightclubs and numerous pieces of graffiti art. There have been protests in the area to stop gentrification as people would no longer be able to afford to live there

Urban Sprawl

Problem - Coupled with a growing population and the demolition of old slums the demand for new housing increased. 3200 houses were lost and 1800 were badly damaged in the 2nd world war, in 1955, 43 families per week were moving into new homes on new estates (e.g. Hartcliffe) on the edge of the built up areas. New homes were owned by the council, private housing was also built. Urban sprawl extended to the north west of the city e.g. the town of Bradley Stoke

Solution -

- 2006-2013 only 6% of new housing developments were on greenfield sites
- By 2026 over 30000 new homes are planned on brownfield sites
- Planned brownfield developments will be high density with an average of 210 houses per hectare compared with 60 on greenfield sites
- Brownfield examples: Temple Mead, Templegate, Harbourside and Finzels Reach
- Finzels Reach - 2 hectare brownfield site near the CBD with a redundant sugar refinery and old brewery buildings. The facades of the old buildings has been kept with its high density development of office space, shops and 400 apartments



1. Define the term 'urban sprawl'

2. Define the term 'dereliction'

3. Explain the main challenges on the environment in Bristol

4. Outline the problems and solutions of dereliction

5. Outline the problems and solutions of urban sprawl



UIC13 & UIC14 - How has environmental challenge been managed in Bristol?

<u>Waste Disposal</u>	<u>Atmospheric Pollution</u>
<ul style="list-style-type: none"> • Bristol's waste per head is 23% lower than the UK average • Still produces ½ million tonnes of waste annually (one of worse for food waste) • Reduced the amount of waste in landfill • Reduced the amount of waste generated per household by 15% • Increasing the amount of waste recycling to 50% • Population has grown by 9% since 2000, household waste has reduced by 18% due to <ul style="list-style-type: none"> ○ Higher targets with contractors who handle household waste ○ Teaching pupils about the importance of recycling and how to do it at home ○ Specialised kerbside collections and facilities for recycling different kinds of household waste ○ Technological improvements in recycling • Recycling create 4.2 million litres of diesel p/y by treating 6000 tonnes of plastic • Avonmouth waste treats 200 000 tonnes of waste p/y. Any non-recyclable waste generates enough electricity to meet the needs to 25000 homes in Bristol 	<ul style="list-style-type: none"> • 200 people die in Bristol due to air pollution each year • Prevailing wind (most common wind direction) are from the SW and blow pollutants over the city from the industrial area around the port at Avonmouth • Reduced speed limits on motorways and residential areas • The Frome Gateway, a walking and cycling route to the city centre • Electric vehicle programme with charging points in 40 public car parks • A smartphone app with info about public transport • Eco-friendly poo bus - powered by human and food waste transports people between Bath and Bristol's Airport. Runs on bio-methane gas produced at the sewage treatment works. Can travel 300 km (186 miles) on 1 tank of gas, which takes the annual waste of 5 people to produce





1. Using data explain how Bristol is managing the impact of waste disposal

2. Using data explain how Bristol is reducing its atmospheric pollution
