

Bristol is a **Nationally** and **Internationally** important city

Two major universities

Attract UK and foreign students. Known for engineering degrees

Deep water dock at Avonmouth

Important UK port for import and export e.g. cars and food products

Tourist attractions such as SS Great Britain

Boosts tourist economy

8th largest UK tourist destination for foreign tourists

Adds millions to UK tourist economy

International airport

Travel hub for international travel. Business and tourists visits to Europe and USA

Major global centre of silicon chip manufacture

Creates parts for the global computer industry e.g. Toshiba

Several theatres including the famous Old Vic

Regional centre for arts and culture

Many multinational companies such as Airbus have located here

Global centre for aeronautical industry

Excellent road and rail links to London

Attractive as a location for high tech industries

Excellent shopping at The Mall and Cabot circus

National destination for shoppers

These features create thousands jobs, raising standard of living for Bristol's population, and boosting the local and national economy

For a UK city you have studied assess its national and global importance [9 marks]

Bristol is a Nationally and internationally important city in the UK

It is a nationally and internationally important location for high tech industries. Bristol has over 50 high tech businesses and is a major global centre of silicon chip manufacture. It is also a global location for the aeronautical industry with 14 of the 15 major global companies located here.

This provides thousands of well paid jobs for people living and working in Bristol improving their standard of living and boosting the local and national economy. Workers and businesses pay millions in personal and business tax to the Government that can be used for improvements in services like the NHS.

It is also an international hub for import and export trade through Avonmouth deep water dock, again creating many jobs and supporting international trade e.g. Import of Toyota cars (700 000 per year) and food products. This boosts the local and national economy and creates a multiplier effect for other businesses e.g transport and distribution.

It is also a major national and international tourist destination due to major tourist attractions e.g. SS Great Britain, the Harbourside, theatres like the Old Vic and excellent shopping at Cabot Circus and The Mall. It is the 8th most popular tourist destination in the UK for foreign tourists.

This creates many jobs in the leisure and tourism industry, and again boosts local and national employment and the economy.

Economic opportunities

MIGRATION TO BRISTOL

Internal migration from other cities

Lower cost of living than London
Lower than average unemployment

Jobs in;

Finance and banking
High tech industries
Professional services
Aerospace

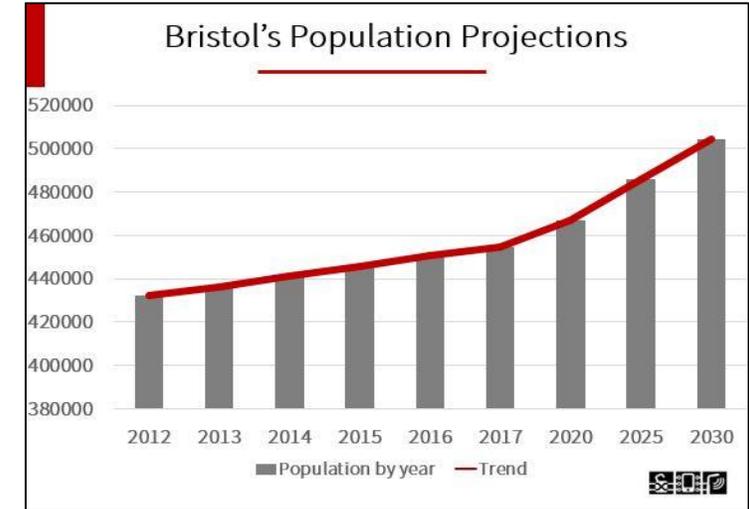
International migration from other countries

Economic migrants from EU,
especially Spain and Poland

Jobs in;
hospitality, manufacturing,
healthcare, construction, retail
and transport

Refugees Somalians

Bristol's population is
growing rapidly



Positives of international migration	Negatives of international migration
<p>Hard working workforce Reducing skills shortages Tax to Government Supporting the local economy Balancing the ageing population Enriching culture (St Paul's carnival)</p>	<p>Language barriers for kids in school Oversubscribed primary schools Pressure on housing stock (rental) Competition with locals for jobs Integration in to the community</p>

For a UK city you have studied, assess the impacts of international migration to the character of the city and its people [6 marks]

International migration has had a major impact on the character and people of the city of Bristol and is responsible for half of Bristol's current growth in population.

Many economic migrants move to Bristol for work in industries like tourism, healthcare and construction, especially from EU countries like Poland and Spain.

This is positive as workers are hard working and productive, and often fill jobs with skills shortages like care work or construction. This benefits Bristol's local people by improving care standards, businesses by increasing profits, but also workers pay tax which can be used to improve local services.

A negative is that migrants need homes so put pressure on the local housing market, particularly rental properties. This leads to housing shortage and increased rental prices for local people. Bristol already has a major shortage of affordable housing.

Also many migrants have children who's first language is not English. This puts pressure on local schools to fund extra teachers for the increased number of children, but also for specialist teachers to deal with language barriers. This is expensive.

Urban change provides **new employment and leisure opportunities** for people in Bristol

Growth of High tech industry



Big growth industry in Bristol

50 micro-electronic businesses

Big companies like Toshiba

Lots of highly skilled and well paid jobs

Improvements in shopping



Construction of The Mall and Cabot circus

Excellent shopping and leisure experience for people

Boosts shopping tourism to Bristol

Thousands of jobs created

Growth of aerospace industry



Major industry in Bristol

14 of 15 main global aircraft manufacturers (mostly Filton)

Big companies like Rolls Royce

Lots of highly skilled and well paid jobs

Re-development of the Harbourside



Many new luxury homes built

Leisure and tourism opportunities for local people

Boosts tourism to Bristol

Created 3000 jobs in Leisure and Tourism



High tech industry Bristol

Rapidly growing sector of the economy
50 micro-electronic businesses in Bristol
14 aerospace companies
Chinese giant Huawei located in city

Reasons

- Super connected city – High speed broadband for research and development
- 2 universities for research and development and highly educated and skilled workforce
- Links to London on M4 and by rail for business travel
- International airport for business travel



Science and business parks

Advantages of Location of Bristol and Bath science park

Near M4 and M5 motorways and A4174 ring road

Edge of city location near Longwell Green

- to avoid city centre congestion for commuters
- to have a large, spacious modern site
- to be near countryside for views and possible expansion of site in the future
- a modern and spacious working environment attracts the best workers

To what extent has urban change created opportunities in a UK city you have studied?
[9 marks]
[+ 3 SPaG marks]

Urban change has created a wide range of opportunities for employment, leisure and entertainment in Bristol

High tech industry is growing rapidly in Bristol. Bristol is a nationally important location and has over 50 high tech businesses and is a major global centre of silicon chip manufacture. It is also a global location for the aeronautical industry with 14 of the 15 major global companies located here.

This provides thousands of well paid jobs for people living and working in Bristol improving their standard of living and boosting the local and national economy, and millions in personal and business tax to the Government that can be used for improvements in services like the NHS.

Re-development of the Harbourside, with its leisure and tourist attractions e.g. SS Great Britain, We the curious and Za Za Bazaar have made Bristol the 8th most popular tourist destination in the UK for foreign tourists. This creates thousands of job opportunities in leisure and tourism. It also provides a range of leisure opportunities for the people of Bristol e.g. family day trips, improving Quality of life for locals.

Improvements in city centre shopping e.g. Cabot circus and edge of town shopping at The Mall have created over 5000 jobs for Bristolians, meaning unemployment is amongst the lowest of any UK city. This again boosts standard of living. Shopping facilities also attract shoppers from all over the country who spend money in all sorts of Bristol businesses, creating a multiplier effect of jobs and profit in restaurants, hotels and tourist destinations, boosting the local economy.

A big city like Bristol must Face many environmental challenges

Environmental challenges	Environmental solutions
<p>Dereliction e.g. Stokes Croft Areas of run down buildings, squatters and vandalism Usually inner city areas</p>	<p>Re-generation e.g. Harbourside and Finzel's reach</p>
<p>Urban sprawl e.g. Harry Stoke and Longwell Green The city is expanding in to the countryside Commuter towns are growing e.g. Keynsham and Yate</p>	<p>94% of recent housing developments on brownfield sites</p>
<p>Waste disposal Half a million tonnes of household waste produced per year Landfill causes soil and water pollution</p>	<p>Black box recycling scheme 50% of waste recycled Avonmouth waste treatment plant produces enough energy for 25 000 homes</p>
<p>Congestion and air pollution. Second most congested city in the UK creating air pollution from vehicle fumes 200 people die from air pollution related illness</p>	<p>Bristol cycle network Park and Ride Integrated transport network</p>
<p>Green space City development reduces the amount of green space</p>	<p>Urban greening 300 parks in Bristol e.g. Queens square 30% of city to be tree covered 1/3 of Bristol is open space</p>

To what extent has urban change created environmental challenges in a UK city you have studied?

[9 marks]
[+ 3 SPaG marks]

The rapid population growth and urban change in Bristol has created a wide range of environmental challenges.

Rapid population growth due to Bristol's popularity as a destination for national and international migrants means its population is now 430 000 people.

This means much more traffic on the already congested roads. Traffic congestion leads to increased **air pollution from exhaust fumes**. This air pollution contributes to climate change, but is also responsible for **200 deaths per year due to poor air quality**. This is a challenge that Bristol is trying to overcome by improving public transport with the Metro bus system, and increasing the popularity of cycling with the cycle network.

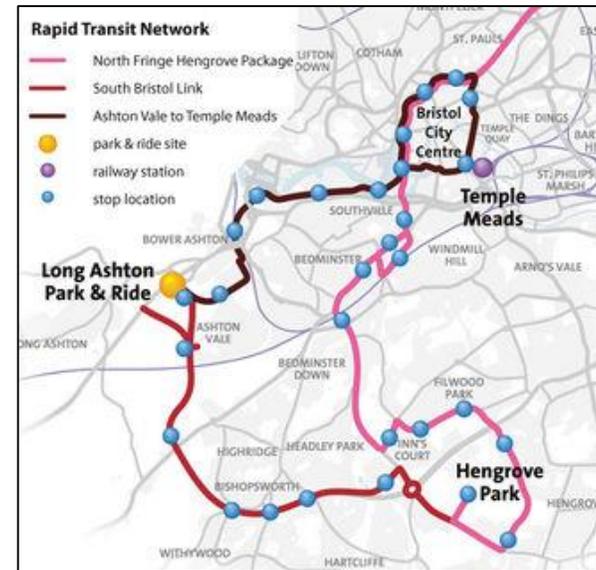
Extra population also leads to **extra household waste**. A challenge for Bristol is to deal with this waste without sending it to **landfill**, which damages habitats **reducing bio-diversity** and also causes **water pollution** from leachates from rotting waste. Over half a million tonnes of waste is produced each year. Bristol has been successful in overcoming this challenge with its black box recycling scheme, and waste energy plant on Avonmouth, which means none of Bristol's waste is going to landfill.

Urban growth means that **greenfield sites** around the urban fringe of Bristol are at threat from **housing developments**. This has happened at Longwell Green and other sites, and is currently happening at Harry Stoke in North Bristol. This **uses up valuable farmland** and also **destroys local habitats**, reducing bio-diversity. The challenge is to preserve Bristol's beautiful countryside from development. This has largely happened as 94% of recent housing developments have occurred on brownfield sites within the city which actually improves the urban environment.

Bristol Metro bus Integrated transport network

This new transport network is designed to reduce traffic congestion and air pollution in Bristol by taking cars off the road because;

- 200 people die from air pollution related illness each year
- Bristol is the second most congested city in the UK
- Journey times take 31% longer in the rush hour
- Millions are lost to business each year from delays in deliveries of products and stock
- Traffic jams along main roads like the A4 occur daily in rush hour



Links three park and rides to Bristol Temple Meads – Portway, Long Ashton, Brislington

Has own bus lanes and regular bus services with stops throughout Bristol

Free parking in park and ride. – Tickets £4 per day or £18.50 per week

Reduces congestion, lateness to work, travel time and cost of transport for commuters

Evaluate the effectiveness of an urban transport scheme(s) you have studied.

[9 marks]

[+ 3 SPaG marks]

The scheme I am evaluating is the **Bristol Metrobus Integrated Transport network** which links Bristol's 3 park and rides to Bristol Temple Meads station by bus. There are many bus stops along the 3 routes to the city centre.

The scheme is designed to reduce traffic congestion and air pollution which are major problems in Bristol by providing a low cost alternative to the use of cars by commuters. Bristol is one of the UK's most congested cities and air pollution contributes to 200 deaths per year. Journeys take an estimated 33% longer in rush hour.

The scheme has been **partially successful** at reducing congestion and air pollution.

Regular buses **every 10 minutes** in rush hour provide a rapid bus route to the centre along purpose built **bus lanes**. This avoids most traffic jams meaning travel times are quicker. This reduces lateness to work. This attracts commuters to leave their cars at one of the three large **free car parks** at edge of town park and rides and use the bus, reducing cars on the road so reducing congestion.

The bus travels directly to the centre where most people work, and also connects to the **main train station** at Temple Meads. This reduces the need to use **expensive city centre parking** (up to £20 per day) if working in Bristol, or taking the train to other cities like London making it attractive for commuters and business travellers. Bus fares are **reasonably priced at £4 per return ticket** making it a cheap alternative to sitting in traffic jams burning petrol.

However, the creation of many bus lanes reduces the road space available for other traffic which has the effect of increasing traffic congestion for the remaining road users. This is especially a problem for companies who deliver goods because they lose profit through late deliveries.

Overall the scheme has many good points but traffic congestion and associated pollution remains a big problem in Bristol.

Urban sprawl of housing in to the countryside

History of urban sprawl

1940-50's - War damage and slum clearance

Council estates like Hartcliffe built

1970's-80's - New towns like Longwell and Emmersons Green

2000 onwards

Commuter towns expand e.g. Keynsham and Clevedon

2014

1200 houses at Harry Stoke with another 2000 planned



Economic problems

Increase traffic congestion and air pollution e.g. A4174 ring road and M32 motorway leads to lateness to work and late deliveries

Increased use of online shopping and supermarkets by new residents causes local shops to close

Social problems

Towns like Long Ashton lose their rural character
Traffic increases on rural roads leading to congestion e.g. Wick A420

Local bus routes close due to increased use of cars.
Only 8 buses through Wick each day

Environmental problems

Uses up green space, destroying habitats affecting bio-diversity e.g. Great Crested Newt

Increase traffic congestion and air pollution e.g. A4174 ring road and M32 motorway

Using a case study of a major UK city, discuss the effects of urban sprawl on people and the environment [6 marks]

Urban sprawl due to new housing developments like Harry Stoke in North Bristol have positive and negative effects on people and environment. The development of 2000 houses is being built on the urban fringe in North Bristol.

A negative effect on the environment is that it is being built on green space. This means that habitats are being destroyed reducing local bio-diversity. Some local ponds nearby contain the Great Crested Newt, an endangered and protected species who's habitat could be negatively affected.

In addition, extra traffic from the development is creating greater congestion on the M32 and A4174 ring roads nearby. This affects people by making them late for work and business by increasing delivery times therefore reducing profits. It also adds to air pollution which is already a major problem in Bristol, contribution to 200 deaths per year.

Local people in Stoke Gifford are also unhappy that new houses are destroying the character of their area, reducing places for leisure and spoiling views of the countryside.

However, the extra houses help reduce the serious house shortage in Bristol, giving people who are looking to buy more alternatives for modern family homes. This will also help to slow down house price growth in Bristol making homes more affordable.

Social inequality in Bristol

What is deprivation?

High unemployment
Low educational qualifications
Lack of services
High unemployment
High crime rates
Low quality housing
Many people rent not own
Poor quality environment
Poor health and lower life expectancy



Deprivation in Filwood

Life expectancy – 78 years (2 years below average)
50% owner occupied 50% rental
Many poor quality council houses
1300 crimes per year (violent crime biggest category)
36% of students achieves 5A*-C grades
1/3 of 16-24 year olds unemployed
Lowest rates of sport participation in city

Affluence in Stoke Bishop

Life expectancy 83 years (3 years above average)
81% housing owner occupied
Many houses worth £1 million +
Less than 300 crimes (Anti-social behaviour biggest category)
94% of students achieves 5A*-C grades
3% unemployed
50% of people have a degree

Urban re-generation

Improving run-down or derelict areas of a city – Brownfield sites



Advantages of re-generating brownfield sites

Improves a run down area

Regenerates run-down areas, improving communities by creating jobs, housing and community spaces for work, leisure and living.

Reduces urban sprawl

Less housing built on greenfield sites on the edge of cities protecting the countryside, habitats and bio-diversity.

Reduces traffic congestion and pollution

New residents are near places of work in the centre so less reliant on cars for travel, reducing congestion and air pollution.

Local Employment

Jobs created in construction, then in new businesses like leisure, restaurants and entertainment reduces unemployment and boosts standard of living.

Boosts economy

Re-generated city centres make a city more attractive to new business, boosting the economy.

Restores historic buildings

Old industrial buildings are re-used, attracting leisure and tourism opportunities

Reduces housing shortage

Flats and apartments are build providing a range of housing for people. Affordable housing for local people is often included in the development.



Social sustainability



Economic sustainability



Environmental sustainability

What are the features of sustainable cities?

Building affordable housing so that people can afford good living conditions

Creating leisure and tourism opportunities improving quality of life

Providing good local services like local health clinics

Creating jobs improving local people's standard of living

Attracting green businesses e.g. renewable energy or recycling

Reducing the use of greenfield sites, reducing urban sprawl protecting habitats

Providing green spaces and planting trees in cities, reduces pollution, creates habitats and provide leisure opportunities

Waste is re-cycled rather than dumped in landfill, reducing pollution

Encouraging the use of public transport and cycling, reducing climate change, air pollution and improving public health

Encouraging the use of renewable energy sources reduces climate change

Using an example in a major UK city, evaluate the sustainability of an urban re-generation scheme [9 marks]

The re-generation of Bristol Harbourside in the city centre has largely been carried out in a sustainable way, although there have been some criticisms.

The re-generation occurred because the area became run-down and derelict after the closure of Bristol docks in the 1970's. This led to high levels of local unemployment and urban deprivation.

The re-generation is socially sustainable because it provides a range of leisure and tourism opportunities.

For example the building of 'We the Curious' M Shed, and the location of the SS Great Britain, along with a range of restaurants e.g. Za Za Bazaar and nightlife e.g. Evolution.

This provides lots of local leisure opportunities for Bristol's people, improving their quality of life, and also attracts tourists for around the country and even abroad. This boosts the local economy.

Over 1000 new flats and apartments have also been built in the area.

Bristol has a serious housing shortage and house prices are rapidly rising, so this helps to address the problem of a lack of housing for Bristol people. Being near the centre also helps to reduce traffic congestion and pollution caused by commuters travelling to work from outside the city.

However there is criticism that there is a lack of affordable housing as most apartments are too expensive for local Bristol people to afford. Some sell for over £1 million.

The re-generation is economically sustainable because it has created over 3000 jobs, mostly in leisure and hospitality.

This reduces local unemployment, increased income and improves the standard of living for many locals.

However, it is argued that these types of jobs are at risk if there are economic problems in the country because if people need to save money or reduce spending one of the first things they cut back on is leisure.

Finally the re-development is environmentally sustainable because it improves a run-down area and has re used many historic buildings e.g. M Shed preserving Bristol's historic past.

This improves the local environment, because derelict buildings are improved. However there is some criticism that there is not enough green space in the re-generation.

South facing solar panels
on roofs

Solar energy is clean and
free (no co2)

Reduces climate change
Reduces energy bills

Rainwater collection from
roofs

Recycled water can be
used on gardens

Conserves precious water
supplies

Sustainable communities in Freiburg - Germany



Large south facing
windows

Reduces heating and
lighting costs

Reduced energy use
Reduced climate change

Plenty of green spaces
(urban greening)

Provides habitats and
areas for leisure

Protects bio-diversity
Improves quality of life
Trees absorb pollution

Electric tram stops nearby

Cheap. Local public
transport

No co2 emissions
Takes cars off the road
Reduces air pollution

The Greenhouse development includes:



- renewable energy generation methods
- cycle links to the city centre and railway station
- a car sharing scheme
- recycling facilities
- local shops and cafés
- a medical centre and nursery
- parks with children's playgrounds
- a sports centre, with a swimming pool
- allotments where people can grow fruit and vegetables.

Using **Figure 4** and your own knowledge, discuss how the features of the Greenhouse development will make for more sustainable urban living.

[6 marks]

The development has renewable energy generation methods such as wind turbines

This provides cheap electricity to residents, reducing their energy bills and the energy is produced without producing harmful greenhouse gases like carbon dioxide.

This is sustainable because this is an everlasting source of energy and has zero contribution to climate change, reducing the buildings carbon footprint

The development cycle links to the city centre

This means people can cycle to their jobs or to the shops

This is sustainable because it improves public health through exercise, but also takes cars off the roads which improves air quality and reduces and reduces climate change because less cars means less harmful greenhouse gas emissions.

The development also has re-cycling facilities

This reduces the amount of waste going to landfill

This is sustainable because landfill damages habitats and leachates released as it rots cause water pollution.