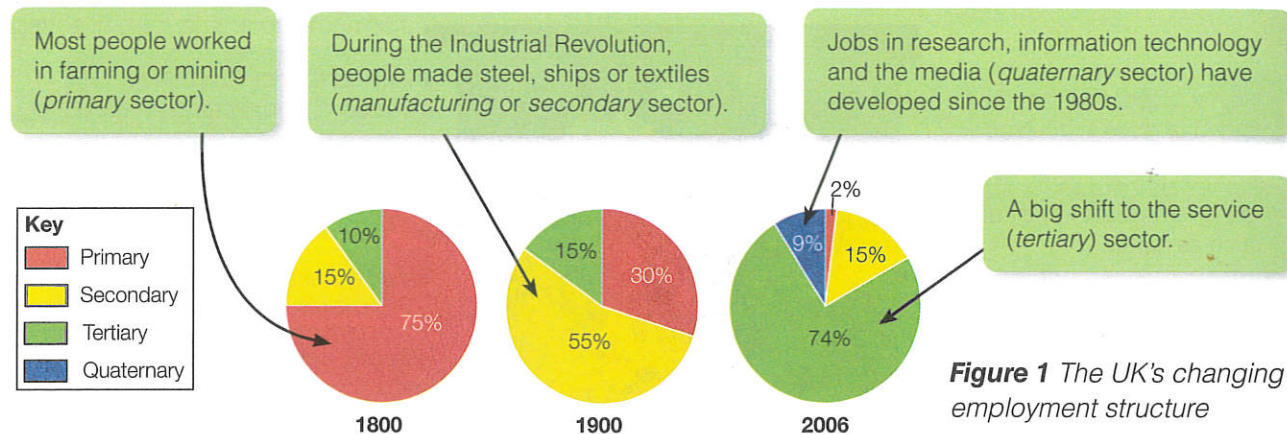


## You need to know:

- how the economy of the UK has changed
- the causes of economic change in the UK.

Student Book  
See pages 234–5

## How has the economy of the UK changed?



## What are the causes of economic change in the UK?

**De-industrialisation** is the decline traditional industries, such as manufacturing. This has happened because:

- machines and technology have replaced many people
- other countries (e.g. China) can produce cheaper goods because labour is less expensive.

**Globalisation** is the growth and spread of ideas around the world.

- Many people now work on global brands in the quaternary sector, e.g. in IT.
- Increased world trade and cheaper imported products have contributed to the decline in UK manufacturing.

## Government policies

## 1945–79

- The government created state-run industries such as British Rail.
- Government money 'propped up' unprofitable industries.

## 1979–2010

- State-run industries sold to private shareholders. This is called *privatisation*.
- Many older industries closed down.
- New private companies brought innovation and change.

## 2010 onwards

'Rebalancing' the economy by relying less on service industries. Policies have included:

- improvements to transport (e.g. HS2)
- more investment in manufacturing
- encouraging global firms to locate in UK.

## Six Second Summary

- The UK economy has changed over time.
- De-industrialisation is the decline of manufacturing.
- Globalisation has increased the quaternary sector.
- Government policies have caused economic change.

## Over to you

Make your own glossary of the key words (in bold and in italics) in this section.

## You need to know:

- what a post-industrial economy is
- how the development of information and technology, service industries, finance and research have moved the UK towards a post-industrial economy.

Student Book  
See pages 236–7

## What is a post-industrial economy

A **post-industrial economy** is where manufacturing industry declines and is replaced by growth in the service and quaternary sectors. This happened in the UK from the 1970s.

## Development of information technology

The use of **information technology (IT)** is a key factor in the UK's move to a post-industrial economy.

- Internet access enables people to work from home.
- Over 1.3 million people work in the IT sector.
- The UK is one of the world's leading digital economies.

## Service industries and finance

The UK service sector (including quaternary employment) has grown rapidly since the 1970s. Today it contributes over 79% of the UK's GDP.

- Finance is an important part of the service sector.
- The UK is the world's leading centre for financial services.
- The financial services sector accounts for about 10% of the UK's GDP.

## Research

The UK research sector (part of the quaternary sector) employs over 60 000 highly qualified people and is estimated to contribute over £3 billion to the UK economy. This sector is likely to be one of the UK economy's main growth areas in the future.

Business and financial companies

NHS

Universities

Environment Agency

BBC

Charities

Engineering

Pharmaceutical

**Figure 1** Some UK research organisations

## British Antarctic Survey

The British Antarctic Survey (BAS) employs over 500 highly skilled people in Cambridge (UK), Antarctica and the Arctic. It is linked to the University of Cambridge and helps us understand the impact of humans on the Earth's natural systems.



**Figure 2** The Rothera Research Station in Antarctica

## Six Second Summary

- Developments in IT have encouraged the growth of service and quaternary sectors.
- Finance is an important part of the service sector.
- Research employs highly qualified people.

## Over to you

Explain **three** reasons why the UK is developing as a post-industrial economy.



## You need to know:

- what a science park is
- what a business park is
- how science and business parks are moving the UK towards a post-industrial economy.

Student Book  
See pages 238–9

## What is a science park?

A **science park** is a group of scientific and technical knowledge-based businesses located on a single site. Most are associated with universities, enabling them to use research facilities and employ skilled graduates. Science parks may also include support services such as financial services and marketing.

## University of Southampton Science Park

Southampton Science Park includes one hundred small science and innovation businesses including Fibrecore (manufacturer of optical fibres) and PhotonStar (specialising in lighting products).

## Benefits

- Excellent transport links – close to M3, Southampton international airport and rail links
- Excellent links with the University
- Attractive location with green areas



Figure 1 Southampton Science Park – transport links

## What is a business park?

A **business park** is an area of land occupied by a cluster of businesses. Business parks are usually located on the edges of towns where:

- land is cheaper and more available
- access is better with less congestion
- businesses can benefit from working together.

## Cobalt Business Park, Newcastle-upon-Tyne

Cobalt Park is the UK's largest business park, with support facilities including retail outlets and a fitness centre. The park is next to the A19, close to the A1 and 20 minutes from the international airport.

Businesses locating in Cobalt Park qualify for governmental assistance.

Companies in the park include Siemens, IBM and Santander.



Figure 2 Siemens offices at Cobalt Business Park

## Six Second Summary

- Science parks provide benefits such as links with universities and attractive locations.
- Business parks tend to be located on the edges of towns because land is cheaper, has better access and has potential for expansion.

## Over to you

Cover up everything apart from Figure 1. Use the map to explain the benefits of science parks.

## You need to know:

- what the impacts of industry are on the physical environment
- about an example of how modern industrial development can be made more environmentally sustainable – Torr Quarry in Somerset.

Student Book  
see pages 240–1

## Impacts of industry on the physical environment

- Manufacturing plants can look dull and affect the visual effect of the landscape.
- Industrial processes and waste products can cause air, water and soil pollution.
- The transport of raw materials and manufacturing products increases levels of air pollution.

## How can industrial development be more sustainable?

- Care in design can reduce the visual impact.
- Technology can be used to reduce harmful emissions.
- Desulphurisation can remove harmful gases.
- Heavy fines can be imposed when pollution incidents occur.

## Quarrying in the UK

## Impacts of quarrying

- destroy natural habitats
- pollute water courses
- scar landscapes

## Making quarrying more sustainable

- There are strict controls on blasting, removal of dust from roads and landscaping.
- Recycling is encouraged.
- Companies are expected to restore or improve a quarry after it has been used.

## Torr Quarry, Somerset

Torr Quarry is a limestone quarry in the Mendip Hills. It employs over 100 people and contributes more than £15 million towards the local economy each year. Torr Quarry is an example of how modern industrial development can be more environmentally sustainable.

- The quarry is being restored to create wildlife lakes.
- 200 acres of the site have already been landscaped.
- Regular monitoring of noise, vibration, dust and **water quality**.
- Rail transport of quarried rock minimises the impact on local roads and villages.

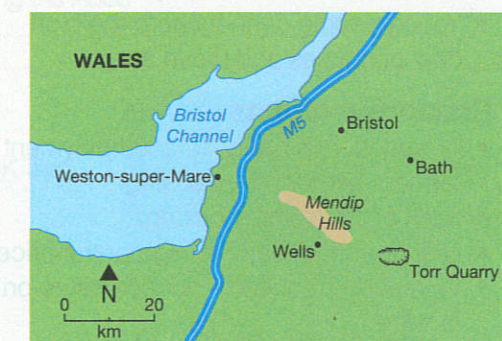


Figure 1 Location of Torr Quarry, Somerset



Figure 2 Torr Quarry



Figure 3 Planned restoration of Torr Quarry

## Six Second Summary

- Modern industry can cause pollution and destroy habitats.
- Torr Quarry aims to be environmentally sustainable by landscaping and monitoring.

## Over to you

Draw a field sketch of Figure 3 and annotate it to show how Torr Quarry is environmentally sustainable.



## You need to know:

- what social and economic changes are happening in an area of population growth and also in one of population decline.

Student Book  
See pages 242–3

### An area of population growth: South Cambridgeshire

#### What are the changes?

- The population of 150 000 is increasing, due to migration into the area.
- Most migrants come from Cambridge and other parts of the UK; many arrive from Eastern Europe.
- The proportion of people aged 65 or over is growing.

#### Social effects

- 80% car ownership leads to increased traffic on narrow roads.
- Housing developments on the edges of villages can lead to a reduction in community spirit.
- Young people cannot afford the high cost of houses and move away.

#### Economic effects

- A reduction in agricultural employment as farmers sell land for housing.
- Lack of affordable housing.
- High demand leads to high petrol prices.
- Increased population puts pressure on services.



Figure 2 The landscape of Cambridgeshire

### An area of population decline: the Outer Hebrides

#### What are the changes?

- The population has declined by more than 50% since 1901.
- With limited employment, young people have moved away.

#### Social effects

- The expected fall in the number of children may result in school closures.
- An increasingly ageing population has fewer young people to support them.

#### Economic effects

- Services are closing.
- Most small farms (crofts) can only provide work for two days a week.
- There has been an increase in tourism, but ...
- ... the current infrastructure cannot support the scale of tourism needed to provide an alternative source of income.



Figure 1 Location of South Cambridgeshire and the Outer Hebrides

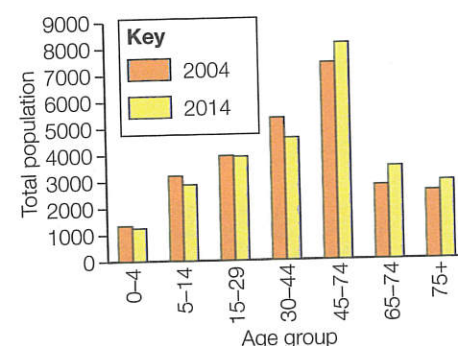


Figure 3 Population structure of the Outer Hebrides, 2004–14

## You need to know:

- about improvements and new developments in road and rail infrastructure in the UK
- how those improvements will make a difference.

Student Book  
See pages 244–5

### Road improvements

The 2014 'Road Investment Strategy' includes:

- 100 new road schemes by 2020
- 1300 new lane miles added to motorways and trunk roads
- extra lanes added to turn main motorways into 'smart motorways'.

New road schemes will create thousands of construction jobs and boost local and regional economies.

#### South-west 'super highway'

- A £2 billion road-widening project will take place on the A303.
- Converting the route to dual carriageway will create a 'super highway' to Plymouth and beyond.

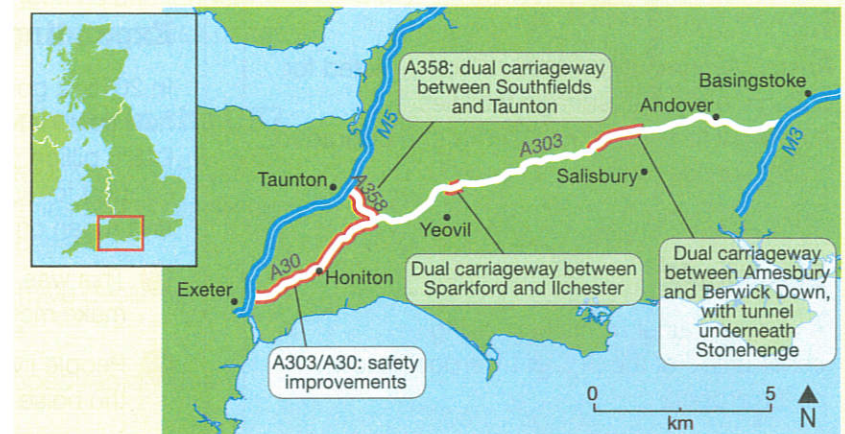


Figure 1 Upgrading the A303

### Railway improvements

There are plans to stimulate economic growth in the north of the UK by:

- improving trans-Pennine rail links reducing journey times by up to 15 minutes.
- HS2 – a planned high-speed rail line to connect London with Birmingham, Sheffield, Leeds and Manchester. It is controversial as the route passes through countryside and close to many homes.

#### London's Crossrail

Crossrail is a new railway across London that links Reading and Heathrow (to the west), to Shenfield and Abbey Wood (to the east).

- Crossrail (and Crossrail 2) will reduce journey times across London.
- It will bring an additional 1.5 million people within 45 minutes' commuting distance of London's key business districts.

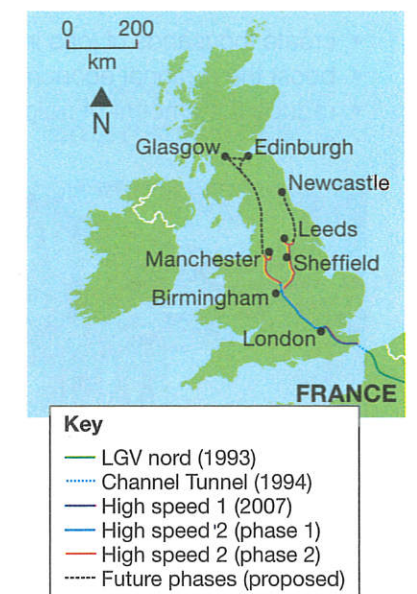


Figure 2 Plans for the UK high-speed rail

#### Six Second Summary

- Social changes include increased traffic and fewer young people to support the elderly.
- Economic changes include lack of affordable housing and reduced employment.

#### Over to you

Draw a table comparing the populations of Cambridgeshire and the Outer Hebrides.

#### Six Second Summary

- Improvements include building new rail lines and roads and adding lanes to motorways.
- These schemes can create jobs, reduce journey times and ease congestion.

#### Over to you

Create a Venn diagram to show the benefits of road and rail improvements.



## You need to know:

- how new developments will affect the UK's port and airport capacity
- how these can make a difference in the UK.

## Developing the UK's ports

About 32 million passengers travel through UK ports each year. Ports employ around 120 000 people. Private companies run many ports and invest heavily in infrastructure, often with government assistance.

- Bristol (Avonmouth) – £195 million invested for bulk handling and storage facilities.
- A new rail terminal at Felixstowe and upgraded cruise service facilities at Harwich.

## Liverpool2

A new container terminal is being constructed at the Port of Liverpool, known as 'Liverpool2'.

The project will more than double the port's capacity to over 1.5 million containers a year. Phase 1 opened in 2016. When complete the new terminal will:

- create thousands of jobs in the north-west
- boost the regional economy
- reduce the amount of freight traffic on the roads.



Figure 1 The construction of Liverpool2

## Airport developments

- Airports create vital global links
- They provide thousands of jobs
- They also boost economic growth both regionally and nationally.

## Expanding London's airports

In 2015, a government report recommended a new third runway at Heathrow. The cost would be £18.6 billion. The report recommended financial support for soundproofing homes and schools, and a ban on night-time flights.

😊 This was predicted to create more jobs and make more money for the UK.

😬 People living nearby are concerned about the noise and air pollution from planes.

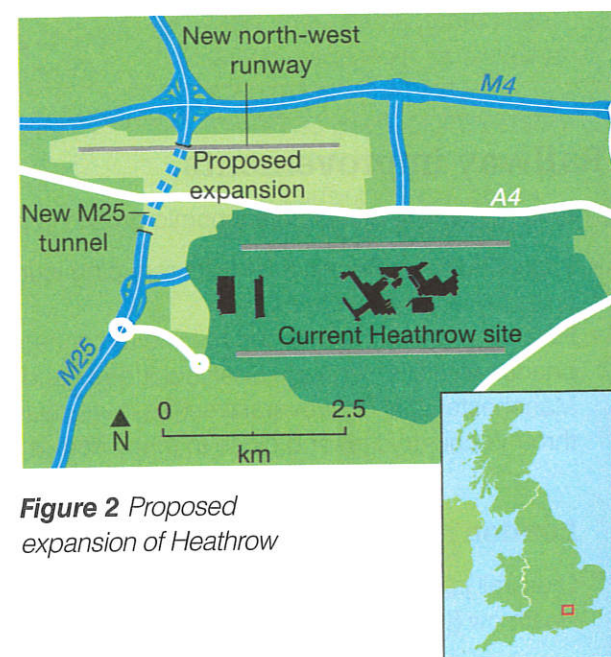


Figure 2 Proposed expansion of Heathrow

## You need to know:

- what is meant by the north-south divide
- why the north-south divide exists
- strategies used to try to resolve regional differences.

## What is the north-south divide?

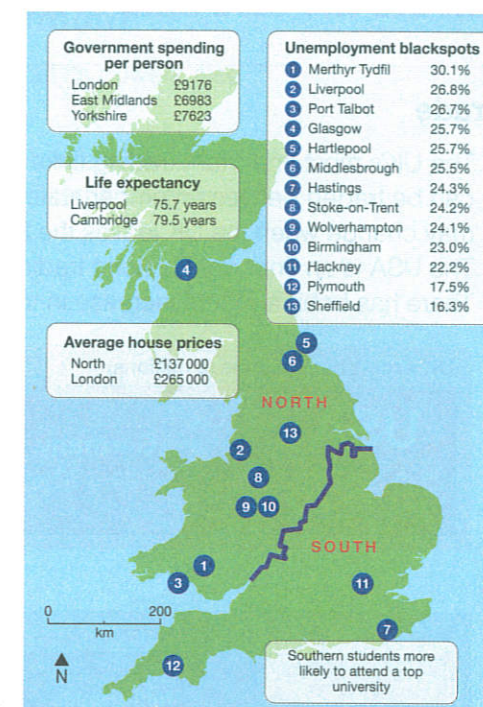
It refers to real or imagined cultural and economic differences between the south of England and the rest of the UK.

In general, the south enjoys higher incomes and longer life expectancy. But the south also has higher house prices and more traffic congestion.

## Why is there a north-south divide in the UK?

- During the Industrial Revolution, the UK's growth was centred on coalfields, heavy industries and engineering in northern England, Wales and Scotland.
- Since the 1970s, many industries have declined, reducing prosperity in those areas.
- London and the South East developed rapidly due to a fast-growing service sector.

Figure 1 North and south – some facts



## How can regional strategies address the issue?

## Local enterprise partnerships (LEPs)

LEPs are voluntary partnerships between local authorities and businesses.

Their aim is to identify business needs and encourage companies to invest in order to boost the local economy and create jobs.

The Lancashire LEP is one example.

## Lancashire LEP

The Lancashire LEP will:

- promote new businesses and create 50 000 new jobs by 2023
- improve transport with £20 million investment
- extend superfast broadband across 97% of the region
- create 6000 high-skilled jobs in Enterprise Zones at Sarnesbury and Warton.

## Enterprise Zones

The aim of Enterprise Zones is to encourage new businesses and jobs. The government supports businesses in Enterprise Zones by:

- providing a business rate discount
- ensuring the provision of superfast broadband
- creating simpler planning regulations.

## Six Second Summary

- Examples of improvements and new developments are Liverpool2 (a port) and a new runway at Heathrow (an airport).
- They are intended to create new jobs and boost the economy.

## Over to you

Produce a **five**-sentence summary of what you have learnt from this page.

## Six Second Summary

- The north-south divide refers to differences between the north and south of the UK.
- Local enterprise partnerships and Enterprise Zones are attempts to resolve regional differences.

## Over to you

Write the words 'north-south divide' and, for each letter, write a word or phrase, relevant to this page's information, e.g. **N**orth-south divide, **r**egional strategies, **E**nterprise Zones etc.