



## Human geography: Contemporary urban environments

## 2.3 Contemporary urban environments

Assessment  Mini-tests will take place the Mini-mocks will take place unit on the following top:  Urbanisation trend Issues with urbanis Sustainable urban	e throughout the ics: ds zation	Students should have a solid foundation of knowledge from this topic through he study of the Geography GCSE unit on Changing urban environments.		Will b	ework/independent study be set each week by the class ber. Tasks will include: Further reading Guided research into tourism sectors Guided writing practice
Specification content	Subject-specific skills development	Learning outcomes	Suggested Learning activition (including ref to differentiation and exten activities)		Resources
<ul> <li>Global patterns of urbanisation since 1945.</li> <li>Economic, social, technological, political and demographic</li> </ul>	Use of key subject specific and technical terminology. Online research. Collect, analyse	Students will have a clear understanding of the terms urbanisation and urban growth.  Students will be able to describe and explain the	To introduce the topic of Contemporary urban environm you could show the students t first few minutes of <i>Andrew M Megacities</i> which outlines som the key issues facing the 21 <sup>st</sup> century. Alternatively, you cou	he larr's ne of	Good general reference books:  Hall and Barrett (2011) <i>Urban Geography</i> (Routledge)  Pacione M, (2009) <i>Urban geography: a global perspective</i>

processes associated with urbanisation and urban growth.

- The emergence of megacities and world cities and their role in global and regional economies.
- Contemporary characteristics or mega/world cities.

and interpret a range of qualitative and quantitative data from a range of primary and secondary sources – this could include discussive/creative.

changing global patterns of urbanisation since 1945.

Students will be able to discuss the economic, social, technological, political and demographic processes associated with urbanisation and urban growth.

Students will be able to explain the emergence of megacities and world cities, describe their characteristics and discuss their role in global and regional economies.

select a small section from Slumdog Millionaire or Kolkata with Sue Perkins highlighting issues of informal settlements. You might also collect together a number of newspaper articles highlighting current issues such as housing shortages, air pollution and flooding. Get students to think about their local urban areas or cities they are familiar with and discuss the issues that face these cities.

Give students a range of maps and data which illustrate changing urban trends since 1945. Students to describe and explain the data (exam style) and discuss the impacts of urbanisation in HICs, MICs and LICs.

**Extension**: You can draw links with the Changing Places topic here, with discussion on homogenisation, clone towns and placelessness.

Students can work in groups to research and produce presentations on different world cities and megacities. Examples might include:

MUMBAI Wraight, P. (Sept 2013)

See also Drake, G. and Lee, C. (2000) The Urban challenge (Hodder)

The United Nations publishes a number of useful annual reports on cities, including <u>The World Population Prospects: 2015 Revision</u>.

The Urban Geography Research Group (UGRG) of the Royal Geographical Society/Institute of British Geographers has a useful website with links and resources to many urban issues. There are further RGS urban geography resources and lectures on the 21st Century challenges page.

Topic Eye, Geography Review and GeoFile/GeoActive regularly have urban geography related articles. The Guardian newspaper also does a regular feature on cities @guardiancities

Read the excellent article on mega and meta cities by Mark Rowe (2014) 'Growing pains' in *Geographical magazine*. (Sept, 2014)

There are a lot of good resources on informal settlements in cities such as Mumbai (Dharavi), Nairobi (Kibera) and Rio (Rocinha). You could use

<ul> <li>Suburbanisation, counter-urbanisation, urban</li> </ul>	Use of key subject specific and	Students will be able to discuss the causes and	GeoFile 650 SHANGHAI Guinness, P. (2014) 'Urban issues in Shanghai' GeoFile 511 BEIJING Guinness, P. (Sept 2010) 'Beijing a global city' GeoFile 627 There is also a huge amount of material about London which is classified as a world city.  Define and distinguish between suburbanisation, counter-	redevelopment in Rio de Janiero: an update' <i>GeoActive 458</i> The <i>Andrew Marr's Megacities</i> documentaries (2011) have some excellent material on the issues facing cities including London, Shanghai, Dhaka and Mexico City Episode 1: Living in the city Episode 2: Cities on the Edge Episode 3: Sustaining the City Watch BBC documentary <i>Supersized Earth: A place to live</i> Stiff, P. (2010-2011) Suburbs part 1 and 2 in <i>Geography Review</i> , 24:2 and
<ul> <li>Urban change: deindustrialisation, decentralisation, rise of service economy.</li> <li>Urban policy and regeneration in Britain since 1979.</li> </ul>	technical terminology. Map skills.  Interpretation and evaluation of a range of source material including textual and visual sources.  Online research	consequences of suburbanisation, counterurbanisation and urban resurgence. Students will be able to describe and explain the processes of deindustrialisation, decentralisation and rise of service economy.	urbanisation and urban resurgence.  Use OS maps to identify urban areas which have experienced suburbanisation, counterurbanisation or urban resurgence.  There are good links with the Changing Places topic here – you could look at changing demographic, cultural, social and economic characteristics of settlements affected by these	24:4.  Garrington, S. (April 2008) 'A case study of village suburbanisation' <i>GeoFile 570</i> Burton, S. (April 2005) 'Melbourne managing urban growth and change' <i>GeoFile 498</i> Rae, A. (Jan 2001) 'Impacts of cities on their surrounding area' <i>GeoFile 394</i> Burton, S. (Jan 2002) 'Pressures on

and presentation skills.	the term urban policy and be able to outline a range of regeneration strategies	processes.  Define deindustrialisation,	the greenbelt from UK counter- urbanisation' GeoFile 414
	in Britain since 1979.  Students should also appreciate that regeneration also occurred because of wider social, economic and demographic processes.	decentralisation and the rise of the service economy and discuss their causes.  Students to work in groups to research and present their findings relating to urban regeneration schemes adopted in the UK post 1979. These presentations should include a description of the policy, an example of where it was adopted and an evaluation of its	issues' <i>GeoFile 408</i> Warbuton, P. (April 2002) 'Issues relating to greenfield and brownfield
		impact.  Extended writing task: Discuss the other wider social, economic and demographic processes which have led to regeneration in recent decades  Link to suburbanisation, counterurbanisation and urban resurgence.	National Geographic (Aug 2012) Warbuton, P. (Sept 2012) 'Planning issues in today's MEDC cities' GeoFile 675 Dunn, C. (2012/3) 'Redevelop, regenerate, rebrand' in relation to Greater Manchester in Topic Eye changing cities.
		Extension: Doreen Massey wrote about a gender division of labour and the impacts of deindustrialisation on masculinity. Discuss changing gender roles in the UK as a result of deindustrialisation and the rise of service economy.	Davies, O. (2013) 'The Emirates stadium: a case study of urban regeneration' in <i>Geography Review</i> , 27:2.  Essex, S. and Ford, P. (2015) 'Coastal Urban Regeneration: Thirty Years of Change on Plymouth's Waterfront.' Transactions of the Devonshire Association (evaluates the success of

				the New Deal Programme in Plymouth)  Tallon, A. 2010. <i>Urban Regeneration in the UK</i> . (Routledge, London).  Pumpkin interactive dvd Regenerating a city: the rebranding of Glasgow.  Pumpkin dvd The 2012 Olympics and East London's regeneration.
contrasting settings.  Physical and human factors in urban forms.  Spatial patterns of land use and the factors that influence them.  New urban land uses: town centre mixed developments, cultural and heritage quarters, fortress	Opportunities to develop skills such as drawing, labelling and annotating diagrams.  Collect, analyse and interpret a range of qualitative and quantitative data from a range of primary and secondary sources.  Fieldwork potential here.	Students will be able to discuss the contrasting characteristics of cities across the world but recognise that both physical and human factors are important.  Students will be able to describe patterns of spatial land use in contrasting urban settings.  Students will be able to describe and discuss the most recent changes in the urban landscapes, such as town centre mixed	Look at a range of OS maps to consider the relevance of physical geography in the siting of towns and cities (could use old OS exam map extracts) Discuss which physical factors were important and whether they are still important today. Could link here with urban climate issues.  Have human factors such as land prices become more relevant?  London, Mexico City and Los  Angeles worth discussing here. You could also discuss the fact that informal settlements still tend to occupy sites with physical	Melbourne, B. (September 2001) 'The socio-demographic structure of UK cities' <i>GeoFile 405</i> The excellent book by Cheshire, J. and Uberti, O. (2014) <i>London: the information capital</i> considers the growth of London over time and considers physical and human factors  Melbourne, B. (Jan 2002) 'Los Angeles: a multiple hazard area' <i>GeoFile 419</i> considers the physical geography of LA and the impact of this on its inhabitants.  Boot, J. (April 2005) 'The gentrification of the inner city:

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gentrified inner	developments, cultural	disadvantages, eg (Rocinha on the	processes and fieldwork' GeoFile 496
areas and edge	and heritage quarters,	steep hill sides of Rio).	
cities.	fortress landscapes,		View the RGS online lecture on
The concept of the	gentrified inner areas and	Urban fieldwork potential here	gentrification
post-modern	edge cities. Students will	investigating evidence of new urban	
western city.	also be able to describe	landscapes in local city.	Read article and watch clip about
	the concept of a post-		gentrification in Notting Hill, London
	modern western city.	Discuss reasons why urban areas	
		have experienced a resurgence in	
		recent years. What examples can	See footage and discussion of anti-
		the students think of? Link back to	gentrification protests in London in
		ideas of rebranding/reimaging	September 2015
		places from Changing Places topic.	
		Watch the RGS online lecture on	
		gentrification and discuss media	
		coverage and articles about the	
		2015 anti-gentrification protests in	
		East London	
		For a more active learning approach	
		students could research	
		gentrification from the point of	
		view of different stakeholders.	
		Feedback could then take the form	Fortress Cities: American Mike Davis
		of a debate/role play, or	has written extensively about Los
		construction of SWOT analysis in	Angeles
		groups etc. Link back to notion of	
		insiders and outsiders from	In UK, read about strategies to design
		Changing Places topic.	out crime. See also <u>BBC Bitesize:</u>
			Designing out crime
		Fortress Cities: Discuss how and	
		why security has become more of	
		an issue in cities? <b>Extension 1</b> : link	

			back to the notion of insiders and outsiders from Changing Places topic. Issues of segregation can also be discussed here. What are the ethical issues surrounding certain groups being excluded from particular places? Why has this happened?  Extension 2: what is postmodernism? What evidence of postmodernism exists in UK cities or is it just an "American" thing?	
<ul> <li>Spatial patterns of economic inequality, social segregation and cultural diversity in contrasting urban areas and the factors that influence them.</li> <li>Issues associated with these processes and strategies to manage them.</li> </ul>	Collect, analyse and interpret a range of qualitative and quantitative data from a range of primary and secondary sources. Fieldwork and GIS potential here. An ability to collect and use digital and geo-located data, and understand a range of approaches to use and analyse such data. Understanding of	Students will be able to define the terms economic inequality, social segregation and cultural diversity.  Students will be able to describe and explain patterns of economic inequality, social segregation and cultural diversity in contrasting urban areas and discuss the factors that influence them.  Students will be able to discuss issues relating to economic inequality, social segregation and cultural diversity and outline the	This is an excellent opportunity to use a range of GIS resources to investigate spatial patterns in economic inequality and cultural diversity.  Primary data can be collected through urban fieldwork. Secondary data also available from a number of sources: The Office for National Statistics provides a range of data for different wards within urban areas. These statistics can be used alongside primary data on housing, land-use, provision of services and environmental quality to compare different parts of an urban area. The Field Studies Council (FSC) has numerous useful documents and	Bennett, P. (2011) 'Multiculturalism in urban areas' <i>GeoActive 462</i> Cowling, D. (April 2014) 'Multicultural UK: ethnic enclaves in the UK' <i>GeoFile 715</i> Brighty, P. (Sept 2014) 'Understanding the multi-dimensional nature of urban poverty' <i>GeoFile 720</i> Adams, Chamberlain and Lockheart, (Jan 2013) 'The riots of 2011 and the role of multiculturalism' <i>GeoFile 680</i> Melbourne, B. (September 2001) 'The socio-demographic structure of UK cities' <i>GeoFile 405</i> To look at inequality in London, go to London's Poverty Profile: Key facts. Also, London Mayor and Assembly and

	the ethical and	stratagies adopted to	recourses on their website to belo	Landan Mannary A cocial atlas of
		strategies adopted to	resources on their website to help	London Mapper: A social atlas of
	socio-political	manage these.	you investigate the quality of urban	London. Go also to The Information
	implications of		areas and inequalities.	<u>Capital</u> or get hold of the excellent
	collecting, studying		It is also worth looking at the 2015	book by Cheshire, J. and Uberti, O.
	and representing		Index of Multiple Deprivation data	(2014) London: the information capital
	geographical data		which measures relative	with fabulous examples of G.I.S. for
	about human		deprivation. This can be viewed at	London.
	communities.		The Consumer Data Research	
			Centre or IMD explorer	See also Oliver O'Brien's new map of
				diversity in London (2016)
			<b>Extension</b> : Discuss the ethical and	Turner, S. (2013) 'Housing issues in
			socio-political implications of	London' in <i>Geography Review</i> , 27:2.
			collecting, studying and	<b>3</b> , , , ,
			representing geographical data	Danny Dorling has written and spoken
			about human communities.	extensively about inequality,
				particularly in London. ( <i>The 32 stops:</i>
				The Central Line) It is worth looking
				too at his other resources on his
				webpage.
				webpage.
				For inequality in another country, you
				, , ,
				could look at <b>Bangalore</b> in India
				(Pumpkin Interactive dvd) or
				<b>Johannesburg</b> . Read the article by
				Paul Webber (2011) 'Johannesburg:
				changing patterns in the city' in
				Geography Review: 24, 4.
The impact of urban				
	Opportunities to	Students will be able to	There are great opportunities for	Parsons, G. (Sept 2003) 'Urban
forms and processes	develop skills such	describe and explain how	fieldwork here:	microclimates' GeoFile 457
on local climate and	•	urban areas affect		
weather.	as drawing,		Changes in temperature	An excellent source of information and
<ul><li>Urban</li></ul>	labelling and	temperature,	and/or pollution levels can	video clips about urban climate can be
	annotating	precipitation, fogs,		,

temperatures: the urban heat island effect.  • Precipitation: frequency and intensity.  • Fogs and thunderstorms in urban environments.  • Wind: the effects of urban structures and layout on wind speed, direction and frequency.	diagrams.  Collect, analyse and interpret a range of qualitative and quantitative data from a range of primary and secondary sources.  Maps showing spatial patterns — isoline maps.  Fieldwork and GIS potential here.	thunderstorms and wind.  Students will be familiar with terms such as the urban heat island, channeling and the venturi effect.	be measured and mapped across an urban area.  Traffic counts at strategic points may show a correlation with such data.  • Measure the impact of buildings on wind.  Get students to produce isotherm maps using primary or secondary data.  Extension: what are the implications of climate change on urban climatic events? Why is there particular concern regarding the urban heat island effect?	For an excellent range of urban heat island resources, go to  MetLink: Urban heat islands and  US Environmental Protection Agency:  Heat island effect
<ul> <li>Urban precipitation, surfaces and catchment characteristics; impacts on drainage basin storage areas; urban water cycle, water movement through urban catchments as measured by hydrographs.</li> <li>Issues associated with catchment management in</li> </ul>	Collect, analyse and interpret a range of qualitative and quantitative data from a range of primary and secondary sources – this could include discussive/creative.  Fieldwork and GIS potential here.	Students will be able to describe and explain the effect of urban surfaces on the water cycle.  Students will be able to analyse a hydrograph for an urban area.  Students will be able to define the term sustainable urban drainage systems (SUDS) and describe different SUDS strategies.	Discuss the impacts of urbanisation on water movement through urban areas. This could be demonstrated simply by observing and comparing rain falling on hard surfaces and vegetated surfaces.  Annotate and analyse an urban hydrograph  Online research for a case study of river restoration  Extension 1: A lot has been written about the fact that increasing	The Thames Estuary 2100 (TE2100) project is one response to the risk of flooding in London but other strategies are being adopted. Go to London Climate Change Partnership for more information on these.  See information on the Thames Tideway Tunnel.  The RHS are running a campaign to encourage people to green up urban areas. For more information and to look at the benefits, go to: RHS: Why greening grey Britain is important.

urban areas. The development of sustainable urban drainage systems (SUDS)  River restoration and conservation in damaged urban catchments with reference to a specific project. Reasons for and aims of the project; attitudes and contributions of parties involved; project activities and evaluation of project outcomes.		Students will be able to describe and evaluate a specific urban river restoration project, outlining the reasons for its restoration and the attitudes and contributions of the stakeholders involved.	numbers of people are replacing lawns and gardens with impermeable surfaces – what impact is this having? How could people be persuaded to reverse this trend? The RHS are running a campaign to encourage people to green up urban areas. For more information, go to: RHS: Why greening grey Britain is important  Extension 2: Look at the proposals (by a former Geography teacher) to make London the first National Park City.  What would be the costs and benefits for London and the rest of the UK? (Link here with issues such as the urban heat island, air and water pollution and sustainability)	See The British Geographer for an excellent source of information and video clips about urban climate. Dove, J. (April 2009) 'Urban ecosystems' GeoFile 590  Details about the Cheonggyecheon river restoration project can be found at WWF Global and Inhabitat  See also section on Cheonggyecheon river in 'Environmental issues in a world city' by Nick Middleton in Geography Review volume 27, number 1 (Sept 2013)  See also case study in Abbiss et al (2016) AQA A-level Geography Fourth edition (Hodder)
<ul> <li>Urban physical waste generation: sources of waste - industrial and commercial activity, personal consumption.</li> <li>Relation of waste components and waste streams to</li> </ul>	Collect, analyse and interpret information, and demonstrate the ability to understand and apply suitable analytical approaches for the different	Students will be able to describe the different sources of urban waste and recognize that both quantities of waste produced and waste disposal methods vary according to economic development.	What are the different sources of urban waste? Discuss how and why waste production varies across the world.  Investigate and evaluate the different strategies for dealing with urban waste. Students could research waste from the point of view of different stakeholders.	The World Bank is a useful source for information on global waste.  Smith, J. (2012/3) 'Managing urban waste' in <i>Topic Eye changing cities</i> .  See the excellent article on waste disposal in Taiwan by Chris Fitch entitled 'A new lease of life' (June 2015) in <i>Geographical</i> magazine.  Wheeler, P. (April 2016) 'Recycling

economic characteristics, lifestyles and attitudes.  The environmental impacts of alternative approaches to waste disposal: unregulated, recycling, recovery, reduction (incineration), burial, submergence, trade. Comparison of incineration and landfill approaches to waste disposal in relation to a specified urban area.	information types	Students will be able to describe and evaluate a range of waste disposal methods.  Students will be able to compare and contrast incineration and landfill approaches to waste in a specified urban area.	Feedback could then take the form of a debate/role play, or construction of SWOT analysis in groups etc.  Online research of case study which allows the comparison of incineration and landfill approaches to waste disposal in relation to a specified urban area  Many urban waste centres now offer educational visits – it is worth looking at this option.	costs and benefits' GeoFile 752 Bennett, P. (2013) 'Sustainable waste management in the West Midlands' GeoActive 496 Eddis, T. (2007) 'Managament of waste in cities: a DME' GeoFile 548 There are lots of resources about the world's first offshore landfill in Singapore called Semakau landfill.  Plymouth Energy from Waste case study  The NGO Practical Action has some useful resources on Urban waste management.
<ul> <li>Air quality:         particulate and         photo-chemical         pollution.</li> <li>Pollution reduction         policies.</li> <li>Other         environmental         problems in         contrasting urban</li> </ul>	An ability to collect and use digital and geo-located data, and understand a range of approaches to use and analyse such data.  Collect, analyse	Students will be able to describe and distinguish between particulate and photo-chemical pollution. Students will be aware of the range of strategies being used to combat air pollution in urban areas.	Investigate the different causes and impacts of air pollution. London said to have 9,400 premature deaths annually due to air pollution. Could also look at concept of "Airpocalypse" (Beijing) What are the main causes? What is being done to tackle this problem?	Warbuton, P. (April 2013) 'Environmental issues in urban areas today' <i>GeoFile 692</i> Parson, G. (Jan 2012) 'Air quality issues' <i>GeoFile 656</i> Nagle, G. (Sept 2000) 'Air pollution in Beijing' <i>GeoFile 383</i> An excellent source of information and

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areas: water	and interpret	Students will be able to	Get students to produce isoline	video clips about urban climate can be
pollution and	information, and	describe and explain the	maps using (primary or) secondary	found here at <u>The British Geographer</u> .
dereliction.	demonstrate the	causes of air pollution,	air pollution data. Look for patterns	
<ul> <li>Strategies to</li> </ul>	ability to	water pollution and	and get students to describe and	City pollution levels are monitored
manage these	understand and	dereliction and outline	explain their findings.	continuously and you can use this data
problems.	apply suitable	strategies used to manage		to examine geographical patterns. Go
<ul> <li>Impact of urban</li> </ul>	analytical	these problems.	Detroit would be a useful case	to London Air for a "nowcast", which is
areas on local and	approaches for the		study to look at the impacts of	a service to show current pollution
global	different		deindustrialisation and dereliction.	levels in detail across London in
environments.	information types.		Ford has just announced new	comparison with the Government's Air
	Maps showing		investment in the city which also	Pollution Index.
	spatial patterns –		makes it a useful case study for	
	isoline maps.		regeneration.	Warbuton, P. (April 2002) 'Issues
	·			relating to greenfield and brownfield
	Fieldwork and GIS		Extension: weigh up the pros and	sites' GeoFile 421
	potential here.		cons of different strategies to	Dove, J. (April 2009) 'Urban
			manage problems of dereliction	ecosystems' <i>GeoFile 590</i>
			and pollution.	
				The <u>Derelict London</u> website includes
				over 3000 photographs of London
				sights not normally seen by tourists.
Ecological footprint				
of major urban	An ability to collect	Students will be able to	As a starter and for context,	Look at the latest WWF Living Planet
areas.	and use digital and	define the terms	students could work out their own	report which considers the impacts of
Dimensions of	geo-located data,	ecological footprint,	ecological footprint.	urbanisation.
sustainability:	and understand a	sustainability and	<u> </u>	
natural, physical,	range of	liveability.	<u>UN Habitat</u> – an organisation	Frost, L. (2012) 'Greening the city'
social and economic.	approaches to use	Students will be able to	concerned with global urban issues	GeoActive 481
Nature and features	and analyse such	describe the features of a	has published a number of reports	Rawlings Smith, E. (2012) 'Abu Dhabi
of sustainable cities.	data.	sustainable city.	entitled The State of the World's	goes green?' in Geography Review.
Concept of		Students will be able to	Cities which focus on sustainability	Evans, L. (Jan 2006) 'Sustainable cities'
liveability.	Collect, analyse	recognize the	issues. A new World Cities Report is	GeoFile 515
iiveability.	and interpret	opportunities and	due to be published by the UN in	Nagle, G. (Jan 2009) 'Ecotowns'
1	<u>l</u>	opportunities and	add to be published by the off in	1148.0, 0. (3411 2003) 2001011113

<ul> <li>Contemporary</li> </ul>	information, and	challenges for developing	2015/2016. See also the report of	GeoFile 581
opportunities and	demonstrate the	more sustainable cities.	the <u>UN World economic and social</u>	
challenges in	ability to	Students will be able to	survey.	Singapore - the 'City in a garden' is
developing more	understand and	describe and evaluate	Discuss the concepts of liveability	known for its green credentials.
sustainable cities.	apply suitable	different methods used to	and sustainability. Emphasise the	View details of the proposal to make
<ul> <li>Strategies for</li> </ul>	analytical	create more sustainable	need to look beyond simply	London the first National Park City.
developing more	approaches for the	cities.	environmental issues.	
sustainable cities.	different		Students to research different	A good article on greening London by
	information types.		strategies adopted by cities to	Chris Fitch can be found in
			become more sustainable. There is	Geographical magazine, May 2016
			lots going on in London but other	entitled 'A walk in the park.' See also
			well-documented cities include	the <u>Greener London report</u> by a
			Curitiba, Freiburg and Singapore.	consortium of environmental
				organisations.
			Extension: Why does liveability	Research the construction of the
			mean different things to different	London garden bridge. For more
			people? Students could research	information and useful video clips, go
			and evaluate the Global liveability	to Garden Bridge London.
			rankings.	
			The 2015 rankings can be found at	The RHS are running a campaign to
			The Economist: The world's most	encourage people to green up urban
			liveable cities	areas. For more information, go to:
			Extension 2: Discuss the issue or	RHS: Why greening grey Britain is
			urban resilience. What does it	important
			mean? Why are cities increasingly	
			considering resilience? Go to 100	TED Talk by Jaime Lerner, former
			Resilient Cities.	Mayor of Curitiba.
			Examples include Rotterdam's 2016	, ,
			Resilience strategy	Watch "Fully Charged" documentary
			The strategy	on Masdar City (two parts).
Case study development –				
this could be left to the end	Collect, analyse	Students will have time to	Students to collect (primary and)	Data is readily available for most cities
or built up over the course	and interpret a	build up their two	secondary data to produce two	in some form or another.
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of the topic. Students are expected to study two contrasting urban areas to illustrate and analyse key themes set out in the specification, to include:

- patterns of economic and social well-being and
- the nature and impact of physical environmental conditions

with reference to the implications for environmental sustainability, the character of the study areas and the experience and attitudes of their populations

range of qualitative and quantitative data from a range of primary and secondary sources

An ability to collect and use digital and geo-located data, and understand a range of approaches to use and analyse such data

about human communities contrasting place studies to illustrate and analyse the key themes set out in the specification.

contrasting urban case studies. Particular attention should be given

- 1. patterns of economic and social well-being and
- 2. the nature and impact of physical environmental conditions

For census data and social and economic characteristics of places in the UK, go to: Office for National **Statistics** 

**DataShine Census and Consumer Data** Research Centre provide interactive visualisation of census data.

**Local Government Association** UK Local Area and Check My Area can provide localised data on information such as house prices, school results, council tax and crime. For healthrelated data, go to Public Health Outcomes Framework. All of these can be used to show inequality.

The Guardian newspaper does some good features on cities around the world.

Understanding of the ethical and socio-political implications of collecting, studying and representing geographical data

Fieldwork and GIS potential here

Links back to **Changing Places** topic