World cities: The global pattern

Millionaire cities have one million or more people.
- The number of millionaire cities has increased from 11 in 1900 to 250 in 2000.

Megacities have at least five million people:
- The largest cities are Tokyo with 34m people,
- Mexico City with 23m,
- Seoul, South Korea, and New York with 22m
- and Sao Paulo and Mumbai with 20m.

World cities are those that exert a global influence due to their financial and commercial status.

Contemporary urbanisation processes

Urban growth refers to the physical expansion of a city in terms of population size and density, or areal extent and building density.

Urbanisation is the increase in the proportion of a country’s population living in urban areas. It is caused by in-migration and by natural increase in population.

Suburbanisation is the movement of people and businesses from the inner to the outer parts of the city, encouraged by the development of transport and private car ownership.

Counter-urbanisation is the outward movement of people and businesses from major urban areas to rural areas and smaller settlements.
**Re-urbanisation** is the movement of people and businesses back to cities.

**Urbanisation**
The diagram suggests that economic development and industrialisation are related to urbanisation. Comment on the validity of this diagram as an explanation for the growth of developing world cities. Urbanisation in the past was closely associated with industrialisation based on the western model. Developing world urbanisation is more closely associated with comparative levels of poverty in rural and urban areas.

*Who moves?* Young adults, the rural poor and students.
- Over half the world's population now live in urban areas.
- Migration accounts for roughly half of urbanisation in poorer countries due to poverty, unemployment and deprivation in rural areas.
- In developing urban areas, the rates of pay are higher and access to informal sector work is easier so there are perceived advantages to urban living.
- Natural increase occurs as migrants are younger and better health care means there are higher birth rates and lower death rates in urban areas.
- However, urban poverty is growing faster than rural poverty due to the social and economic costs of the rapid rate of urbanisation.

**Suburbanisation**
*Who moves?* Young couples, families, home buyers and older people.
- There are different types of suburbs that have developed at different times.
- Initial development of transport networks enabled more affluent to move away from the city centre, e.g. Victorian villas, districts such as The Park, Nottingham, and Islington.
- Inter-war developments of semi-detached properties, e.g.
- Post-war council estates and private modern estates, e.g. Bilborough in Nottingham.
- Growth of suburban villages following counter-urbanisation, e.g. Bramhope.

**Counter-urbanisation**
*Who Moves?* Retired people, long-distance commuters, new rural workers and people working from home (tele-commuters).
- The process of depopulation from cities and conurbations to smaller towns and villages is largely due to dissatisfaction with urban living in such large centres.
- Better transport and wider car ownership plus the rise of new communication technologies, especially in electronic systems, have encouraged this movement.
- Essentially there is a clear break between the location for counter-urbanisation and the sprawling urban area where suburbanisation may be taking place at the urban fringe. The land between the two is used for agriculture and other rural activities.
Benefits:
• Increased value of property.
• Better living and working conditions.
• More trade for some services such as filling stations, restaurants, builders.
• Property renovated and conserved.
• New employment created.
Costs:
• Local people priced out of property market.
• Some services decline: schools, shops, public transport.
• Loss of traditional character of village.
• Tension between incomers and older country folk.
• Increased traffic on rural roads.

Re-urbanisation

Who moves? Students, young single workers, older empty-nesters and affluent dual home owners.

There are several processes operating:
• Gentrification – in-migration of individuals buying and renovating older inner city property such as Notting Hill in London.
• Property-led regeneration by private developers converting old industrial buildings or building apartment blocks on brownfield sites, e.g. Butler’s Wharf in London.
• Property-led regeneration as part of large-scale government inspired investment programmes such as Hulme in Manchester.
• Development of sustainable communities such as the Coin Street scheme in London.

World cities

World cities have become focal points for international capitalism but create spatial and social inequalities. They are hubs of power based on innovation and communication. The greater the range and density of links they have with the rest of the world, the greater their power.

A number of factors contribute to the evolution of a world city:
– The international division of labour
– The growth of communication networks and hierarchies
– The internationalisation of services
– The availability and freer movement of capital
– Divisions of wealth and well-being

Global industrial change has been both the cause and the consequence of the emergence of a highly integrated network of global or world cities. New communications technology and the internationalisation of services and finance have strengthened the power of a small number of cities such as London, Paris, New York and Hong Kong.
Planning and management issues

In MEDC cities:
- Loss of population, industry and employment.
- Shift from manufacturing to service-based employment has led to the need to encourage new service industries.
- Derelict and polluted land needing to be cleared and redeveloped.
- Congestion and pollution.
- Cities have to market themselves to attract investment and people.

In LEDC cities:
- Rapidly rising population.
- Growth of industries and services has not matched increase in labour availability.
- Inability to provide adequate utilities (water, electricity, sewerage) and housing.
- Rising congestion and pollution levels.
- Uncontrolled growth of illegal squatter settlements.

Urban decline and regeneration

Characteristics of urban decline:
- Economic decline and dereliction in former industrial areas;
- Loss of retailing and offices to out-of-town centres, suburban and peripheral locations;
- Diseconomies from congestion and high land costs;
- Loss of population to suburbs and beyond;
- Increasing poverty and deprivation in inner city;
- Deteriorating commercial and domestic property.

Causes of urban decline:
- Closure of factories due to global shift and tertiarisation of employment;
- Increased mobility due to rise in car ownership;
- Availability of cheaper locations for business and commerce on periphery;
- Urban environments perceived as unattractive and even dangerous;
- Poorly built mid-20th century redevelopment (high-rise flats).

Urban regeneration

Key terms:
- Redevelopment includes a large-scale rebuilding of urban areas to reclaim derelict land and generate economic activity.
- Regeneration refers to a wide range of urban improvements including gentrification, property-led regeneration, and partnership schemes between local and national governments and the private sector. Its function is to reverse the economic, social and physical decay in areas where market forces alone will not suffice.
- Renewal extends this to focus on communities, the most disadvantaged areas and the quality of services they receive. Its aim is to provide improved work and business opportunities, improved residential attractiveness and improved public services.
Urban regeneration

• Redevelopment and regeneration of urban areas is taking place alongside the globalisation of urban economies as all major cities seek to stem the flow of population and employment from their centres.
• Some cities have been ‘re-imaged’ through special events; the Olympic Games is the prize event and has brought significant benefits to Barcelona (1992) and Sydney (2000) and Manchester hosted the Commonwealth Games in 2002.
• City advertising works together with creating new urban landscapes such as shopping malls (Trafford Centre, Les Halles), science parks (Cambridge, La Villette), and sports, cultural and conference centres (Wembley, the NEC, La Stade de France).
• Leisure, entertainment and tourist facilities are also extended. The principal aim is to provide cities with a new economic infrastructure geared to the needs of a de-industrialised economy.

Case study: Planning Paris (1)

• The central city of Paris is home to over 2 million people but it is surrounded by the inner suburbs called the Petite Couronne and the outer suburbs or Grande Couronne, each containing about 4 million people.
• Population densities vary enormously from tightly packed tenements in the working class arrondissements of the Ville de Paris (397 per hectare) to the spacious settlements on the commuter fringe (28 per hectare) where the city merges with open fields and woodland.
• To the north and east of the city centre, the more deprived citizens, often from ethnic minority groups, live in the grande ensembles (multi-storey apartments) such as Sarcelles and la Corneuve.
• Paris is a primate city: it has 20% of France’s jobs and 30% of its GDP, and it suffers many of the problems of primacy. So the government aim has been to limit the growth of Paris, reduce regional disparities and revitalise old industrial regions.
• One policy directed at this aim was that of creating métropoles d'équilibres as counterbalances to the magnetic attraction of Paris; cities such as Marseilles, Bordeaux, and Lyons were encouraged to expand.

Case study: Planning Paris (2)

Many of the most recognisable features of Paris were constructed in the mid-19th century under the direction of Baron Haussmann.
The older buildings, and the people who lived there, were cleared to make way for tree-lined boulevards, monumental architecture and pavement cafés.
Over 10,000 people were displaced to the suburbs or crowded into the remaining central areas but the new streets facilitated faster travel and encouraged new private investment and entrepreneurialism.
Case study: Planning Paris (3)
The Schéma has undergone several revisions; the latest edition in 1994 turned away from the new towns and outer suburbs – now largely completed – to a reappraisal of the inner areas suffering from industrial decline and consequent social problems.

Case study: Planning Paris (4)
• The plan aimed to limit growth around the existing conurbation and encourage two development corridors, running north-west to south-east, each with four new towns and a population of 20,000.
• There has been a decline in the population of the City of Paris and counter-urbanisation bringing an increase in population in the outer areas and in the new towns in the Grande Couronne.
• Many left inner Paris after slum clearances in the 1970s. House prices rose and people moved out to the new towns such as St Quentin-en-Yvelines. In all 25,000 people were forced to move elsewhere.
• New town Marne-la-Vallee is a garden city that grew from 26 small villages and has lots of surrounding open space. But it has caused problems in the villages where house prices have risen greatly causing resentment.

Case study: Planning Paris (5)
Urban renewal in the City of Paris includes
– La Villette, the old cattle market and abattoir area, which has been redeveloped for leisure and recreational activities with a large concert venue and a prestigious science museum.
– La Défense, a former industrial area that has been redeveloped as a centre for finance and commerce.
– Le Marais used to contain mansions but fell into disrepair. Much of the area has now been renovated and is now the prime area for urban restoration in Paris.
– Les Halles, the former fruit and vegetable market which is now a large shopping mall.
– Le Stade de France, the new sports stadium built for the 1998 World Cup in the inner city district of Saint-Denis, formerly an industrial suburb, this area has a high crime rate and social unrest.

Case study: Mumbai (1)
• In India, 60% of urbanisation is due to natural increase, 22% is due to migration, and 18% is due to the expansion of urban administrative boundaries.
• The Mumbai Metropolitan Area is the sixth most populated metropolitan area in the world.
• The population is about 20 million with an average density of 27,000 people per sq km (the most densely populated areas house four times this number).
• Mumbai has attracted rural migrants seeking work and an escape from the poverty of their villages for over a century but its fragile infrastructure is collapsing under population pressure and city officials say that there is no more room for migrants.
• Much of the migrant population, which is male-dominated, is now absorbed by Mumbai’s peripheral urban areas such as Navi Mumbai, Thane, and Kalyan.

**Case study: Mumbai (2)**

- The city has evolved from a fishing hamlet to a British colonial port with major textile industry to the centre of India’s commerce, with the Bollywood film industry. It is now one of the top ten world financial centres.
- The tertiary sector accounts for 80% of total employment - growth of the financial sector has encouraged the growth of telecommunications, construction, real estate, etc.
- Migrants are employed in industries requiring semi-skilled and unskilled workers with minimal educational qualifications but, as manufacturing has declined, former factory workers join the growing informal sector.
- The benefits of economic change have been unevenly distributed and Mumbai’s rich and poor co-exist with very different access to basic services such as clean water, sanitation, and health care.

**Case study: Mumbai (3)**

The Mumbai slums house 60% of the population. They cover some 3,500 hectares of Mumbai nicknamed Slumbai by critics.

One-room slum tenements originally surrounded the textile mills in the Byculla district but the slums have grown significantly since India's independence in 1947, in the centre of city, on streets, along railway tracks, near water pipelines and on airport boundaries. They have spread into neighbouring areas like Mahim Creek, Parel, and Dharavi, Asia’s largest slum.

**Case study: Mumbai (4)**

A succession of slum clearance policies have been implemented by the Municipal Corporation to improve housing for the poor including:

- 1970s: provision of civic amenities (water, electricity, etc) with grants from central government
- 1976: Urban Land Act to enlarge area for middle and lower class housing but more upper class housing was built instead
- 1980s: Slum Upgrading Project offered secure long-term plot tenure to slum households but the programme targeted only 10-12% of the slum population
- 1980s: Bombay Urban Development Project (BUDP) introduced ‘cross-subsidisation’ – developers being required to allocate 20% or more of all housing projects to affordable housing
- 1995: Slum Rehabilitation (SRA) made more land available for building – builders demolish entire slum neighborhoods and use part of land for tenements for original residents – slum dwellers are given free apartments (21m² = size of typical shanty) – developer pays nothing for land and builds lucrative tower blocks on remainder.
Case study: Mumbai (5)

Benefits of SRA:
- Since 2005, Western based finance companies have also investing heavily in slum resettlement and the lucrative construction that follows.
- By end of 2006: 100,000 free apartments had been built out of the local government target of 800,000, housing 600,000 people.
- It is the first scheme to include the estimated 25,000 families living in makeshift huts along miles of pavements.
- It gives access for urban poor to otherwise unaffordable land and market subsidies.
- The mass removal plan will shift families out of the city’s slums into tenement blocks despite protests over tactics employed by officials and police.
- Some former slum-dwellers welcome the resettlement as it gives them new dignity and is peaceful.

Costs of SRA:
- Earlier efforts to re-house slum dwellers failed and implementation of the SRA plans has led to slum dwellers being evicted without warning as their homes have been demolished.
- In the tenements, horizontal slums may become vertical ones, without the vibrant street life and sense of community.
- Building skyward will strain public services and disrupt the livelihoods of street sellers and shopkeepers.
- The poor may not be able to afford the upkeep of capital-intensive buildings.
- The tenements may become ghettos.
- Slum dwellers may lose self-sufficiency, so professional help is needed.
- Many living find it brings loneliness, likened to being caged in a poultry farm.

Retailing and other services

The decentralisation of retailing:
The nature of retailing has changed with the growth of urban fringe developments. New shopping centres and business parks on the urban fringe have been occupied by companies that were originally located in the city centre. Their migration was encouraged by traffic congestion, high land values, and unattractive urban landscapes, often the product of poor architecture and planning. This has had a serious impact on the economic, social, and environmental well-being of the city centre.

The decentralisation of other services:
- Office premises have also changed location to accommodate new business methods and information technology. Often business needs are better served in new business parks on the urban fringe, closer to access routes.
- Decentralisation means that the city’s local government may lose revenue and jobs to adjacent local authority areas, increasing the poverty of the centre. City centre decline also leads to an increase in vandalism and crime, so fears about personal safety have increased desertion of the
city centre after dark. These factors have lead to cities developing a “dead heart”, or the “doughnut effect”.

**Retailing changes**

Since 1970s there has been a range of new forms of retail centres:

- Infill local shopping centres in suburban or inner city centres (convenience and lower order comparison goods)
- Retail developments at major intersections (DIY and furniture and other large outlets)
- Superstores/hypermarkets in suburban locations
- Edge-of-city shopping malls on major transport routes such as
  - 1977: Brent Cross on the North Circular road in suburban London
  - 1986: Metro Centre in the Gateshead Enterprise Zone
  - 1989: Merry Hill in the West Midlands
  - 1990: Lakeside Thurrock off the M25 and Meadowhall in Sheffield by the M1
  - 1998: Trafford Centre in Greater Manchester by the M60
  - 1999: Bluewater by the M25

**Retailing changes**

*Impact of new developments:*

- **Economic:** Dudley town centre, for example, lost 70% of the market share when Merry Hill opened and over half of retailers closed or moved out between 1986 and 1992. Often it was the independent retailers who lost out as the chains were more able to move. An application in 1997 to expand Merry Hill was refused to protect viability of existing centres.
- **Social:** Retail suburbanisation meant that the urban centres lost the wider market and became dependent on local consumers who were often poor, elderly and from ethnic minorities. There was a division of the market into suburban affluent car owners and poorer (excluded) inner-urban inhabitants.
- **Environmental:** Urban centres were left with empty retail units vulnerable to vandalism and the ‘dead heart’ syndrome while new centres were often built on greenfield sites.

**Case study: Meadowhall and Sheffield (1)**

**Meadowhall** – the “Land of Shoppertunity” – was the largest indoor shopping centre in Europe when it opened (since overtaken by the Trafford Centre and Bluewater). It was built on the site of a derelict steelworks.

Located next to the M1 (Junction 34) and linked to the rail and tram networks, with its own ring road, it is three miles northeast of Sheffield city centre.

Over 2 million people live within 45-minute drive and it attracts some 30 million visitors a year.

There are over 270 stores, and over 30 restaurants and fast food outlets plus an 11-screen cinema and three major dept stores: Marks & Spencer, House of Fraser and Debenhams.
Case study: Meadowhall and Sheffield (2)
Impact on Sheffield city centre:
Sheffield city centre planners made improvements with regard to litter, graffiti and refurbishment of pedestrianised areas but they saw Meadowhall as a challenge rather than a threat as they expected a different type of shopper to use Meadowhall. It was expected that consumers would use the city centre for convenience shopping and Meadowhall for leisure and recreation. In fact, the impact of the new mall impact was quite significant – many retailers just moved to Meadowhall and others closed as takings dropped by 25%. The empty shops were targeted by vandals and the city centre was caught in downward spiral.

Case study: Meadowhall and Sheffield (3)
Sheffield city centre’s response – the Retail Quarter – aims to provide a covered square, curved street, improved car parking and min-transport exchange with a rebuilt John Lewis store as its flagship. It is part of Sheffield’s City Centre Masterplan focused on
– the economy, including social exclusion
– the property market
– the retail, cultural and leisure provision
– the transport system
• The Retail Quarter is a 20-acre site intended to re-establish the city centre as a regional shopping destination with 100 new shops and 200 residential units. The aim is to provide existing retailers with better quality units and to attract new business. It will involve the redevelopment of a cluster of run-down streets, many not currently used for retail.

Contemporary sustainability issues
Waste management: recycling and its alternatives

On average, each person in the UK produces over 500 kg of household waste a year. Each year about 100 million tonnes of waste is generated by households, commerce and industry combined. This goes to one of four destinations:
– Landfill
– Incineration
– Recycling
– Composting
Each of these has environmental costs.

Waste facts:
• 25.9 million tonnes of household waste was collected in England in 2006/07.
• The amount of household waste not re-used, recycled or composted equivalent to 352 kg per person.
• This amount is decreasing.
• Household waste contributes only 9% to the total produced in the UK each year.
• Construction and demolition generates the largest amount (32%) closely followed by mining and quarrying (29%).
• Industry and commerce contribute 25%.
• The remainder is produced by agriculture, sewage sludge, and dredged material.

Waste management
Municipal waste includes household waste and any other wastes collected by the local authority, such as that from parks and gardens, beaches, commercial or industrial premises and fly-tipped material.

– Landfill is the main disposal method making up 64% of municipal waste.
– Over 30% is recycled or composted.
– About 11% is incinerated with energy recovery.
– These proportions are changing each year as more waste is recycled.

The composition of household waste shows the potential for reducing the landfill component by increasing recycling and also by reducing waste production, for example by reducing packaging. How does this breakdown compare with your household’s waste output? Are there ways in which you could increase recycling and decrease the amount for recycling incineration?

Kitchen waste could be divided into vegetable waste which can be composted and animal waste which cannot. White goods are appliances such as cookers and washing machines. Disposable nappies are a problem as some components are non-biodegradable.

Getting rid of the waste:
• Landfill: It is easy to dump waste in old quarries, though tax is now payable on this waste and available sites are fast filling up. But transport costs are increasing, biodegradable waste generates methane, a greenhouse gas, toxic chemicals leach into groundwater, and it does look unsightly.
• Incineration: modern incinerators reduce the volume of waste by 60-90% and also produce heat and electricity (CHP) but they release harmful pollutants such as CO₂ and dioxins which are carcinogenic.
• Recycling: valuable energy is used in extracting raw materials and making new products, it makes economic as well as environmental sense to recycle materials such as glass and aluminium. But there are costs involved in collecting, sorting and recycling waste.
• Composting: small amounts of garden waste and kitchen waste can be composted at home, larger amounts are composted for use in municipal parks and gardens. Biogas is released in the decomposition of organic matter and this can be used to produce energy.

The Government’s waste strategy:
– Remove waste by better design of products, e.g. using more recyclable parts in cars
– Reduce waste by more efficient practices, e.g. use less packaging
- Reuse materials as far as possible, e.g. Freecycle or charity shops
- Recycle waste into new usable materials, e.g. plastics recycled into fleeces
- Recover valuable materials or energy, e.g. glass & aluminium recovery
- Responsibly dispose of the residue, e.g. landfill or incineration

**Case study: Waste management in Nottingham (1)**

- The Waste Local Plan for Nottinghamshire was adopted January 2002. It sets out the broad land use framework for future waste management in the county and covers all forms of waste including household, commercial, industrial and construction wastes.
- The Plan identifies potential future sites for new facilities such as waste transfer, recycling, composting, energy recovery and landfill.
- It seeks to encourage waste management options that minimise the environmental impact while meeting Nottinghamshire's waste needs. The current plan is based on four key objectives:
  - Protecting the environment
  - Using resources efficiently
  - Controlling pollution
  - Encouraging public awareness and involvement

**Case study: Waste management in Nottingham (2)**

- Landfill 58 sites
  - 12 commercial/industrial/household sites
  - 32 commercial and industry only
  - 14 county council
- 4 incinerators (only one accepts waste collected by the council)
- 19 household waste centres
- 11 transfer stations
- 1.8 million tonnes of waste disposed of at licensed facilities
- Low levels of recycling in the city 2003/04: 5% compared to national average (20%)
- Relatively high level of incineration at 25% compared to national average (9%)
- Plans to extend incineration are very unpopular as
  - may lead to lessened efforts at recycling/ composting if we can burn waste
  - may have associated health risks

**Case study: Waste management in Nottingham (3)**

*The Eastcroft incinerator*

An energy from waste scheme was started in Nottingham in the 1960s to deal with a shortage of landfill for the city’s waste. The city council decided to invest in incineration as it could also to provide heat for local homes and businesses.

The scheme was updated in 1990s to Combined Heat and Power (CHP) to generate electricity as well as heat.

The municipal waste incinerated now reduces the amount of waste going to landfill by 70% and cuts CO₂ emissions by 34,000 tonnes each year.
CHP provides low-cost energy to more than 4000 Local Authority and housing association homes and 7000 private homes. It also supplies commercial and public buildings including Nottingham Trent University and the 120-outlet Victoria shopping centre.

**Transport and its management**

**The issues:**
- Growth in private transport has caused congestion in city centres, increasing the demand for parking space and traffic management.
- Investment in public transport has not kept pace with demand.
- The more affluent residents have moved to the suburbs or beyond leaving elderly and poorer people, often without transport and little access to decentralised services.
- Road transport accounts a quarter of CO₂ emissions in the UK.

**The problem:**
- In the UK the car is used for 89% of business trips, 80% of shopping trips over two miles, and 80% of personal journeys.

**The solutions:**
- Restrictions on private transport.
- Improvements in public transport.

**The best aim:**
- The development of integrated, efficient and sustainable systems.

**Transport and its management**

Restrictions on private transport:
- Segregating heavy traffic
- Building ring-roads and by-passes
- Pedestrianising shopping streets and town centres
- Parking restrictions and permits
- Congestion charging
- Number plate restrictions on certain days
- Variable car taxes based on engine size and type (the photo shows a tax-free electric car recharging in London)

**Improvements in public transport:**
- Bus priority schemes
- Park and ride schemes
- Public subsidies to private bus and rail companies
Other strategies:
• Development of cycle routes
• Provision for disabled (shopmobility schemes)
• ‘Walking buses’ and school buses

Managing transport in Nottingham
• The LTP for Greater Nottingham is a five-year strategy (2006-2011) jointly produced by the City and County Councils, it sets out how the local integrated transport schemes will be delivered.
• Its aims cover the Government's Shared Priorities for Transport:
  – Tackling Congestion
  – Delivering Accessibility
  – Safer Roads
  – Better Air Quality and Environment
• Plus three locally important priorities:
  – Regeneration and Neighbourhood Renewal
  – Quality of Life
  – Efficient Maintenance
• The ‘big idea’ is The Big Wheel that enables people to get around easily using a sustainable network of trams, trains, buses, walking and cycling that links together.
• The Hub, at the centre of the wheel, will be the central transport node based on an extended railway station interchange where all the types of transport – rail, tram, bus, coach, car, taxi, cycling and walking – directly connect.

Practice examination questions
(a) Comment on the percentage of slum dwellers in the urban populations shown in Figure 1. (7 marks)
(b) Outline how Local Transport Plans can improve the sustainability of urban transport. (8 marks)
(c) Discuss the consequences of suburbanisation for the centres of cities you have studied. (10 marks)

Synoptic:
“Unsustainable urban growth is an inevitable consequence of globalisation.” To what extent do you agree this view? (40 marks)