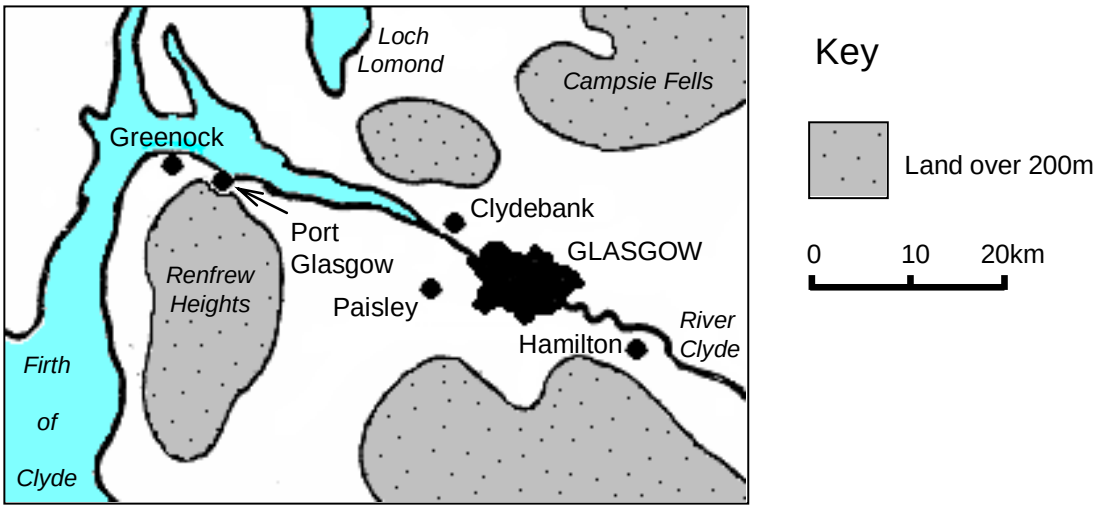
URBAN

(Glasgow)

INFORMATION BOOKLET

INTRODUCTION TO GLASGOW (DEVELOPED CITY)

Glasgow is Scotland's largest city, with a population of over 600,000 people. It is located in west central Scotland, on the River Clyde. Glasgow's riverside location was vitally important in the city's development, firstly as a trading port and then as major shipbuilding centre.



Medieval Glasgow (before 1600)

The city of Glasgow was founded in the 6th century when Saint Mungo established a church on the north side of the river, near to the present-day Glasgow Cathedral. A ford across the shallow river allowed a north–south routeway to develop. The establishment of a market in the 12th century encouraged trade especially with a wooden bridge being built in the 13th century which was later replaced by a stone bridge in 1410. The University of Glasgow was founded in 1451 and Glasgow became a centre of learning. However, population growth remained quite slow until 1600.

17th Century

During the 17th century, quaysides, such as the Broomielaw, were established along the river. The straightening and dredging of the River Clyde also allowed bigger boats upstream, and the town became the west of Scotland's main port. Prior to this, large boats could only unload further down the Clyde Estuary, which led to the development of the town of Port Glasgow.

18th Century

At the start of the 18th century, Scotland was joined with England as part of the United Kingdom because of the Act of Union (1707). Glasgow could now trade with English colonies such as the Americas and Glasgow took advantage of this. Glasgow was able to trade in tobacco, cotton and sugar and became a major player in the trans-Atlantic Slave Trade. Towards the end of the 18th century, a former student of Glasgow University, James Watt, was responsible for improving the steam engine and this allowed factories to be powered cheaply using coal from nearby Ayrshire and Lanarkshire. The Industrial Revolution was set into motion.

19th Century

The Industrial Revolution during the 19th century allowed Glasgow's economy to grow rapidly. The manufacturing of iron, steel and textiles became common and this was soon followed by shipbuilding along the river. By the end of the 19th century Glasgow was the second city of the British Empire and was producing most of the ships and locomotives in the world.

During this period, Glasgow's population also grew at an incredible rate. Workers flocked to Glasgow from all over rural Scotland and Ireland in search of jobs and wealth. Large areas of tenement housing (such as Partick, Govan and the Gorbals) were built to house hundreds of thousands of workers.

20th Century

Although the city's reputation for manufacturing and its population declined steadily through the 20th century, Glasgow continued to expand in size. Large housing estates such as Easterhouse and Drumchapel were built on the edge of the city during the 1950s and 1960s to house people moved from the inner city slums. This rebuilding lasted until the late 1970s. New private housing areas continued to emerge at the city's edge, including the suburbs of Bishopbriggs and Newton Mearns.

21st Century

Glasgow has continued to improve and it is a multifunctional city offering tourism, shopping, industry, finance and more. The main project has been the Clyde Waterfront Regeneration, with 250 developments planned over a 20–25 year period. This is one of Britain's largest urban renewal projects. The Commonwealth Games were held in Glasgow in 2014 and this also resulted in several new building projects throughout the city. Glasgow will also host the European Championships of athletics in 2018.

TASKS

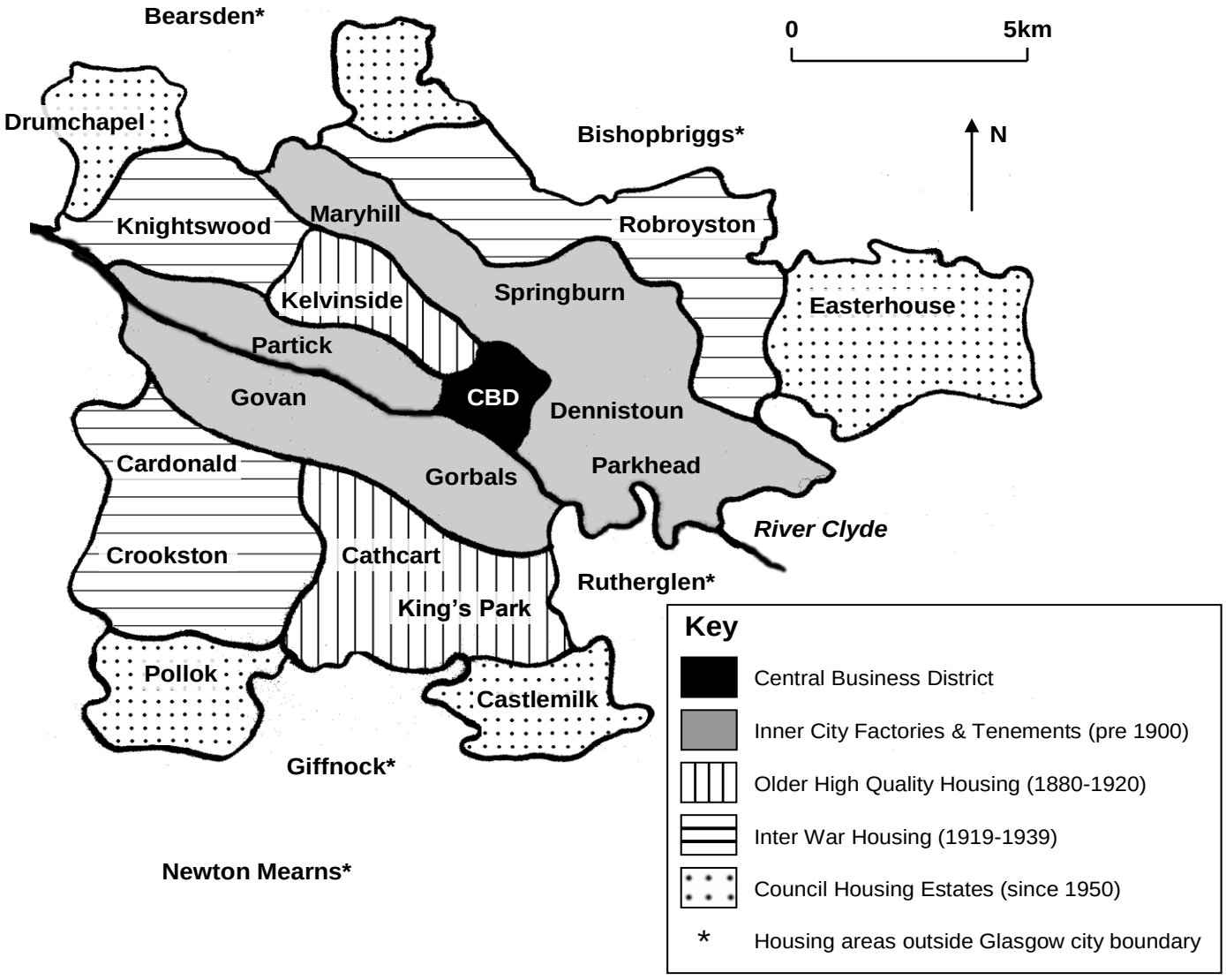
(a) Who founded the city of Glasgow?
(b) What changes to the River Clyde allowed Glasgow to become a busy port?
(c) What were the three main products that were traded in the port of Glasgow?
(d) What piece of technology allowed the industrial revolution to gather speed?
(e) What powered Glasgow's factories and where did this resource come from?
(f) Why did Glasgow earn the name the 'second city of the Empire'?
(g) Where did the workers come from to work in Glasgow?
(h) What changes occurred at the city's edge during the 20th century?

TASK: Complete the timeline of Glasgow by placing the key events into chronological order.

GLASGOW'S LAND USE ZONES

Geographers use land use models to try and explain how cities grow and how different land zones within a city are used. For example, one famous model is known as the Burgess (or concentric circle) Model. This imagines that the Central Business District (CBD) is at the very heart of a city and everything else grows equally outwards from around that. But this is a little bit too simplistic.

Below is a diagram of Glasgow's different urban zones. Each of the zones has different characteristics and different ways in which the land is used. The tables that follow **DESCRIBE** the common features of each zone and **EXPLAIN** why you find these features here.



TASK: Use the map above and the following tables to create an annotated urban transect of Glasgow.

CBD (CENTRAL BUSINESS DISTRICT)	
Land Value	Extremely high, because it has the greatest accessibility

Land Uses	• **High order shops** (Argyll Arcade jewellery, Frasers) → *can afford rents, attracts shoppers to area, has a large amount of shoppers* • **Department shops** (Debenhams, John Lewis, Frasers) → *can afford rents, large amount of shoppers (footfall), need large work forces* • **Entertainment facilities** (e.g. Cineworld, Garage, George Square events - ice rink, funfair, homeless World Cup 2016) • **Major offices** → *accessible for many workers; large workforces employed and good communication links for business* • **Hotels** (Radisson Blu, Premier Inn) → *due to large amount of tourists and as it's very accessible* • **Public buildings** (Town Hall, Churches, museums) → *most accessible location for most people* • **Historic buildings** (e.g. City Chambers, Tron Church,) → *due to being the oldest part of the city* • **Tourist attractions** (GOMA, The Lighthouse) → *most accessible, many tourists stay in the centre and the location generates the most visitors*
Sub-zones	• Often subdivided into **office district** (Charing Cross area St Vincent Street), **entertainment area** (Merchant Square) **shopping areas** ('Golden Z' of Buchanan Street, Argyle Street and Sachiehall Street) • Also zoned vertically, with land uses that can only afford cheaper rents on the upper floors e.g. ground floor = main shops, first floor = small offices, second floor = flats (e.g. flats above Buchanan Street)
Street Pattern	• **Densely packed** and Glasgow has a **grid iron street** pattern which was formed in the times of horse and carts • Some streets are **pedestrianised** (e.g. Buchanan Street, Argyle Street) as these are major shopping streets which are made safer for shoppers by restricting cars from using them.
Traffic	• **Greatest vehicle and pedestrian flow**, because main roads converge (meet) here. • Also **main railway stations** (Central and Queen Street) and **bus stations** (Buchanan Bus station) are here so many commute into CBD. • Many people work here and people come for shops, entertainments, tourist attractions so traffic congestion occurs.
Buildings	• Usually the **oldest**, being the 'core' of the city from where the city expanded from. • **Tallest** buildings → due to lack of space and high price of land so buildings are built up the way. • **Very high density** → because the land is in great demand so little open space available and lack of greenery.
Population	• Mostly **young couples** with no children and students. • Housing not a major land use and typically outward migration due to high rents, pollution, congestion etc. but now popular with students.
INNER CITY	
Land Value	Cheaper than CBD but still high, because CBD is accessible from it.

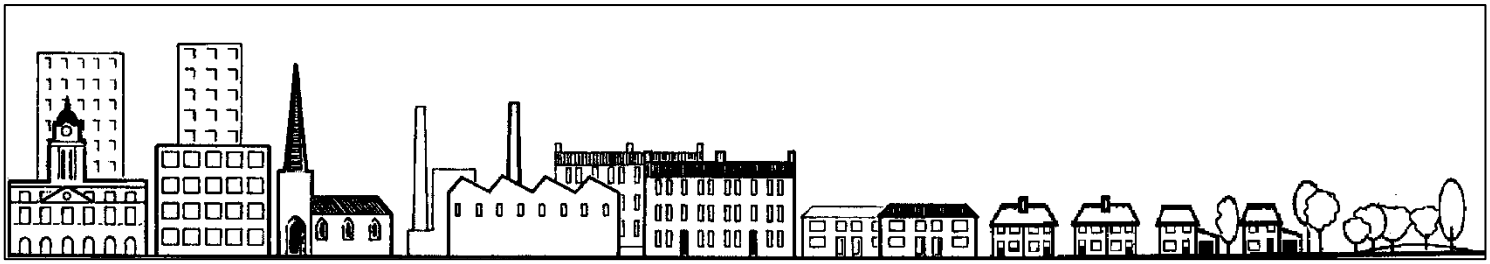
Land Uses	• **Was 19th century factories and 19th century terraced/tenement** housing. Tenements were built to house Glasgow's large population and built close to factories so people could walk to work (pre-motor cars). • **Canals and railways** often found here because these transports were used in industry for transporting goods. • **Now** some urban regeneration, with new housing replacing old housing. Also new light-manufacturing industry being located in inner city area and also services such as shops and restaurants (e.g. Finnieston)
Street Pattern	Glasgow's inner city has a **grid-iron pattern** in places as tenements were built to maximise the amount of people who could live there.
Traffic	**High vehicle traffic**, because many factories and industries located here and high population of people living in tenements and flats.
Buildings	• Many 19th century but slowly being regenerated with more modern housing. Smaller than the CBD but still tall with 4 storey tenements and some high rise flats (e.g. Partick) • **Was** high density, due to factories and houses needing to be close together with lack of green space. • **Now** becoming lower density, with urban regeneration and planning of open spaces in parts (e.g. Gorbals)
Population	• Mostly poorer groups e.g. immigrants, students, young couples but **now** some more affluent people moving in (e.g. Gorbals) • **Was** very high (more than 1 million people lived in Glasgow in 1950s) but **now** lower, as people move from the inner city to the suburbs. • **Was** outwards migration, due to high crime-rates, and few nearby jobs but **now** some immigration, due to regeneration.

SUBURBS	
Land Value	Lower land values although building values are high.
Land Uses	• Mainly housing with detached and semi-detached housing with driveways and gardens. • Leisure and recreation (e.g. parks, nature trails and golf courses) • Outer city housing estates, some tower blocks, 4-5 storey flats • Few industries or shops due to accessibility and so that housing is kept separate from industry. • Some areas can be "dormitory" or "commuter" settlements meaning there are few services but people live there and commute for work.
Street Pattern	Mostly access roads in a curvilinear pattern (crescents, squares, cul-de-sacs) with main roads nearby for commuting to the CBD.
Traffic	Less, as away from main roads and factories although commuter roads can become congested as many commute to work at peak times.
Buildings	• 20th and 21st century buildings as it's the newest part of a city

	• Low buildings, because land is cheaper • Low density, because land is cheaper and need space for large gardens.
Population	• More affluent groups in private housing e.g. middle-aged couples, poorer groups e.g. young couples with families, in local authority estates • Quite high population density in residential places, but much lower than the inner city.

EDGE OF CITY/ RURAL-URBAN FRINGE	
Land Value	Cheaper land values because far from the CBD.
Land Uses	• Modern industrial estates with large car parks. • Out of town shopping centres / retail parks. • Some private and local authority housing estates. • Large business parks that have been landscaped.
Street Pattern	• Situated near motorways and main (A) roads. Very planned road layouts including roundabouts.
Traffic	• Less traffic as on the edge of a city but high at peak times.
Buildings	• 20th and 21st century buildings (very new) • Low rise buildings since land is cheap so can build outwards • Low density with lots of space between buildings.
Population	• Low population with only a few housing estates nearby. Predominantly people come here for work and to shop.

TASK: Label the land use zones on the transect diagram below. Use vertical lines to split up each zone.



THE NEED FOR MANAGING TRANSPORT IN GLASGOW

Glasgow is one of the UK's most congested cities. There are a number of reasons why:

a) In developed world cities (like Glasgow), there has been an **increase in the number of cars** on the road each year as people have higher disposable incomes → in Glasgow, >50% of employed people travel to work by car and new roads and infrastructure is **not able to keep up with the demand.**

b) Lots of people have **moved to the suburbs** of Glasgow (e.g. Crookston) and to 'dormitory towns', but they **still commute into the CBD** for work thereby enhancing traffic congestion.

c) Many of these routes to work are on **newer, larger roads or motorways** which then link up with **older, narrower roads in the city centre** which were developed before the era of cars and they are unsuitable for modern traffic flows.

d) Many **inner city areas**, with a network of narrow roads and many junctions, cannot cope with the increased volume of traffic.

e) Glasgow's CBD has a **grid-iron street pattern** meaning that there are many intersections and multiple traffic lights in operation causing traffic to move short distances at a time.

f) Glasgow's CBD is **multi-functional** and has a high daytime population with people being in the CBD for **work, shopping and entertainment**. The tourism industry is also prominent so large **coach tours** and sightseeing buses contribute to traffic problems.

g) Many commuters all use similar roads at similar times of the day thereby creating **rush hours** as people generally commute to work **between 8-9:30am** as well as parents **dropping off their kids at school** between these times.

h) There is an increased use of **private and commercial vehicles** in the city centre such as **delivery lorries/vans** and these heavy vehicles can cause damages to roads.

i) The width of roads can be narrowed by vehicles **parking at the sides** which means that traffic can't flow properly.

j) Public transport may be seen as **costly, inefficient or lacking** meaning that more cars are on the road.

k) Glasgow has **few bridging points** across the River Clyde (e.g. Kingston Bridge, Clyde Arc, Erskine Bridge) meaning that bottlenecks occur at these points.

l) Outside of the CBD, Glasgow has a number of **industrial estates (e.g. Hillington)** which provide employment but this also attracts people to drive there particularly as public transport can be poor.

*All of these issues highlighted cause **traffic congestion** which leads to high levels of **pollution**. In fact, 2017 studies suggest that air pollution contributes to 15,000 early deaths in Scotland each year. Hope Street is the most polluted street in Scotland with dangerous levels of nitrogen dioxide!*

*Traffic management is also important because without proper planning there is an increasing **risk of accidents**. Lots of congestion also leads to economic problems such as **huge costs** to the council in road repairs and wasting of **time and fuel** for each journey made.*

TASKS:

1. Name 3 bridging points across the Clyde for transport. (3)
2. For what reasons is public transport seen as undesirable. (3)
3. How does Glasgow's CBD street pattern contribute to transport problems? (2)
4. To which zone of the city do a lot of people move to? Why is this a problem? (2)
5. How do parked cars make transport issues worse? (1)
6. How does Glasgow's multi-functionality contribute to transport problems? (2)
7. Explain why "rush hour" is a problem. (2)
8. What is an industrial estate? How do these create transport issues? (2)
9. How do delivery vehicles contribute to transport issues in Glasgow? (2)
10. Why do inner city areas suffer from congestion? (2)

TRANSPORT MANAGEMENT STRATEGIES (IMPACT/EFFECTIVENESS)

*Glasgow has used several **management strategies** to tackle traffic congestion and continues to do so. Here are some of the strategies that Glasgow had carried out along with the impact of each strategy (i.e. if it has been effective or not).*

BUILD NEW ROADS

The Clyde Tunnel (1963) and Kingston Bridge (1970) were built to increase the amount of bridging points from north to south. More recently, the Clyde Arc has been built.

- ☺ *This reduces the amount of congestion at each bridging point.*
- ☹ *Bottlenecks still occur at these points particularly at rush hour due to the sheer volume of commuters.*

The building of the M8, M77 and the M74 extension (2011) were all designed to keep through traffic away from CBD roads and increase the car capacity.

- ☺ *Congested areas can be bypassed and large volumes of traffic have meant congestion has eased slightly on the Kingston Bridge.*
- ☹ *The M77 cuts through a section of Pollok Country Park which caused protests over increased pollution and loss of wildlife habitats.*

As part of the M8, M73, M74 improvement project, major roadworks were carried out in 2017 at the Baillieston Interchange as the A8 was upgraded to motorway standard.

- ☺ *Less congestion now due to more lanes, fast moving traffic and modern roundabout layout.*
- ☹ *Disruption caused during the building works leading to widespread congestion in areas like Baillieston.*

IMPROVE PUBLIC TRANSPORT

Increased number of bus lanes to discourage use of private transport and encourage use of public transport. Also, increased frequency of bus services to every 10 minutes at peak times.

- ☺ *These make journey times quicker and more reliable so it may encourage car users to switch to using buses.*
- ☹ *It can lead to heavier congestion on major roads at rush hour as there is less road space for cars, which remain the most common vehicle.*

Upgrading of transport termini such as Buchanan Street bus station, Subway stations, Central Station and recently Queen Street Station (summer 2016) which has enabled longer platforms and electrified lines.

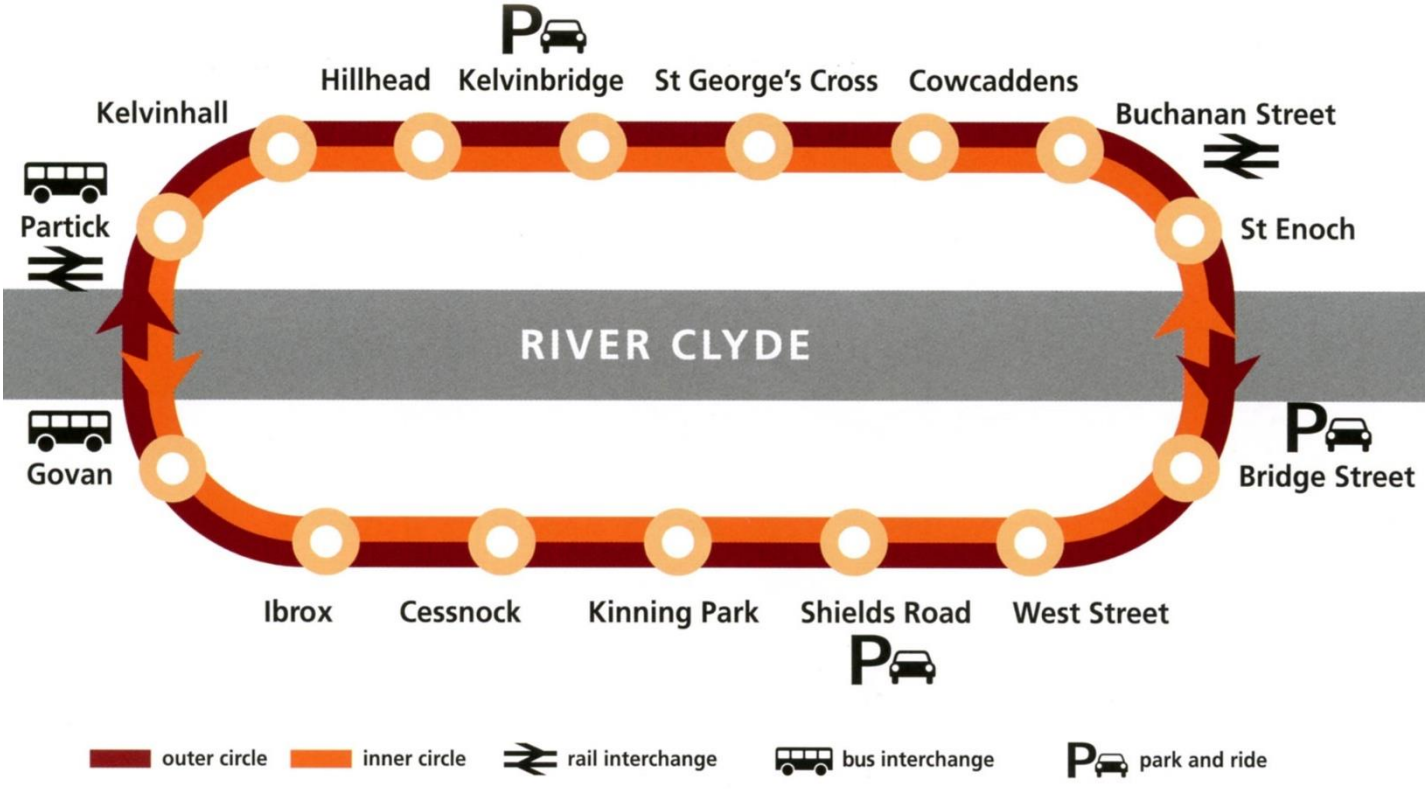
- ☺ *Electrified lines mean faster trains can be used and extended platforms means that 8 carriage trains can be used to increase the number of passengers.*
- ☹ *Queen Street station was closed for 20 weeks and caused some disruption for regular commuters and also reduced the frequency of services. This disruption will continue as the full plan is to be completed by 2019.*

Complimentary Wi-Fi provided by ScotRail and by First buses as well as addition of plug sockets on trains and improved seating on buses.

- ☺ *These upgrades make public transport more appealing and offer commuters the chance to complete work whilst they commute.*

Park and ride schemes (e.g. Shields Road – 800 car park spaces) allow people to leave their car outside the CBD and complete their journey using the Subway or train network. Also extra parking created at suburban train stations, e.g. Carluke, and new railway stations have opened, e.g. Larkhall.

- ☺ *This has reduced the amount of cars travelling into the CBD which reduces congestion and pollution levels as well as saving commuter's money.*



Season tickets and Zone Cards are offered for trains, buses and the subway in Glasgow

- ☺ *This allows commuters to switch between transports and should in theory reduce the cost of travel too. These can also be used at weekends for those who work Monday-Friday.*
- ☹ *Campaigners still say that season tickets are too expensive to convince people to ditch the car at home. E.g. in 2016 train fares increased again and have increased above the rate of inflation.*

New **bus and taxi camera lanes** (e.g. Glassford Street) now fine car users £60 for driving in these lanes at rush hour times.

- ☺ *The number of motorists using these lanes has reduced each year suggesting that the punishment of £60 is working.*
- ☺ *Glasgow City Council re-invests some of the money generated by fines into local transport strategies.*
- ☹ *Some motorists claim that signage is not always visible and that sometimes they need to manoeuvre around buses on busy narrow roads.*

Improved cycling network in Glasgow with 100 new racks added each year and more stations for Glasgow NextBikes (People Make Glasgow).

- ☺ *Cycle usage has increased each year which creates more space on the roads and also reduces pollution since cycling is an eco-friendly method of transport.*

Co-wheels car club is a scheme that has parked cars in the CBD available to hire out per hour.

☺ *Co-wheels car club replaces up to 12 privately owned cars on the road thereby reducing congestion, pollution and parking pressures in the city.*

IMPROVE EXISTING TRAFFIC FLOW

☹ **Pedestrianisation** of CBD roads e.g. Buchanan Street and Argyle Street creates traffic-free areas in and around the CBD.

- ☺ *This provides a much safer environment for pedestrians in the CBD as well as reducing pollution levels and congestion in the CBD.*
- ☹ *Some say it causes congestion elsewhere in the CBD rather than reduce it.*

☹ **One-way streets** (around George Square) with synchronised traffic lights

- ☺ *Improves the flow of traffic and allows more lanes to be used by cars since they are all travelling in the same direction.*

☹ **Parking restrictions** (e.g. double yellow lines), fines and increased costs for parking (60p for 12 minutes; max. 2 hour stay) targeted at normal office hours (9am-6pm).

- ☺ *This reduces on street parking and discourages people brining their car into the CBD. It also reduces the amount of lane blockage.*

☹ **Early morning deliveries** to shops by lorries and vans have been enforced such as shops on Buchanan Street.

- ☺ *This has reduced the number of lorries and vans delivering goods into the CBD during the day which eases congestion.*

☹ Building of **multi-storey car parks** (e.g. Buchanan Galleries) in and around the CBD

- ☺ *This reduces the amount of cars parking on the street.*
- ☹ *It does still encourage people to use their car though and parking tends to be cheaper than parking on the street.*

☹ **Travel updates** on the radio, breakfast TV or even on social media (e.g. Twitter) alerts people to areas where there is congestion or where there are accidents or road works.

- ☺ *This prevents congestion from getting worse in these areas and encourages commuters to use alternative routes or travel at earlier times.*
- ☹ *Sometimes this can lead to a build-up of traffic in another area.*

☹ **Flexi-time** is when workers choose what time they start work at in the morning and when they leave in the evening.

- ☺ *This reduces the amount of traffic flow at rush hours as it spreads the traffic at non-peak times.*

TASK: Using the notes above, annotate your copy of the Glasgow city centre map. Pick out named locations and describe and explain the traffic management strategies used.

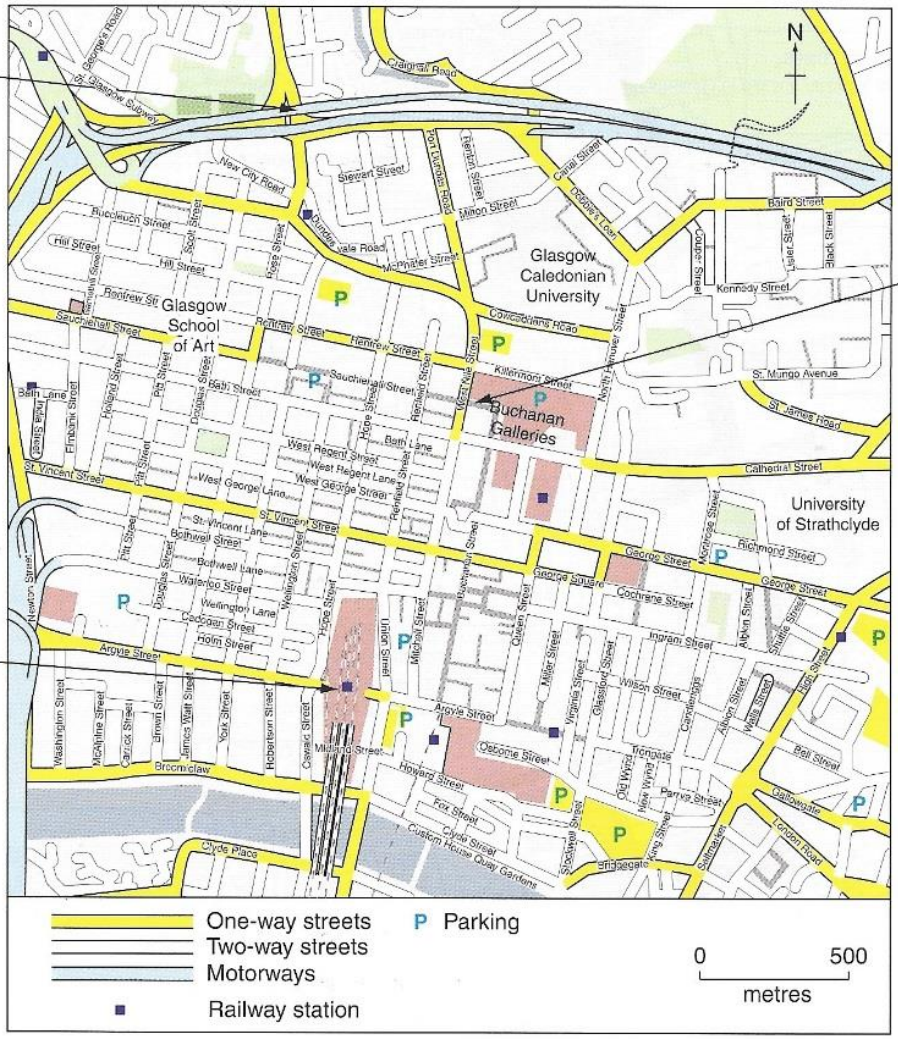
M8 and M74 motorways pass very close to the CBD and take 'through traffic' away from the centre

Pedestrianised streets, where cars are banned

Bus lanes allow buses to run more quickly, making them more popular

Glasgow has the biggest city train network outside London, making it easy to reach the centre without a car

One-way streets allow vehicles to go faster



TASKS:

1. Give a positive and a negative of building or extending new roads in Glasgow such as the M77.
2. What impact does building the Clyde Arc ("Squinty Bridge") have on traffic congestion?
3. Describe 3 ways (giving named examples) that have made public transport more appealing for commuters?
4. Why was Queen Street train station closed for 20 weeks this summer? Has this been effective?
5. Explain why park and ride schemes are used. Name an example for Glasgow.
6. Discuss what Glasgow is doing to increase the use of cycles.
7. What new strategy to reduce congestion has appeared in locations such as Glassford Street, Nelson Mandela Place and North Hanover Street?
8. Are these effective?
9. What is pedestrianisation? What impact does this have on traffic?
10. What parking restrictions are in place in Glasgow? Why?
11. When are deliveries encouraged to be made to major shops in the CBD of Glasgow?
12. What is flexi-time and what is the effect it has on congestion?
13. Are one-way streets effective?

THE NEED FOR MANAGING HOUSING IN GLASGOW

In 1931, Glasgow's population peaked at 1,088,000 and stayed at this through the 1940s and 1950s. Glasgow's population grew so rapidly because of the shipping and locomotive industry that provided thousands of jobs attracting people to migrate to Glasgow.

Many of these people were living in old 19th century tenements that were built quickly to house Glasgow's growing population. After World War II the heavy industry like ship building, coal mining and steel went into decline as the demand reduced and Britain started importing from abroad.

This now left Glasgow with a huge housing problem – many people were unemployed and the tenement housing they were living in was not fit for purpose.

Some of the problems in the inner city were:

- As both the tenements and factories had chimneys air pollution was a big problem
  - this caused poor air quality and a high rate of respiratory diseases (e.g. asthma).
- Many factories closed down and were left empty and derelict
  - these often became areas for vandalism.
- The high rates of unemployment saw a rise in crime rates in the inner city
  - because people sought other means to make a living as many people descended into poverty.

The tenements themselves had a number of issues:

- Small & overcrowded with often large families living in a single room → lack of open space for children to play and recreation
- No electricity, running water or heating.
- No inside toilets or gardens.
- Dark and damp → this lead to high incidence of disease e.g. tuberculosis.
- The inner city environment was polluted, dirty and rat-infested → leading to further spreading of disease
- Lack of services nearby due to economic decline

Overall, Glasgow was notorious for having the worst housing in the British Isles and the overall quality of life in Glasgow was lowered in the inner city areas e.g. the Gorbals.

GLASGOW'S HOUSING STRATEGIES (1950s-1970s)

Glasgow adopted several strategies to deal with its housing problem:

1. Comprehensive Redevelopment Areas (CDA's)
2. Council Housing Estates
3. Urban Renewal
4. New Towns

1a. Comprehensive Redevelopment (1957-1975)

Comprehensive Redevelopment is where the whole urban landscape was demolished before being rebuilt on a planned basis by the council or city government.

In Glasgow, this involved demolishing huge inner city areas of tenement housing e.g. Springburn, Partick, Govan and the Gorbals. In total, 29 areas underwent comprehensive redevelopment and 70,000 homes were bulldozed to the ground!

1b. Impact of Comprehensive Redevelopment

- Space cleared by demolishing tenements in the inner city was used to construct high rise flats - a **cheaper** and **quicker** option to rehouse thousands of families.
- Glasgow built more of these tower blocks flats than any other city in Europe; >300 seemingly solving the housing problem...BUT…

On **outskirts** of city – people had to travel to CBD for work.

No services – people had to travel to the CBD for shops.

Often **lifts were broken** – old people found it difficult to use the stairs.

Hundreds are now **demolished** <30 years after being built

No gardens

Ugly buildings that **scarred** the landscape

High rise flats **dangerous** for children.

Communities were **split up**.

Poorly designed and built

Suffered from **Dampness**

Some families **didn't want to live there** and moved out.

Unemployment high

Crime, violence, vandalism, drugs, squatters, isolation, depression, suicide.

Flats have been **modernised** and to improve safety **CCTV** cameras and entry phone systems have been installed.

Entrance foyers are fitted with **security lighting** and some tower blocks have **24 hour wardens**

- These were areas of housing built on the edge of the **pre-1938** boundary.

- Glasgow Corporation (city council) originally planned to build low density, **semi-detached** council houses at the city's edge with gardens and set in pleasant surroundings.
- However, the high cost and large amounts of land required, meant **cheaper 3 and 4 storey blocks** of tenement style flats were built instead.
- **Uniform** design, **low** rent
- A total of **200,000** people were relocated to four main areas during the 1950s and 1960s - ***Castlemilk***, ***Drumchapel***, ***Easterhouse*** and ***Pollok***.

2b. Impact of Council Housing Estates

- Families had **no say** in where they went → this meant inner city communities were lost (**social fragmentation**)
- **No amenities** (e.g. pub, shops, cinema) or workplaces provided in these new council housing estates which lacked "character or spirit"
  → so people felt isolated (since they were formerly countryside areas) and the estates were called "deserts with windows"
- Poorly served by public transport
  → meaning that accessibility to the CBD was not good further leading to an isolated feeling
- The lack of amenities and poor access to jobs meant these areas quickly became **run down**
  → **High crime** rates and gang culture arose
- The areas were **expensive** to renovate and some areas have already been **demolished**.

3a. Urban Renewal

- Not all tenements had been flattened during the comprehensive redevelopment of the 1950s and 60s.
- Late 1970s - improve the existing tenements, rather than demolish them
- Tenements were structurally sound so **refurbished** and **modernised:**
  - The first stage involved removing internal walls to make flats much **bigger**; very often two flats would be knocked into one.
  - Rewired
  - New **central heating** systems installed
  - Windows were **double glazed**
  - **New** kitchens and bathrooms were fitted
  - Buildings **cleaned** (sandblasted)
  - Area **landscaped** (trees / shrubs)

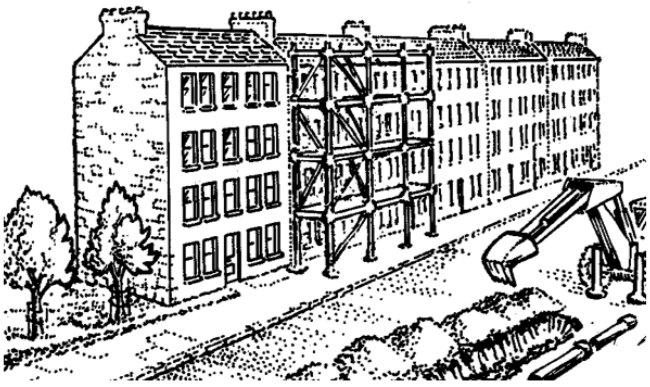
- Renovation **cheaper** and effective than building new council estates or high rise flats.

3b. Impact of Urban Renewal

Good quality buildings were kept intact.

Kept people in the inner city – **encourages young people** to move back.

Still **close to the CBD** for work and services.



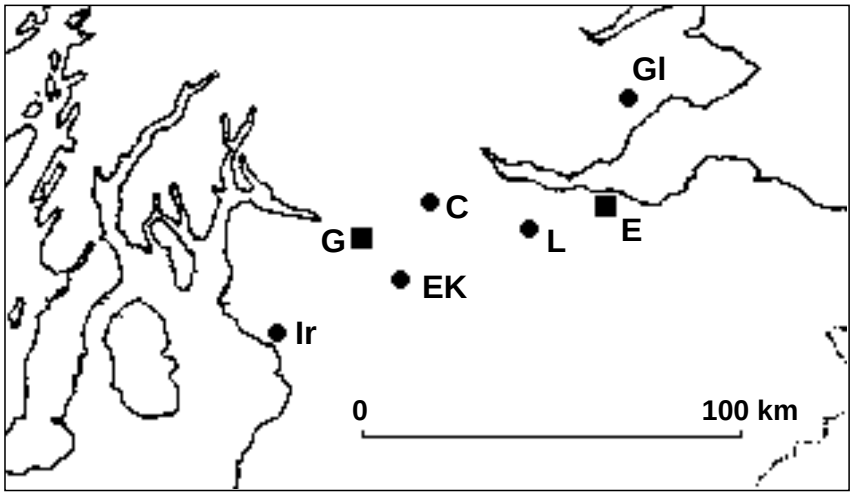
Communities were **not split up**.

All modernised – rewired and re-plumbed to make **highly attractive properties**.

4a. New Towns (1950s & 1960s)

- **Within 25 km** of Glasgow and Edinburgh

- During the **1950s** and **1960s**
- House the **overspill** from the inner cities
- East Kilbride is the **largest ~80,000**
- Built with **health**, **safety** and **wealth** in mind
- Self-contained, **planned** settlements, built in the countryside
- Had **jobs** and **services** for residents.

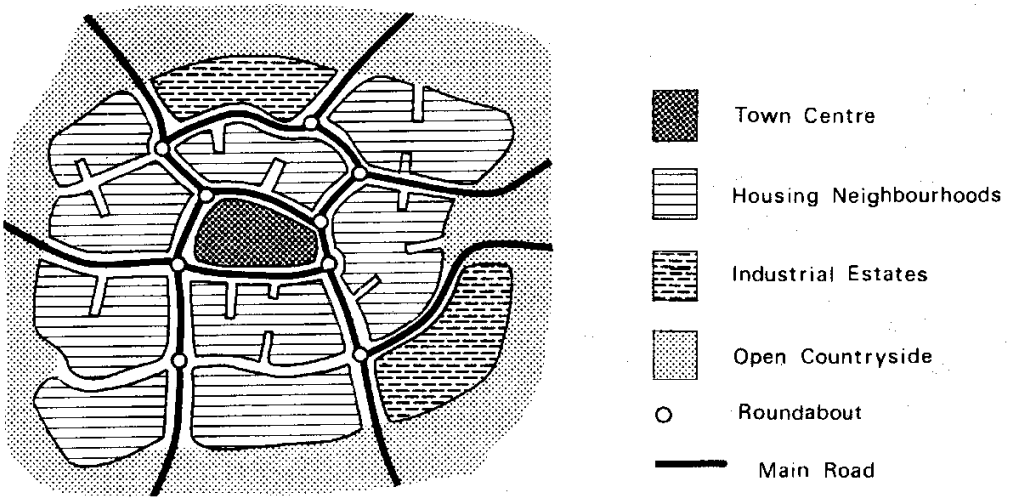


Key

G	Glasgow
E	Edinburgh
EK	East Kilbride
Ir	Irvine
C	Cumbernauld
L	Livingston
Gl	Glenrothes

4b. Impact of New Towns

- **Industrial estates** created at the edge of the town and industries given incentives (e.g. brand-new factories, loans and grants to locate and create jobs) (e.g. DFID in East Kilbride)
- '**Neighbourhoods**' included **services** such as shops, libraries, schools and leisure centres.
- A **variety of housing** styles were built to encourage a mix of people.
- A **pedestrianised shopping area** in the centre of the town served the residents.
- Pavements removed from busy roads so pedestrians linked by underpasses and bridges.
- All areas were separated from each other by a network of main roads and **roundabouts**.
- Recreational space – golf courses, Palacerigg Country Park (Cumbernauld)



Glasgow Eastern Area Renewal (GEAR) Project (1976-1987)

The population that was left in the east end after 1976 was disproportionately elderly, disabled, on low income and suffering from ill health and high mortality rates. The areas targeted by the GEAR project included Calton, Camlachie, Tollcross, Cambuslang, Shettleston, Bridgeton and Dalmarnock.

GEAR had 6 basic aims:

1. **New job opportunities** –Trained workers in new skills e.g. ICT. By 1985, there were over 200 new training schemes. Community education programmes set up to improve literacy.
2. GEAR **Business Development** Package - attracted new companies by offering grants and other incentives e.g. tax relief. New industrial estates (e.g. Queenslie near Easterhouse) and motorways to improve infrastructure. Over 5,000 new jobs created by 1987.
3. **Improve Quality of Life** – new leisure amenities (e.g. Crownpoint Sports Complex), housing, health centres and community education facilities. Over £25 million spent. Companies like Soapworks (102 staff employed by 1990) in Easterhouse (25 % unemployment) were encouraged to provide community facilities such as playgrounds, community centres. 25% of Soapworks profits go into a trust fund to help the local community. £26,000 spent in 1991 on building playgrounds for local youngsters.
4. **Improve environment** – Millions spent on landscaping, reducing pollution, cleaning buildings, creating play spaces, clearing out old "closes". Industrial pollution from chemical works in Camlachie was a major concern. New technology used.
5. **Build new houses** – modernising remaining tenement buildings and also new smaller estates built of flats & houses with gardens.
6. **Involve the community** in making decisions about the future.

Impact: GEAR

- ☺ By 1987 the Scottish development agency had assembled 190 hectares of new industrial land to attract new industry.
- ☺ Many historical buildings were restored.
- ☺ By 1987 2/3 people were living in new or modernised housing
- ☹ 2,000 additional jobs were created but 16,000 lost between 1976-1985

MORE RECENT GLASGOW HOUSING STRATEGIES

(A) Gorbals: Crown Street Regeneration (1990-2000)

Background:

The Gorbals area was famous for being one of the most deprived areas in Glasgow with high unemployment, poor quality housing, poverty and crime. The council started demolishing the high-rise flats in 1987 and many of the Gorbals residents were rehoused in other parts of Glasgow - **depopulating** Gorbals residents. Many residents were happy to leave and get a fresh start since the Gorbals had a bad reputation. However, many were sad to leave & believe that the history and sociable side of the Gorbals was being lost. After regeneration, only **20% of the residents were former Gorbals inhabitants**. The population is made up of 34% families, 36% singles & 30% couples, so there is a 'mix'.

(A) Impact: Gorbals: Crown Street Regeneration (1990-2000)

- 1200 private houses, 600 council houses, 80 student flats built to mix social classes and all with secure entry access.
    - *This reduces crime and people are more likely to care for the area.*

- New houses are a maximum of 4 storeys and made from a range of building materials and architectural styles.
    - *This makes the environment look good (compared to the high-rise flats) and attracts a 'mix' of people (young professionals who want to be near the city in a nice flat).*

- Flats are centred around communal gardens with ground floor flats having private gardens as well as there being more open space (e.g. Rose Garden) in the area.
    - *This creates green spaces which improves the environment as well as creating play areas for children and outdoor social areas for locals.*

- There is on-street parking (at least 1 space per flat) as well as parking spaces running along a central spine on the road.
    - *This avoids large unsightly car parks and helps reduce crime given that cars can be parked near flats in view.*

- Street furniture has been added, public artwork has been designed by members of the community and each block of flats has a theme.
    - *This makes flats distinctive and creates a trendy and sociable area to live.*

- Local shops and services provided e.g. Co-op, Lloyds pharmacy, a library with free internet access, police station and health centres.
    - *This gives the area several services for the locals so that they are not isolated or having to travel long distances for things like shopping and doctors etc.*

- St. Francis Church building now converted into a community centre and can be used for health and wellbeing classes (e.g. keep fit, dancing, martial arts) as well as for conferences, meetings and after school kids clubs.
    - *This adds more services into the area and builds community spirit by offering a number of opportunities for locals to come together.*

TASKS:

1. When did the council start demolishing the high rise flats in the Gorbals and what happened to the residents? (2)
2. After regeneration, what % of original Gorbals residents were left? What was a problem of this? (2)
3. Name 3 types of housing that have been built as part of the Crown Street Regenration. (3)
4. Describe 4 ways that the Crown Street Regeneration Project has tried to make the area more pleasant and sociable. (4)
5. Describe the local services in the Gorbals community and the impact of them. (5)

(B) Clyde Gateway Project (2007-present)

This project is focused on **Glasgow's East End** areas including **Bridgeton**, **Dalmarnock** and **Parkhead**, as well as **Rutherglen** and **Shawfield** in South Lanarkshire. These are all targeted for regeneration because they suffer from high crime, unemployment and social issues etc. The project runs from **2007-2028** as a partnership between Glasgow City Council, South Lanarkshire Council, Scottish Enterprise and funding from the Scottish Government.

(B) Impact of Clyde Gateway Project (2007-present)

Dalmarnock saw a significant amount of investment in infrastructure because of the 2014 Commonwealth Games. The Athlete's Village homes in Dalmarnock were later turned into **~1,400 City Legacy Homes** and the Emirates Arena (sporting venue) was also built.

- *All the homes have been sold increasing home ownership and attracting new people to the area. However, there was concern about the affordability of the housing and the forcing of residents out of the area which leads to loss of communities.*
- *The Emirates Arena provides jobs as well as promoting a variety of sports in the area.*

Large areas of housing in **Bridgeton** and **Dalmarnock** have been streetscaped with trees planted.

- *This creates a much-improved environment with extra greenery too.*

There have been transport improvements such as the M74 extension, **Dalmarnock** train station upgrade as well as new improved bus services.

- *This has improved public transport facilities and car access making the area more accessible to residents overall.*

150 local businesses are supported directly by the Clyde Gateway Project and new business and office spaces have been created (e.g. Albus building in **Bridgeton** - 2,000m^2; **Rutherglen** Links 5ha; **Shawfield** National Business District 11ha)

- *This has the impact of training and employing local people for the construction and then has also created **~3,000 jobs**.*
- ***Red Tree Bridgeton**: 26 office suites, 2 shop units created by converting vacant and derelict shops and has created up to **120 jobs**.*

Before

After

Old buildings have been reopened (e.g. Olympia Cinema in Bridgeton) and derelict or contaminated land has been developed on.

- *50% of all derelict land has seen regeneration which attracts residents and businesses to the East End – thus improving the housing areas as there are jobs to be had.*

Community Safety Glasgow moved its 450 workforce to **Bridgeton** in 2012 and **Police Scotland** moved 1100 staff to its new £25m **Dalmarnock** office in 2015.

- *The presence of these organisations in the area makes the area feel safer and is aimed at reducing the high crime rates in the East End.*

Legacy Hub in **Dalmarnock** opened in October 2015. It houses a community centre, a nursery, GP surgery, dental surgery and pharmacy.

- *This provides services for the residents in the area boosting the quality of life in the area and helps build stronger communities.*

OTHER CHANGES IN GLASGOW

****There will not be an EXAM question on this section but it will possibly be useful for your assignment (worth 33%).****

Background:

The function of Glasgow's CBD has changed through time. Historically, Glasgow was founded by St. Mungo in the 6th century. In its early days, Glasgow had a **religious** function as it had numerous churches and its cathedral. When the university of Glasgow was founded in 1451 this gave it another function as a centre for **education**. Through the industrial revolution, Glasgow was the site of heavy **industry**, becoming very important in ship-building on the Clyde as well as **manufacturing** locomotives. These days, Glasgow's CBD is multi-functional. Its functions are in: **Tourism, Entertainment, Retail (shopping), Residential and Administration / Finance.**

TOURISM CHANGES	REASON	EXAMPLE(S)
Lots of hotels in the CBD with lots being built.	CBD is most accessible location for tourists visiting Glasgow.	*Radisson Blu, Travelodge, Premier Inn.*
Hosting of the 2014 Commonwealth Games.	Increased Glasgow's international appeal.	

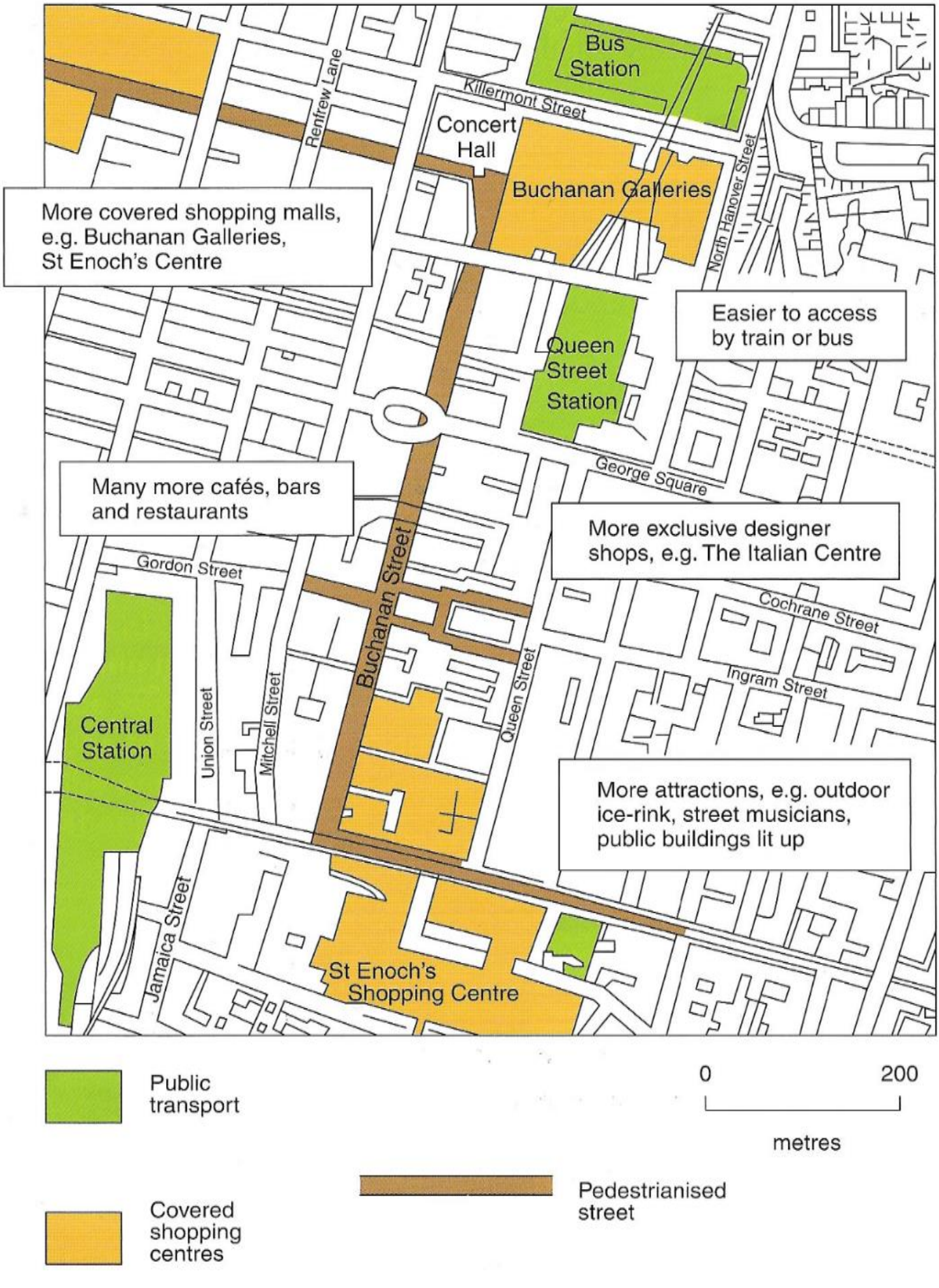
ENTERTAINMENT CHANGES	REASON	EXAMPLE(S)
Lots of restaurants available to eat at including all the main national chains.	CBD is most accessible location for people.	*Merchant Square and Princes Square food court. Nando's, Five Guys, GBK etc.*
New buildings for entertainment as well as seasonal entertainment provided.	Attracts more people into the CBD generating more money for the city and boosting economy.	*Cineworld, George Square ice rink and 2016 Homeless World Cup, Christmas fair*
Lots of pubs, bars and nightclubs.	Creates a good nightlife in Glasgow's CBD generating income.	*Wetherspoon's, The Garage.*

SHOPPING CHANGES	REASON	EXAMPLE(S)
Multiple shopping malls built in the CBD.	To compete with out of town shopping centres such as Braehead and attract customers into the CBD to spend money.	*Buchanan Galleries, St. Enoch,*
Large "chain" department stores built and expanded on whilst older more "regional" stores no longer appeal.	The high-street names attract customers to CBD.	*Debenhams, Marks & Spencer ("high street") Forsyth's & Arnott's ("regional")*
American stores now prominent as Glasgow is a global city.	Extends the appeal of the CBD and brings it in line with other world cities.	*Disney store*
Pedestrianised shopping streets.	Creates car-free zones and therefore reduces pollution in shopping areas making it a better environment as well as making it safer for shoppers.	*"Golden Z" of Buchanan Street, Argyle Street, Sauchiehall Street*
Specialist and high end shops.	Attracts affluent shoppers to the CBD as well as offering exclusive items to the CBD.	*Argyll Arcade, Frasers, Princes Square, Italian Centre*
Old building exterior kept whilst the interior is refurbished.	The old character of buildings remains in line with the surrounding buildings whilst new interiors are built to make welcome shopping spaces.	*Apple Store*
New 21st century building developments replacing old, deteriorating buildings.	Gives the CBD a modern look and creates a good shopping environment.	*Forever 21, Paperchase, Skechers*
Some shop closures and empty buildings in CBD or replaced with low-end shops or charity shops.	Some shops unable to make enough money as some customers are lost to out of town shopping centres. The space is then rented out at a lower cost.	*Seen a lot on Argyle Street, e.g. Debra, Variety Stores*
Longer shopping hours.	To compete with out of town shopping centres and encourage people back to the CBD.	*Late night shopping on Thursdays and Xmas season.*

RESIDENTIAL CHANGES	REASON	EXAMPLE(S)
Young couples and students attracted to live in the CBD.	Like to be amongst the entertainment offered by the CBD and do not require large living spaces as they don't have children. Generates council tax money. Student accommodation is very close by for university and nightlife.	*Strathclyde University accommodation.*
New flats built from old warehouses.	Regenerates older, run-down areas of the CBD and creates a new function whilst providing living space.	*Old warehouses in merchant city converted to flats. New flats also built above Forever 21. Stockwell China Bazaar (5 storeys).*

ADMIN/FINANCE CHANGES	REASON	EXAMPLE(S)
Lots of banking buildings now closing down.	Many people do banking online so no need to visit branches.	*Clydesdale Bank on George Square (now a pub).*
Many offices and financial services have moved westwards from the CBD.	Main CBD becoming more focused on shopping and entertainment so large offices pushed out.	*St Vincent Street through to Charing Cross is now populated with lots of offices and financial buildings.*
Some new office spaces being built in CBD.	Replacing old run-down buildings and creating a 21st century workplace.	*Queen Street development.*

TASK: Summarise the **FIVE** tables into **ONE** spider diagram.


Bus Station
Killermont Street
Renfrew Lane
Concert Hall
Buchanan Galleries
North Hanover Street
More covered shopping malls, e.g. Buchanan Galleries, St Enoch's Centre
Easier to access by train or bus
Queen Street Station
George Square
Many more cafés, bars and restaurants
More exclusive designer shops, e.g. The Italian Centre
Gordon Street
Buchanan Street
Cochrane Street
Ingram Street
Queen Street
Central Station
Union Street
Mitchell Street
More attractions, e.g. outdoor ice-rink, street musicians, public buildings lit up
Jamaica Street
St Enoch's Shopping Centre
Public transport
Covered shopping centres
Pedestrianised street
0
200
metres

OUT OF TOWN SHOPPING CENTRES

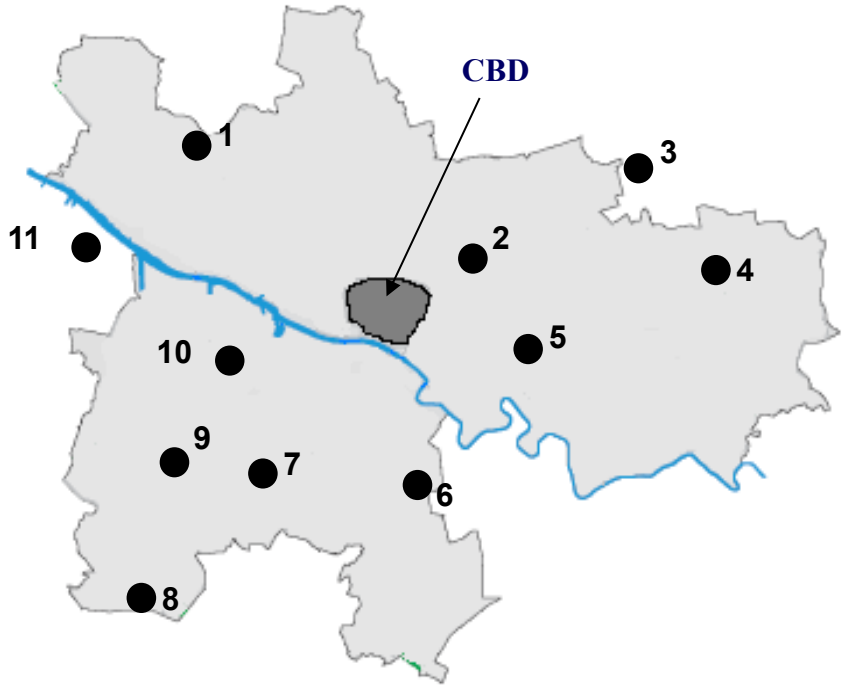
Background:

The main change in shopping in Glasgow has been the rise in the number of out of town shopping centres during the 1980s and 1990s. The location of these in Glasgow is shown below. They are very popular with shoppers and retailers.

Out of town shopping centres were actively discouraged by the government during the 1990s because of the negative influence on the High Street. Braehead was given planning permission to develop prior to this and opened in 1999. Since December 2003 the government has relaxed the tight planning restriction on out of town shopping.

TASK: Label Glasgow's out of town shopping areas.

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.



TASK: In pairs, think about the PROS and CONS of Braehead vs going into town for shopping.

ADVANTAGES

- Located near to main roads and motorways for **easy access**.
- Good **use made of the derelict land**.
- **Provides jobs** (25% of Scotland's population live within a 20 min drive from Braehead and 50% live within a 45 min drive)
- **Free parking** – major benefit for customers & **plenty of spaces** available compared to CBD
- There are **many services** in one location e.g. retail, restaurants and entertainment .
- Soar provides **entertainment**; skiing, cinema, bowling etc.
- Fewer customers travelling into the CBD thus **reducing congestion** in city.
- Offers a range of shops **under cover, so people can shop regardless of weather** (major drawback in the CBD & high street).
- **Pleasant environment** (bright, landscaped gardens) with lots of places to eat in the 1 area.
- **New houses** & Offices built & room for **expansion**.
- **Children are accommodated** for; crèches, pop groups perform in the shopping area.
- **Elderly and disabled catered for** – lifts, wide entrances etc.

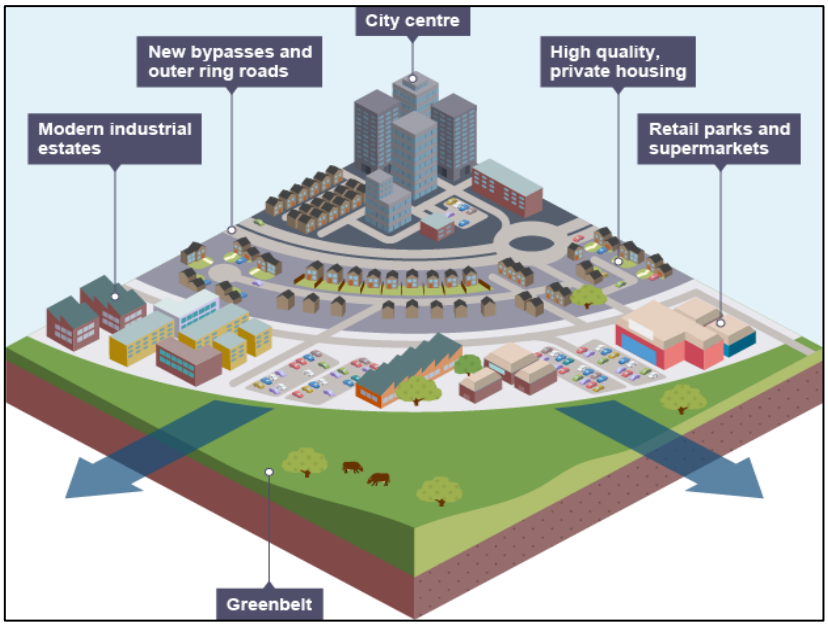
DISADVANTAGES

- CBD **loses customers** from other services – cafes etc.
- **Jobs are lost** in the CBD
- Creates **extra traffic** at edge of town - **localised congestion** – Hillington junction busier
- Many out of town shopping centres are built on farmland or use up **Green Belt**.
- Takes **trade away from High Street** – (e.g. Paisley and Renfrew) and **CBD – empty shops** replaced with charity shops - **loss of** independent shops.
- Shops move from CBD to the shopping centre due to there being more customers, more space etc. This again results in **empty shops**. (e.g. Argyle Street)
- **Discriminates** against people without cars as bus services are poor.
- Local people – **NIMBY (Not In My Back Yard) effect; people oppose it.**
- CBD shops now tend to offer more exclusive or specialised shops (designer shops – Princess Square)
- Council **lose income** from parking meters in the CBD/high street.
- Some would consider **environment unappealing.**

MANAGING THE RURAL-URBAN FRINGE

URBAN SPRAWL:

The spreading of urban developments (as houses and shopping centres) on undeveloped land near a city.



****This section will be useful for a SKILLS question.****

These are some of the reasons why these developments locate on the edges of cities.

1a. New Housing Estates - Why?

- **Room to build** and **land is cheaper** (houses and gardens larger) e.g. Castlemilk.
- **House overspill** from inner city areas e.g. Gorbals.
- **Less crime**
- Beside the countryside – nice landscape, **less pollution** than city
- New, **clean** and **attractive housing** estates with new homes.
- **Good access** to city centre (M77, M74, M8 and railway stations) – people can commute for work.

2a. Modern Industrial Estates – Why?

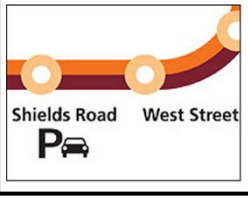
- Land is **cheaper** to rent/buy so large buildings with **room for expansion**.
- Located next to **good communications** e.g. main roads to allow **easy access** for workers/deliveries.
- **Less congestion** so workers & deliveries can arrive on time.
- Nearby populations provide a **workforce** and **market/customers**.
- Railway stations are often nearby allowing workers to **commute**.
- **Attractive**, **clean environment** for people to work in (attract workers).

3a. New Business Districts – Why?

- Shopping centres/ retail parks locate here to be **away from city centre congestion**.
- Plenty of space for large buildings and **large car parks** can be built.
- Local population provide a **workforce** and **market**.
- **Near customers** in housing estates – brings in business.
- **Near workers** in the business parks – brings in business.
- Land is **cheaper** – car parks can be large and free.
- Near a motorway junction – deliveries & workers will arrive on time.
- **Less congestion** – same reason as above.
- **Attractive environment** for shoppers

4. Bypasses & Ring Roads – Why?

- Built to limit cars going into city centre.
- **Reduces accidents** and congestion in busy city centre.
- Main roads and train lines allow **easy access** from suburbs to CBD e.g. Park and Ride.



As cities expand (**URBAN SPRAWL**), this causes **PROBLEMS** and **IMPACTS** on the edge.

TASK: Complete the table by matching up the **IMPACT/EFFECT** to the correct **PROBLEM**.

PROBLEM	IMPACT / EFFECT
Some farmland is lost to new housing developments…	
Increased traffic on the roads during peak times…	
Commuter villages grow…	…so some local services are lost due to not being used.
Demand for new housing increases…	
Young people from the rural area cannot afford the houses…	
Loss of trees/plants and habitats…	…means wildlife habitats are pushed further back.
More houses are developed on floodplains…	
Houses get built even further away from CBD…	
Increase in traffic on rural roads…	…leads to demand for new roads to link suburbs with CBD (costly – e.g. M74 extension ~£700m).
Loss of recreational land…	
Multiplier effect…	
Fewer people live in the city…	…so city is less crowded and reduction of traffic and air pollution in city centre outwith peak times . …but financial problems for city councils and loss of business for city centre shopping areas.
High % of privately owned land around cities	…leads to a decline in the quality of the rural/urban fringe around many cities

and high rate of tenant farmers…	

TASKS:

1. What is meant by the term 'urban sprawl'?
2. What are the major land uses at the edge of the city?
3. Explain fully why many people prefer to **live** in the suburbs.
4. New developments at the city edge are often beside motorway extensions. Describe the benefits to residents, businesses and shops.
5. Explain fully the advantages for **industry** setting up at the city edge as opposed to the city centre.

MANAGEMENT STRATEGIES ON THE RURAL-URBAN FRINGE

KEY WORDS

- **GREENBELT**: "an area of open land around a city, on which building is restricted. It can include farmland, country parks and golf courses."
- **GREENFIELD SITE**: undeveloped land in a city or rural area either used for agriculture, landscape design, or left to evolve naturally.
- **BROWNFIELD SITE**: a term used in urban planning to describe land previously used for industrial purposes or some commercial uses. Such land may have been contaminated with hazardous waste or pollution or is feared to be so. Once cleaned up, such an area can become host to a business development such as a retail park.
- **DORMITORY TOWN/COMMUTER SETTLEMENT**: a **town** that people live in and from where they travel to work in a bigger **town** or city.

Greenbelt Facts

- Glasgow has 109,933 hectares of greenbelt land
- 82% of Britons believe that greenbelts should be protected at all costs
- 3% of Scotland is built upon
- In the next 10 years Scotland will need an additional 250,000 new homes.
- A recent UK study found continuing migration away from towns and cities into the countryside
- Not all greenbelt land is green, some sections are derelict or neglected
- Most greenbelt land is privately owned
- 28% of people believe more industry or office buildings should be allowed in greenbelts if it creates jobs

TASK: Fill in the missing words to explain the aims of the **GREENBELT**.

Scotland's greenbelts (Glasgow's established 1950s) aim to:-

- Stop unrestricted _____ of built up areas
- Stop towns _____ into one another
- Protect _____ from development
- Preserve _____ of historical towns
- Assist urban _____
- Protect natural or semi-natural _____
- Improve _____ quality within urban areas
- Ensure that urban dwellers have access to _____, with consequent _____ and recreational opportunities; and
- Protect the unique character of rural _____ that might otherwise be absorbed by _____ suburbs.
- direct planned growth to the most _____ locations
- protect and give _____ to open space within and around towns and cities

EDUCATIONAL | ACCESS | REGENERATION | EXPANDING | COUNTRYSIDE | FARMLAND | COMMUNITIES | APPROPRIATE | MERGING | ENVIRONMENTS | AIR | SPRAWL | CHARACTER

Is a Greenbelt Effective?

- **The green belt has many benefits for people:**
  - Walking, camping, and biking areas close to the cities and towns.
  - Connected habitats for wild plants and animals.
  - Cleaner air and water.
  - Better land use of areas within the bordering cities.
- **The effectiveness of green belts can differ depending on location and country:**
  - Can be eroded by urban-rural fringe uses
  - Development can 'jump' over the green belt area, resulting in the creation of "satellite towns" which function like suburbs rather than independent communities.
  - It has prevented urban sprawl but building has taken place beyond the Greenbelt (e.g. Bearsden has grown in size, Greenlaw, 2009 SW Glasgow).
  - Exceptions have been made to the "no development" rule. New roads such as the M77, Cathkin landfill & the Greenlaw development.

How else is urban sprawl managed?

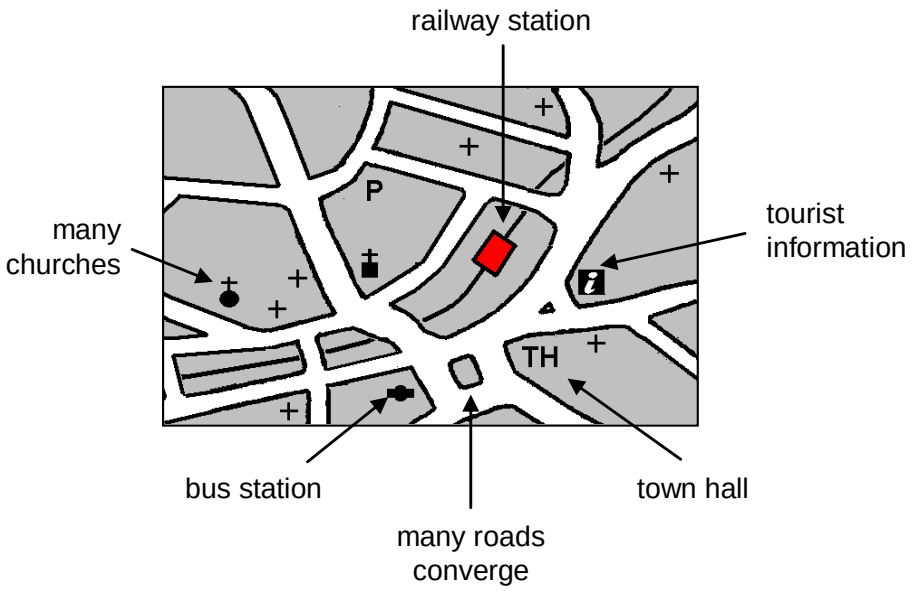
The idea is to attract people from the commuter settlements back into the city.

- Government grants and incentives → encourage industry to develop brownfield sites.
- Encourage regeneration and development of inner city → e.g. affordable housing, transport links, leisure facilities, shopping areas, attracting new industry.
- A lot of money has been spent on upgrading older properties.
- Legislation and planning controls → restricts development → **GREEN BELT**
- **Stricter** controls on the greenbelt. Only **essential** development should be allowed and where 'nibbling' occurs, the greenbelt should be 'added to' from elsewhere.
- All **brownfield** sites (DERELICT LAND) should be developed upon before **greenfield** sites → may encourage a population move back into these areas. (e.g. Dalmarnock, Clyde Corridor)
- Increase **housing density** – UK government advises 30-50 houses per hectare
- Create "**urban wedges**" – ensuring some green areas are protected near the CBD and throughout the city. Denmark does this.
- More investment on methods to **reduce the volume of traffic** instead of building more roads, for example, more park & ride schemes, **improve public transport**.
- Environmentally friendly housing?

URBAN OS MAPWORK

*In the **Application of Geographical Skills question (worth 10 marks)** you may be given a question based on an URBAN landscape so it's important that you are able to interpret and understand what an URBAN landscape looks like on an OS map.*

Identifying the CBD from an OS map (description):



Other Possible CBD Features to Look For:

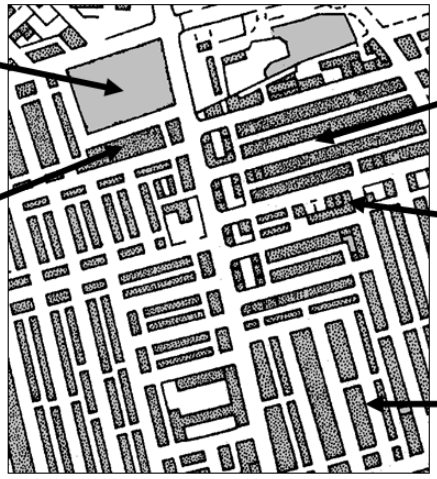
- Grid iron street pattern (not always)
- Hotels
- Museums
- Encircled by a ring road
- Cathedral
- Castle
- Lack of greenery

Reasons for these CBD Features (explanations):

- **Grid iron street pattern** was the common building method in previous centuries, designed for horse and cart. ***N.B. not all cities have a grid iron street pattern!***
- **Many roads converge** here because it is a route centre with easy access for tourists, shoppers and workers.
- **Tourist information centre** for tourists as they will often be in the CBD and can therefore access information about a city easily.
- **Many churches** because the city would have been a highly religious centre in the past.
- **Bus station/main railway station** because it is a route centre where tourists, shoppers and workers need to access easily.
- **Town Hall, Cathedral and/or castle** due to the CBD historically being the oldest part of a city so fortifications like castles where built to defend the settlement although these old buildings tend to be tourist attractions now.
- **Lack of greenery** because the land is highly sought after by businesses, offices and retail rather than for recreation.
- **Encircled by a ring road** because this alleviates traffic congestion by diverting traffic around the CBD.
- **Hotels/museums** due to a rise in tourism so places to stay and places of interest.

- **University and/or student accommodation** being built (e.g. Strathclyde University in Glasgow) for the increasing number of students who need quick access to university.

Identifying the INNER CITY from an OS map (description):



Other Possible INNER CITY Features to Look For:

- Located close to the CBD
- Industry is located along a river
- Unplanned arrangement of buildings
- Old industrial named areas e.g. *works, mill, docks*
- Many churches
- Derelict land

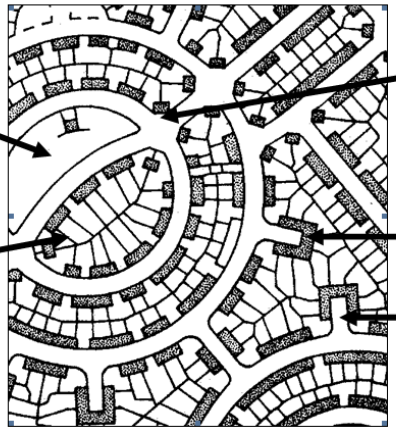
Reasons for these INNER CITY Features (explanations):

- **Very large buildings (factories)** are remains of old industry. These may be now used for light manufacturing or could be converted / redeveloped.
- **Often adjacent to railways and canals** because heavy goods (coal, iron, steel) were transported by train and still do continue to transport some freight today.
- **Long rows of tenement/terraced housing** as these were quick and cheap to build for the numerous workers.
- **Grid iron street pattern** was the common building method in previous centuries, designed for horse and cart. ***N.B. more likely to be grid-iron street pattern in inner city than the CBD.***
- **High density/few open spaces** as all available land was used for either housing or industry as many workers were needed and it also maximised output.
- **Located close to the CBD** as cities tend to grow outwards from the CBD.
- **Industry is located along a river** as it provides transport as well as a water source.
- **Unplanned arrangement of buildings** due to the speed at which these were built.
- **Many churches** as large percentage of the population would be religious.

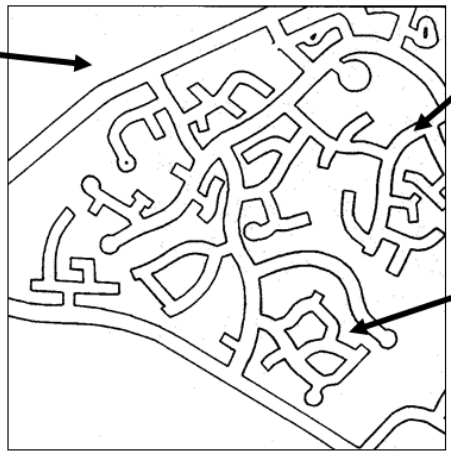
- **Derelict land** because there has been a sharp decline in heavy industry (e.g. shipbuilding) and a move towards more light manufacturing and technology. A lot of things can now be imported in at a cheaper cost due to globalisation.

Identifying INTER-WAR HOUSING from an OS map:

The inter-war period is the time after World War I (1914-18) but before World War II (1939-1945). A lot of better quality housing was built during the 1930's.



Identifying the SUBURBS from an OS map (description):



Reasons for these SUBURB Features (explanations):

- **Pleasant environment, near the edge of the city** because this provides high quality living environments for residents with recreation opportunities for families.
- **Many crescents and cul-de-sacs** as this is a modern road layout and it reduces traffic thereby increasing the safety of children since lots of families live in the area.
- **Detached and semi-detached villas** with gardens and driveway/garage because these are attractive for residents but also because the land is cheaper further from the CBD so more land can be used for these features.
- **Located away from the CBD and on the edge of the city** as cities tend to expand outwards and the edge of the city provides a greener living environment.
- **Lower building density with more open space** as less competition for land.
- **Multiple schools** (e.g. primary and secondary) for the many families living here.

- **Located away from or separately from industry** to improve environmental quality for residents (e.g. less noise, smell, visual pollution)
- **Usually accessed by secondary roads** which will link to a main road/primary route so that the neighbourhood is quiet but is still easy to access.

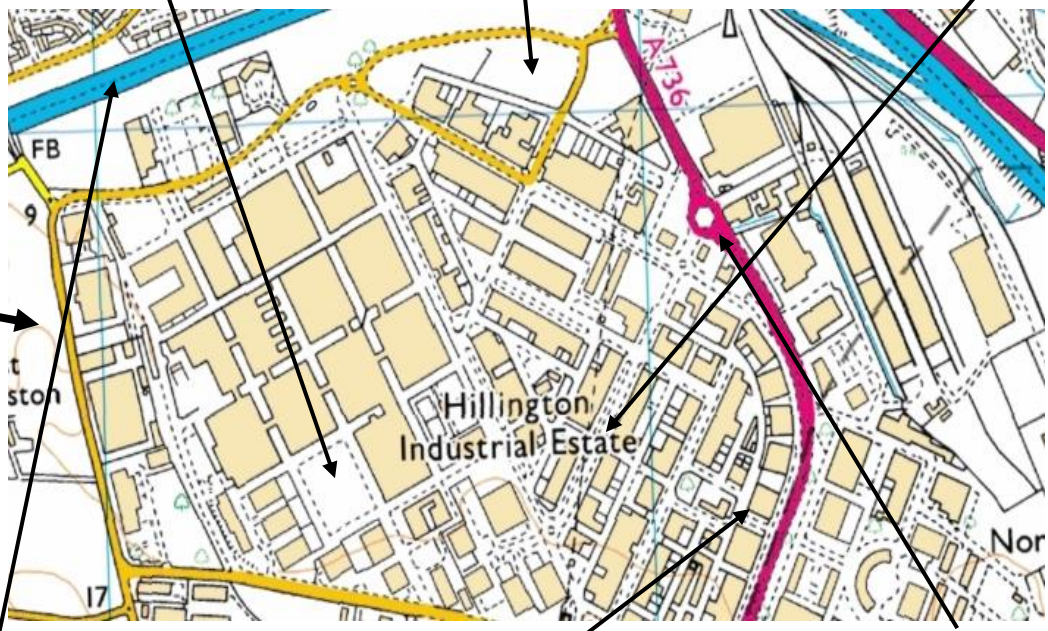
Identifying a NEW INDUSTRIAL / BUSINESS DEVELOPMENT from an OS Map:

Nowadays derelict land in the inner city is being used for industrial estates and retail parks. This is also happening on new land at the edge of the city with developments such as science parks, out of town shopping centres and airports being built.

Land tends to be cheaper further from the CBD so larger buildings and car parks can be built.

Often built on flat land as this is easier to construct on and reduces building costs.

The name "industrial estate" or "business park"

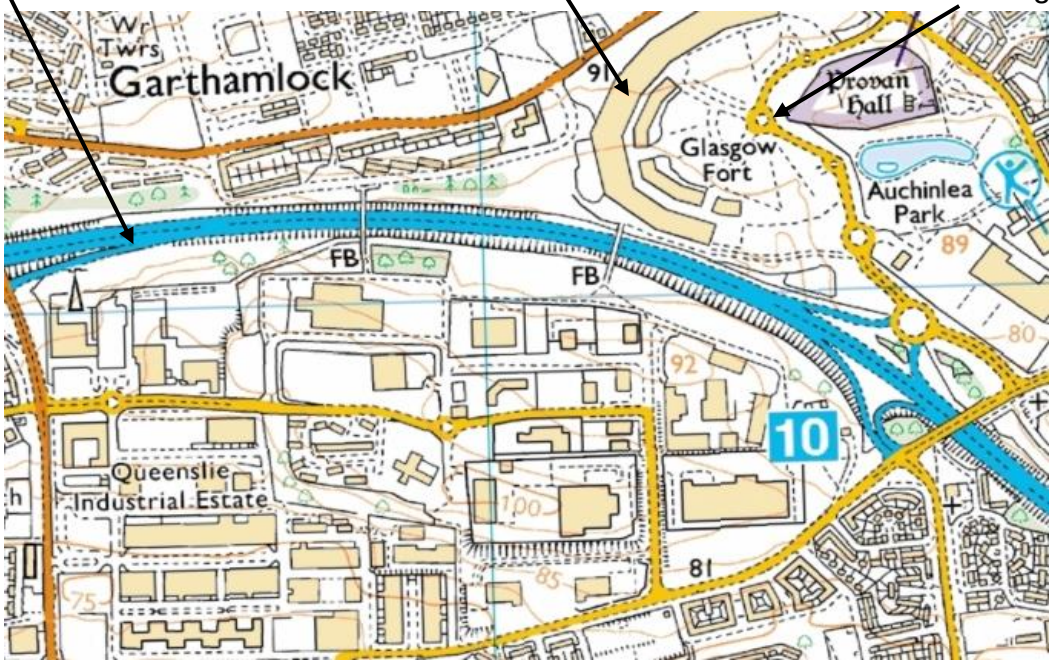


Often open space so that there is room to expand.

Near main roads and/or motorway for transportation of goods and workers.

Planned arrangement of buildings to make the best use of space.

Roundabouts due to this being a more modern road layout and this keep transport moving e.g. lorries delivering goods.



Not mixed in with housing areas to reduce pollution but will be situated close to housing areas for potential workforce.

Map Tasks: Glasgow OS Map

Using the Ordnance Survey map of Glasgow (from the 2001 General Paper), answer the questions below:

(a) Name the two squares where Glasgow's CBD is located. Give five pieces of map evidence (including 6 figure grid references where possible) to back up your answer.

(b) For the 6 areas listed below; identify in which zone of the city they are located and give a period (for example nineteenth century) when the area was built.

(i) 6165 (Dennistoun)
(ii) 5862 (Govanhill)
(iii) 5770 (Summerston)
(iv) 5765 (Finnieston)
(v) 5463 (Mosspark)
(vi) 5166 (Dean Park)

(c) Describe the urban environment of the two areas below (mention house type, age of housing, density and describe the street patterns)

(i) 5763 (Pollokshields)
(ii) 6270 (Bishopbriggs)

(d) What map evidence is there along the River Clyde that this is industrial? Give three examples with grid references in your answer.

EXTENSION (Source: Old Higher 2010)

Study OS Map Extract number 1788/105: York and Map Q4.

(a) What map evidence suggests that the Central Business District of York lies within Area A? **(6)**

(b) For either Area B or Area C, explain the advantages of its location and environment for its residents. **(7)**

(c) Using map evidence, explain why the southward expansion of York into Area D may create land use conflicts. **(7)**