

Mathematics Level 7

Chapter 4 — Changing nations

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

Attribution: Classbasics Pty Ltd, vwx.au

Curriculum codes refer to the *Victorian Curriculum F–10 Version 2.0*, published by the Victorian Curriculum and Assessment Authority (VCAA). Classbasics is not affiliated with the VCAA; the VCAA does not endorse this resource and makes no warranties regarding it.

Distribution note: this document may be distributed, and whole pages may be removed from it, provided only WHOLE pages are removed (never part of a page). This allows teachers to remove tests, exams and subtopics they do not want to issue.

Aboriginal and Torres Strait Islander content has been excluded as accuracy cannot be guaranteed, and it is better to be respectful than cover the entire curriculum inaccurately.

Significant effort has been made to ensure this content is legal. Please send any areas of concern to admin@vwx.au with appropriate document/legal references so errors can be verified and changes be made.

Contents

Section	Page
Urbanisation in urbanising countries: causes, patterns and environmental, economic and social impacts	2
Worked demonstration 1 — Urban growth or urbanisation? Test it with real numbers	12
Migration to, from and within Australia and China, and its effect on city growth	15
Comparing urban patterns: Australia and another highly urbanised country	32
Managing Australia's cities: liveability, environmental sustainability and climate-change adaptation	45
Urbanisation and its impacts through five lenses: space, place, interconnection, change, sustainability	59

Urbanisation in urbanising countries: causes, patterns and environmental, economic and social impacts

Curriculum focus — VC2HG8K18 (Victorian Curriculum 2.0, Geography, Levels 7–8). Elaborations drawn on: VC2HG8K18.E01, .E02, .E03, .E04, .E05, .E06, .E07. Case study default: **United States of America** (with the growth of Australia’s capital cities for E06).

In this section

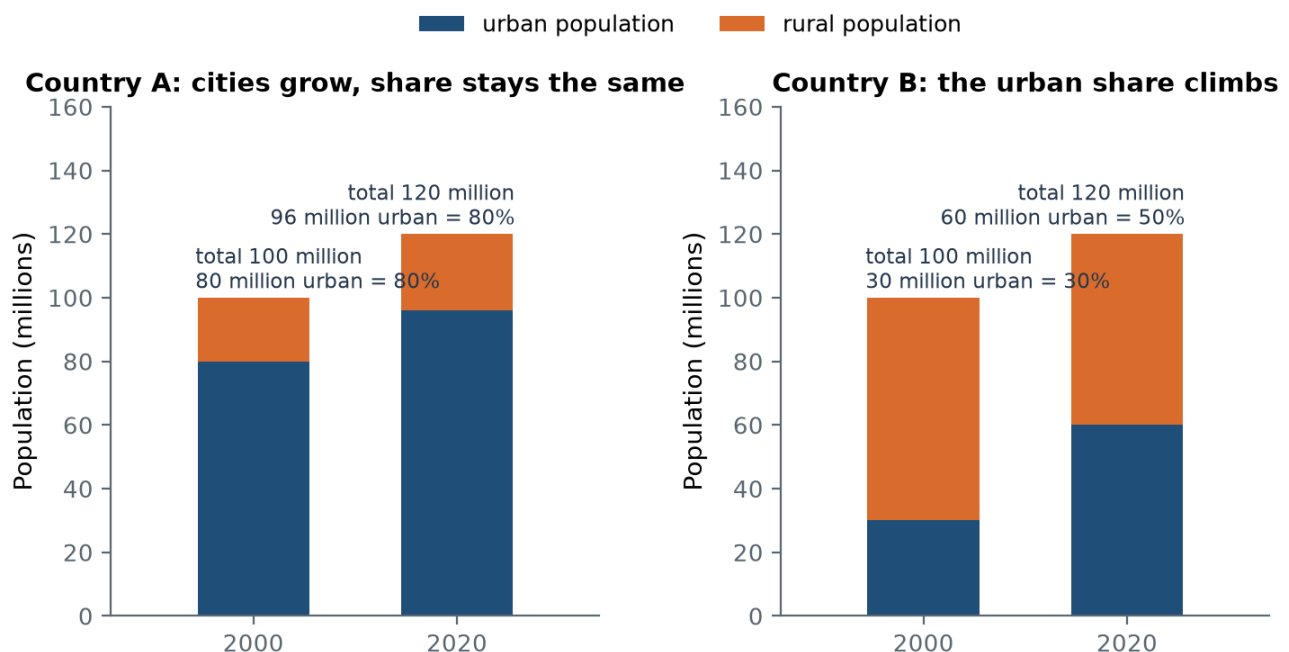
- what **urbanisation** means, and how it is different from **urban growth**
- why people move from the countryside to towns and cities: **push and pull factors**
- the pattern of urbanisation in the **United States**, including **megacities** and the **Boston–Washington urban corridor**
- the growth of Australia’s big capital cities
- how urbanisation changes city environments and the countryside
- how to sort impacts into **environmental, economic and social**, positive and negative

Key words to learn: urbanisation, urban growth, megacity, urban corridor, census, push factor, pull factor, internal migration, international migration, outmigration, return migration, remittances, urban heat island.

1. What is urbanisation? A process, not just bigger cities

Urbanisation is the process by which a growing *share* of a country’s people come to live in towns and cities. The share (or proportion) is the key idea. A country’s cities can grow bigger because the whole population is growing — but if the *share* of people living in cities stays the same, that is **urban growth** without urbanisation. Urbanisation means the urban share climbs: more of the country’s people live in cities than before.

Urban growth and urbanisation are different ideas

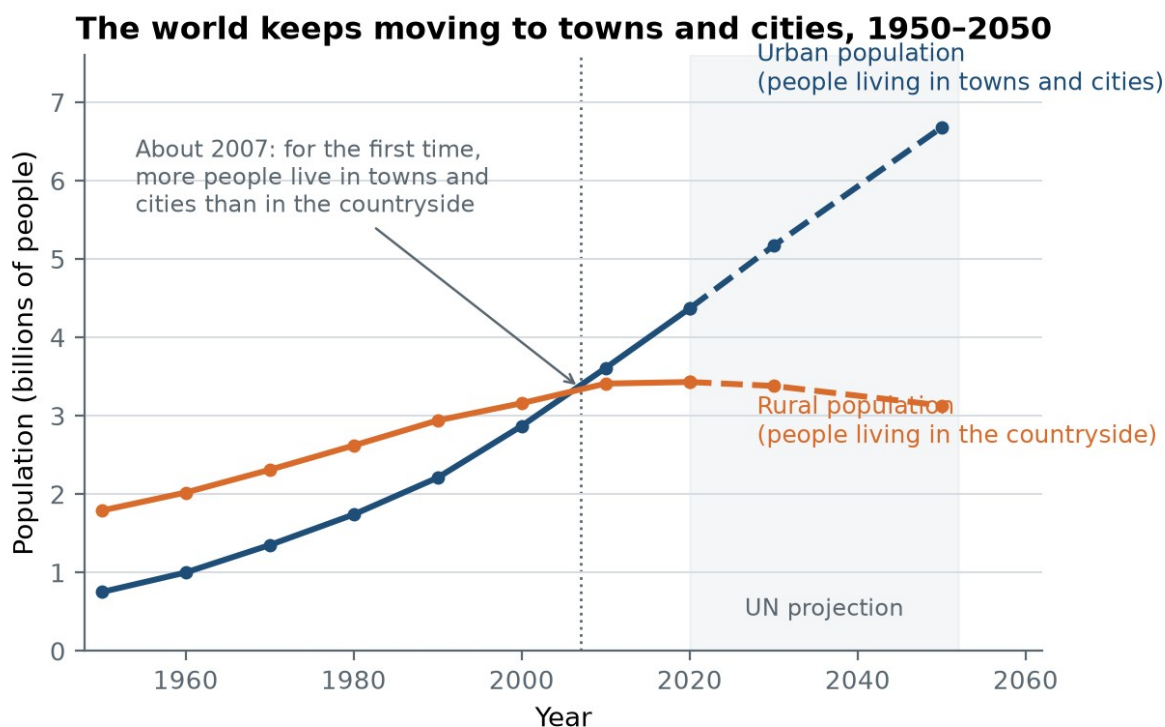


Urban growth YES — urbanisation NO (share stays 80%) Urban growth YES — and urbanisation YES (share 30% → 50%)

Two paired bar charts for made-up countries A and B. Country A’s urban share stays at 80 per cent while its totals grow, which is urban growth without urbanisation. Country B’s urban share rises from 30 to 50 per cent, which is urbanisation.

Figure 1 shows the difference with made-up countries. Country A's cities grow by 16 million people, but the urban share stays at 80%, so there is no urbanisation. Country B's urban share climbs from 30% to 50%: that is urbanisation.

The world as a whole has been urbanising for two centuries, and the fastest urbanisation today is happening in **urbanising countries** — countries where the urban share is still climbing. In about 2007, for the first time in history, more people in the world lived in urban areas than in rural areas.



Line graph of the world's urban and rural population in billions, 1950 to 2050. The urban line climbs from 0.75 billion to 6.7 billion while the rural line rises slowly, peaks after 2020 and then falls. The two lines cross at about 2007.

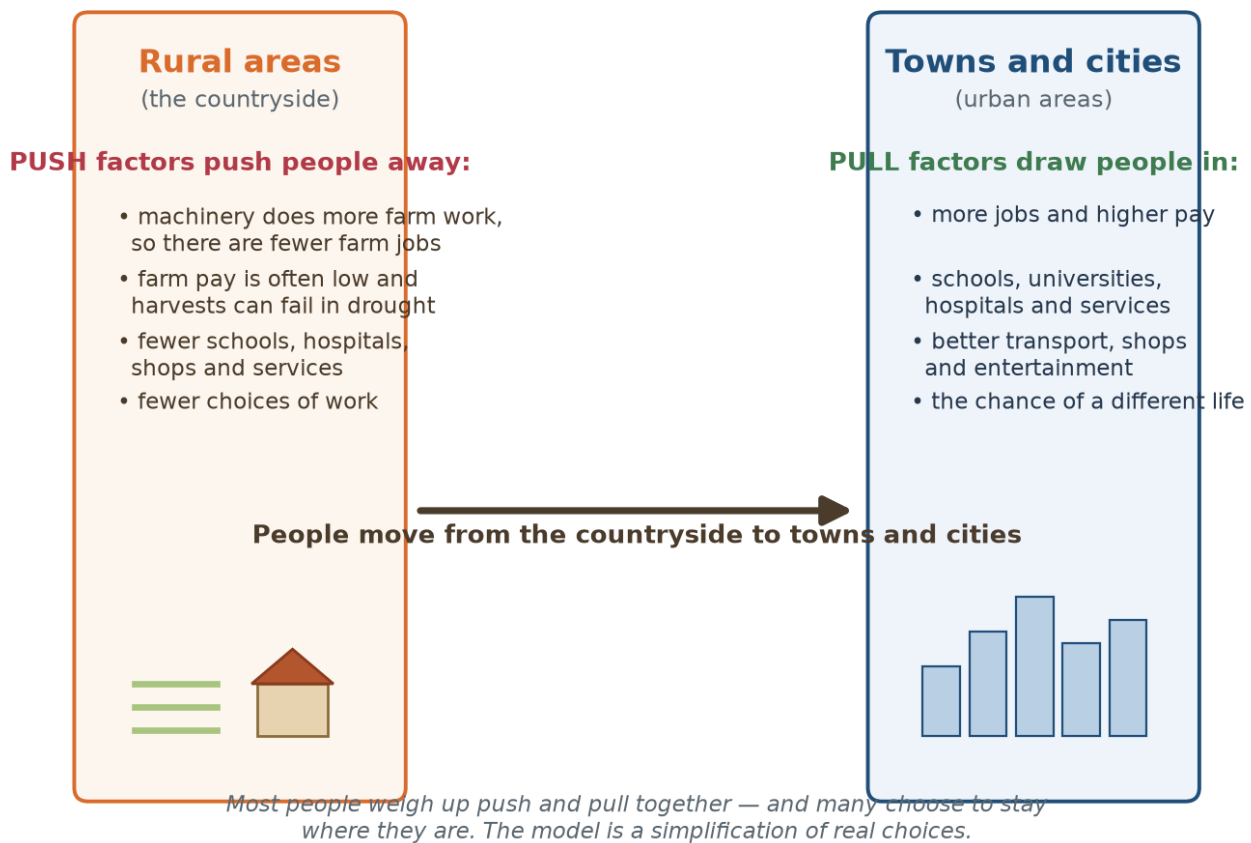
Source: United Nations, *World Urbanization Prospects: 2018 Revision* (2020–2050 values are projections), retrieved 25 August 2026.

Geographers treat urbanisation as a **process** with a pattern over time: it usually starts slowly, then speeds up as a country's factories and city jobs grow, then slows again once most people already live in cities. That is why we study "urbanising countries" as a group — they are in the fast middle stage of the process.

2. Why people move: push and pull factors

Most urbanisation happens because people **move** from rural areas to towns and cities. Geographers explain this movement with the **push–pull model**. **Push factors** are the problems that push people away from the countryside; **pull factors** are the attractions that draw them towards cities. Both sets of forces work in the same direction: towards the city.

The push-pull model: why people move to towns and cities



Model diagram with a rural panel listing push factors, a city panel listing pull factors, and an arrow showing people moving from the countryside to towns and cities. A note says the model is a simplification of real choices.

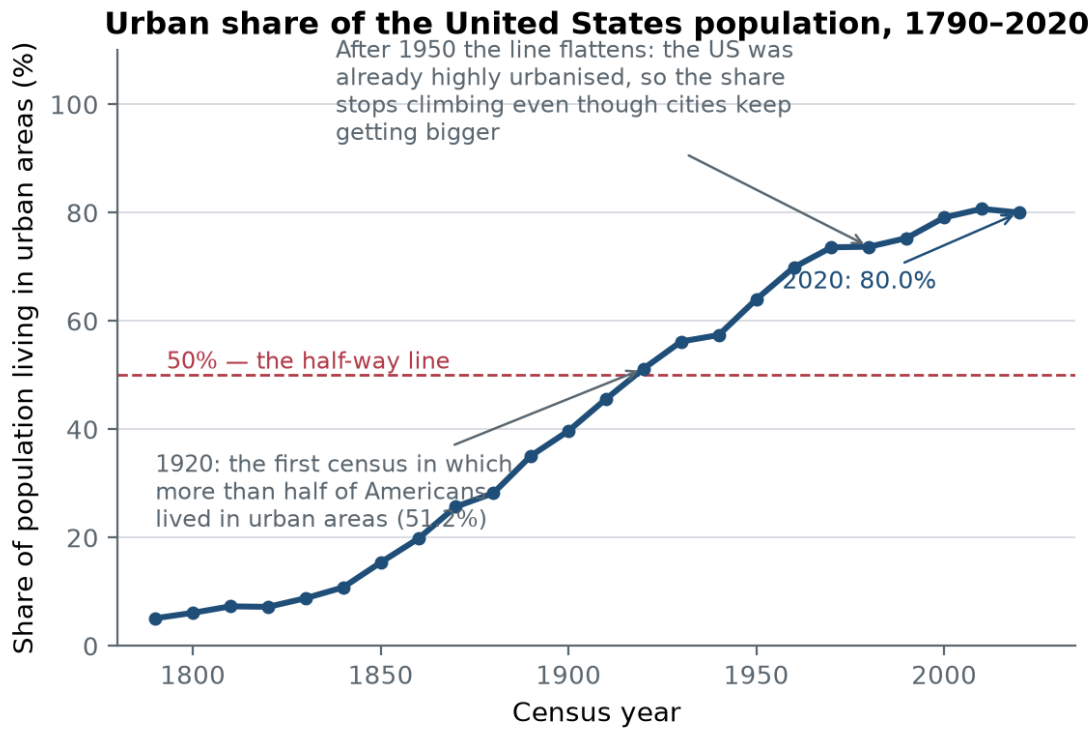
Figure 3 is a model. Real people weigh up push and pull together, and many choose to stay where they are — so the model is a simplification, but a useful one (see also the note under the figure).

Movement inside a country (for example, from a farm region to a capital city) is **internal migration**. Movement between countries is **international migration**. Most urbanisation comes from internal migration, together with natural increase (more births than deaths) in cities and the growth of city boundaries around towns.

A famous internal movement in our case-study country is the **Great Migration**: between 1916 and 1970, about six million Black Americans left the rural South for northern and western cities such as Chicago, Detroit and Los Angeles, pushed by poor farm work and unfair treatment and pulled by factory jobs and a chance of a better life.

3. The pattern in the United States: a long, early urbanisation

The United States urbanised early and steadily. At the first census in 1790, only about 5% of Americans lived in urban areas. The urban share crossed 50% at the 1920 census (51.2%), and by 2020 it reached 80.0%. The United States Census Bureau defines an urban area as a densely settled territory with at least 2,000 housing units or at least 5,000 people — so “urban” is a *defined* word, and different countries define it in different ways.

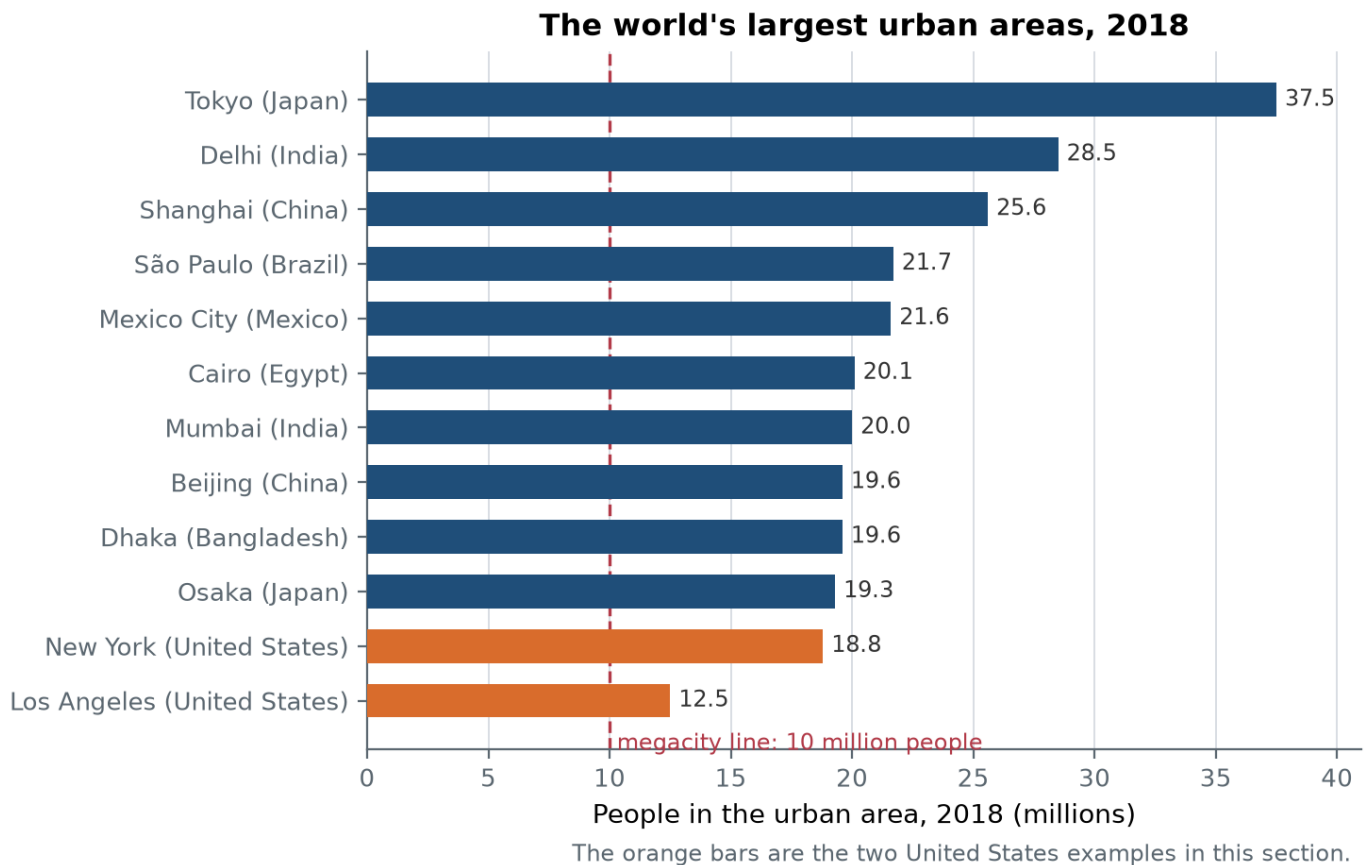


Line graph of the share of the United States population living in urban areas at each ten-year census, 1790 to 2020. The line climbs from 5.1 per cent to 80.0 per cent and crosses the 50 per cent line at 1920.

Source: US Census Bureau, decennial censuses 1790–2020, retrieved 25 August 2026.

Because the US urban share is already high, recent decades show **urban growth** with only a little urbanisation: between 2000 and 2020 the urban population grew by more than 40 million people, yet the urban share moved only from 79.1% to 80.0%.

Megacities. At the national and world scale, geographers distinguish between “large cities” and **megacities**. A megacity is an urban area with **10 million people or more** (the United Nations definition). In 2018 there were 33 megacities, most of them in urbanising countries; the UN projects 43 by 2030. The United States has two: New York and **Los Angeles** (about 12.5 million in 2018).

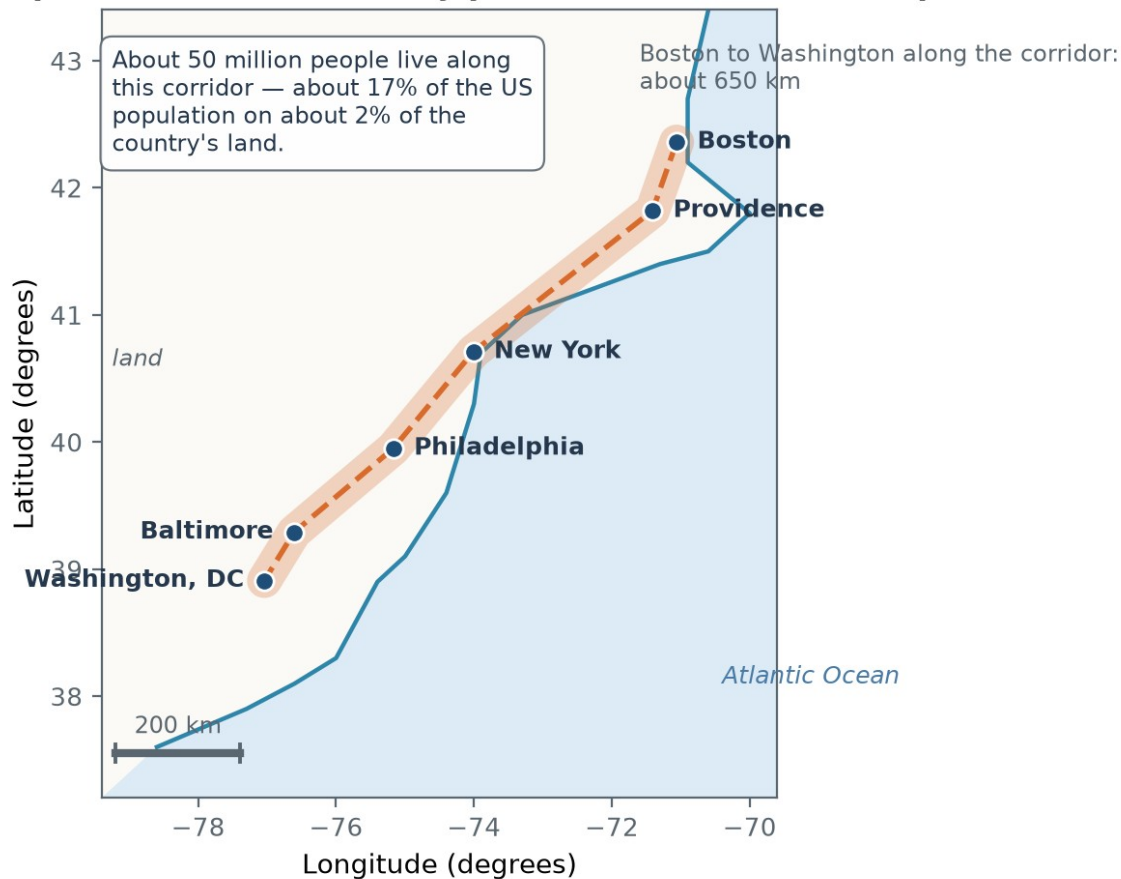


Bar chart of the twelve largest urban areas in the world in 2018, from Tokyo at 37.5 million down to Los Angeles at 12.5 million. A dashed line at 10 million marks the megacity threshold, and the two United States bars (New York and Los Angeles) are shaded orange.

Source: United Nations, World Urbanization Prospects: 2018 Revision, retrieved 25 August 2026.

An urban corridor. Sometimes separate cities grow towards each other until their built-up edges and their daily travel-to-work links join up into one long band of urban development: an **urban corridor**. On the US east coast, Boston–Providence–New York–Philadelphia–Baltimore–Washington form the classic example, about 650 km long. About 50 million people live along it — about 17% of the US population on about 2% of the country's land.

The Boston-Washington urban corridor, United States (a simple sketch from real city positions — not a true map)

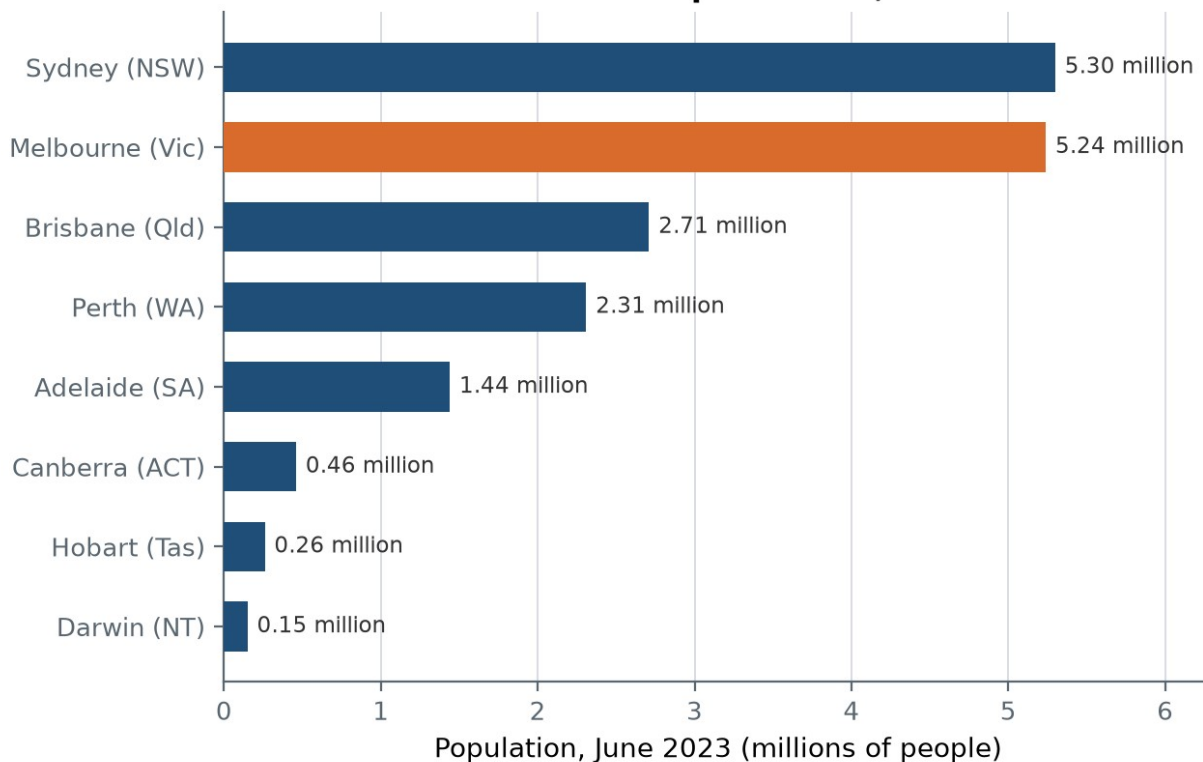


Sketch map of the north-eastern United States coast, drawn from the real positions of Boston, Providence, New York, Philadelphia, Baltimore and Washington DC. An orange band joins the six cities into one corridor, with a 200 km scale bar and a note that about 50 million people live there.

Source: city positions are the cities' real coordinates; corridor statistics from America 2050 / Regional Plan Association, retrieved 25 August 2026. The sketch is drawn from real coordinates but is not a true map projection.

Australia's capital cities. Australia is already one of the most urbanised countries in the world — about 86% of Australians live in urban areas (the ABS counts an urban centre as a settlement of 1,000 people or more). Our pattern is the growth of very large capital cities: Sydney (5.30 million) and Melbourne (5.24 million) in 2023, with Melbourne close behind and growing fast. About three in four Victorians live in Melbourne.

Australia's capital cities, 2023



Sydney is the largest city; Melbourne is close behind and growing fast.
About 86% of Australians live in urban areas (ABS).

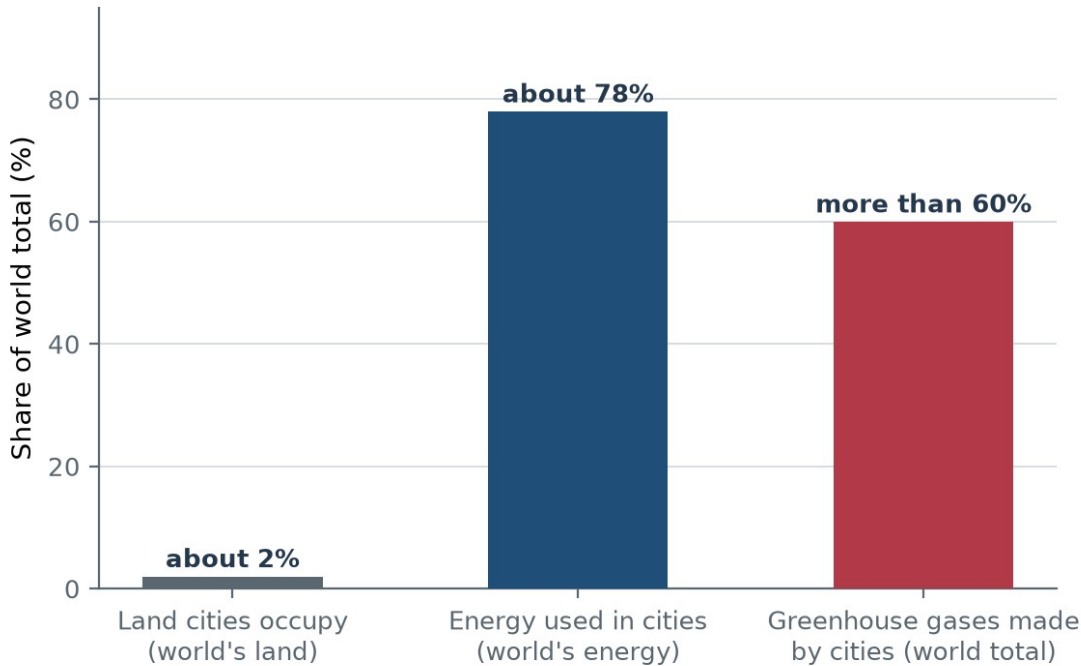
Bar chart of Australia's eight capital cities by population, June 2023: Sydney 5.30 million, Melbourne 5.24 million (highlighted in orange), Brisbane 2.71 million, Perth 2.31 million, Adelaide 1.44 million, Canberra 0.46 million, Hobart 0.26 million, Darwin 0.15 million.

Source: Australian Bureau of Statistics, Regional Population, June 2023 (values rounded); urban share from ABS, retrieved 25 August 2026.

4. Impacts in the city: environment, economy and society

Cities cover a tiny slice of the Earth's land — about 2% — yet they use about 78% of the world's energy and produce more than 60% of the world's greenhouse gases. That is why urbanisation is an environmental question, not just a population one.

Small area, huge footprint: cities and the environment



Bar chart showing that cities occupy about 2 per cent of the world's land but use about 78 per cent of the world's energy and produce more than 60 per cent of the world's greenhouse gases.

Source: UN-Habitat, *Cities and Climate Change (2021)*, retrieved 25 August 2026.

Environmental impacts. Negative: air, water and noise pollution; farms and bushland paved over as cities spread; and the **urban heat island** — built-up areas trap heat, so cities can be up to about 4°C warmer by day and up to about 3°C warmer at night than the countryside around them. Positive: people living close together use less land per person than spread-out housing, and buses, trains and trams can replace many car trips.

Water consumption is a clear example of an environmental impact (E07). Los Angeles grew in a dry place, so it had to reach further and further for water: its first aqueduct (a long pipe that carries water) opened in 1913, bringing water about 375 km from the Owens Valley; later the city also drew on the Colorado River and on northern California. The city's growth changed environments hundreds of kilometres away.

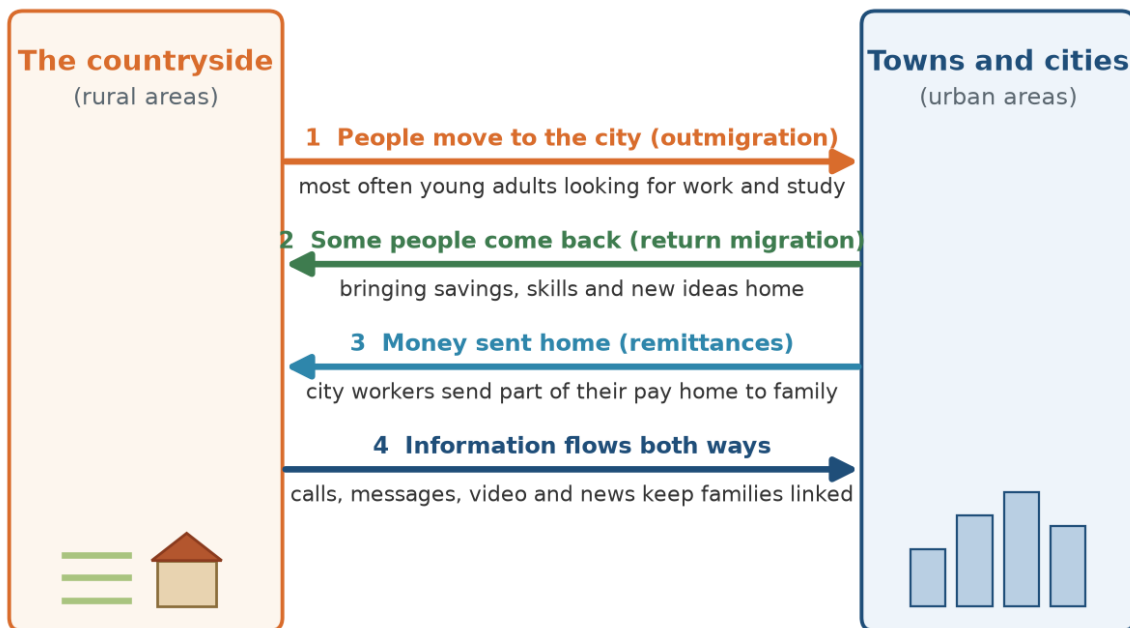
Economic impacts. Positive: more jobs and more kinds of work; firms sit near customers and workers; ideas and new businesses spread quickly. Negative: land and housing cost a lot; traffic jams waste time and fuel; new roads, pipes and power lines cost billions to build.

Social impacts. Positive: easier reach to schools, hospitals, libraries, sport and culture; people find others who share their interests. Negative: crowding and long travel to work; some people cannot afford to live where they want; newcomers can feel lonely.

5. Impacts on the countryside: four flows

Urbanisation does not only change cities — it changes rural areas too, through four flows. **Outmigration** (most often young adults leaving for work and study) can leave rural areas with fewer workers and an older population. **Return migration** brings people home with savings, skills and new ideas. **Remittances** — money that city workers send home to family in the country — pay for school fees, health care, homes and small businesses. And **flows of information** (calls, messages, video, news) keep families and places linked.

Urbanisation changes the countryside too: four flows



The same flows can cross borders too: for example, city workers in the United States send remittances to family in other countries.

Model diagram of four flows between the countryside and towns and cities: outmigration towards the city, return migration back home, remittances (money sent home) back home, and information flowing both ways.

Figure 9 is an original model diagram for this workbook.

The same flows cross borders. The United States is the world's biggest sender of remittances, and Mexico is the biggest receiver: money earned in US cities supports rural households in Mexico and other countries, while outmigration leaves some Mexican villages with fewer young adults.

Remittances are a mixed picture for rural areas — worth evaluating, not just describing. The money raises living standards and pays for schooling and health care; but rural areas can become dependent on it, and the loss of young workers can make it harder to run farms and local services.

6. Urbanisation: consequence *and* cause of change

Urbanisation is a **consequence of economic and social change**: when a country's economy shifts from farm work to factories, offices and services, jobs cluster in cities, and people follow the jobs. The US pattern in Figure 4 shows this — the urban share climbed fastest while industry and city jobs grew (1870–1970).

Urbanisation is also a **cause of further change**: bigger cities mean bigger markets, more investment in schools and hospitals, and faster spread of ideas — which draws in even more people. Cities change social life too: smaller households, more paid work for women, more schooling, and more contact between people from different backgrounds. The same process brings gains and costs at once, which is why we sort impacts carefully.

Sorting the impacts of urbanisation

	Positive impacts	Negative impacts
Environmental	• homes close together use less land per person than spread-out houses • buses, trains and trams can replace many car trips	• air, water and noise pollution • heat builds up in streets (urban heat island) • farms and bushland are paved over as cities spread
Economic	• more jobs and more kinds of work • firms sit near customers and workers • ideas and businesses spread quickly	• land and housing cost a lot • traffic jams waste time and fuel • new roads, pipes and power lines cost billions to build
Social	• easier reach to schools, hospitals, libraries, sport and culture • people find others who share their interests	• crowding and long travel to work • some people cannot afford where they want to live • newcomers can feel lonely

One process, many effects. the same growth that brings jobs can also bring pollution and high housing costs.

Three-by-two grid sorting examples of urbanisation's positive and negative impacts into environmental, economic and social rows.

Figure 10 is an original model diagram for this workbook; its examples are drawn from the United States and Australian case material in this section.

Worked demonstration 1 — Urban growth or urbanisation? Test it with real numbers

Task: Use US census numbers to decide whether 2000–2020 was mainly urban growth or mainly urbanisation, and compare it with 1890–1930.

Step 1 — Write down the data (US Census Bureau). - 2000: total population about 281.4 million; urban share 79.1% → urban population ≈ 222.6 million. - 2020: total population about 331.5 million; urban share 80.0% → urban population ≈ 265.2 million.

Step 2 — Check for urban growth. Did the number of urban people rise? Yes: from about 222.6 million to about 265.2 million (a rise of more than 40 million). **Urban growth: YES.**

Step 3 — Check for urbanisation. Did the urban *share* climb? From 79.1% to 80.0% — a rise of under 1 percentage point. **Urbanisation: very little.**

Step 4 — Compare with 1890–1930. The urban share went 35.1% → 56.2%, a jump of 21 percentage points. *That* period shows strong urbanisation.

Conclusion sentence (model): “Between 2000 and 2020 US cities grew by more than 40 million people, but the urban share moved less than one percentage point, so this was urban growth with little urbanisation; between 1890 and 1930 the share jumped 21 percentage points, so that was strong urbanisation.”

Source: US Census Bureau, decennial censuses, retrieved 25 August 2026.

Worked demonstration 2 — Writing an evidence-based impact statement (Los Angeles water)

Task: Model a claim–evidence–explain statement for one environmental impact of urbanisation.

Step 1 — Claim (name the impact and its direction). Growing cities consume more water, and that can damage environments far beyond the city edge.

Step 2 — Evidence (real, with a source). Los Angeles opened its first aqueduct in 1913, carrying water about 375 km from the Owens Valley; as the wider city area grew to about 12.5 million people, the city also drew water from the Colorado River and from northern California.

Step 3 — Explain (the mechanism). A city in a dry place cannot rely on local rainfall once its population grows; water has to be taken from rivers and valleys hundreds of kilometres away, lowering lakes and rivers in those places (the Owens Valley lake bed dried up).

Step 4 — Judge (balanced link-back). The water made life possible for millions of city residents (a social and economic gain), at a real environmental cost to the places the water was taken from.

Sources: Los Angeles Department of Water and Power (aqueduct history); United Nations, World Urbanization Prospects: 2018 Revision (city population), retrieved 25 August 2026.

Practice — scaffolded

Q1. Write one sentence defining *urbanisation* in your own words. Starter: “Urbanisation is the process by which ...”

Q2. Look at Figure 2 (world urban and rural population). (a) In about which year did the urban line cross the rural line? (b) What happens to the rural line after about 2020?

Q3. Look at Figure 4 (US urban share). Write down the urban share in (a) 1790, (b) 1920, (c) 2020. (d) Which census was the first where more than half of Americans lived in urban areas?

Q4. Sort these factors into a two-column push/pull table: low farm pay in drought years; more jobs and higher pay in the city; fewer schools and hospitals in the countryside; universities and hospitals in the city; machines replacing some farm work; better transport, shops and entertainment in the city.

- Q5.** Look at Figure 5 (largest urban areas, 2018). (a) Name the three largest. (b) Which two bars are US cities? (c) Why is the 10 million line important?
- Q6.** Match each flow in Figure 9 to its meaning: (a) money sent home by city workers; (b) young adults leaving rural areas; (c) people coming home with savings and skills; (d) calls, messages and news.
- Q7.** Look at Figure 1 (Countries A and B). Which country shows urbanisation? Answer in one sentence that uses the word *share*.
- Q8.** Finish this sentence about one of the push/pull factors in Figure 3: “Many people moved from the countryside to the city because ... and ...”
-

Practice — unscaffolded

- Q9.** Explain how *urban growth* differs from *urbanisation*, using one example from Figure 1 or Figure 4.
- Q10.** Choose one environmental impact of urbanisation (urban heat island, water consumption, pollution, or loss of farm and bushland). Explain *why* cities cause it.
- Q11.** “Urbanisation changes the countryside too.” Use *outmigration* and *remittances* to give one positive and one negative effect on a rural area.
- Q12.** Why do geographers describe Boston–Washington as one *urban corridor* rather than six separate cities? Use evidence from Figure 6.
-

Extended response

- Q13.** Explain what drove urbanisation in the United States, describe the patterns it produced, and assess its impacts — environmental, economic and social.

Your response must: - use the push–pull model to explain causes (E05); - describe the US pattern with at least two dated figures from the section (for example, 1920 and 2020) and name either the Los Angeles megacity or the Boston–Washington urban corridor (E06); - give at least one positive and one negative impact for each of environmental, economic and social (E02, E07); - include one sentence on how urbanisation affected a rural area (E03).

Write 250–350 words, or present the same content as a labelled multimodal poster. Name the source of each figure you use.

Tip: Plan with a three-row table (environmental / economic / social) and a positive and negative column before you write. Every claim gets a date, a place or a number.

Teaching notes (for the teacher)

Sequence. 1 → 2 → 3 → 4 → 5 → 6 mirrors the elaborations: E01/E05 (process and distinction) open, E05 push–pull, E06 national-scale patterns (US megacities, corridor; Australian capitals), E02/E07 city impacts, E03 rural impacts, E04 consequence-and-cause synthesis. Worked demonstration 1 drills the growth-vs-urbanisation distinction with real calculations; demonstration 2 models the claim–evidence–explain structure assessed in Q13.

Key misconceptions to confront. (1) “Cities getting bigger = urbanisation” — drill the *share* idea (Figures 1–2, WD1). (2) “Megacity = any very big city” — hold the UN 10 million threshold (Figure 4). (3) Push–pull as a complete account — it is a simplifying model; people weigh factors together and many stay (Figure 3 footer).

Contested/defined terms (stipulate at first use). Megacity = UN definition, ≥10 million. “Urban” differs by country: US Census Bureau (2020) = densely settled territory with ≥2,000 housing units or ≥5,000 people; ABS urban centre = ≥1,000 people. Flag to students that changing the definition changes the counted urban share.

Literacy. *Share/proportion* carries the whole distinction — rehearse “out of every 100 people”. Remittances, outmigration and return migration are defined in Part 5 before Q11 uses them.

Assessment. Q13 rubric suggestion: causes (push–pull) /1, pattern with dated evidence /2, six impacts sorted correctly /3, rural link /1, spelling of key terms /1. Figures in this section are original sketches drawn from real coordinates or real published data; every data figure cites its source and retrieval date in the caption.

Glossary

- **census** — an official count of a country’s people, usually every five or ten years.
- **internal migration** — movement of people within one country.
- **international migration** — movement of people between countries.
- **megacity** — an urban area with 10 million people or more (UN definition).
- **outmigration** — people leaving one area to live in another.
- **pull factor** — a feature of a destination that draws people towards it.
- **push factor** — a problem in a place that drives people away from it.
- **remittances** — money that workers in one place send home to family in another.
- **return migration** — people moving back to their home area after time away.
- **urban corridor** — a long band where nearby cities have grown together into linked urban development.
- **urban growth** — a rise in the *number* of people living in urban areas.
- **urban heat island** — the extra warmth of built-up city areas compared with the countryside around them.
- **urbanisation** — the process by which a growing *share* of a country’s people come to live in towns and cities.

Migration to, from and within Australia and China, and its effect on city growth

Australia's population reached 27,801,023 people on 31 December 2025 — and almost three-quarters of its growth over that year came from people arriving from overseas to live here. At the same time, China's total population is shrinking, yet its cities and towns are still growing by more than ten million people a year, because people inside China keep moving from villages to cities. This section follows those people: what kinds of moves there are, why people move, where overseas migrants settle in Australia, and what all this movement does to the growth of cities in both countries.

Curriculum record — VC2HG8K19; elaborations VC2HG8K19.E01, VC2HG8K19.E02, VC2HG8K19.E03, VC2HG8K19.E04, VC2HG8K19.E05, VC2HG8K19.E06, VC2HG8K19.E07. The seven elaboration ids are linkage keys for questions and coverage (see the TOC, §1 and D10); this section is organised by ideas, not as a walk through E01–E07. The Asia-priority elaborations (.E03–.E05) are taught in full.

Theory

Teaching sequence (for the teacher) 1. Open with the five types (Figure 1) and reasons for moving (Figure 2): the push–pull machinery from 4A, reused at the scale of one move. Add chain and circular migration as the changing influences of E02. 2. Read Figures 3–4 as the Australian international pattern (E01/E02/E06): the time series with the border-closure dip and the record 2022–23 peak, then where migrants settle — NSW and Victoria took 59% of net overseas migration in 2024–25. Students check the 59% themselves in Worked example 1. 3. Ground E06 in census evidence (Figures 5–6): birthplace counts for Australia, then birthplace shares across Australia, Greater Melbourne and Greater Sydney. Note that census shares are worked out over stated responses, which is why the cross-area comparison is valid even though it is not a full count. 4. Turn to contributions to city growth (E04): Figure 7 shows net overseas migration supplied 73% of Australia's growth in the year to 31 December 2025; Figures 8–9 show the capital cities grew by 324,700 people in 2024–25 even though internal migration took 29,800 away — Worked example 2 rebuilds that total from its parts and explains the 100-person rounding gap. 5. Cross to China (E03): Figure 10 shows the urban share more than tripling from 1980 to 2025; Figure 11 shows one year in which the whole country shrank by 3.39 million people while its cities and towns grew by 10.30 million. Stress that China counts people where they usually live, not where they are registered. 6. Teach the hukou system (E05) as a defined term at first use; keep the issues qualitative. Run the reform debate as two strongest cases and mark reasoning steps, not verdicts. 7. Close the knowledge with resource regions and cities (E07, Figure 12): Western Australia holds 46% of Australia's mining jobs but only about 11% of its jobs overall, and fly-in, fly-out work joins remote mines to city homes. Run the migration-levels debate as the second steelman, then hand over to the response task (Q13).

Key words

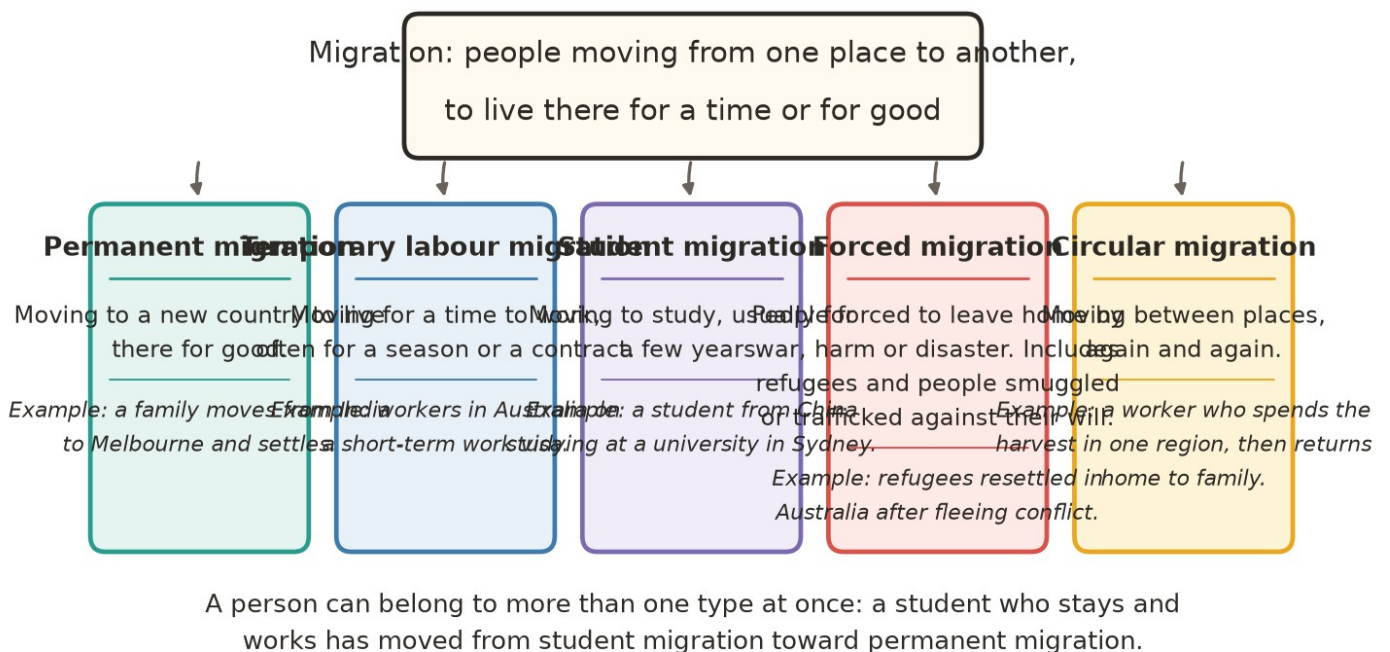
- **migration** — people moving from one place to another to live there, for a time or for good.
- **international migration** — movement between countries.
- **internal migration** — movement within one country.
- **net overseas migration** — people arriving to live in Australia from overseas minus people leaving to live overseas; the Australian Bureau of Statistics (ABS) works it out from border records of arrivals and departures.
- **natural increase** — births minus deaths.
- **chain migration** — the way each migrant can help family or friends to follow, so moves build up along family links over time (named in E02).
- **circular migration** — moving between the same places again and again — for seasonal work, family visits or a cultural event (named in E01 and E02).
- **census** — an official count of a country's people, run every five years in Australia (the most recent was 2021).
- **hukou** — China's household registration system, run by the Chinese government. It records each person's registered home place, and local services such as public schools and health care have historically followed that registration (see Part 7).

- **push factor / pull factor** — from 4A: a problem that drives people away from a place, and an attraction that draws them toward another.
- **fly-in, fly-out** — a way of working in remote resource regions: workers fly in for a block of shifts, then fly home for their time off.

1. Five types of migration (E01)

Migration comes in several main types, and the curriculum names five. **Permanent migration** is moving to a new place to live for good. **Temporary labour migration** is moving for a time to work — for a season or on a contract — and then often going home. **Student migration** is moving to study, usually for a few years. **Forced migration** is being made to leave home by war, harm or disaster; it includes refugees and people moved against their will. **Circular migration** is moving between places again and again.

Five types of migration



Model diagram drawn for this workbook. Types follow VC2HG8K19.E01 (VCAA).

Concept map of five types of migration — permanent, temporary labour, student, forced and circular — each shown with a short meaning and an example, arranged around a central definition of migration as people moving to live somewhere for a time or for good

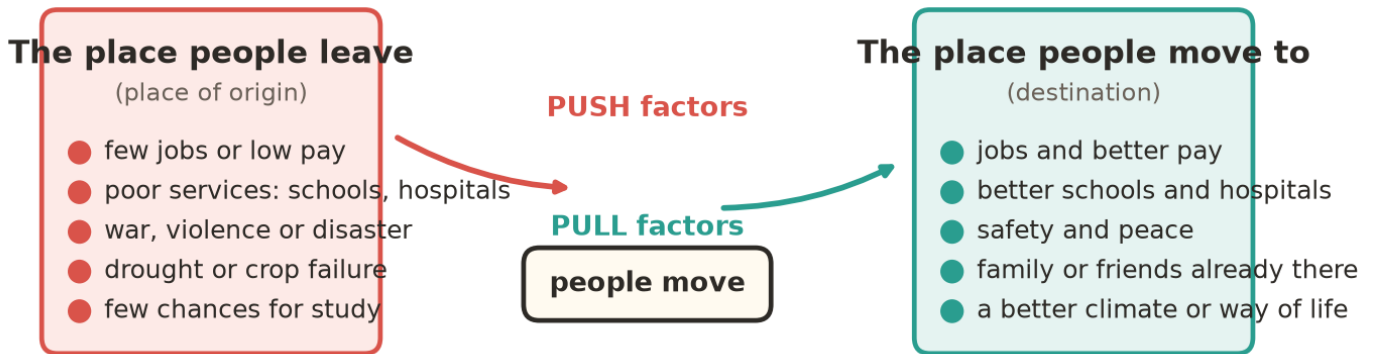
Model diagram drawn for this workbook; the five types follow VC2HG8K19.E01.

The types overlap in real life: a student who finishes a course and stays on to work has moved from student migration toward permanent migration. **Internal migration** (moves within one country) and **international migration** (moves between countries) are the two big groups these types sit inside — and the rest of this section looks at both, in Australia and in China.

2. Why people move: push and pull, one move at a time (E01, E02)

Section 4A used push and pull factors to explain why people move from the countryside to cities. The same machinery works at the smaller scale of one person's or one family's move. **Push factors** drive people away from the place they leave — few jobs or low pay, poor services, war or disaster, drought or crop failure. **Pull factors** draw them toward the place they go to — jobs and better pay, better schools and hospitals, safety, a better climate or way of life — and, very often, family or friends already there.

Push and pull factors behind migration



Push factors drive people away from a place; pull factors draw them toward another. For most migrants, several factors work together — and they can change over time. Family links are a strong pull: each arrival can help the next to follow (chain migration).

Model diagram drawn for this workbook. Factors follow VC2HG8K19.E01-E02 (VCAA).

Push and pull model for migration: the place people leave lists push factors such as few jobs and poor services; the place people move to lists pull factors such as jobs, better schools and family already there; an arrow shows people moving, with notes that several factors work together and that family links drive chain migration

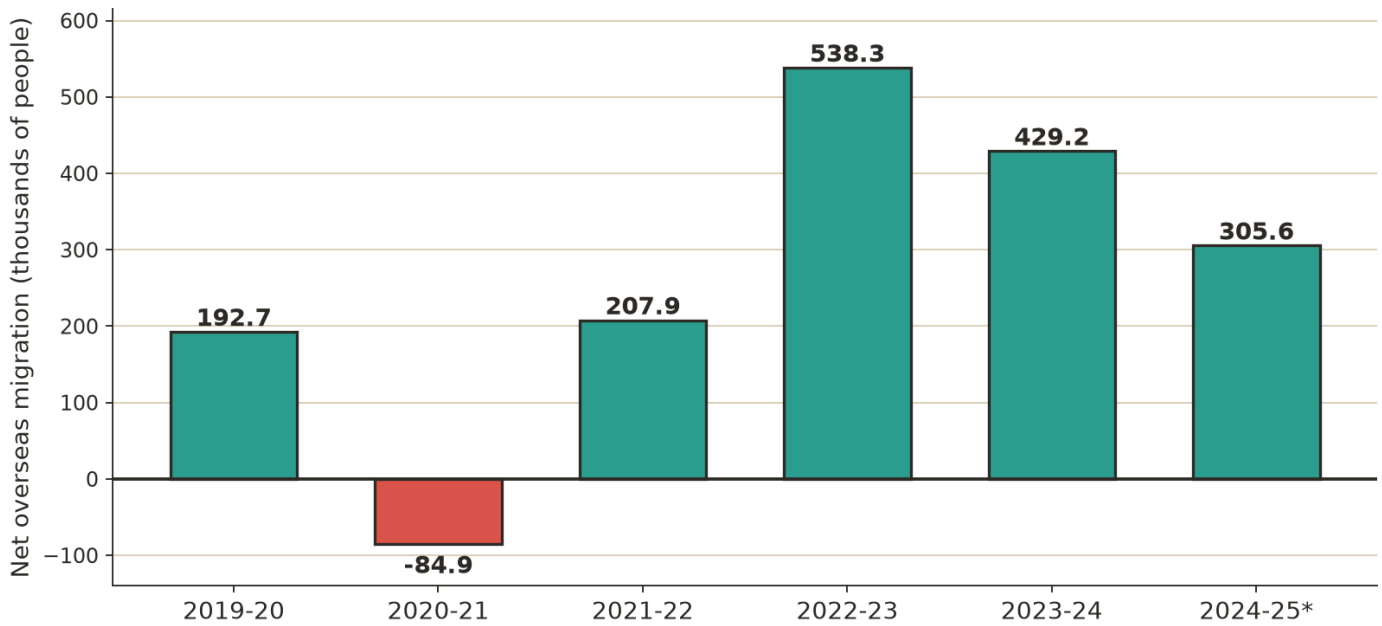
Model diagram drawn for this workbook; the factors follow VC2HG8K19.E01–.E02.

Two of the changing influences named in E02 matter most. **Chain migration** works through family links: each arrival can help the next to follow — with a place to stay, advice, and a community already in place — so one migrant group can grow large in one city over decades. **Circular migration** is short-term mobility in both directions: a worker who spends each harvest season in one region and returns home to family, or a grandparent who flies between countries to help with a new baby. Migration is not always one move that settles everything; for many people it is a pattern of repeated moves.

3. Australia's international migration: the recent pattern (E01, E02)

Net overseas migration (people arriving to live here minus people leaving) is the measure the ABS uses to count migration's contribution to Australia's population. The last six years show how fast the pattern can change. In 2019–20, net overseas migration was 192,700 people. Then Australia's borders closed: in 2020–21 it fell below zero (–84,900 — more people left than arrived), the only negative year in decades. As borders reopened it climbed to 207,900 in 2021–22, then to a record 538,300 in 2022–23 as delayed arrivals and departures all happened at once. It has since settled back: 429,200 in 2023–24 and 305,600 in 2024–25 (the ABS's first estimate for that year).

Net overseas migration, Australia, financial years ending 30 June



*preliminary. In 2024-25 there were 568.4 thousand migrant arrivals and 262.8 thousand departures.
Source: ABS, Overseas Migration, Australia; retrieved 2026-08-25.

Bar chart of Australia's net overseas migration for the six financial years from 2019-20 to 2024-25: 192.7 thousand people, then minus 84.9 thousand, then 207.9 thousand, a record 538.3 thousand, 429.2 thousand, and 305.6 thousand, with a note that in 2024-25 there were 568.4 thousand migrant arrivals and 262.8 thousand departures

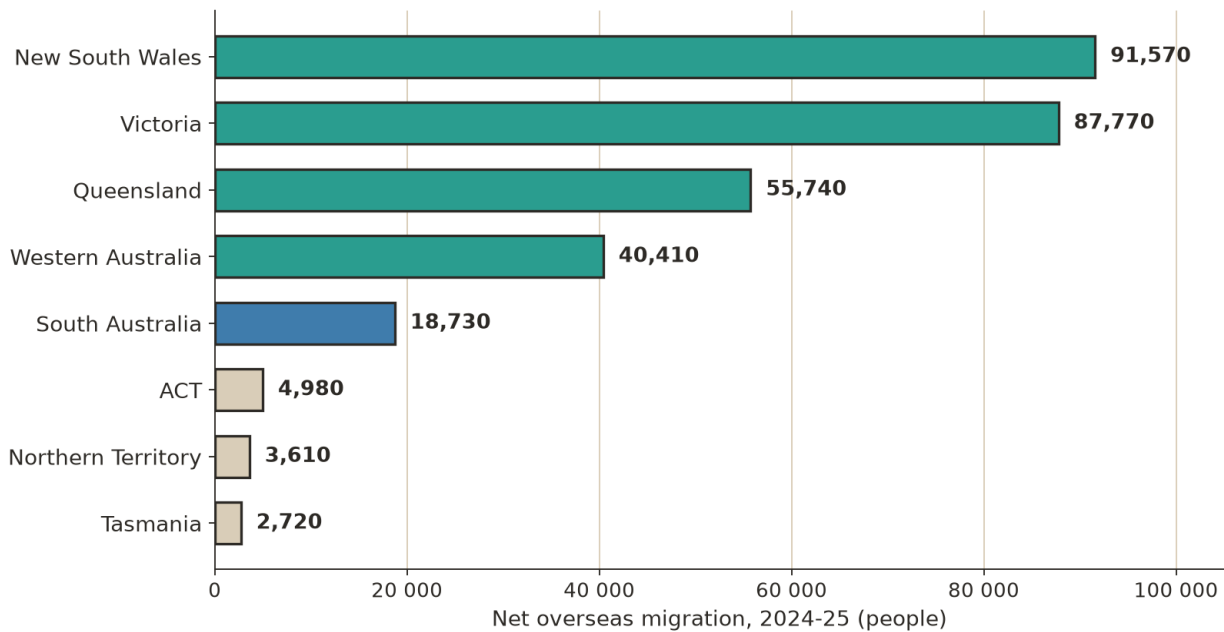
Source: ABS, Overseas Migration, Australia, years ending 30 June; the 2024-25 value is the ABS's first estimate; retrieved 25 August 2026.

One year of that measure is worth opening up: in 2024-25 there were 568,400 arrivals of people coming to live in Australia and 262,800 departures of people leaving to live overseas. The difference between those two numbers — 305,600 — is the net overseas migration for the year (E01's patterns, measured).

4. Where overseas migrants settle: states, birthplaces, cities (E06)

Overseas migrants do not spread evenly across Australia. In 2024-25, New South Wales took in 91,570 people through net overseas migration and Victoria 87,770 — together 59% of the national total. Queensland (55,740) and Western Australia (40,410) took the next largest shares, with South Australia 18,730, the ACT 4,980, the Northern Territory 3,610 and Tasmania 2,720. Every state and territory recorded a net gain.

Where overseas migrants settled: net overseas migration by state and territory, 2024-25



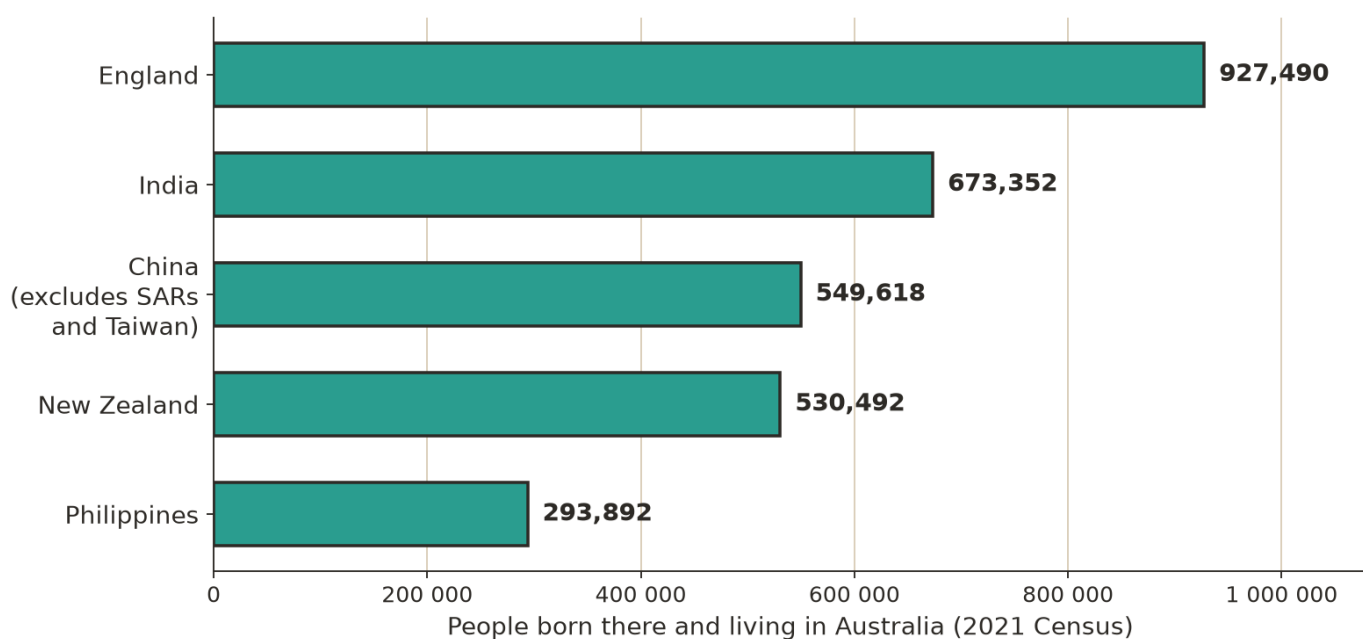
New South Wales and Victoria together took 59% of Australia's net overseas migration.
Source: ABS, Overseas Migration, Australia, 2024-25; retrieved 2026-08-25.

Horizontal bar chart of net overseas migration by state and territory in 2024-25: New South Wales 91,570 people, Victoria 87,770, Queensland 55,740, Western Australia 40,410, South Australia 18,730, ACT 4,980, Northern Territory 3,610 and Tasmania 2,720, with a note that New South Wales and Victoria together took 59% of Australia's net overseas migration

Source: ABS, Overseas Migration, Australia, 2024-25 (year ending 30 June); retrieved 25 August 2026.

The census shows who is already here. At the 2021 Census, 7,479,000 people counted in Australia were born overseas — 29.1% of everyone counted. The five most common overseas birthplaces were England (927,490 people), India (673,352), China (549,618), New Zealand (530,492) and the Philippines (293,892).

The five most common overseas birthplaces in Australia, 2021



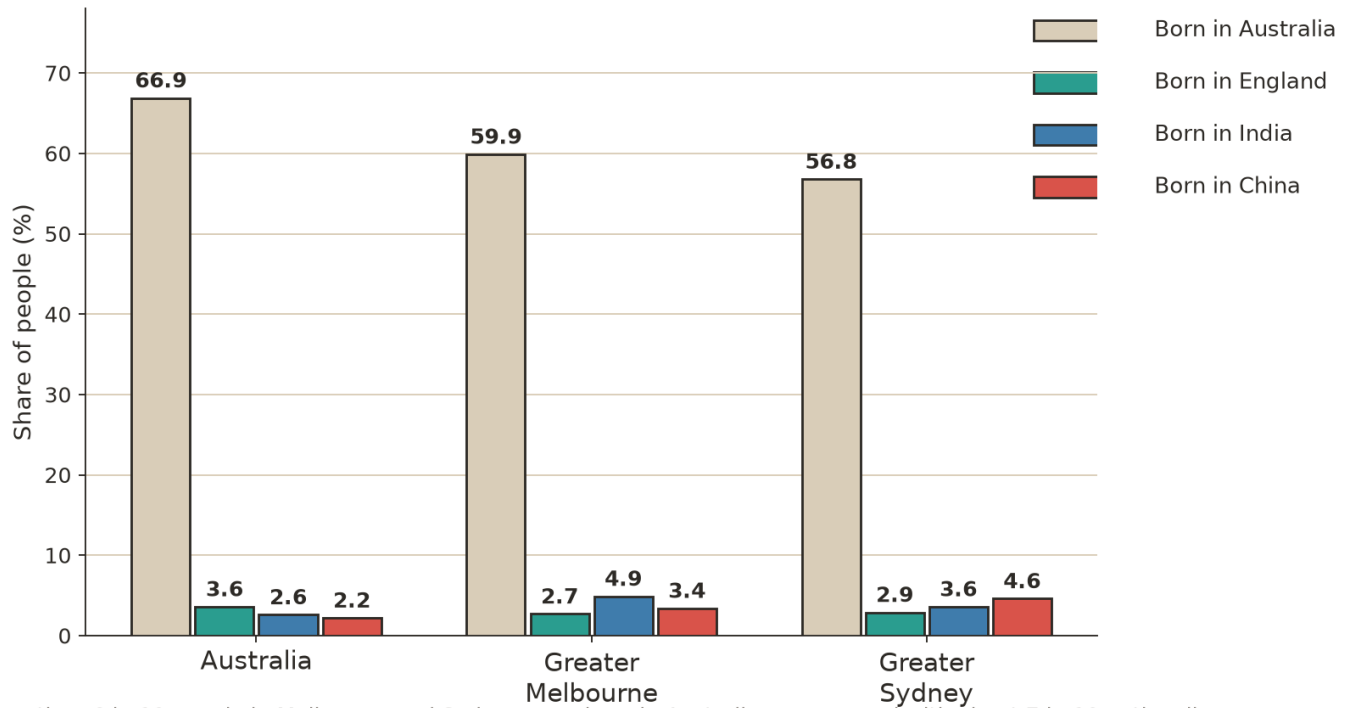
Every state and territory has its own mix: in the 2021 Census, England was the most common overseas birthplace nationally, while in Greater Melbourne it was India and in Greater Sydney it was China. Source: ABS, 2021 Census QuickStats (Australia); retrieved 2026-08-25.

Horizontal bar chart of the five most common overseas countries of birth at Australia's 2021 Census: England 927,490 people, India 673,352, China (excluding its special administrative regions and Taiwan) 549,618, New Zealand 530,492 and the Philippines 293,892, with a note that the most common overseas birthplace was England nationally, India in Greater Melbourne and China in Greater Sydney

Source: ABS, 2021 Census QuickStats (Australia); retrieved 25 August 2026.

And these groups are not spread evenly either — most people in each migrant group live in the big cities (E06). At the 2021 Census, 66.9% of people counted in Australia were born in Australia, but only 59.9% in Greater Melbourne and 56.8% in Greater Sydney. The groups that pull up those city shares are easy to see: people born in India were 2.6% of Australia's census count but 4.9% of Greater Melbourne's, and people born in China were 2.2% nationally but 4.6% of Greater Sydney's. In numbers: 220,196 India-born people were counted in Greater Melbourne and 214,766 China-born people in Greater Sydney. Chain migration helps explain why: each group grows where its family links already are.

Migrant groups are concentrated in the big cities



Fewer than 6 in 10 people in Melbourne and Sydney were born in Australia — compared with about 7 in 10 nationally.

Source: ABS, 2021 Census QuickStats (Australia, Greater Melbourne, Greater Sydney); retrieved 2026-08-25.

Grouped bar chart comparing shares of the census count for four groups across Australia, Greater Melbourne and Greater Sydney: born in Australia 66.9, 59.9 and 56.8 per cent; born in England 3.6, 2.7 and 2.9; born in India 2.6, 4.9 and 3.6; born in China 2.2, 3.4 and 4.6, with a note that fewer than 6 in 10 people in Melbourne and Sydney were born in Australia compared with about 7 in 10 nationally

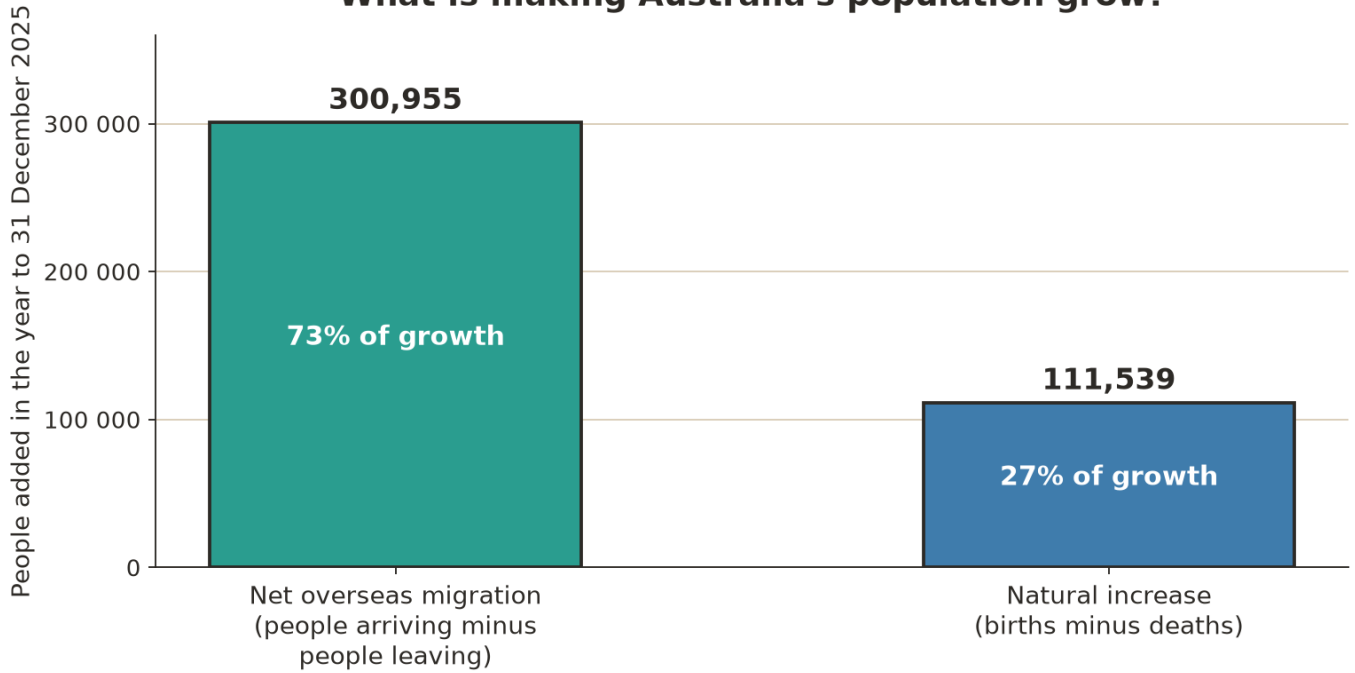
Source: ABS, 2021 Census QuickStats (Australia, Greater Melbourne, Greater Sydney); shares are worked out over stated responses, on the same basis across areas; retrieved 25 August 2026.

Australia's migration also shows up in daily life: at the 2021 Census, more than 5.6 million people (5,663,729) reported speaking a language other than English at home, with Mandarin (685,274) and Arabic (685,243) the most common. Migration changes the places that receive it, not just their numbers.

5. What migration adds to city growth in Australia (E04)

A city's growth has three parts: overseas migration, natural increase, and internal migration — people moving between places inside Australia. At the national scale, migration is now the biggest part by far. In the year to 31 December 2025, Australia's population grew by 412,494 people. Of that growth, 300,955 came from net overseas migration — **73% of the growth** — and 111,539 from natural increase.

What is making Australia's population grow?



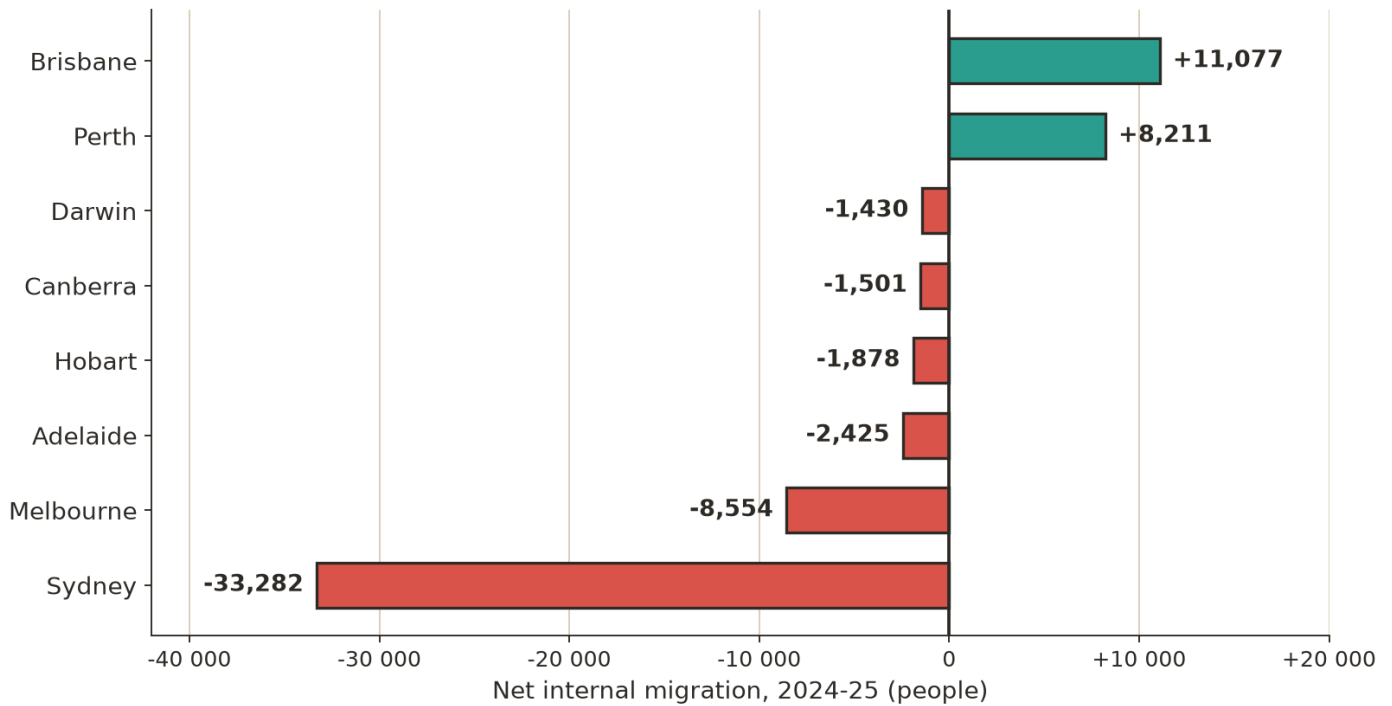
Australia's population reached 27,801,023 on 31 December 2025. Most of its growth now comes from migration.
Source: ABS, National, state and territory population, December quarter 2025; retrieved 2026-08-25.

Bar chart of the two parts of Australia's population growth in the year to 31 December 2025: net overseas migration 300,955 people (73% of growth) and natural increase 111,539 people (27% of growth), with a note that Australia's population reached 27,801,023 on 31 December 2025

Source: ABS, National, state and territory population, December quarter 2025; retrieved 25 August 2026.

Internal migration tells a different story. In 2024-25, more people left Australia's capital cities for the rest of the country than moved into them from it — a net loss of 29,800 people. Only Brisbane (+11,077) and Perth (+8,211) recorded net internal migration gains among the capitals; Sydney lost 33,282 people this way and Melbourne 8,554.

Internal migration: who gains, who loses?



Brisbane and Perth were the only capitals with a net internal migration gain.

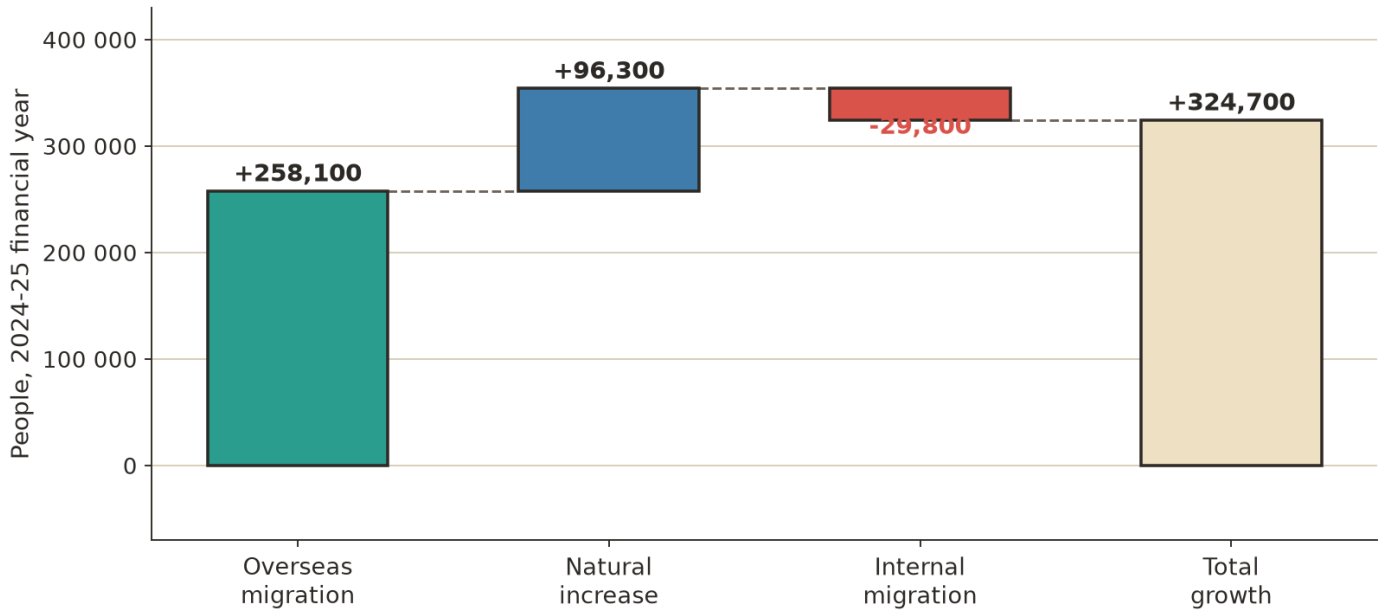
Source: ABS, Regional Population, 2024-25; retrieved 2026-08-25.

Horizontal diverging bar chart of net internal migration by capital city in 2024-25: Brisbane +11,077 people and Perth +8,211 as the only gains, then Darwin -1,430, Canberra -1,501, Hobart -1,878, Adelaide -2,425, Melbourne -8,554 and Sydney -33,282

Source: ABS, Regional Population, 2024-25; retrieved 25 August 2026.

Yet every capital city still grew, because overseas migration and natural increase were larger than the internal losses. Together the eight capital cities gained 324,700 people in 2024-25: overseas migration added 258,100, natural increase added 96,300, and internal migration took away 29,800. Melbourne grew by about 105,000 people to 5.44 million and Sydney by about 75,200 to 5.64 million in that year (ABS). This is the pattern of E04 in one line: overseas migration, not internal migration, is what Australia's big cities grow by.

How Australia's capital cities grew in 2024-25



More people left the capital cities for regional Australia than moved in — yet the cities still grew, because overseas migration and natural increase were larger.

Source: ABS, Regional Population, 2024-25; retrieved 2026-08-25.

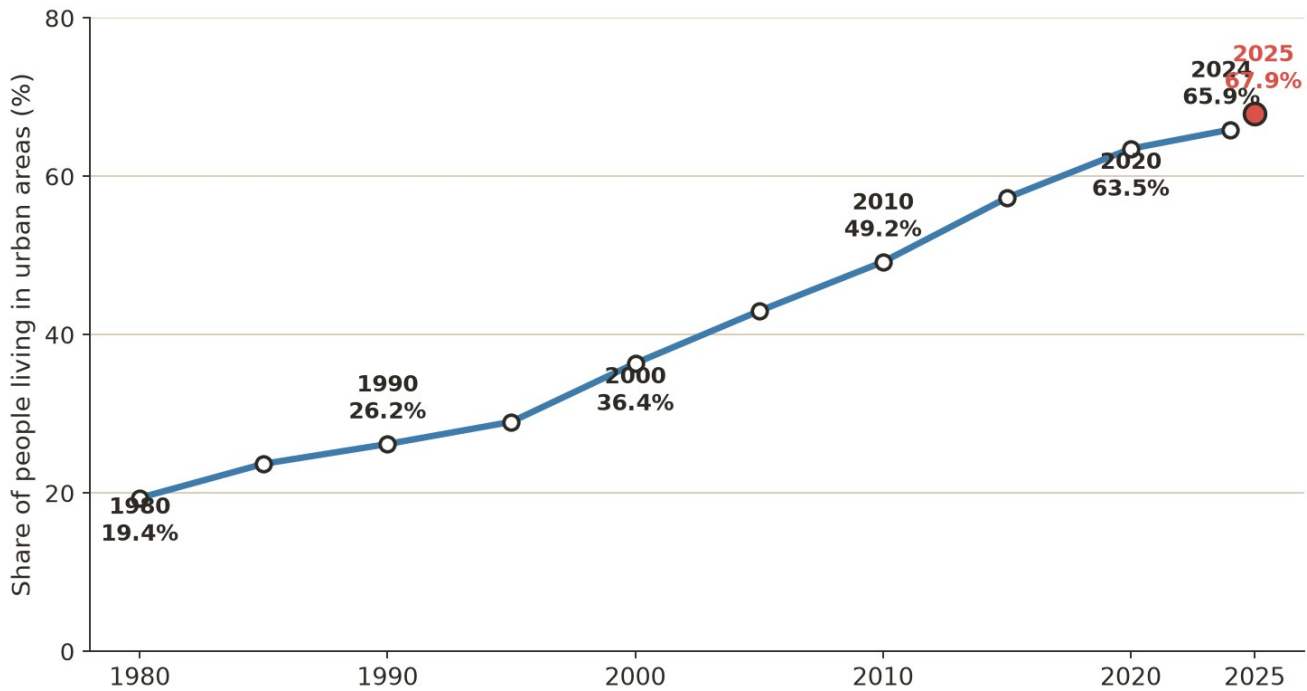
Waterfall chart building Australia's capital-city growth in 2024-25 from its three parts: overseas migration adds 258,100 people, natural increase adds 96,300, internal migration takes away 29,800, leaving total growth of 324,700

Source: ABS, Regional Population, 2024-25; retrieved 25 August 2026.

6. China's internal migration: cities growing while the country shrinks (E03)

China's migration story is almost all internal — movement within the country, mainly from villages and small towns to cities. The scale has no equal: in 1980, only 19.4% of China's people lived in urban areas; by 2025 the share was 67.9% — more than tripled in 45 years, and most of that climb happened after 2000.

China's urban share more than tripled in 45 years



In 1980, fewer than 1 in 5 people in China lived in urban areas. Today about 2 in 3 do.

The 2025 point uses China's own permanent-resident measure (NBS national report); the rest are World Bank series values.

Source: World Bank (1980-2024) and NBS (2025); retrieved 2026-08-25.

Line chart of the share of China's people living in urban areas from 1980 to 2025, climbing from 19.4 per cent to 67.9 per cent, with labelled points at each decade and a note that in 1980 fewer than 1 in 5 people lived in urban areas while today about 2 in 3 do

Source: World Bank, Urban population (% of total population), China, 1980–2024; the 2025 point is China's own permanent-resident measure from the NBS national report; retrieved 25 August 2026.

One recent year shows the mechanism at work. Between the end of 2024 and the end of 2025, China's whole population fell by 3.39 million people (from 1,408.28 million to 1,404.89 million) — yet its urban population grew by 10.30 million (to 953.80 million) while its rural population fell by 13.69 million (to 451.09 million). Because births did not drive that urban growth, most of it came from people moving within China: villages and small towns are the **places of origin**, and the cities are the **places of destination** (E03's own words).

China, one year of change: 2024 to 2025



All figures in millions of people (permanent residents).

The whole country shrank by 3.39 million people — yet its cities and towns grew by 10.30 million. Most of that urban growth came from people moving within China, not from new births.

Source: NBS national reports on the 2024 and 2025 National Economic and Social Development; retrieved 2026-08-25.

Three fact cards for China from end-2024 to end-2025: the whole country fell from 1,408.28 million people to 1,404.89 million (minus 3.39 million); urban areas grew from 943.50 million to 953.80 million (plus 10.30 million); rural areas fell from 464.78 million to 451.09 million (minus 13.69 million), with a note that most of the urban growth came from movement within China rather than new births

Source: NBS, Statistical Communiques on the 2024 and 2025 National Economic and Social Development (China counts people where they usually live); retrieved 25 August 2026.

The impacts run both ways. For destination cities, the arrivals are workers and customers: they build, make, deliver and serve, and they fill new housing. For origin villages, the effects are mixed — money sent home raises living standards, but the young adults who leave are the hands the farms and local services most need. In 2024, China's National Bureau of Statistics (NBS) counted 297.53 million **migrant workers** — people from rural areas working away from home — about ten times the entire population of Australia. Many of them move for months at a time (temporary internal migration), and some settle in cities for good (permanent internal migration); E03 asks for both patterns.

7. Migrant workers in China's cities: the hukou system (E05)

A **migrant worker** in China faces one barrier that most Australian migrants never meet: the **hukou** system. Hukou is China's household registration system, run by the Chinese government: every person has a registered home place, and for decades the right to local public services — a place in a public school, city health care, help with housing — followed that registration. A worker from a village who moves to a city can live and work there for years yet still hold a rural registration from home. The system was designed for a China in which few people moved; today, with about two in three people living in urban areas, it does not fit well with so much movement.

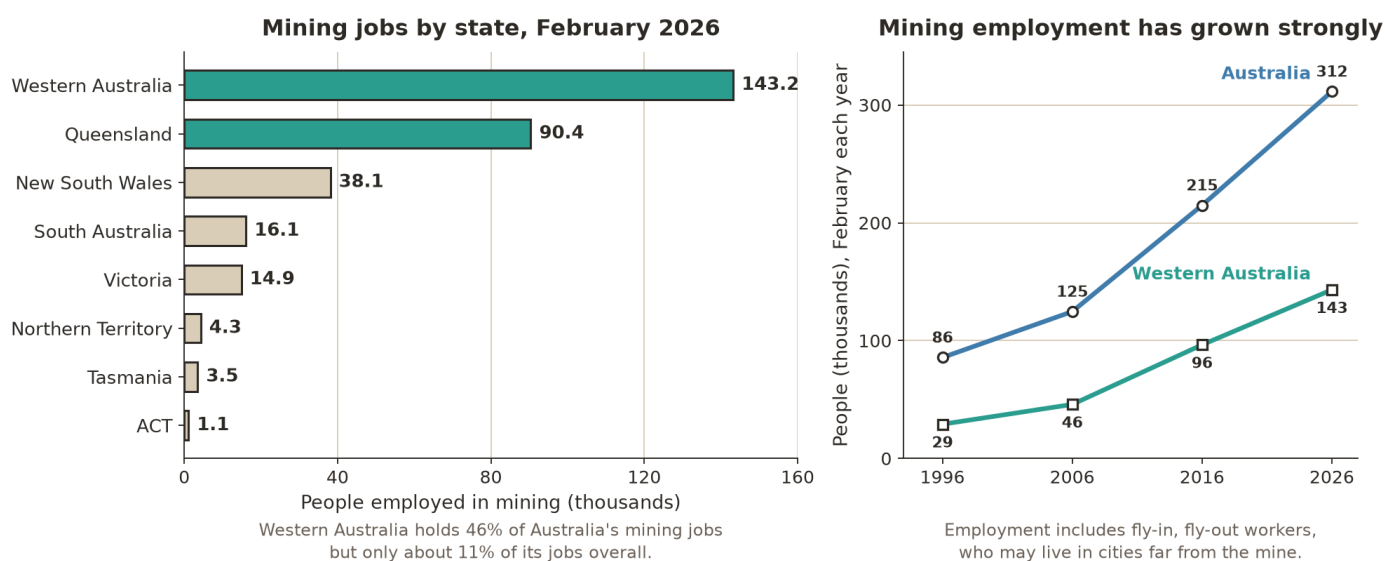
The issues for migrant workers follow from that gap (E05). Without a local city registration, a worker's children may be unable to get a place in the city's public schools, so many children stay behind in the village with grandparents while their parents work in the city. Health care and housing support can be harder to get in the city where the worker actually lives. And because registration is tied to one place, long-term city residents can remain outsiders in the place that depends on their work.

How fast to change the system is a live debate in China, and both sides argue from real costs. **The strongest case for faster change:** the migrant workers built the cities and keep them running; equal access to city schools and health care is a matter of fairness, and letting families stay together would also support city life and spending. **The strongest case for slower, careful change:** city schools and hospitals are paid for by city budgets planned around registered populations, so a sudden rush of new people could be more than those services can handle — and the biggest cities are already crowded, so making their rules easier first would add to the pressure. A reasoned answer weighs both sides and says which costs it weighs more heavily — it does not pretend one side has no case.

8. Resource development, jobs, and migration in Australia (E07)

Migration and urban growth also connect to Australia's resource regions. Mining is the clearest example. In February 2026, 311,500 people worked in mining across Australia — and 143,200 of them, **46% of the national total, worked in Western Australia**, even though Western Australia holds only about 11% of Australia's jobs overall. Queensland (90,400) was next; Victoria had 14,900 mining jobs and Tasmania 3,500. The growth has gone on for decades: Australia's mining jobs rose from 85,700 in February 1996 to 311,500 in February 2026, and Western Australia's from 29,100 to 143,200 — a rise of almost five times.

Resource development and jobs: where are Australia's mining jobs?



Two-panel chart of mining jobs in Australia: the left panel shows mining jobs by state in February 2026, from Western Australia 143.2 thousand people down to the ACT 1.1 thousand, noting that Western Australia holds 46% of Australia's mining jobs but only about 11% of its jobs overall; the right panel shows mining employment growing from 1996 to 2026, Australia rising from 85.7 to 311.5 thousand people and Western Australia from 29.1 to 143.2 thousand

Source: ABS, Labour Force Australia, Detailed, Table 05 (February 2026; growth since February 1996); retrieved 25 August 2026.

The impacts of resource development land in two different kinds of place (E07's comparison). **In the resource regions** — such as the iron-ore country of the Pilbara in Western Australia — mining creates the jobs themselves, but few people live there all year, so many of those jobs are filled **fly-in, fly-out**: workers fly in from cities for a block of shifts, then fly home. **In the cities** — above all Perth and the Queensland cities that serve the mines — resource development creates jobs that support mining: firms that design and repair machines, offices, ports, transport and the trades that support them. That is one reason Western Australia's population has grown quickly — it was Australia's fastest-growing state in the year to 31 December 2025, up 1.8% (ABS) — and why times of strong mining growth add people to cities as well as to the regions where the ore comes out of the ground.

9. An open question in Australia: how much migration?

How many people Australia should take in each year is openly argued, and reasonable people can look at the same ABS numbers and come to different views. **The strongest case for a higher intake:** most migrants arrive of working age, so they fill job shortages, pay taxes, and support services for an ageing population; students and skilled workers

also add to universities and businesses. **The strongest case for a lower intake:** because most migrants settle in Sydney and Melbourne (59% of net overseas migration went to New South Wales and Victoria in 2024-25), fast growth lands on a few cities' housing, roads, trains and services, and building keeps struggling to catch up. The first case weighs what migration adds to the economy and to public services; the second weighs what fast growth costs the cities that receive it. Both use the same data from this section — the difference is which costs and benefits a person counts most heavily. Your task in the questions below is to reason with evidence on either side, not to guess the “right” side.

Worked examples

Example 1 — scaffolded: how much of Australia's growth and settlement is overseas migration?

Task. Using the figures in this section, (a) check the claim that New South Wales and Victoria took 59% of Australia's net overseas migration in 2024-25, and (b) work out what share of Australia's population growth in the year to 31 December 2025 came from net overseas migration.

Step 1 — the settlement share. New South Wales took in 91,570 people and Victoria 87,770 through net overseas migration in 2024-25: together $91,570 + 87,770 = 179,340$ people. All eight states and territories together sum to 305,530 (each value rounded to the nearest ten). $179,340 \div 305,530 = 0.587$ — about **59%**. The claim checks.

Step 2 — the growth share. In the year to 31 December 2025, Australia grew by 412,494 people and net overseas migration supplied 300,955 of them. $300,955 \div 412,494 = 0.730$ — **73% of the growth**.

Step 3 — a model conclusion sentence. “In 2024-25, New South Wales and Victoria together took about 59% of Australia's net overseas migration, and in the year to December 2025, net overseas migration supplied about three-quarters of Australia's population growth — migration, not births, is now the main driver of the country's growth.”

Sources: ABS, Overseas Migration, Australia, 2024-25; ABS, National, state and territory population, December quarter 2025; retrieved 25 August 2026.

Example 2 — scaffolded: rebuilding capital-city growth from its three parts

Task. Rebuild the capital cities' 2024-25 growth of 324,700 people from its three parts, and explain why your sum differs slightly from the published total.

Step 1 — add the two gains. Overseas migration +258,100 and natural increase +96,300: $258,100 + 96,300 = 354,400$ people gained.

Step 2 — take away the loss. Internal migration removed 29,800 people: $354,400 - 29,800 = 324,600$ people.

Step 3 — compare with the published total. The ABS total is +324,700 — 100 more than our sum. Why? Each part is rounded to the nearest hundred before it is published, so small rounding differences of this size are expected. The pattern matters more than the last digit: **the cities grew strongly even though more people left them for regional Australia than moved in**, because overseas migration and natural increase were larger.

Step 4 — a claim–evidence–explain sentence (model). “Australia's capital cities grew by 324,700 people in 2024-25 (ABS, Regional Population) even though internal migration took away 29,800, because overseas migration (+258,100) and natural increase (+96,300) more than covered the loss — overseas migration is what the big cities grow by.”

Practice questions

Scaffolded

Q1. Fill each gap with a key word: *net overseas migration*, *internal migration*, *chain migration*, *circular migration*, *natural increase*, *hukou*. (a) People arriving to live in Australia minus people leaving is _____. (b) Movement of people within one country is _____. (c) Births minus deaths is _____. (d) Each arrival helping family or friends to follow is _____. (e) Moving between places again and again is _____. (f) China's household registration system is the _____ system.

Q2. Look at Figure 3 (net overseas migration, 2019-20 to 2024-25). (a) In which year was net overseas migration below zero, and what was its value? (b) Which year was the record, and what was the value? (c) What was the value for 2024-25? (d) Check that value using the arrivals and departures figures given on the chart.

Q3. Look at Figure 4 (net overseas migration by state and territory, 2024-25). (a) Which two states took in the most people, and how many each? (b) Check the 59% claim: add the two states' values, add all eight values, then divide. (c) Which two places took in the fewest?

Q4. Look at Figure 5 (five most common overseas birthplaces, 2021 Census). (a) List the five birthplaces in order with their numbers. (b) How many more England-born people were counted than Philippines-born people? (c) The most common overseas birthplace differs by city: name it for Australia nationally, for Greater Melbourne, and for Greater Sydney.

Q5. Look at Figure 6 (birthplace shares across Australia, Greater Melbourne and Greater Sydney). (a) What share of people in each area was born in Australia? (b) Which group's share in Greater Melbourne is nearly double its national share? (c) Which group's share in Greater Sydney is more than double its national share?

Q6. Look at Figure 9 (capital-city growth parts, 2024-25). (a) Name the three parts and their values. (b) What was the total growth? (c) Which part is negative, and what does a negative value mean here?

Q7. Look at Figure 11 (China, end-2024 to end-2025). (a) What happened to China's whole population? (b) What happened to its urban population? (c) What happened to its rural population? (d) Using your answers, explain why most of the urban growth must have come from people moving rather than from new births.

Q8. Look at Figure 12 (mining jobs). (a) Which state had the most mining jobs in February 2026, and how many? (b) What share of Australia's mining jobs does that state hold, and what share of Australia's jobs overall? (c) What is fly-in, fly-out work, and how does it connect mining regions to cities?

Unscaffolded

Q9. Explain how chain migration can build up one migrant group in one city over decades. Use the India-born population of Greater Melbourne (220,196 people at the 2021 Census) as your example.

Q10. Sydney lost 33,282 people through internal migration in 2024-25, yet its population still grew by about 75,200. Explain how that is possible, using the idea of the three parts of growth from Figure 9.

Q11. "China's cities grew while the country's population shrank." Use Figures 10 and 11 to explain how both can be true in the same year.

Q12. (a) What is the hukou system, and what does it tie to a person's registered home place? (b) Explain one issue a migrant worker in a Chinese city might face because of it. (c) Put the strongest case for faster change in one sentence and the strongest case for slower change in one sentence.

Response task

Q13. Evidence-based response task: *Explain the movements of people into Australia and within China, and what those movements do to the growth of cities in both countries.* Plan and write your response so that it: - describes one pattern of international migration in Australia (where overseas migrants settle) and one pattern of internal migration in China (movement from villages to cities), each with at least one dated figure from this section; - explains how migration contributes to urban population growth in both countries, using the parts of growth from Figure 9 for Australia and the 2024–2025 changes from Figure 11 for China; - includes the strongest case on both sides of one of this section's debates (migration levels in Australia, or changing China's hukou system); - uses real figures from at least four of this section's figures, and names the source of each one; - ends with a numbered source list with the date each source was read.

Write 250–350 words, or present the same content as a labelled poster.

Tip: Plan with a two-column table — Australia | China — and rows for pattern, numbers, impact on cities, and the debate. Every claim gets a date, a place or a number.

Answers

Q1. (a) net overseas migration (b) internal migration (c) natural increase (d) chain migration (e) circular migration (f) hukou.

Q2. (a) 2020-21, -84,900 people. (b) 2022-23, 538,300. (c) 305,600. (d) 568,400 arrivals – 262,800 departures = 305,600.

Q3. (a) New South Wales 91,570; Victoria 87,770. (b) $91,570 + 87,770 = 179,340$; all eight sum to 305,530; $179,340 \div 305,530 \approx 0.59$, about 59%. (c) Tasmania (2,720) and the Northern Territory (3,610).

Q4. (a) England 927,490; India 673,352; China 549,618; New Zealand 530,492; the Philippines 293,892. (b) $927,490 - 293,892 = 633,598$. (c) England nationally; India in Greater Melbourne; China in Greater Sydney.

Q5. (a) Australia 66.9%, Greater Melbourne 59.9%, Greater Sydney 56.8%. (b) People born in India: 4.9% in Greater Melbourne against 2.6% nationally. (c) People born in China: 4.6% in Greater Sydney against 2.2% nationally.

Q6. (a) Overseas migration +258,100; natural increase +96,300; internal migration -29,800. (b) +324,700 people. (c) Internal migration — more people left the capital cities for regional Australia than moved into them.

Q7. (a) It fell by 3.39 million people, from 1,408.28 million to 1,404.89 million. (b) It grew by 10.30 million, to 953.80 million. (c) It fell by 13.69 million, to 451.09 million. (d) The whole country shrank, so births across China did not add people overall; the urban gain of 10.30 million came mainly from people moving in from rural areas.

Q8. (a) Western Australia, 143,200 people. (b) 46% of Australia's mining jobs; about 11% of Australia's jobs overall. (c) Workers fly in for a block of shifts, then fly home — often to a city such as Perth or Brisbane — so mining-region jobs support city households.

Q9–Q12. Answers will differ. A good answer names its example, uses the section's real figures, and holds both sides of any weighing — see the models below.

Q13. Responses will differ. The requirements are the mark scheme: one Australian pattern and one Chinese pattern with dated figures, the contributions of migration to urban growth in both countries, both sides of one debate at their strongest, real figures from at least four figures, and a numbered, dated source list.

Fully-worked solutions

Solution to Q10 (model). Growth has three parts, and they can pull in different directions. Sydney lost 33,282 people through internal migration in 2024-25 — more people left for regional Australia and other cities than arrived from them. But overseas migration and natural increase were both positive and much larger: Sydney still grew by about 75,200 people in the year. The same pattern held for every capital city — together they gained 324,700 people while internal migration took away 29,800 (Figure 9). The lesson is that a negative part does not mean a shrinking city: it is the total of all three parts that decides whether a city grows, and in Sydney overseas migration and births more than covered the internal loss.

Solution to Q12 (model). (a) Hukou is China's household registration system, run by the Chinese government: it records each person's registered home place, and local public services — public school places, city health care, housing help — have historically followed that registration. (b) A worker from a village who has lived and worked in a city for years may still hold a rural registration, so her children may be unable to get a place in the city's public schools and may stay behind in the village with grandparents. (c) Strongest case for faster change: the migrant workers built the cities and keep them running, and equal access to schools and health care is fairer and would let families stay together. Strongest case for slower change: city schools and hospitals are budgeted around registered populations, so a sudden rush of new registrations could strain services that are already stretched, especially in cities that are already crowded. Both cases are real; a good answer says which costs it weighs more heavily and why.

Solution to Q13 (model plan). Australian pattern: in 2024-25, net overseas migration added 305,600 people to Australia, and New South Wales (91,570) and Victoria (87,770) took 59% of them (Figure 4); at the 2021 Census, 29.1% of people counted were born overseas, with the largest groups from England, India and China (Figure 5), and those groups are concentrated in Sydney and Melbourne (Figure 6). Chinese pattern: the urban share climbed from 19.4% in 1980 to 67.9% in 2025 (Figure 10), and in 2025 the urban population grew by 10.30 million while the whole

country shrank by 3.39 million (Figure 11). Contributions to urban growth: Australia's capital cities gained 324,700 people in 2024-25 despite an internal-migration loss of 29,800 — overseas migration was the engine (Figure 9); China's city growth came mainly from internal migration, with villages as origins and cities as destinations. Debate chosen — migration levels in Australia: higher intake fills job shortages and supports an ageing population; lower intake protects housing and services in the cities where 59% of migrants settle; verdict weighed on which costs count most heavily. Sources numbered: ABS Overseas Migration; ABS National, state and territory population (December quarter 2025); ABS Regional Population 2024-25; ABS 2021 Census QuickStats; NBS national reports for 2024 and 2025; World Bank urban-share series — all read on 25 August 2026.

Sources for this section

All sources retrieved 25 August 2026.

- Australian Bureau of Statistics, *Overseas Migration, Australia* — net overseas migration by financial year (2019-20: 192,700; 2020-21: -84,900; 2021-22: 207,900; 2022-23: 538,300; 2023-24: 429,200; 2024-25: 305,600, first estimate), arrivals (568,400) and departures (262,800) in 2024-25, and net overseas migration by state and territory in 2024-25 (New South Wales 91,570; Victoria 87,770; Queensland 55,740; Western Australia 40,410; South Australia 18,730; ACT 4,980; Northern Territory 3,610; Tasmania 2,720).
- Australian Bureau of Statistics, *National, state and territory population*, December quarter 2025 — Australia's population of 27,801,023 at 31 December 2025; growth in the year to 31 December 2025 of 412,494 people, of which net overseas migration supplied 300,955 and natural increase 111,539; Western Australia's growth of 1.8%, the fastest of any state.
- Australian Bureau of Statistics, *Regional Population, 2024-25* — capital-city growth parts (overseas migration +258,100; natural increase +96,300; internal migration -29,800; total +324,700); net internal migration by capital city (Brisbane +11,077; Perth +8,211; Darwin -1,430; Canberra -1,501; Hobart -1,878; Adelaide -2,425; Melbourne -8,554; Sydney -33,282); growth of Melbourne (about 105,000 people, to 5.44 million) and Sydney (about 75,200, to 5.64 million).
- Australian Bureau of Statistics, *2021 Census of Population and Housing, QuickStats* (Australia, Greater Melbourne, Greater Sydney) — overseas-born 7,479,000 (29.1%); top five overseas birthplaces (England 927,490; India 673,352; China, excluding its special administrative regions and Taiwan, 549,618; New Zealand 530,492; the Philippines 293,892); India-born in Greater Melbourne 220,196; China-born in Greater Sydney 214,766; birthplace shares (born in Australia: 66.9% nationally, 59.9% Greater Melbourne, 56.8% Greater Sydney; England 3.6 / 2.7 / 2.9%; India 2.6 / 4.9 / 3.6%; China 2.2 / 3.4 / 4.6%); 5,663,729 people speaking a language other than English at home, led by Mandarin (685,274) and Arabic (685,243). Shares are worked out over stated responses, on the same basis across areas.
- World Bank, *Urban population (% of total population)*, China — 19.4% in 1980, 26.2% in 1990, 36.4% in 2000, 49.2% in 2010, 63.5% in 2020, 65.9% in 2024.
- National Bureau of Statistics of China (NBS), *Statistical Communiques on the 2024 and 2025 National Economic and Social Development* (released 28 February 2025 and 28 February 2026) — total population 1,408.28 million at end-2024 and 1,404.89 million at end-2025; urban 943.50 million to 953.80 million; rural 464.78 million to 451.09 million; urban share of permanent residents 67.89% at end-2025. People are counted where they usually live.
- National Bureau of Statistics of China (NBS), migrant worker figures for 2024 — 297.53 million migrant workers counted in the survey, up 0.8% on the previous year.
- Australian Bureau of Statistics, *Labour Force Australia, Detailed*, Table 05 — employed persons by state and industry, February 2026: mining Australia 311,500; Western Australia 143,200; Queensland 90,400; New South Wales 38,100; South Australia 16,100; Victoria 14,900; Northern Territory 4,300; Tasmania 3,500; ACT 1,100 — and the same series in February 1996, 2006 and 2016 (Australia 85,700 → 124,700 → 214,900 → 311,500; Western Australia 29,100 → 45,900 → 96,500 → 143,200, in thousands).

Comparing urban patterns: Australia and another highly urbanised country

For the teacher

This is the comparative-method section of Chapter 4. It carries **VC2HG8K20**, taught here with the curriculum’s default pair, Australia and the United States (D12), and develops elaborations .E01–.E04. The section walks one method in three moves — describe each pattern, compare (sameness and difference), explain why — and every move is anchored to a figure built from current, citable data: ABS Significant Urban Areas and GCCSAs at 30 June 2025, US Census Bureau Vintage 2025 incorporated-place estimates (1 July 2025), and World Bank urban-share series (UN definitions).

Two bases are compared and each is labelled honestly on its figure: Australia’s figures are functional urban areas (Significant Urban Areas), the USA’s are city boundaries (incorporated places), which understate its urban areas. The comparison is robust to that difference: on *any* consistent basis Australia’s settlement pattern is far more concentrated, and the section says in student-facing text which basis each number uses.

Sequence: one teaching sequence — Theory (key words → describe → compare → explain → consequences → the method), two worked examples, eight supported and four independent practice tasks, and one evidence-first writing task that reuses the describe–compare–explain frame. The causes of Australia’s concentration (.E02) and the causes of the *difference* between the two countries (.E03) are kept distinct in the tasks; the consequences (.E04) are surveyed here only as consequences — how Australia manages them is section 4D’s entry point, and this section does not anticipate 4D’s teaching. First Nations histories are outside this book’s scope (see **CONTENT_POLICY**, Rule 1); the settlement timeline therefore runs from 1788 European settlement, matching the elaborations’ own framing (“the history of European settlement”).

Vocabulary is gated at Year 7; the six key words and the small set of defined subject terms (colony, evidence) carry the discipline language.

Theory

The key words

Key words for this section	
urban settlement	a town or city and its built-up area, where many people live and work
distribution	where things are spread across a place, and how close together they are
urban concentration	when most of a country's people live in a small number of big cities
size distribution	the mix of large, middle-sized and small settlements a country has
transport network	the roads, railways, ports and airports that connect places
inland	the parts of a country away from the coast

Figure 4C.1 — The key words for this section. Each word is defined again where it first appears.

An **urban settlement** is a town or city and the built-up area around it, where many people live and work. The **distribution** of urban settlements is where they sit across a country, and how close together they are. When most of a country’s people live in a small number of big cities, the country has high **urban concentration**. The **size**

distribution is the mix of big, middle and small settlements a country has, and the **transport network** is the roads, railways, ports and airports that connect places. The **inland** is the part of a country away from the coast. [E01]

Two highly urbanised countries

This section compares Australia with the United States of America, the pair the curriculum develops for this topic. Both countries are highly urbanised. “Urban” here uses the United Nations’ measure — the share of a country’s people living in towns and cities — and on that measure 87.5% of Australians and 80.1% of Americans lived in urban areas in 2023 (World Bank). Figure 4C.2 gives the headline facts, and Figure 4C.3 shows the pattern is old: Australia was already highly urbanised in 1960, and the United States climbed steadily over the next fifty years. [E01]

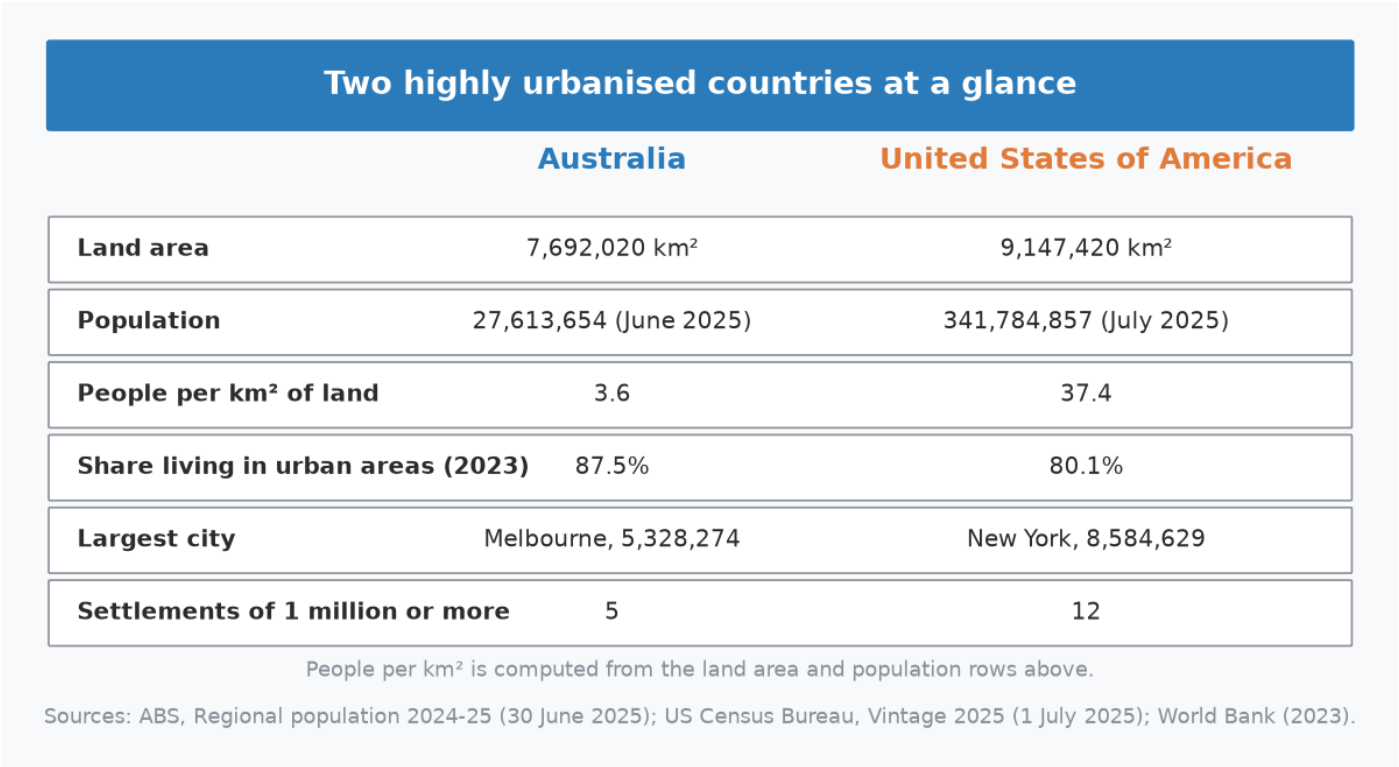


Figure 4C.2 — Two highly urbanised countries at a glance. Australia is the bigger country by area per person: 3.6 people per square kilometre, against 37.4 in the United States.

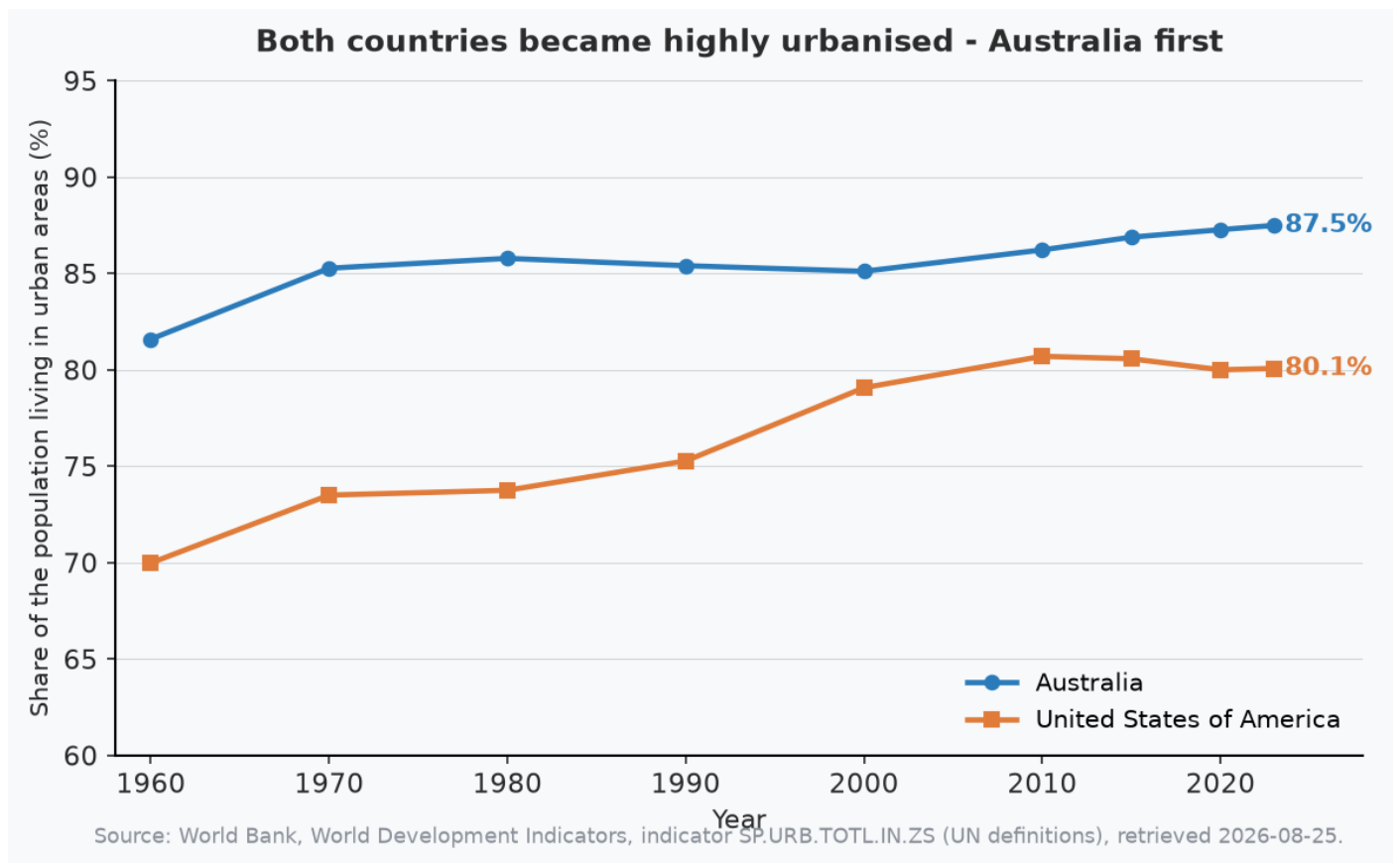


Figure 4C.3 — Both countries became highly urbanised long ago. Source: World Bank, UN definitions, retrieved 2026-08-25.

But “highly urbanised” does not tell you *where* the cities are, or how the people are shared among them. That is the pattern this section compares.

Step 1 — Describe: Australia

Figure 4C.4 plots every Australian urban settlement of about 20,000 people or more, plus a few smaller mining towns. Read the map and the pattern jumps out: almost every dot hugs the coast, and the biggest dots — Melbourne, Sydney, Brisbane, Perth and Adelaide, each over one million — sit on or near the coastline. The inland has only small towns, many of them mining or farming service towns such as Kalgoorlie, Mount Isa, Broken Hill and Alice Springs. Canberra, the planned national capital, is the one big inland exception. [E01]

Where Australia's urban settlements are



Source of populations: ABS, Regional population 2024-25 (Significant Urban Areas, 30 June 2025). Simplified outline; not to scale.

Figure 4C.4 — Where Australia's urban settlements are. Source: ABS, Significant Urban Areas, 30 June 2025.

Why the coast? Figure 4C.5 shows the deep reason. Each of Britain's Australian colonies began as one port, and each port grew into today's state capital: Sydney (1788), Hobart (1803), Brisbane (1824), Perth (1829), Adelaide (1836), Melbourne (1837) and Darwin (1869). A **colony** is a place ruled from a far-away home country, and each colony shipped wool, wheat and minerals out through its port, so the port became the biggest town. When the colonies joined as one country in 1901, those same ports kept growing. [E02]

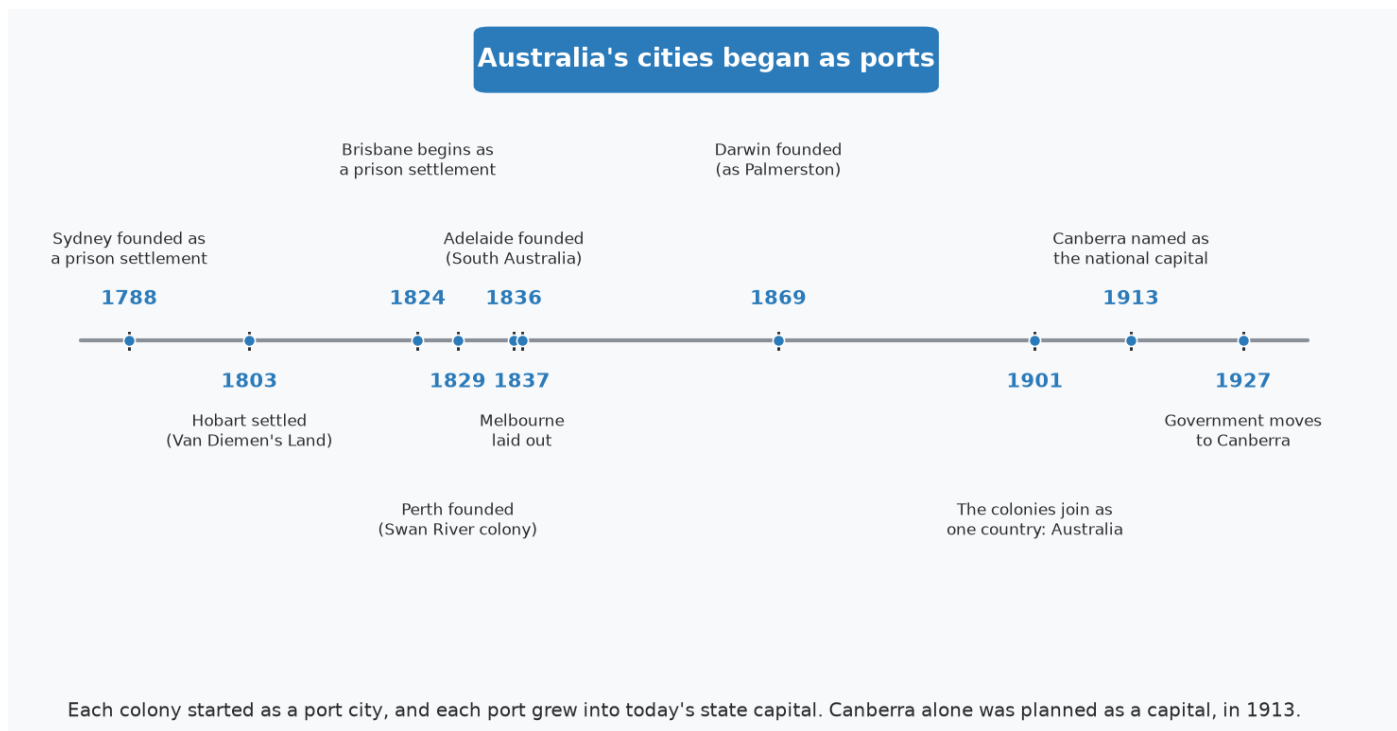


Figure 4C.5 — Australia's cities began as ports. Only Canberra was planned as a capital.

The legacy is still visible in the numbers. Figure 4C.6 shows the share of each state's people who live in its capital city: about 81% of Western Australians live in Perth, about 78% of South Australians in Adelaide, about 77% of Victorians in Melbourne. Across Australia, Melbourne and Sydney together hold 38% of the country's people, and the five million-plus cities hold 62%. That is urban concentration. [E02]

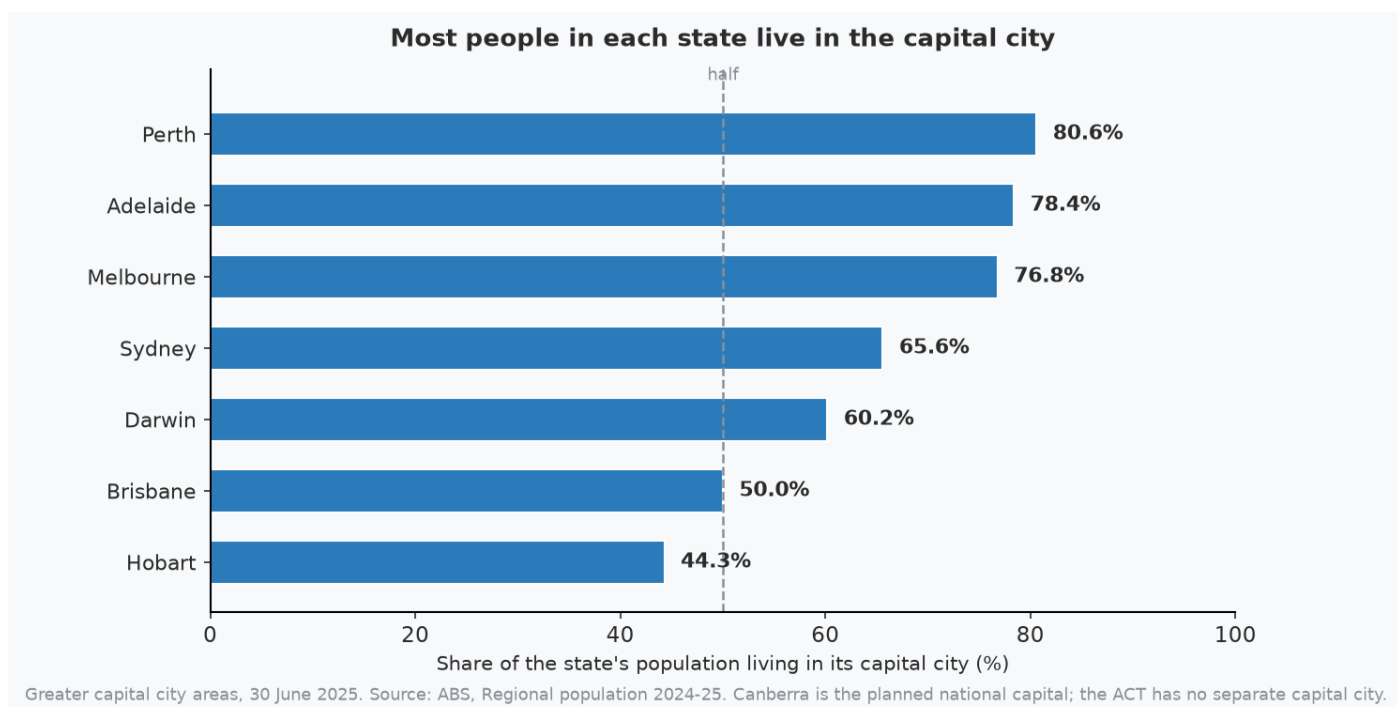
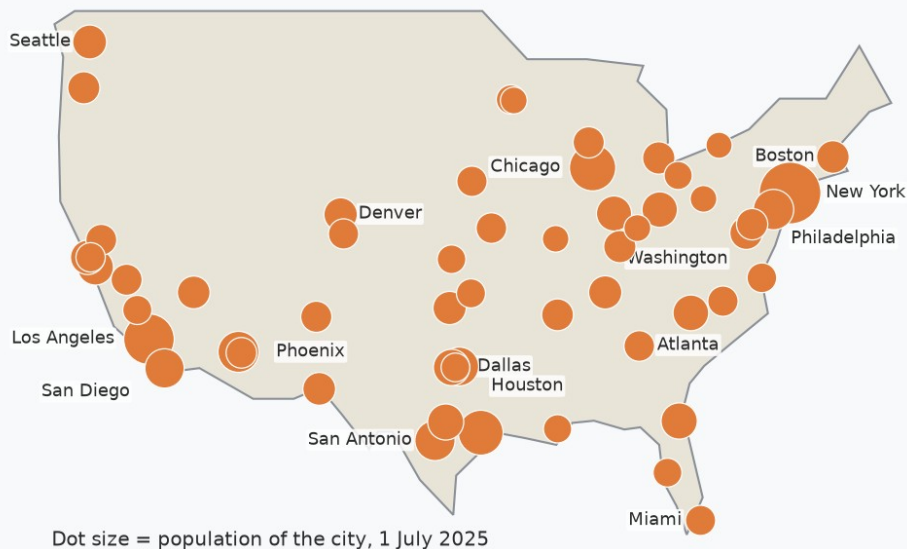


Figure 4C.6 — In most states, most people live in the capital city. Source: ABS, Greater Capital City Statistical Areas, 30 June 2025.

Step 1 — Describe: the United States of America

Now read Figure 4C.7 the same way. The United States is highly urbanised too, but its big cities are spread across the whole country: Seattle in the north-west, Denver and Phoenix in the dry west, Dallas and Houston in the south, Chicago and Minneapolis in the mid-west, Atlanta and Miami in the south-east, and New York and Boston on the east coast. Twelve American cities hold a million or more people, using city boundaries. [E01]

Where the United States' urban settlements are



The United States has many large cities, spread across the whole country.

Source of populations: US Census Bureau, Vintage 2025 city estimates (1 July 2025). City boundaries; urban areas are larger. Simplified outline; not to scale.

Figure 4C.7 — Where the United States' urban settlements are. The basis is city boundaries, so each dot shows less than the full built-up area of the city; the spread across the country is the point. Source: US Census Bureau, 1 July 2025.

Step 2 — Compare

Line the two maps up and the sameness comes first: both countries are highly urbanised, and each country's largest city is an old port (Melbourne; New York). [E01]

The difference is in the size distribution. In Figure 4C.8, Australia's chart falls off a cliff after five big cities — the sixth largest settlement, Gold Coast–Tweed Heads, holds only 0.76 million people. The United States' chart keeps going: twelve cities over one million, and thirty-nine over half a million. Australia's two biggest cities hold 38% of its people; the twelve biggest American cities hold only 8% of theirs. Same level of urbanisation, very different concentration. [E03]

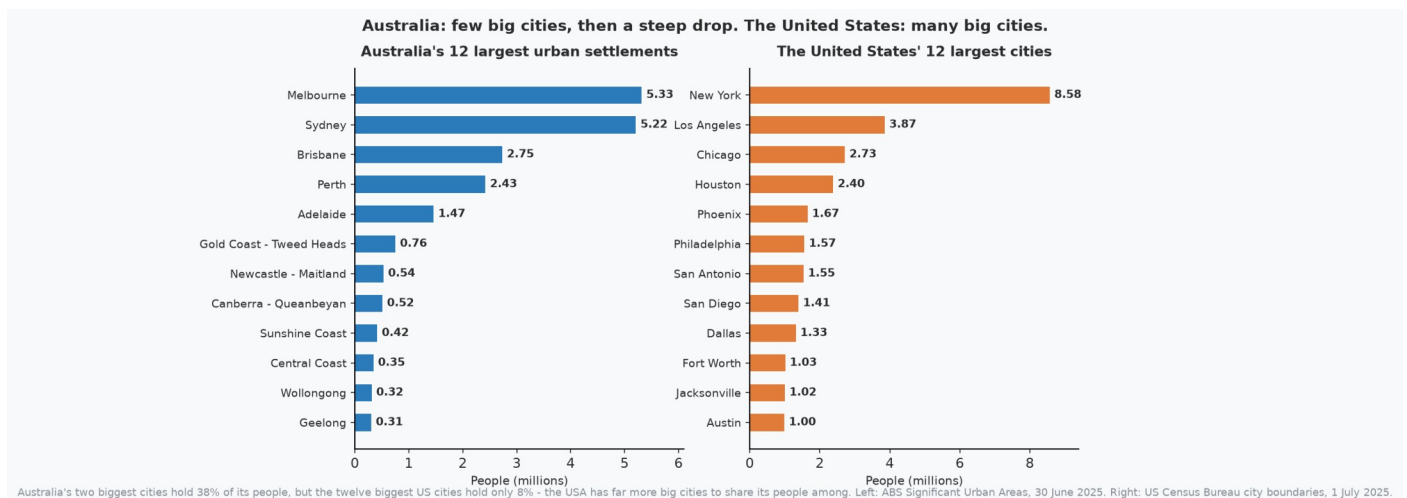


Figure 4C.8 — Size distribution compared. Left: ABS Significant Urban Areas. Right: US Census Bureau city boundaries.

Step 3 — Explain

Why is Australia so concentrated, and why is the United States less so? Figure 4C.9 lays out the six causes the curriculum names for this topic. Three do most of the work in a Year 7 answer:

- **History of European settlement.** Britain planted a handful of port colonies in Australia, and each became one capital city. The United States began as thirteen colonies along a long coast, so it started with many ports and many towns, not a few. [E02]
- **Environmental constraints.** Much of the Australian inland is too dry for big cities, so people stay near the coast where the rain and farmland are. The United States has big rivers and reliable rain right across its middle, so inland cities such as Chicago, Dallas and Phoenix could grow. [E02]
- **Shape of transport networks.** Australia's roads and railways were built like spokes, linking each region to its capital to carry exports out — and **export** trade (wool, wheat, iron ore, coal) leaves through a few big ports. The United States built a web of routes between many cities, so business did not have to sit in one capital per state. [E02]

The other three causes — **migration** (people arriving from overseas settle where the jobs and family networks already are), the **centralisation of state governments** (each Australian state is run from its capital, so government jobs sit there too), and the economy's export orientation — add weight to the same side. [E02]

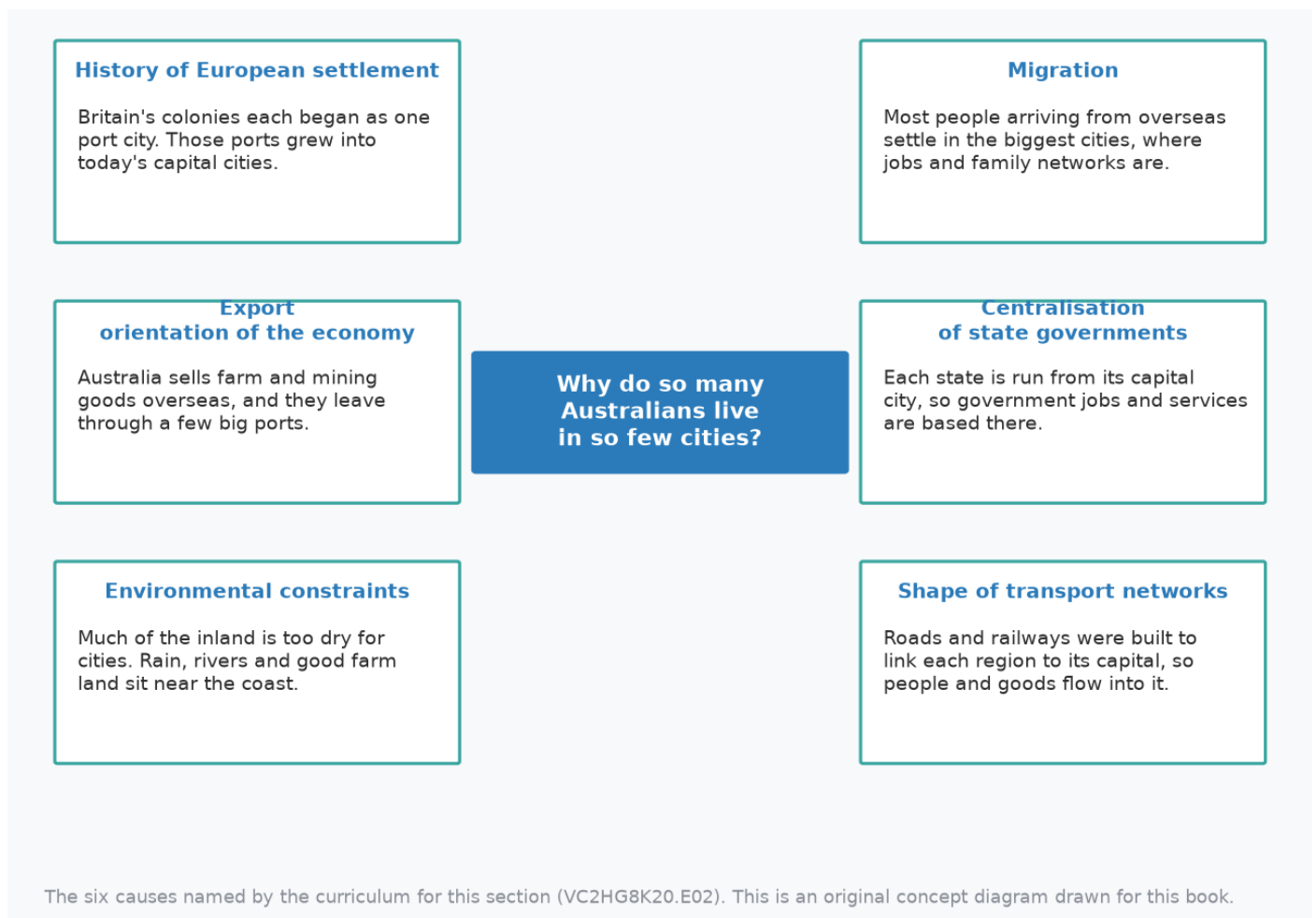


Figure 4C.9 — The six causes named by VC2HG8K20.E02, each with a plain-language gloss.

Evaluating the causes means asking which ones are *different* between the two countries. Duration of colonisation is one: British colonisation of what is now the United States began in 1607, giving its towns about 180 more years to multiply before Australia's first colony existed. Number of states is another: six Australian states each funnel people into one capital, while fifty American states share their people among many cities. [E03]

Consequences

Concentration is not simply good or bad — it brings trade-offs on four fronts, and Figure 4C.10 sorts them. Environmentally, big cities spread over farmland and bushland and need huge amounts of water and energy.

Economically, jobs and services gather in the capitals, which helps business but pushes up prices, and traffic jams cost time. In social terms, house prices rise fastest in the biggest cities, and smaller towns can lose young people and services. Politically, most people who vote live in the capital cities, so governments focus on them — and whether to spread people and jobs more evenly is a debate Australia keeps having. [E04]

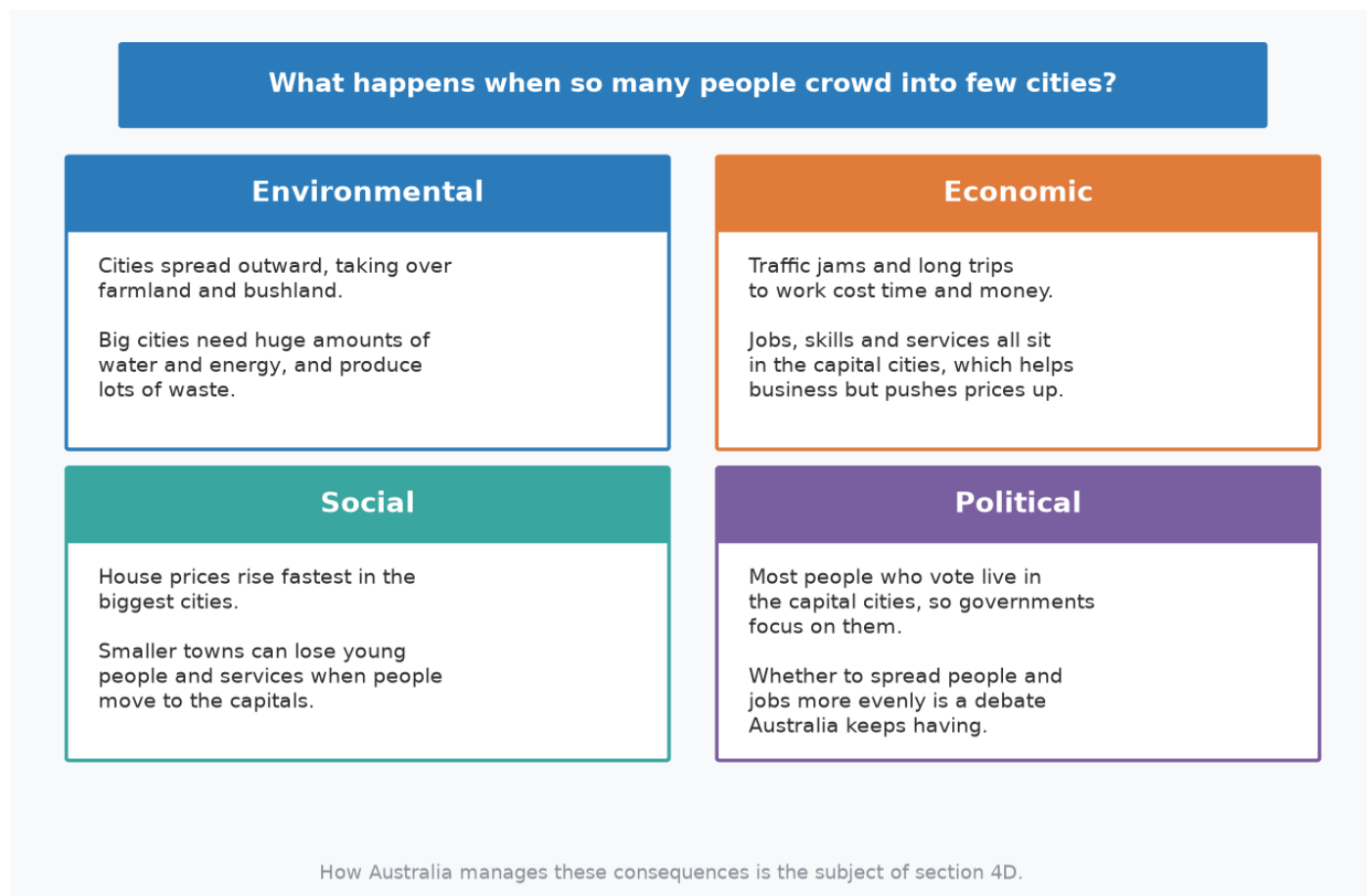


Figure 4C.10 — Four kinds of consequences. How Australia manages them is the work of section 4D.

The method, put together

Everything above is one method, and the method is the point of this section. Geographers compare two countries in three moves: describe each pattern with **evidence** (facts and numbers you can check), say what is the same and what is different, then explain why using causes. Figure 4C.11 shows the method and a model paragraph built only from numbers in this section. Use the same three moves in your own writing below. [E03]

How geographers compare two countries

1. Describe

Describe each pattern on its own, with evidence: what is where?

2. Compare

Say what is the SAME and what is DIFFERENT between the two.

3. Explain

Say WHY the difference exists, using causes and evidence.

A model comparison paragraph (every number comes from this section):

Both Australia and the United States are highly urbanised: in 2023, 87.5% of Australians and 80.1% of Americans lived in urban areas (World Bank, 2023).

SAMENESS sentence

But the two patterns are different. Australia's people are crowded into a few big cities: Melbourne and Sydney alone hold 38% of the population (ABS, 2026). The United States has many big cities spread across the country, and its twelve largest cities hold only 8% of its people (US Census Bureau, 2026).

DIFFERENCE sentences

One reason is that Australia's colonies each began as a single port city, and much of the inland is too dry for big cities, while the United States grew from thirteen colonies along a long, wet coastline.

EXPLANATION sentence

Original model text written for this section; numbers as shown in each sentence.

Figure 4C.11 — How geographers compare two countries, with a model paragraph.

Worked examples

Worked example 1 — Measuring concentration in each country [E03]

Question: Using Figure 4C.8 and the headline table, show that Australia's urban settlement pattern is more concentrated than the one in the United States.

1. Pick the same rule for both countries: count the biggest settlements and their share of the national population. (Australia: Significant Urban Areas, ABS 2025; USA: city boundaries, US Census Bureau 2025.)
2. Add Australia's five biggest: $5.33 + 5.22 + 2.75 + 2.43 + 1.47 = 17.2$ million people.
3. Share of Australia: $17.2 \div 27.6 \approx 0.62$, so about **62%** of Australians live in the five biggest cities.
4. Add the USA's twelve biggest: $8.58 + 3.87 + 2.73 + 2.40 + 1.67 + 1.57 + 1.55 + 1.41 + 1.33 + 1.03 + 1.02 + 1.00 = 28.2$ million people.
5. Share of the USA: $28.2 \div 341.8 \approx 0.08$, so about **8%** of Americans live in the twelve biggest cities.
6. Conclude in one sentence: five Australian cities hold most of the country's people, while twelve American cities hold a small share of theirs — Australia's pattern is far more concentrated.

Worked example 2 — Building a comparison paragraph the method way [E01, E03]

Question: Write a short comparison of the two countries' urban patterns, using the describe–compare–explain frame.

1. **Describe Australia** in one sentence with a number: “Almost all of Australia’s big cities hug the coast, and Melbourne and Sydney together hold 38% of the population (ABS, 2026).”
 2. **Describe the USA** the same way: “The United States has twelve cities of a million or more, spread across every region (US Census Bureau, 2026).”
 3. **Compare** with a sameness and a difference: “Both countries are highly urbanised — 87.5% and 80.1% (World Bank, 2023) — but Australia’s people are crowded into far fewer cities.”
 4. **Explain** with one cause: “One reason is that Australia’s colonies each began as a single port, and much of the inland is too dry for big cities.”
 5. Join the four sentences into one paragraph and read it back: every claim has a number or a cause behind it. (This is the model paragraph in Figure 4C.11.)
-

Practice tasks

With support

1. Look at Figure 4C.4. [E01]
 - a. Name three urban settlements on or near the east coast.
 - b. Name two small inland towns shown on the map.
 - c. In one sentence, describe the distribution the map shows.
2. Look at Figure 4C.7. [E01]
 - a. Is the United States’ pattern “coast only” or “spread across the country”? Give two city names as evidence.
 - b. Name one large American city that is a long way from any coast.
3. Put Figures 4C.4 and 4C.7 side by side. Write one similarity and one difference between the two distributions. [E01]
4. Use Figure 4C.8 to complete these sentences. [E03]
 - a. Australia’s two biggest urban settlements are _____ and _____.
 - b. Together they hold about _____% of Australia’s people.
 - c. The twelve biggest American cities hold about _____% of the American people.
 - d. So the more concentrated country is _____.
5. Figure 4C.9 names six causes. Match each clue to a cause. [E02]
 - a. “Wool, wheat and iron ore leave by ship through a few big ports.”
 - b. “Most of the inland does not get enough rain for a big city.”
 - c. “Each colony began as one port, and the port became the capital.”
6. Use Figure 4C.5. [E02]
 - a. Which began first, Perth or Adelaide? By how many years?
 - b. Which city on the timeline was *not* founded as a port colony?
 - c. Why did the new country need that city? Answer in one sentence.
7. Figure 4C.6 ranks the capital-city share of each state’s people. [E02]
 - a. Which capital holds the biggest share of its state’s people? Which holds the smallest?
 - b. Circle the capitals that hold more than half of their state’s people.
8. Pick any two panels in Figure 4C.10. For each, say whether the consequence helps people, hurts people, or both — and give one reason. [E04]

On your own

9. “Australia and the United States are both highly urbanised, but their urban patterns are different.” Give two pieces of figure evidence for the sameness and two for the difference. [E01, E03]
10. Choose two causes from Figure 4C.9 and explain, in your own words, how each one pushed people into Australia’s capital cities. [E02]

11. Australia has five million-plus cities for 27.6 million people; the United States has twelve for 341.8 million. Work out roughly how many people each country has per million-plus city, and say what the two answers tell you about concentration. [E03]
 12. Is urban concentration good for Australia? Use one consequence that helps and one that hurts, from *different* panels of Figure 4C.10, and end with your own balanced judgement. [E04]
-

The writing task — evidence first

Task: *Explain why Australia's urban settlements are more concentrated than those of the United States of America.* (About 150–200 words; use the describe–compare–explain method of Figure 4C.11.) [E02, E03]

Step 1 — Fill the evidence table first (do not write the paragraph yet).

Move	Evidence you will use	Figure it comes from
Describe Australia	e.g. Melbourne + Sydney hold 38% of Australians	Figure 4C.8
Describe the USA		
Sameness		
Difference		
Explain (cause 1)		
Explain (cause 2)		

Step 2 — Write the paragraph. One describe sentence per country, one sameness sentence, one difference sentence, and two explain sentences. Put a number in every describe and compare sentence.

Step 3 — Check. Underline each number and each cause. If a sentence has neither, rewrite it or cut it.

Answers and suggested responses

1. a. Any three of: Cairns, Townsville, Mackay, Rockhampton, Brisbane, Gold Coast–Tweed Heads, Sydney, Newcastle–Maitland, Central Coast, Wollongong. b. Any two of: Alice Springs, Kalgoorlie, Mount Isa, Broken Hill. c. Expected: “Almost all of Australia’s urban settlements are near the coast; the inland has only a few small towns.”
2. a. Spread across the whole country; e.g. Denver and Dallas are large cities far from the coast. b. Any of: Denver, Phoenix, Dallas, Chicago, Minneapolis, Atlanta.
3. Similarity: in both countries most people live in urban areas, and the largest cities are old ports. Difference: Australia’s big cities hug the coast while the USA’s are spread inland too; Australia has five million-plus cities, the USA twelve.
4. a. Melbourne and Sydney. b. 38%. c. 8%. d. Australia.
5. a. Export orientation of the economy. b. Environmental constraints. c. History of European settlement.
6. a. Perth, 1829 — seven years before Adelaide (1836). b. Canberra. c. Expected: the new country wanted a neutral capital that was not Sydney or Melbourne.
7. a. Perth (80.6%); Hobart (44.3%). b. Perth, Adelaide, Melbourne, Sydney, Darwin.
8. Responses vary; accept any consequence read correctly from a panel with a reasoned helps/hurts/both judgement, e.g. “Economic: both — jobs gather in the capitals, which helps business, but house prices and traffic get worse.”
9. Sameness evidence: both 80%+ urban in 2023 (Figure 4C.3); both largest cities are ports (Figures 4C.4/4C.7). Difference evidence: five million-plus cities vs twelve (Figure 4C.8); coast-hugging vs spread distribution (Figures 4C.4/4C.7).
10. Accept any two causes explained causally, e.g. history: each colony’s port became its capital and kept the head start; transport: spoke-shaped rail and road lines send people and goods to the capital, not between regional towns.
11. Australia $\approx 27.6 \div 5 \approx 5.5$ million people per million-plus city; USA $\approx 341.8 \div 12 \approx 28.5$ million. So each Australian million-city carries about five times the weight of an American one — fewer cities are doing much more of the country’s work, i.e. higher concentration.
12. Responses vary; require one helping and one hurting consequence from different panels and a judgement that weighs both, e.g. concentration helps business and services gather but makes housing and water stress worse in the biggest cities, so the answer is “both, and it depends which consequence you weigh”.

Writing task — suggested response: “Australia and the United States are both highly urbanised: in 2023, 87.5% of Australians and 80.1% of Americans lived in urban areas (World Bank). But the patterns differ. Australia’s people are crowded into a few coastal capitals — Melbourne and Sydney alone hold 38% of the population, and the five biggest cities hold 62% (ABS, 2026). The United States spreads its people across twelve million-plus cities in every region, which hold only 8% of its people (US Census Bureau, 2026). Two causes explain much of the difference. First, each Australian colony began as a single port that became a state capital, while the American colonies were many and older. Second, much of the Australian inland is too dry for big cities, whereas rivers and rain cross the American middle, letting inland cities grow.”

Sources

- Victorian Curriculum 2.0, Geography, Levels 7–8 band: content description VC2HG8K20 and elaborations E01–E04 (VCAA) — scope authority for this section.
- Australian Bureau of Statistics, *Regional population*, 2024–25 (cat. 3218.0, released 31 March 2026), data cubes 32180DS0003 and 32180DS0004 — Significant Urban Area, GCCSA and state ERPs at 30 June 2025. Retrieved 2026-08-25.
- US Census Bureau, Vintage 2025 estimates: SUB-IP-EST2025-ANNRKN (incorporated places, 1 July 2025) and NA-EST2025-POP (national resident population, released January 2026). Retrieved 2026-08-25.

- World Bank, World Development Indicators: SP.URB.TOTL.IN.ZS (urban share, UN World Urbanization Prospects), SP.POP.TOTL and AG.LND.TOTL.K2. Retrieved 2026-08-25.
- Wikipedia, “History of Australia (1788–1850)”, “History of Darwin”, “Canberra” — colonial foundation dates checked. Retrieved 2026-08-25.
- All maps are original simplified outlines drawn for this series (not to scale); no atlas or commercial map content is reproduced.

Figures of this section

Fig	File	Shows	Basis / source
4C.1	../diagrams/ 4c_key_words.png	Key words and glosses	Original concept table
4C.2	../diagrams/ 4c_headline_table.png	Headline comparison of the two countries	ABS June 2025; US Census July 2025; World Bank 2023
4C.3	../diagrams/ 4c_urban_trend.png	Urban share, 1960–2023	World Bank SP.URB.TOTL.IN.ZS (UN definitions)
4C.4	../diagrams/ 4c_aus_cities_map.png	Dot map of Australian urban settlements	ABS Significant Urban Areas, 30 June 2025; series-original outline
4C.5	../diagrams/ 4c_settlement_timeline.png	Port-colony timeline, 1788–1927	Dates checked against Wikipedia history pages
4C.6	../diagrams/ 4c_capitals_share.png	Capital share of each state’s population	ABS GCCSAs and states, 30 June 2025
4C.7	../diagrams/ 4c_usa_cities_map.png	Dot map of US urban settlements	US Census Bureau city boundaries, 1 July 2025; original simplified outline
4C.8	../diagrams/ 4c_rank_size.png	Top-12 size distribution, both countries	ABS SUAs and US Census places, 2025
4C.9	../diagrams/ 4c_causes_web.png	Six causes of Australia’s concentration	VC2HG8K20.E02; original concept web
4C.10	../diagrams/ 4c_consequences.png	Environmental, economic, social, political consequences	VC2HG8K20.E04; original table
4C.11	../diagrams/ 4c_comparison_method.png	Describe–compare–explain method with model paragraph	Original model; numbers as shown in each sentence

Managing Australia's cities: liveability, environmental sustainability and climate-change adaptation

In June 2025 about 27.6 million people lived in Australia — and more than 18.7 million of them lived in just eight cities. The Australian Bureau of Statistics (ABS) projects that by 2071 there could be about 39.2 million Australians. Where will they live? How will the cities keep their water, their shade, their short trips to work and their liveable streets in a climate that is already changing? And should Australia be this crowded into a few coastal cities at all? This section is about responses and strategies: how cities manage growth, improve liveability and environmental sustainability, and adapt to climate change — and the live debate about spreading Australians out more evenly, with Canberra as the working example.

Curriculum record — VC2HG8K21; elaborations VC2HG8K21.E01, VC2HG8K21.E02, VC2HG8K21.E03, VC2HG8K21.E04, VC2HG8K21.E05, VC2HG8K21.E06. The six elaboration ids are linkage keys for questions and coverage (see the TOC, §1 and D10); this section is organised by ideas, not as a walk through E01–E06.

Theory

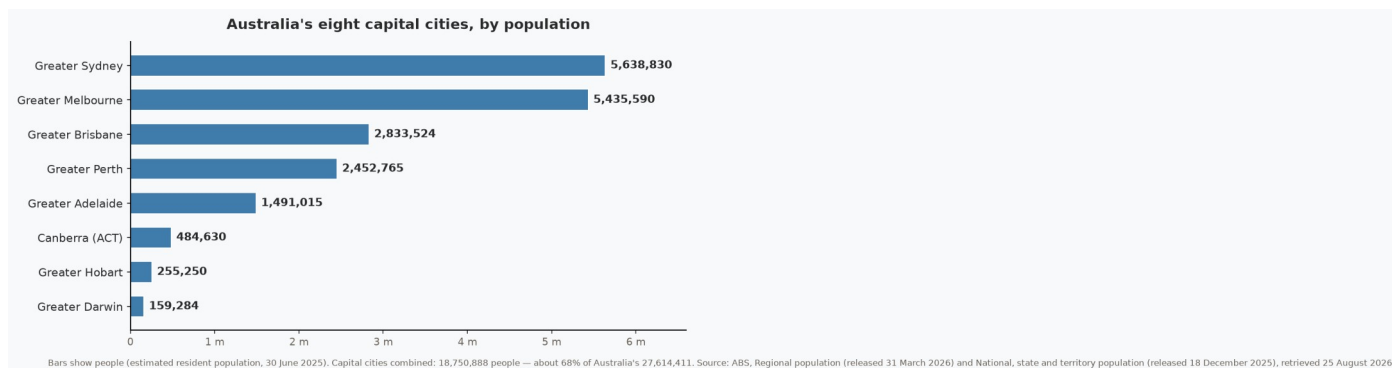
Teaching sequence (for the teacher) 1. Open with the bar chart of the eight capital cities and the Sydney–Melbourne card. Have students compute the two shares themselves ($18,750,888 \div 27,614,411 \approx 68\%$; $11,074,420 \div 27,614,411 \approx 40\%$) — the arithmetic is part of the geography. 2. Read the projections chart as a *forecast with assumptions*, not a fact about the future: one base line, three series. Worked example 1 does the forecast arithmetic; keep the implications discussion to named pressures (housing, trips, water, services) against named gains (jobs, services, ideas). 3. Build the managing-growth strand with the Plan Melbourne drawing. For each feature (boundary, wedges, activity centres, transport) ask: which of environmental, economic and social does it touch, and what does it do to liveability? 4. Build the climate strand from the observed-changes cards and the heat-extremes chart, then the urban heat island drawing as the mechanism that joins a warming climate to cities. Adaptation follows from the remedies. 5. Sort the section's strategies under the three concept types the curriculum names (spatial, interconnection, environmental) — Q8 checks this. 6. Run the decentralisation debate from the balance card as two strongest cases. Insist on a stated meaning of 'balanced' before any verdict (Worked example 2). Use the Canberra card as the example both sides must explain. 7. Close with the response task (Q13) on the planner. Mark the frame, the named evidence and the handling of the other side — not the verdict.

Key words

- **liveability** — how good a place is to live in: its services, safety, housing, transport, environment and community life (the idea Chapter 2 built; here applied to whole cities).
- **environmental sustainability** — using a place's air, water, soil, plants and animals so they keep working for people now and for later generations (the thread from Chapter 1, here applied to cities).
- **urbanisation** — the growth in the share of people living in towns and cities (this chapter's process; 4D asks what cities do about it).
- **population projection** — a worked-out forecast of a future population, built on stated assumptions about births, deaths and migration. Always ask: which series, which assumptions?
- **infrastructure** — the basic structures a city runs on: roads, rail, pipes, wires, hospitals, schools.
- **urban growth boundary** — a line set in a city plan beyond which new suburbs may not be built.
- **green wedge** — protected farmland and open space, kept free of suburb building, reaching into a city's edge.
- **20-minute neighbourhood** — this book states an operational definition: an area in which most everyday needs — shops, a school, a park, a doctor, a stop on good public transport — sit within about a 20-minute walk, ride or safe cycle from home.
- **urban heat island** — the extra warmth of a city over the countryside around it, caused by dark heat-soaking surfaces, scarce plants and waste heat from machines.
- **urban greening** — adding trees, parks, green roofs and water features to a city to cool, shade and improve it. The **canopy** is the layer of tree cover over a suburb, usually counted as a share of its area.
- **adaptation (to climate change)** — changing how we build and run places so they cope with the climate changes now locked in, as well as cutting the causes.

- **decentralisation** — moving people, jobs and services out of the biggest cities into smaller cities and regional centres. A contested word in Australia: whether it should happen, and how, is openly argued — so answers must reason, not assume.
- **distribution** — where things (here, people and cities) sit across a country's space, and how evenly or unevenly they are spread.

Where Australians live now: eight capital cities



Bar chart of Australia's eight capital cities by population at 30 June 2025: Greater Sydney 5,638,830; Greater Melbourne 5,435,590; Greater Brisbane 2,833,524; Greater Perth 2,452,765; Greater Adelaide 1,491,015; Canberra (ACT) 484,630; Greater Hobart 255,250; Greater Darwin 159,284, with a caption noting the eight together hold 18,750,888 people, about 68% of Australia's 27,614,411

Australia's population is not spread evenly across its space; it is crowded onto the coast in eight capital cities. At 30 June 2025, Greater Sydney held 5,638,830 people and Greater Melbourne 5,435,590, with Greater Brisbane (2,833,524) and Greater Perth (2,452,765) next (ABS, Regional population, released 31 March 2026). Add Adelaide, Canberra, Hobart and Darwin and the eight cities hold 18,750,888 people. The check is worth doing once: $18,750,888 \div 27,614,411$ (Australia's population at 30 June 2025, ABS) ≈ 0.68 — about **68% of Australians live in a capital city**. That single number is the starting point for everything in this section: forecasts, growth management, climate adaptation and the decentralisation debate all begin from it.

Two cities hold two in every five Australians

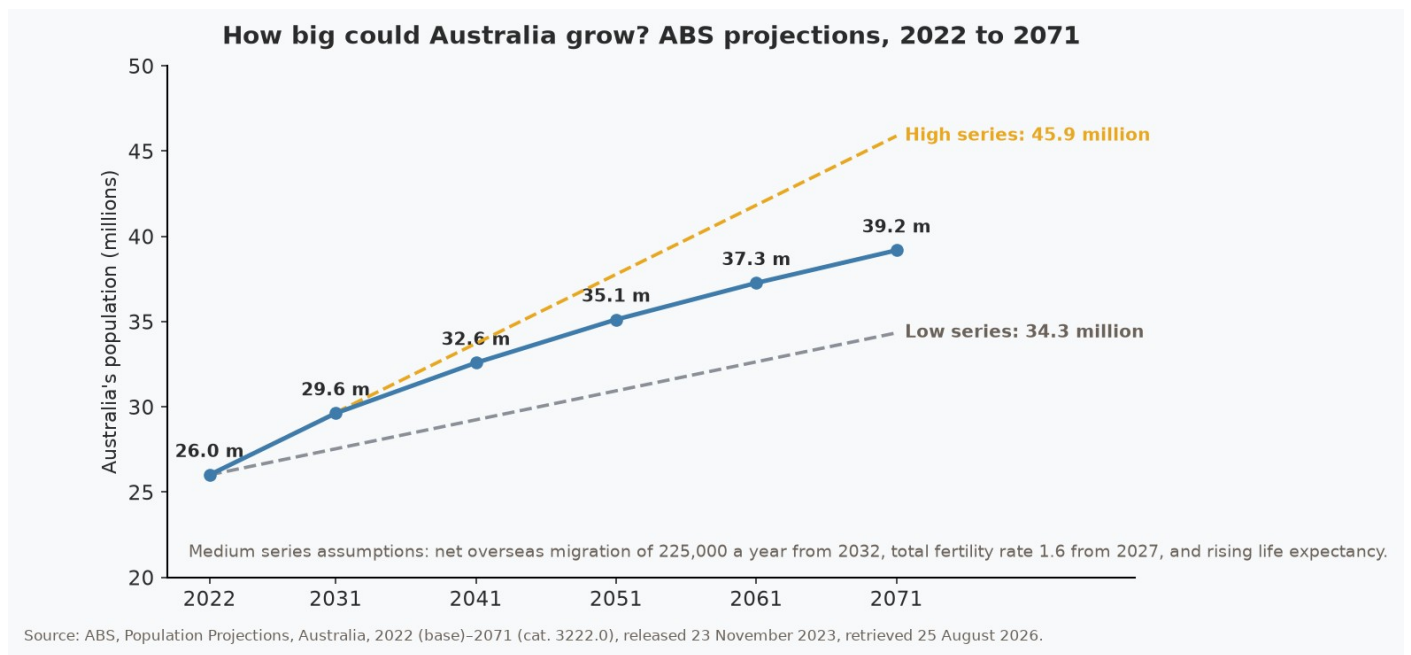


Stat card comparing Sydney and Melbourne at 30 June 2025 (Sydney 5,638,830; Melbourne 5,435,590), their growth in the year to 30 June 2025 (Sydney +75,200; Melbourne +105,000), the race to be biggest (Melbourne projected to pass Sydney between 2032 and 2046) and Melbourne's projected 2071 size of 6.5 to 9.9 million, largest in Australia, closing with: together the two cities hold about 40% of all Australians

Inside the 68%, two cities dominate. Sydney plus Melbourne is $5,638,830 + 5,435,590 = 11,074,420$ people, and $11,074,420 \div 27,614,411 \approx 0.40$ — **two in every five Australians live in Sydney or Melbourne**. And the two are growing fast and unevenly: in the year to 30 June 2025 Melbourne added about 105,000 people and Sydney about 75,200 (ABS). On the ABS projections, Melbourne passes Sydney somewhere between 2032 and 2046 and is projected to be Australia's largest city by 2071, at between 6.5 and 9.9 million people. When growth that big lands on

two coastal cities, the questions of this section — liveability, environmental sustainability, adaptation — stop being abstract.

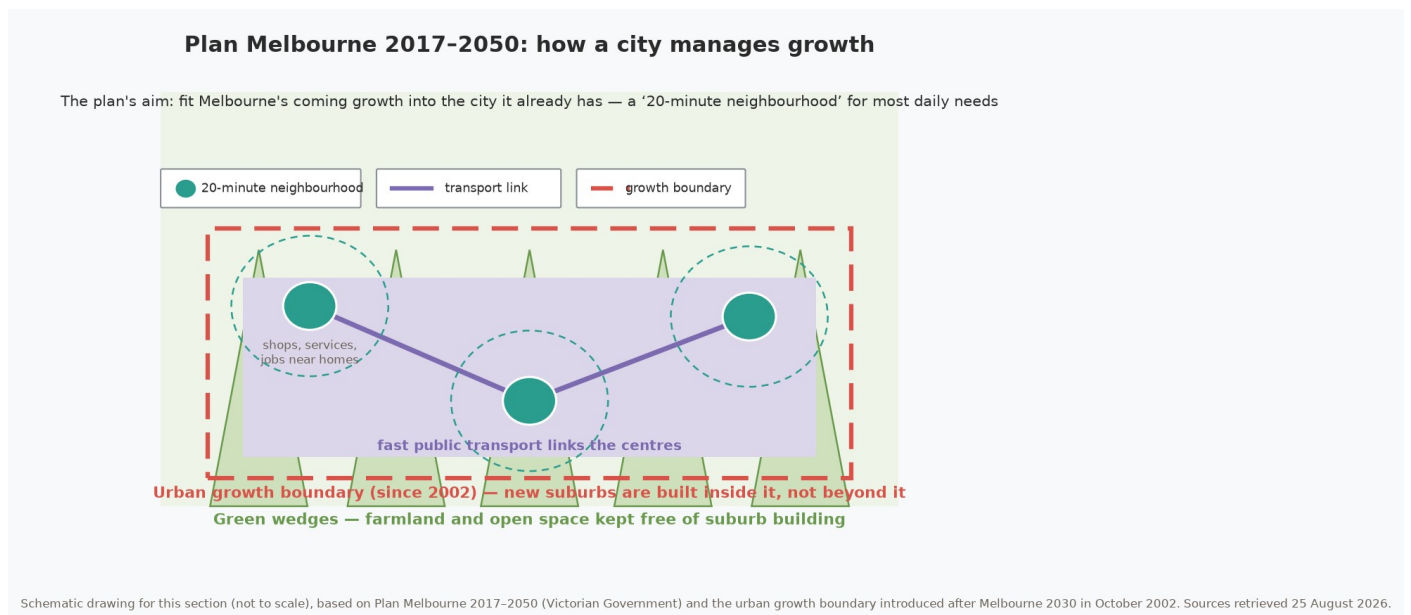
How big could Australia grow? Reading a projection



Line chart of ABS population projections 2022 to 2071: medium series rising from 26.0 million (2022) through 29.6 (2031), 32.6 (2041), 35.1 (2051), 37.3 (2061) to 39.2 million (2071), with dashed high and low series ending at 45.9 million and 34.3 million, and a note stating the medium series assumptions: net overseas migration of 225,000 a year from 2032, total fertility rate 1.6 from 2027, and rising life expectancy

A projection is not a prediction; it is arithmetic run on assumptions. The ABS medium series takes Australia from 26,013,061 people in 2022 to 39,185,129 in 2071. Change the assumptions about migration, births or life expectancy and the 2071 answer moves between 34,343,015 (low series) and 45,888,867 (high series) — a gap of more than 11 million people, all coming from the assumptions. The medium series assumes net overseas migration of 225,000 a year from 2032 and a total fertility rate of 1.6 from 2027 (ABS, Population Projections, 2022 (base)–2071). On the same projections the capital-city share of Australia’s population rises from 67% in 2022 to 68% by 2032 — so the crowding this section starts from is projected to *increase*, not ease. What does growth of this size mean for the environmental sustainability and liveability of the cities that receive it? More people means more hands, more ideas, more customers for services — and more pressure on housing, water, transport, waste and shade. Holding both halves of that sentence at once is the skill this section builds.

One strategy for managing growth: Plan Melbourne 2017–2050



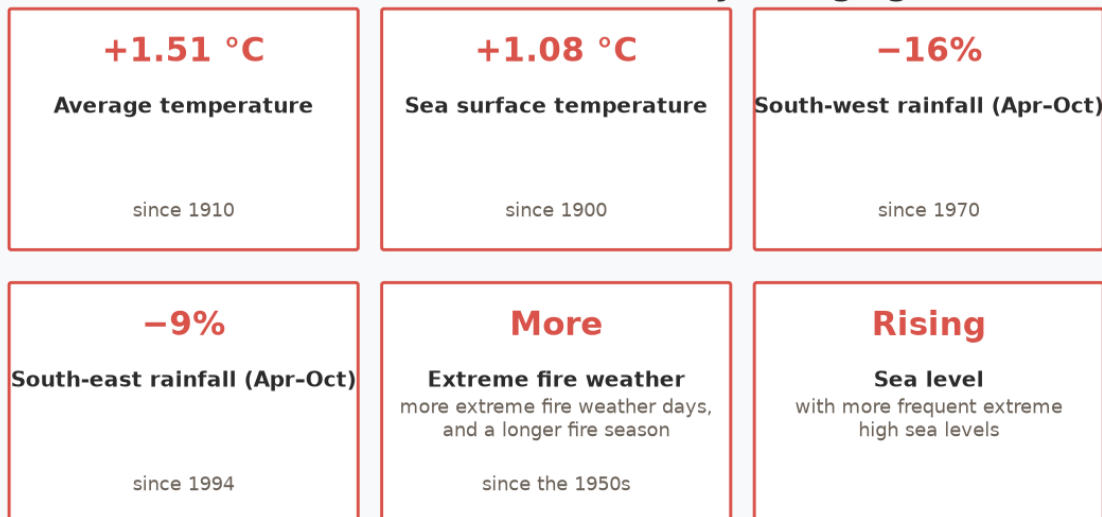
Schematic plan drawing of Melbourne's growth strategy: an urban growth boundary (dashed red ring, since 2002) inside which new suburbs are built; green wedges of farmland and open space kept free of suburb building; three activity centres drawn as teal nodes with dashed 20-minute neighbourhood rings around them, labelled shops, services, jobs near homes; and a purple transport line linking the centres, labelled fast public transport links the centres; the stated aim is to fit Melbourne's coming growth into the city it already has

Every big Australian city has a plan for its projected growth; Melbourne's is Plan Melbourne 2017–2050, the Victorian Government's strategy for fitting the city's coming growth into the city it already has. Three features do most of the work. First, the **urban growth boundary**: a line, legislated after the earlier Melbourne 2030 plan in October 2002, beyond which new suburbs may not be built — it attacks sprawl, the outward spread of suburbs over farmland and bushland. Second, the **green wedges**: fingers of farmland and open space kept free of suburb building, reaching into the city. Third, **activity centres** and **20-minute neighbourhoods**: clusters of shops, services and jobs near homes, linked by fast public transport, so most everyday needs sit close to most people. (The boundary has been widened several times since 2002 as the city grew — a plan is a living thing, and critics of boundaries argue they push up housing prices by limiting land; supporters answer that sprawl without a boundary costs more in roads, pipes and lost farmland than it saves. Both claims are part of the strategy's honest assessment.)

Assess the strategy the way the curriculum does — implications across sustainability's three factors and liveability. *Environmental*: the boundary and wedges protect farmland, bushland and water-catching land at the city's edge, and a tighter city keeps more people near existing parks and trees. *Economic*: building homes, pipes and wires where people already live costs less per person than laying new infrastructure across sprawl. *Social*: activity centres put shops, jobs and services within reach of more households. *Liveability*: shorter trips, greener streets and services near home are exactly the measures Chapter 2 used. One strategy, four kinds of implication — that is the shape of a good assessment.

A climate that has already changed

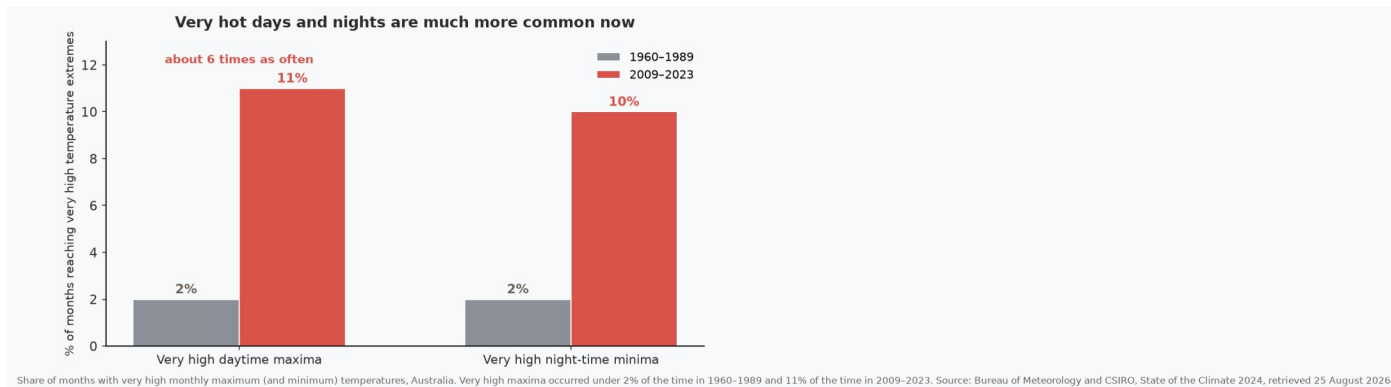
Australia's climate is already changing



Extreme heat already causes more deaths in Australia than any other natural hazard.

Source: Bureau of Meteorology and CSIRO, State of the Climate 2024, retrieved 25 August 2026.

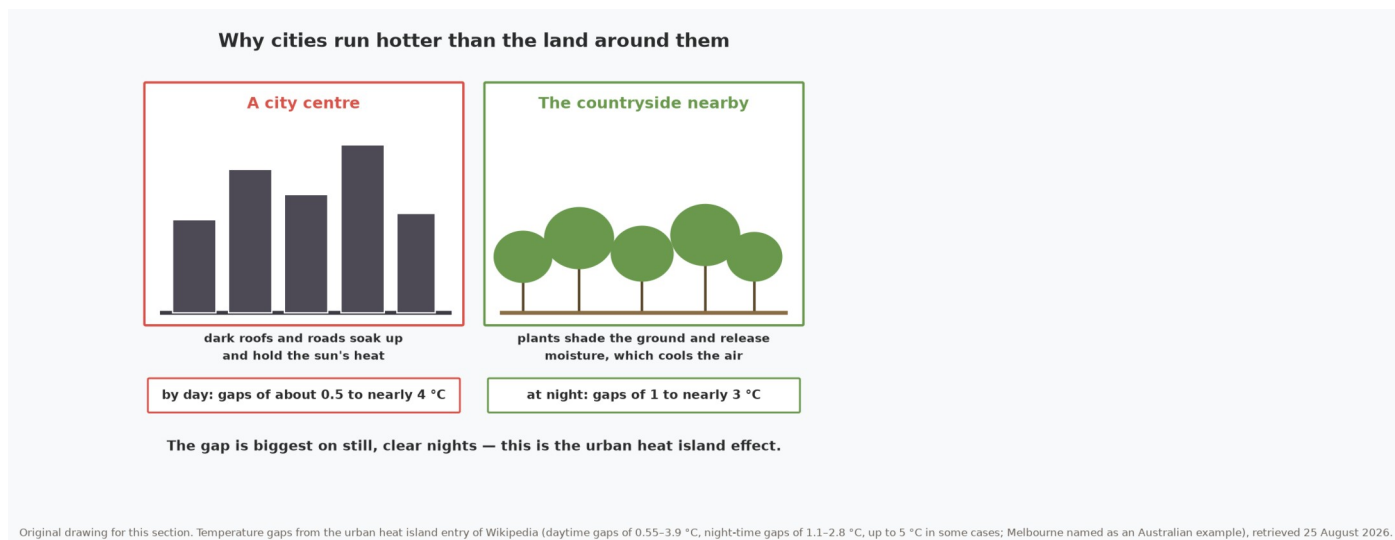
Six stat cards of observed change in Australia: average temperature +1.51 °C since 1910; sea surface temperature +1.08 °C since 1900; south-west rainfall (April to October) down 16% since 1970; south-east rainfall (April to October) down 9% since 1994; extreme fire weather more, with a longer fire season, since the 1950s; and sea level rising with more frequent extreme high levels; below the cards: extreme heat already causes more deaths in Australia than any other natural hazard



Paired bar chart of very hot days and nights then and now: the share of months reaching very high temperature extremes was about 2% in 1960 to 1989 and 11% in 2009 to 2023 for daytime maxima (about 6 times as often), and about 2% versus 10% for night-time minima

Climate change is not only a forecast for Australia; much of it is already measured. Australia's average temperature has risen 1.51 °C since 1910; the cool-season (April to October) rainfall of the south-west has fallen 16% since 1970 and of the south-east 9% since 1994; extreme fire weather days and the fire season have increased since the 1950s; and sea level is rising, with extreme high levels more often (Bureau of Meteorology and CSIRO, State of the Climate 2024). The heat-extremes chart makes the change concrete: very high monthly maximum temperatures, which occurred in under 2% of months in 1960–1989, occurred in 11% of months in 2009–2023 — about six times as often — and very hot nights about five times as often. Extreme heat already causes more deaths in Australia than any other natural hazard. Cities matter here because most Australians live in them, and cities change the climate they receive — usually by making it hotter.

Why cities feel heat first: the urban heat island



Two-panel labelled drawing of the urban heat island: a city centre of dark buildings whose roofs and roads soak up and hold the sun's heat, beside nearby countryside where plants shade the ground and release moisture which cools the air; temperature tags give city–country gaps of about 0.5 to nearly 4 °C by day and 1 to nearly 3 °C at night, and a note that the gap is biggest on still, clear nights

A city is a heat machine. Dark roofs and roads soak up the sun's energy and hold it; concrete and sealed roads release it slowly after sunset; plants that would shade the ground and cool the air by releasing moisture are scarce; and cars, factories and air conditioners add waste heat. The result is the **urban heat island**: measured gaps between city centres and nearby countryside of roughly 0.5 to 3.9 °C by day and 1.1 to 2.8 °C by night (and up to 5 °C in some cases), biggest on still, clear nights (Wikipedia, 'Urban heat island', which names Melbourne among its Australian examples). Now add a warming climate on top: a city that is already a few degrees hotter than its surroundings receives every extra degree of global warming too. That is why adaptation in Australian cities starts with cooling — and why the island's own remedies (tree cover, green roofs, light-coloured surfaces, water features) are the city's first adaptation tools.

Where climate change bites cities most, and how cities adapt

The forecast impacts do not land evenly; they bite particular parts of particular cities. *Coastal cities* — which is nearly all of Australia's big ones, Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart and Darwin among them — face rising seas: extreme sea levels that now occur about once in 100 years are projected to occur about every year by mid-century under a high-emissions pathway (and by late century even under a low one), turning today's rare coastal flooding into a regular event. *Southern and eastern cities* — Perth, Adelaide, Melbourne, Sydney — face drier cool seasons, which shrinks the rain that fills their dams and greens their streets. *Everywhere*, short heavy downpours are projected to become more intense, flashing water through streets and drains built for a gentler climate; and longer fire seasons press on the suburbs that sit against the bush edge. Adaptation is the response: cooling the heat island (urban greening, light-coloured roofs and pavements, green roofs, water features); holding and reusing water (stormwater harvesting, watering the canopy through dry years); planning away from the risk (keeping new housing out of floodways (the low ground that carries flood water) and the zones tomorrow's sea level will reach); and preparing for the extremes that get through (heat plans, fire plans, warnings). Adaptation does not replace cutting the causes of climate change; it copes with the change now locked in.

Strategies that use the geographical concepts

The curriculum asks students to notice *which geographical concept* a strategy applies. The strategies in this section sort into the three types it names. A **spatial strategy** changes *where* things are located: the urban growth boundary and the green wedges decide where suburbs may and may not go, and activity centres put shops and jobs in set places across the city. An **interconnection strategy** changes how people and services are linked: the 20-minute neighbourhood and its fast public transport connect homes to shops, schools and jobs without long car trips. An **environmental strategy** changes the city's natural fabric: urban greening — trees, parks, green roofs, water — cools the heat island, soaks up stormwater and makes streets better to live in. Most real strategies borrow from more than

one type; Melbourne's plan is spatial *and* interconnection *and* environmental at once. Naming the concept is not a labelling game: it forces the question, *what exactly does this strategy change — a location, a link, or the environment?*

The big question: should Australia spread its people more evenly?

Should Australia spread its urban population more evenly?

Each side below is put at its strongest — not a weak version.

FOR: spread the growth

- Big cities carry the strain: housing prices, long trips to work, and crowded roads and trains.
- Spreading growth would spread jobs, services and tax income to regional cities.
- Fewer people in a few coastal cities means less pressure on their water, bushland and beaches.
- Canberra shows a planned city can grow and offer a high quality of life (484,630 people, June 2025).

AGAINST: growth follows jobs

- People move to where work, family and services already are — cities grow because that is what people choose.
- New roads, hospitals and pipes for far fewer people cost more per person than adding to what big cities already have.
- Canberra grew mainly because it is the seat of government — a special case that is hard to copy.
- Past attempts had limited results; the ABS projects the capital-city share rising (67% in 2022 to 68% by 2032).

A reasoned answer weighs both sides and states what 'balanced' means first.

Two-panel balance card titled 'Should Australia spread its urban population more evenly?' FOR (spread the growth): big cities carry the strain of housing prices, long trips and crowded roads and trains; spreading growth would spread jobs, services and tax income to regional cities; fewer people in a few coastal cities means less pressure on their water, bushland and beaches; Canberra shows a planned city can grow and offer a high quality of life (484,630 people, June 2025). AGAINST (growth follows jobs): people move to where work, family and services already are; new roads, hospitals and pipes for far fewer people cost more per person; Canberra grew mainly as the seat of government, a special case hard to copy; past attempts had limited results and the ABS projects the capital-city share rising from 67% in 2022 to 68% by 2032. Closing line: a reasoned answer weighs both sides and states what 'balanced' means first.

With 68% of Australians in eight cities — and that share projected to rise — Australia keeps returning to a contested question: is the **distribution** of its urban population too uneven, and should governments **decentralise**? Read the balance card the way a geographer would: each side at its strongest, and a frame stated first. *What does 'balanced' even mean?* Balanced compared with what — every city the same size (no-one proposes that), or a bigger share of growth going to smaller cities and regional centres than today? State the meaning, then weigh. The FOR side is strongest on strain: housing prices, long trips, crowded trains, and pressure on the water, bushland and beaches of a few coastal cities are real costs of concentration, and spreading growth would spread jobs, services and tax income too. The AGAINST side is strongest on choice and cost: cities grow because people choose to move to where work, family and services already are, and building new roads, hospitals and pipes for far fewer people costs more per person than adding to what the big cities already have. The evidence cuts both ways and must be faced honestly: the ABS projects the capital-city share *rising* (67% in 2022 to 68% by 2032), so concentration is the trend — which is exactly why the debate keeps running. A reasoned answer weighs both sides, states its meaning of 'balanced', and marks that it is weighing reasons, not ending a national argument.

Canberra: the planned-city example

Canberra: a capital built from scratch	
1908	The site was chosen as a compromise between Sydney and Melbourne; the new capital had to sit at least 160 km from Sydney.
1912	An international design contest closed with 137 valid entries; the plan by Walter Burley Griffin and Marion Mahony Griffin was chosen.
1927	The Commonwealth parliament moved from Melbourne to Canberra; government departments and public servants followed.
Today	A fully planned city of 484,630 people (June 2025) — and the living example in Australia's decentralisation debate.

Sources: Wikipedia, 'Canberra' (selection 1908; contest closed 31 January 1912 with 137 valid entries; parliament moved 1927) and ABS, Regional population (released 31 March 2026; population at 30 June 2025), retrieved 25 August 2026.

Fact card for Canberra: 1908, the site chosen as a compromise between Sydney and Melbourne, at least 160 km from Sydney; 1912, an international design contest closed with 137 valid entries and the plan by Walter Burley Griffin and Marion Mahony Griffin was chosen; 1927, the Commonwealth parliament moved from Melbourne and government departments followed; today, a fully planned city of 484,630 people (June 2025) and the living example in Australia's decentralisation debate

Every argument about decentralisation in Australia passes through Canberra, because Canberra is decentralisation that happened: a city built from scratch in a chosen place, away from the two big capitals. The site was chosen in 1908 as a compromise between Sydney and Melbourne — the new capital had to sit at least 160 km from Sydney — an international design contest closed in January 1912 with 137 valid entries, the plan by Walter Burley Griffin and Marion Mahony Griffin won, and in 1927 the parliament moved from Melbourne with the government departments behind it. Today Canberra is a fully planned city of 484,630 people (ABS, 30 June 2025) that regularly rates among Australia's more liveable cities. Both sides of the debate use it. FOR: Canberra shows a planned city can be built, grow, and offer a high quality of life far from the coastal giants. AGAINST: Canberra grew mainly because it is the seat of government — jobs followed the parliament — which is a special case no regional city can copy. The example does not settle the argument; it sharpens it. And it supplies the raw material for generating strategies: if a planned city could be made once, what would a strategy for distributing Australia's urban population in a more balanced way look like now? That generation is the task this section closes with.

Worked examples

Example 1 — scaffolded: reading the forecast — how many more Australians, and where?

Task. Using the medium series on the projections chart, work out (a) how many more people Australia would gain by 2071, (b) roughly how many that is per year, and (c) about how many of those people would live in capital cities. Then (d) name two pressures and two gains for the cities that receive them.

Step 1 — read the two values. Medium series: 26,013,061 people in 2022; 39,185,129 in 2071.

Step 2 — the gain. $39,185,129 - 26,013,061 = 13,172,068$. About **13.2 million more people** — a gain bigger than the populations of Sydney and Melbourne combined today.

Step 3 — per year. $2071 - 2022 = 49$ years. $13,172,068 \div 49 \approx 268,800$ people a year — roughly a large regional city's worth, every single year, for 49 years.

Step 4 — where? The capital-city share is projected at about 68%: $13,172,068 \times 0.68 \approx 8,957,000$ — **about 9 million of the gain lands in the capital cities.**

Step 5 — implications, both halves. Pressures: more households bidding for housing (prices and rents); more trips on roads and trains; more water drawn from dams that already receive less cool-season rain; more heat stored in more dark surfaces. Gains: more workers for hospitals and trades; more customers keeping shops and services alive close to home; more people to share the cost of big infrastructure. A good implications answer always names both halves — sustainability and liveability are weighed, not assumed.

Example 2 — scaffolded: weighing the decentralisation debate with a stated frame

Task. Use the balance card to complete the table, then close with one model sentence that states a meaning of ‘balanced’ before weighing.

	FOR: spread the growth	AGAINST: growth follows jobs
Strongest point	Concentration has real costs — housing prices, long trips, crowded trains, pressure on coastal water and bushland — and spreading growth would spread jobs, services and tax income	People choose cities because work, family and services are already there; new infrastructure for far fewer people costs more per person
Explains well	Why governments keep trying to steer growth, and why regional cities want a bigger share of it	Why past attempts to direct growth had limited results, and why the ABS projects the capital-city share still rising (67% → 68% by 2032)
Leaves out	That people’s own choices keep re-concentrating the population	That choice is shaped by what governments build — jobs and services follow decisions too
The Canberra test	A planned city of 484,630 people with a high quality of life shows it can be done	Canberra grew because the parliament moved — a special case hard to copy

Model closing sentence. If ‘balanced’ means a larger share of Australia’s *growth* going to smaller cities and regional centres than today (not every city the same size), then the FOR side names real costs of concentration and Canberra shows a planned city can work — but the AGAINST side is right that growth follows jobs and choices, so a strategy must move jobs and services first and expect people to follow; I am weighing reasons inside a stated frame, not ending the national argument.

Practice questions

Scaffolded

Q1. Fill each gap with a key word: *urban heat island*, *green wedge*, *urban growth boundary*, *decentralisation*, *adaptation*, *infrastructure*. (a) The extra warmth of a city over the countryside around it is the _____. (b) A line beyond which new suburbs may not be built is an _____. (c) Farmland and open space kept free of suburb building is a _____. (d) Moving people, jobs and services out of the biggest cities is _____. (e) Changing how places are built and run to cope with locked-in climate change is _____. (f) Roads, rail, pipes, hospitals and schools are a city’s _____.

Q2. Look at the bar chart of the eight capital cities. (a) Name the largest and the smallest city, with their populations. (b) What is Canberra’s population? (c) What share of Australians live in capital cities, and what two numbers give that share? (d) Which two cities together hold about two in every five Australians?

Q3. Look at the projections chart. (a) What does the medium series give for 2071? (b) What do the high and low series give for 2071? (c) Why do the three series disagree? (d) Between which years is Melbourne projected to pass Sydney?

Q4. Look at the Sydney–Melbourne card. (a) Which city grew faster in the year to 30 June 2025, and by how much more? (b) Check the ‘two in every five’ claim: add the two populations and divide by 27,614,411. (c) What range does the ABS give for Melbourne’s size by 2071?

Q5. Look at the Plan Melbourne drawing. (a) Name the dashed line and the year such a boundary began in Melbourne. (b) What do the green wedges protect? (c) What does a 20-minute neighbourhood promise about everyday needs? (d) Give one way the boundary serves environmental sustainability and one way the activity centres serve liveability.

Q6. Look at the climate cards and the heat-extremes chart. (a) How much has Australia’s average temperature risen since 1910? (b) What has happened to south-west cool-season rainfall since 1970? (c) Very high daytime maxima

went from under 2% of months to 11% — about how many times as often? (d) Which natural hazard already causes the most deaths in Australia?

Q7. Look at the urban heat island drawing. (a) Name the effect. (b) Give two reasons the city panel runs hotter. (c) When is the city–country gap biggest? (d) Name one remedy from the drawing that a city could use to cool itself.

Q8. Sort these three strategies under the concept types the curriculum names — *spatial* (where things are located), *interconnection* (how people and services are linked), *environmental* (the city’s natural fabric): (a) the urban growth boundary; (b) fast public transport linking 20-minute neighbourhoods; (c) urban greening with trees, green roofs and water features. Give a one-line reason for each.

Unscaffolded

Q9. The medium series projects about 13.2 million more Australians by 2071, with about 9 million of them in capital cities. Choose ONE named Australian city and, using at least two figures from this section, explain what that growth means for its liveability AND its environmental sustainability. Give one pressure and one gain for each.

Q10. Choose ONE forecast change from this section (more hot days and nights; drier cool seasons in the south and east; more intense short downpours; rising seas and more frequent extreme high sea levels; longer fire seasons). Explain where it would bite Australia’s cities hardest, and describe two ways a city could adapt to it. Anchor your answer in at least one measured figure from this section.

Q11. Pick ONE strategy from this section (the urban growth boundary; green wedges; 20-minute neighbourhoods; urban greening). Name the geographical concept it mainly applies (spatial, interconnection or environmental), explain how it improves liveability and/or environmental sustainability, and give one strength and one weakness of it.

Q12. (a) State in one sentence what ‘balanced’ would mean in an answer to the decentralisation question. (b) Put the FOR side at its strongest in one sentence and the AGAINST side at its strongest in one sentence. (c) Say where the ABS figure of the capital-city share rising from 67% (2022) to 68% (2032) fits in the argument, and give a reasoned verdict that weighs both sides.

Response task

Q13. Evidence-based response task: *generate your own strategy for distributing Australia's urban population in a more balanced way, using Canberra as one example.* Plan and write it on the six-step planner below. You must: say what 'balanced' means in your strategy and which cities it covers; use at least three real figures from this section; give the strongest case for your strategy and the strongest case against it; pick your tools from location, transport, housing, jobs, services and greening, and say where they go; judge the impacts (what improves, what it costs, who gains or loses); and end with a verdict that names your evidence. Keep a numbered source list with dates.

Planner for the response task: your strategy for a more balanced city system

1 Define your terms

Say what 'balanced' means in your strategy, and which cities it covers.

2 Use real numbers

Bring in at least three figures from this section (populations, projections, climate changes).

3 Hear both sides

Give the strongest case for your strategy and the strongest case against it.

4 Choose your tools

Pick from location, transport, housing, jobs, services and greening — and say where they go.

5 Judge the impacts

For each tool: what improves, what it costs, and who gains or loses.

6 Reach a verdict

State your conclusion, name your evidence, and list your sources with dates.

A claim without named evidence is only an opinion — number your sources.

Six-step planner for the response task: 1 define your terms — say what 'balanced' means in your strategy, and which cities it covers; 2 use real numbers — bring in at least three figures from this section (populations, projections, climate changes); 3 hear both sides — give the strongest case for your strategy and the strongest case against it; 4 choose your tools — pick from location, transport, housing, jobs, services and greening, and say where they go; 5 judge the impacts — for each tool: what improves, what it costs, and who gains or loses; 6 reach a verdict — state your conclusion, name your evidence, and list your sources with dates; closing note: a claim without named evidence is only an opinion, number your sources

Answers

Q1. (a) urban heat island (b) urban growth boundary (c) green wedge (d) decentralisation (e) adaptation (f) infrastructure.

Q2. (a) Largest: Greater Sydney, 5,638,830; smallest: Greater Darwin, 159,284. (b) 484,630. (c) About 68%: $18,750,888 \div 27,614,411$. (d) Sydney and Melbourne.

Q3. (a) 39,185,129 (about 39.2 million). (b) High 45,888,867 (about 45.9 million); low 34,343,015 (about 34.3 million). (c) They use different assumptions about migration, births and life expectancy. (d) Between 2032 and 2046.

Q4. (a) Melbourne; it added about 105,000 against Sydney's 75,200 — about 29,800 more. (b) $5,638,830 + 5,435,590 = 11,074,420$; $\div 27,614,411 \approx 0.40$, so about 40% — two in every five. (c) Between 6.5 and 9.9 million.

Q5. (a) The urban growth boundary; such a boundary began after Melbourne 2030, in October 2002. (b) Farmland and open space, kept free of suburb building. (c) Most everyday needs within about a 20-minute walk, ride or safe cycle from home. (d) Environmental: it protects farmland, bushland and water-catching land at the edge (less sprawl). Liveability: shops, jobs and services near home mean shorter trips and greener, more convenient streets.

Q6. (a) 1.51 °C. (b) Down 16% (April to October, since 1970). (c) About six times as often. (d) Extreme heat.

Q7. (a) The urban heat island. (b) Any two of: dark roofs and roads soak up and hold the sun's heat; scarce plants, so little shading and moisture cooling; waste heat from machines. (c) On still, clear nights. (d) Any one of: tree cover, green roofs, light-coloured surfaces, water features.

Q8. (a) Spatial — it sets *where* suburbs may and may not go. (b) Interconnection — it links homes to shops, schools and jobs without long car trips. (c) Environmental — it changes the city's natural fabric (shade, cooling, stormwater).

Q9–Q12. Answers will differ. A good answer names its city or frame, uses real figures from this section, and holds both halves of a weighing — see the solutions at the end of this section for models.

Q13. Strategies will differ. The planner is the mark scheme: meaning of 'balanced' stated, at least three real figures used, both sides at their strongest, tools named with locations, impacts judged (improves / costs / who gains or loses), verdict with named evidence and a numbered, dated source list.

Fully-worked solutions

Solution to Q4 (model). (a) The card gives Melbourne +105,000 and Sydney +75,200 for the year to 30 June 2025, so Melbourne grew faster by $105,000 - 75,200 = 29,800$ people. (b) $5,638,830 + 5,435,590 = 11,074,420$; $11,074,420 \div 27,614,411 \approx 0.401$ — about 40%, which is exactly 'two in every five Australians'. (c) 6.5 to 9.9 million, largest in Australia. The habit on display: every claim on the card is checkable against a named ABS release — that is what 'real data' means in this book.

Solution to Q9 (model — Melbourne). Frame: Melbourne as it receives part of the ~9 million capital-city gain. Pressures on liveability: more households bidding for housing pushes prices and rents up, and more trips crowd trains on growth corridors. Gains on liveability: more customers keep shops, sport and services alive close to home, and more workers staff hospitals and trades. Pressures on environmental sustainability: more people draw more water from dams filled by a cool season that has already dried (south-east April–October rainfall down 9% since 1994), and more dark surfaces store more heat in a city that is already an urban heat island. Gains on environmental sustainability: a bigger city can afford bigger fixes — more canopy, green roofs, stormwater harvesting — spread across more households. Weighing: growth strains Melbourne's water and shade first and its trains second, but the same numbers that create the strain create the capacity to fix it — which is why the plan, not the growth, decides the outcome.

Solution to Q10 (model — rising seas on coastal cities). Bite: nearly all of Australia's big cities are coastal — Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart, Darwin — and extreme sea levels that now occur about once in 100 years are projected to occur about every year by mid-century under a high-emissions pathway. So low-lying suburbs by the bay and along rivers, ports and beach roads face flooding that used to be once-in-a-lifetime. Adaptation 1 (planning): keep new housing and critical infrastructure out of the zones tomorrow's sea level will reach, and plan what happens to the zones already built. Adaptation 2 (defence and design): raise and reinforce seawalls, drains and roads where the value at risk justifies it, and design foreshores to take flooding without taking damage (parks and

paths that flood cheaply instead of carparks and power). Both are adaptation in the section's sense: coping with change now locked in, while the causes are still being cut.

Solution to Q12 (model). (a) Frame: 'balanced' means a larger share of Australia's urban *growth* going to smaller cities and regional centres than today — not every city the same size. (b) FOR at its strongest: concentration has real costs (housing prices, long trips, crowded trains, pressure on coastal water and bushland), and spreading growth would spread jobs, services and tax income. AGAINST at its strongest: people choose cities because work, family and services already are there, and new infrastructure for far fewer people costs more per person. (c) The 67% → 68% figure shows concentration is the *trend*, so it supports the AGAINST side's claim that choice and jobs keep re-concentrating Australia — but it is also the very reason the FOR side says governments should act, since the trend is what they want to change. Verdict: inside my frame, a modest strategy is defensible — move jobs and services first (as Canberra's parliament moved first) and let people follow — because the AGAINST side proves that people follow work, while the FOR side proves that the costs of doing nothing are real. I am weighing reasons inside a stated frame; someone with a different frame (for example, 'cheapest infrastructure per person') could weigh the same facts against me.

Solution to Q13 (model plan and verdict). Meaning of 'balanced': a larger share of national growth going to three regional hubs than today. Figures used: (1) the capital-city share stood at 67% in 2022 and is projected at 68% by 2032 — and the measured share at 30 June 2025 is already about 68%; (2) the medium series adds about 13.2 million people by 2071, about 9 million of them to capital cities on the current share; (3) Canberra, the planned-city example, holds 484,630 people and rates highly for liveability. Tools and locations: a jobs anchor in each hub (a university, a hospital precinct, a government agency — the Canberra lesson is that jobs must move first); fast rail or reliable air links to the nearest capital (interconnection); an urban growth boundary and greening from day one, so the hub does not repeat the mistakes of sprawl and urban heat islands (spatial and environmental). Both sides at their strongest: FOR my strategy — spreading even part of the 9 million relieves housing and water pressure in the big cities and gives regional centres the customers that keep services alive; AGAINST — hubs without Canberra's parliament will grow slower, and new infrastructure per person costs more until the hubs are big enough. Impacts judged: improves — big-city housing and train pressure, regional services; costs — upfront infrastructure outlay; who gains or loses — younger households and regional towns gain, outer-suburb land speculation loses. Verdict: the strategy is worth starting small — two or three hubs, jobs first — because the AGAINST case proves scale matters and the FOR case proves the cost of concentration is real; evidence numbered: 1 ABS Regional population (31 March 2026), 2 ABS Population Projections 2022–2071 (23 November 2023), 3 ABS National, state and territory population (18 December 2025).

Sources for this section

All sources retrieved 25 August 2026.

- Australian Bureau of Statistics, *Regional population* (released 31 March 2026) — estimated resident populations of the eight Greater Capital City Statistical Areas at 30 June 2025 (Sydney 5,638,830; Melbourne 5,435,590; Brisbane 2,833,524; Perth 2,452,765; Adelaide 1,491,015; Canberra/ACT 484,630; Hobart 255,250; Darwin 159,284), the capital-city total of 18,750,888, and growth in the year to 30 June 2025 (Melbourne +105,000; Sydney +75,200).
- Australian Bureau of Statistics, *National, state and territory population* (released 18 December 2025) — Australia's estimated resident population of 27,614,411 at 30 June 2025.
- Australian Bureau of Statistics, *Population Projections, Australia, 2022 (base)–2071* (released 23 November 2023) — medium series national totals (26,013,061 in 2022 to 39,185,129 in 2071); high series 45,888,867 and low series 34,343,015 at 2071; assumptions (net overseas migration 225,000 a year from 2032; total fertility rate 1.6 from 2027); Melbourne projected largest by 2071 (6.5–9.9 million) and to pass Sydney between 2032 and 2046; capital-city share 67% in 2022 rising to 68% by 2032.
- Bureau of Meteorology and CSIRO, *State of the Climate 2024* — +1.51 °C since 1910; sea surface +1.08 °C since 1900; south-west April–October rainfall –16% since 1970; south-east –9% since 1994; more extreme fire weather and a longer fire season since the 1950s; rising sea levels with more frequent extreme high levels; extreme heat causing more deaths than any other natural hazard; very high monthly maxima under 2% of months in 1960–1989 versus 11% in 2009–2023 (nights 2% versus about 10%); projections of more hot days, drier cool seasons in the south and east, more intense short downpours, longer fire seasons, and 1-in-100-year extreme sea levels about once a year by mid-century under high emissions.

- Wikipedia, 'Urban heat island' — city–country temperature gaps (about 0.55–3.9 °C by day, 1.1–2.8 °C at night, up to 5 °C in some cases); drivers (dark surfaces, scarce plants, waste heat); gaps biggest on still, clear nights; remedies (tree cover, green roofs, light-coloured surfaces, water features); Melbourne named as an Australian example.
- Wikipedia, 'Urban growth boundary' — Melbourne's boundary legislated after the Melbourne 2030 plan (October 2002) to limit sprawl, and widened several times since.
- Wikipedia, '15-minute city' — the City of Melbourne's Plan Melbourne 2017–2050 developed to accommodate growth and counter sprawl, with '20-minute neighbourhood' elements.
- Wikipedia, 'Canberra' — site chosen 1908 as a compromise, at least 160 km from Sydney; design contest closed 31 January 1912 with 137 valid entries; the Griffin plan (Walter Burley Griffin and Marion Mahony Griffin); parliament moved 1927.

Urbanisation and its impacts through five lenses: space, place, interconnection, change, sustainability

Curriculum: VC2HG8K22 (Geographical Knowledge and Understanding, Changing nations, Levels 7 and 8). Both elaborations are drawn on where they fit: VC2HG8K22 .E01 (urbanisation as a spatial process; how its components interconnect — for instance sustainability and urban settlement adapting to climate change) and VC2HG8K22 .E02 (how rural–urban migration affects the places people leave and the places they move to), tagged [E01] and [E02].

Every section of this chapter added one brick: what **urbanisation** is and what it does (4A), the people moving in it (4B), the patterns it makes in different countries (4C), and the ways Australia manages it (4D). This section is where the chapter comes together. It takes the same material and reads it through the five concepts named in VC2HG8K22 — **space, place, interconnection, change** and **sustainability** — because that is what geographers do with a big process: they look at it through more than one lens at once.

For the teacher

Owens: VC2HG8K22. **Draws on:** .E01 (urbanisation as a spatial process — how its components interconnect, for instance sustainability and urban settlement adapting to climate change); .E02 (how rural–urban migration affects the places people leave and the places they move to — the internal migration of people within Australia and China, per the Asia cross-curriculum priority). All evidence is recycled from 4A–4D; this section teaches no new content, it teaches the concept move. Coverage is judged against the CD text and the achievement standard, not against a walk through the elaborations. **Achievement standard sentence served here:** the band standard’s sentence on explaining urbanisation’s processes and patterns, the sustainability issues facing Australia’s cities, and climate-change impacts. (4A–4D build the processes and patterns; 4E is where students explain them through the five concepts.) **Teaching sequence:** 1. Frame the section as the chapter’s close (Figure 4E.1) and define the five concepts as lenses (Figure 4E.2). 2. Work each lens with its figure: space (Figures 4E.3–4E.4), place (Figure 4E.5), interconnection (Figures 4E.6–4E.7), change (Figure 4E.8), sustainability (Figure 4E.9). 3. Run the steelman debate map (Figure 4E.10) and the two marking rules. 4. Read the model answer aloud and have students name the lens in each sentence (Figure 4E.11). 5. Scaffolded practice, then on-your-own practice. 6. Close with the extended response task, marked on reasoning. **Vocabulary notes:** the terms *urbanisation*, *urban*, *rural*, *migration*, *internal migration*, *overseas migration*, *net migration*, *capital city*, *statistical office*, *urban heat island*, *urban growth boundary*, *space*, *place*, *interconnection*, *change*, *sustainability* and *steelman* are defined at first use. Three exemptions apply to the Year 7 ceiling: the curriculum’s own words, subject terms defined at first use, and proper nouns and numerals. *Urban* is one of the terms defined above (each country’s statistical office sets its own rule — the World Bank indicator note is the stated frame) and *sustainability* is treated as a contested one (framed after the World Commission on Environment and Development, 1987). No First Nations content is required or used (see the series front matter); the Asia priority stays live through the China examples in [E02].

Theory

Words we define

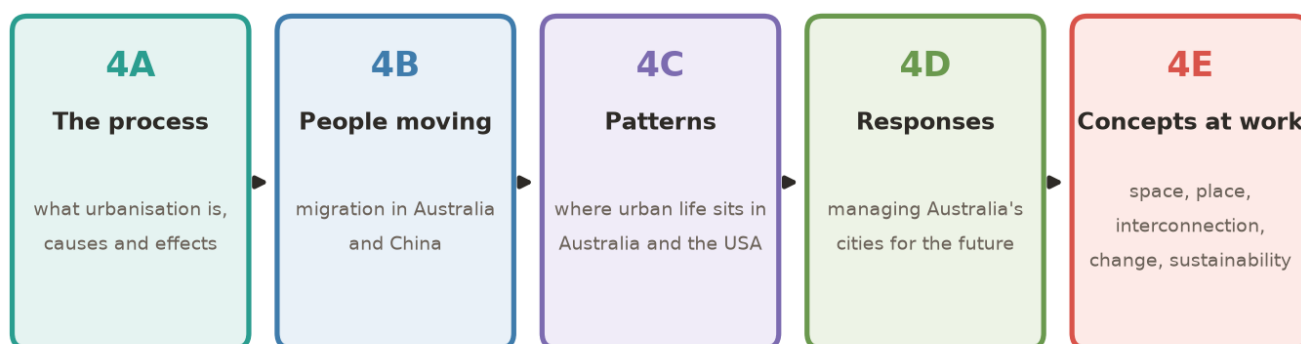
Some words below are the curriculum’s own words. VC2HG8K22 uses them but does not define them, so this section states the working definition each one carries here. Other definitions exist; inside this section, these are the ones in force.

- **Urbanisation** — the process by which a bigger and bigger share of a country’s people come to live in towns and cities.
- **Urban** — counted as living in a town or city by that country’s statistical office. Following the World Bank’s note on its urban figures, each country’s statistical office sets its own rule for what counts as urban, so the word means slightly different things in Australia and China. Inside this section, *urban* simply means “counted as urban by the country’s own rule”.

- **Rural** — the country: farms, small towns and open land outside towns and cities.
- **Migration** — people moving from one place to settle in another. **Internal migration** is moving inside one country (for example, a farm town to Melbourne). **Overseas migration** is moving between countries. **Net migration** is arrivals minus departures; it can be negative.
- **Statistical office** — the government group whose job is counting and measuring a country's people and economy. Australia's is the Australian Bureau of Statistics (ABS).
- **Capital city** — one of the eight cities where a state or territory government sits. The ABS counts each capital together with its surrounding suburbs as one big area, so "Sydney" here means greater Sydney, not just the town centre.
- **Space** — where things happen, and why there: the pattern on the map.
- **Place** — what a location is like, and what it means to the people there.
- **Interconnection** — the flows that tie places together: people, goods, money and ideas moving between them.
- **Change** — how places become different over time, and how fast.
- **Sustainability** — using a place so that it keeps working for the people who come after us. This is the framing used here, after the World Commission on Environment and Development (1987), which put it as meeting the needs of the present without cutting off future generations. Sustainability is a contested word — other frames weigh the economy or the environment first — and this section says so rather than hiding it.
- **Urban heat island** — the extra heat that built-up places hold compared with the country around them, because roads, roofs and walls soak up the sun and there are fewer trees to give shade.
- **Urban growth boundary** — the line around a city that planning says it should not grow past (from 4D).
- **Steelman** — the strongest, fairest version of a side in a disagreement (from 4A).

The chapter so far

Chapter 4: the journey so far



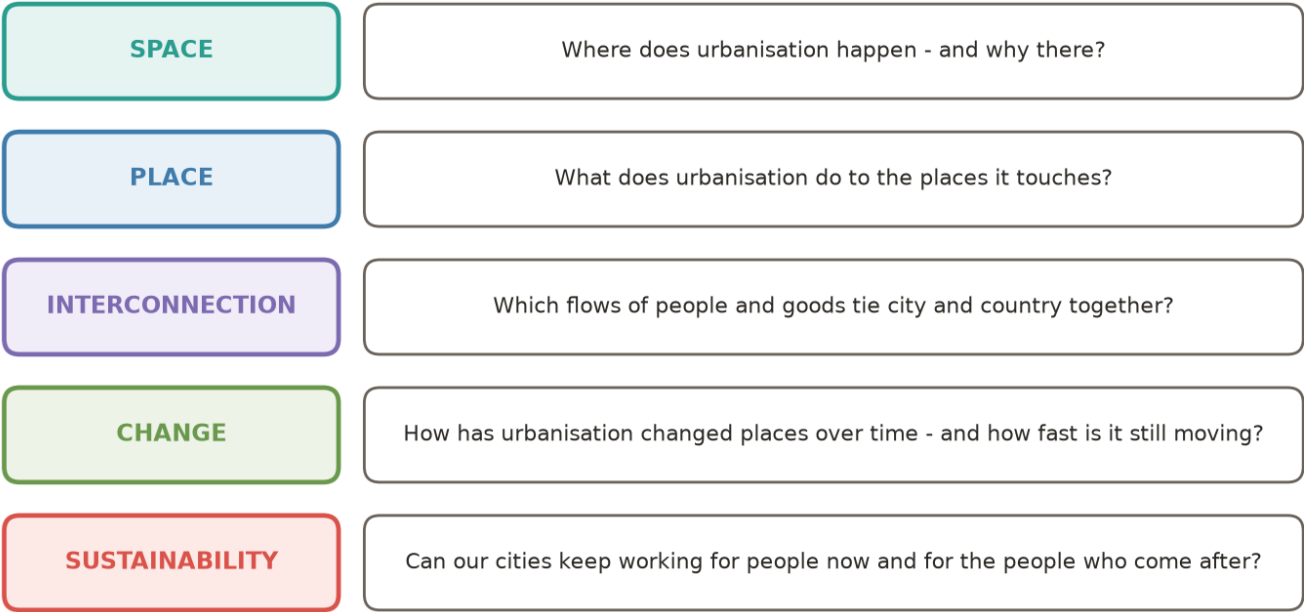
Each section built the next. This section (4E) takes the whole chapter and reads it through the five geographical concepts named in VC2HG8K22.

Five boxes joined by arrows, one per chapter section: 4A the process (what urbanisation is, causes and effects), 4B people moving (migration in Australia and China), 4C patterns (where urban life sits in Australia and the USA), 4D responses (managing Australia's cities for the future), and 4E concepts at work (space, place, interconnection, change, sustainability)

Figure 4E.1 — The journey this chapter has taken. 4E re-reads 4A–4D through the five concepts (model diagram).

Figure 4E.1 is the honest pitch for this section: nothing in it is new content. What is new is the move — holding all five concepts in your head at once and letting each one ask its question of the same process.

Five lenses on urbanisation



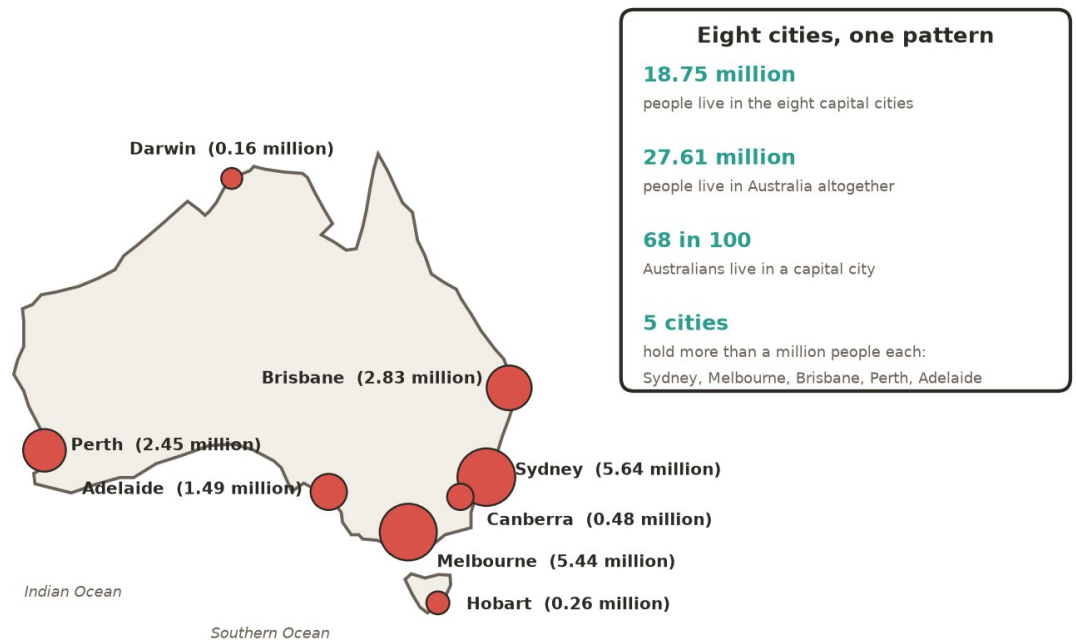
A lens is a way of looking. The same process - urbanisation - looks different through each one.
Every lens asks a question. Evidence from the chapter answers it.

Five rows, each pairing a concept with the question it asks of urbanisation: *space* — where does urbanisation happen, and why there?; *place* — what does urbanisation do to the places it touches?; *interconnection* — which flows of people and goods tie city and country together?; *change* — how has urbanisation changed places over time, and how fast is it still moving?; *sustainability* — can our cities keep working for people now and for the people who come after?

Figure 4E.2 — The five concepts of VC2HG8K22 as lenses, each with its question (model diagram).

A lens is a way of looking. The same fact — Melbourne grew by 105 030 people in 2024–25 — is a **change** fact, a **place** fact, a **space** fact, an **interconnection** fact and a **sustainability** fact, depending on the question you ask it. The rest of the theory walks the lenses one at a time, using this chapter’s own evidence.

Australia's eight capital cities, June 2025



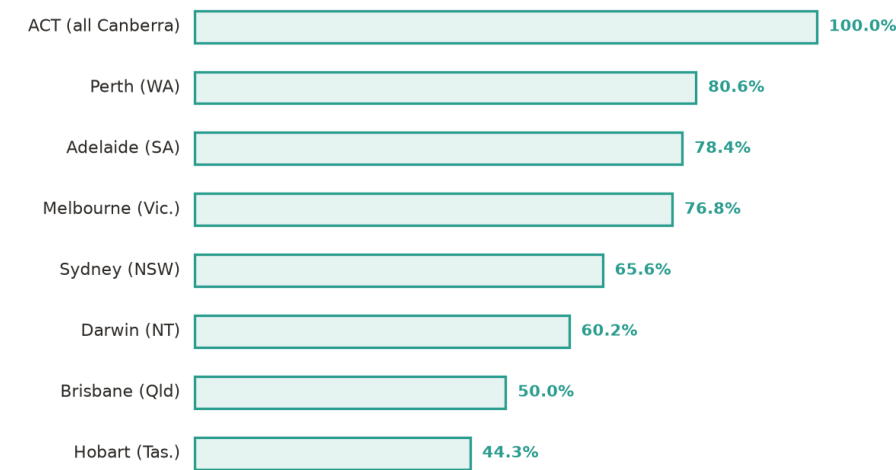
Schematic map: shapes simplified, not to scale. Data: ABS Regional Population, Australia, 2025 (ERP at 30 June 2025, released 31 March 2026).

Schematic map of Australia with a dot for each of the eight capital cities, sized by population and labelled with June 2025 populations (Sydney 5.64 million, Melbourne 5.44 million, Brisbane 2.83 million, Perth 2.45 million, Adelaide 1.49 million, Canberra 0.48 million, Hobart 0.26 million, Darwin 0.16 million), beside a panel stating 18.75 million people live in the eight capitals, 27.61 million in Australia altogether, 68 in 100 Australians live in a capital city, and five cities hold more than a million people each

Figure 4E.3 — Australia's eight capital cities at 30 June 2025. Schematic map: shapes simplified, not to scale (ABS Regional Population, Australia, 2025; retrieved 25 August 2026).

The space question is a map question, and the Australian answer is stark: 68 in every 100 Australians live in one of eight capital cities, and all eight sit on or near the coast. That pattern is not an accident. From 4A and 4C: ports made the first cities, trade and jobs kept them growing, and water and good land decided which ports became big. Urbanisation in Australia is a coastal, capital-city process — that is its spatial signature.

Share of each state or territory's people living in its capital city



Every mainland state keeps most of its people in a single city - and three keep more than three-quarters.
Data: computed from ABS GCCSA and state ERPs at 30 June 2025 (ABS Regional Population, Australia, 2025).

Horizontal bar chart of the share of each state or territory’s people living in its capital city: ACT 100.0%, Perth (WA) 80.6%, Adelaide (SA) 78.4%, Melbourne (Vic.) 76.8%, Sydney (NSW) 65.6%, Darwin (NT) 60.2%, Brisbane (Qld) 50.0%, Hobart (Tas.) 44.3%

Figure 4E.4 — How much of each state or territory lives in its capital city, 30 June 2025 (computed from ABS Regional Population, Australia, 2025; retrieved 25 August 2026).

Figure 4E.4 sharpens the point. On the mainland, every state keeps most of its people in a single city, and three keep more than three-quarters. Compared with 4C’s other country, the USA, Australia packs its urban life into fewer, bigger capitals: the USA spreads a similar share of urban people across many more cities of a million or more. Same process, different space pattern — which is exactly the kind of comparison the space lens is for.

Heat in Melbourne: the numbers for one city



Built-up places run hotter than the country around them. Roads, roofs and walls soak up the sun, and there are fewer trees to give shade and cool the air. Geographers call this extra heat an urban heat island - and it is one reason cities must plan for a warmer climate.

Data: Bureau of Meteorology, station 086282 Melbourne Airport, records 1970-2026, retrieved 19 August 2026.

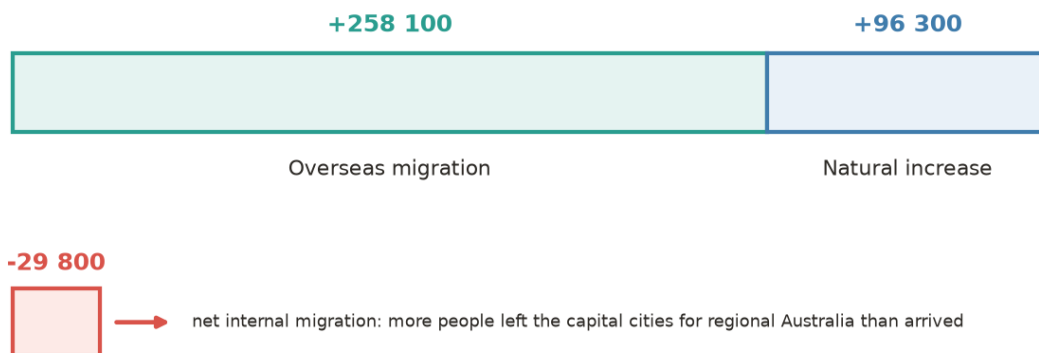
Four tiles of Melbourne heat statistics: 10.0 days a year reach 35 degrees C or more; 32.9 days a year reach 30 degrees C or more; 46.8 degrees C, the hottest day on record, 7 February 2009; 20.0 degrees C average daytime high across the year; above a note that built-up places run hotter than the country around them, that geographers call this extra heat an urban heat island, and that it is one reason cities must plan for a warmer climate

Figure 4E.5 — Heat in Melbourne, one city's numbers (Bureau of Meteorology, station 086282 Melbourne Airport, records 1970–2026; retrieved 19 August 2026).

The place question asks what a location becomes like. Urbanisation does not just put more people in a place; it changes the place itself — its streets, its services, its street life, and even its weather. Figure 4E.5 shows one measurable change: built-up Melbourne runs hot. Ten days a year reach 35 °C or more at the airport, and the urban heat island makes the built-up parts hotter still. That changes what the place is like to live in — more hot nights, more call on cool spaces, more need for shade.

Place cuts both ways, as 4A's liveability work showed. The same growth that adds heat and housing pressure also adds shops, sport, festivals, hospitals and choices that a small town cannot offer. A place answer holds both sides: what the place gains and what it must cope with.

What made Australia's capital cities grow, 2024-25



Total capital city growth: +324 679 people (1.8%). Regional Australia: +94 700 people (1.1%).

Brisbane and Perth were the only capitals with net internal migration gains; Sydney and Melbourne had the largest losses.

The three component numbers are rounded to the nearest hundred, so they do not add up exactly.

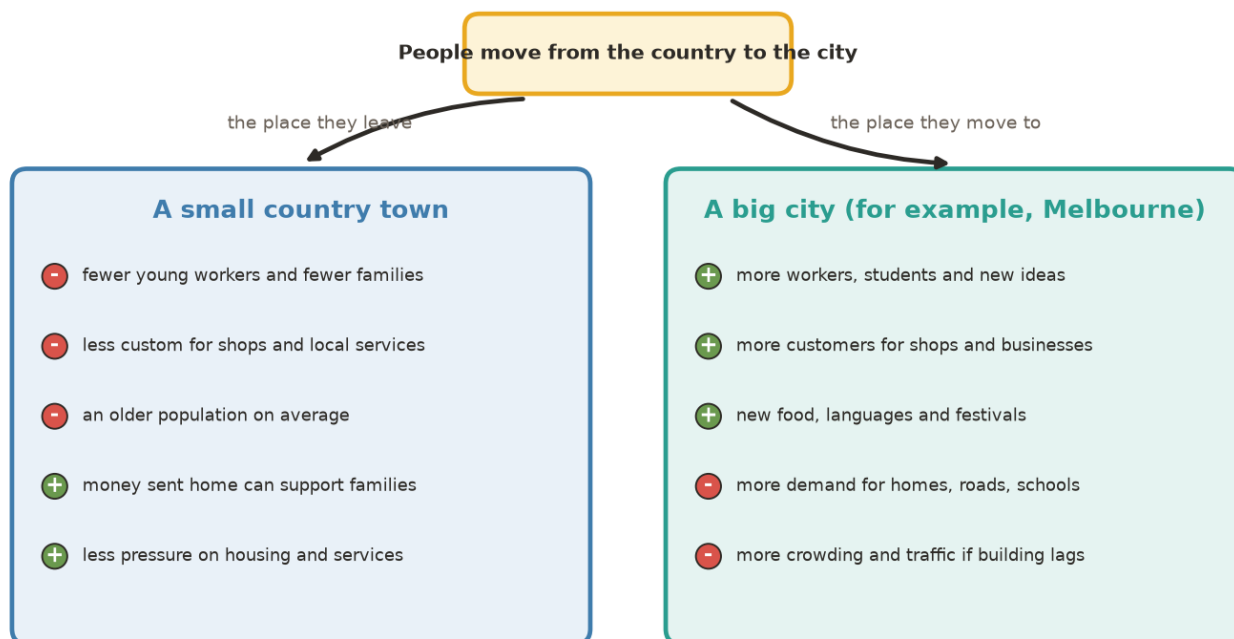
Data: ABS Regional Population, Australia, 2025 (components of capital city growth, 2024-25 financial year).

Bar of the components of capital city growth in 2024-25: overseas migration +258 100, natural increase +96 300, and a separate small block for net internal migration, -29 800, explained as more people leaving the capital cities for regional Australia than arriving; a totals line gives total capital city growth +324 679 people (1.8%) and regional Australia +94 700 people (1.1%), and notes that Brisbane and Perth were the only capitals with net internal migration gains while Sydney and Melbourne had the largest losses

Figure 4E.6 — What made Australia's capital cities grow in 2024–25 (ABS Regional Population, Australia, 2025; retrieved 25 August 2026).

Urbanisation is a spatial process because it is made of flows, and Figure 4E.6 names the flows [E01]. The biggest is overseas migration: +258 100 people in one year, which ties every capital city to families, jobs and decisions in dozens of other countries. The second is natural increase (more births than deaths). The third flow runs the other way: net internal migration of -29 800 means more people left the capital cities for regional Australia than arrived from it — a flow that connects city and country in both directions, and the reason Brisbane and Perth grew at Sydney's and Melbourne's expense.

Rural-urban migration changes two places at once



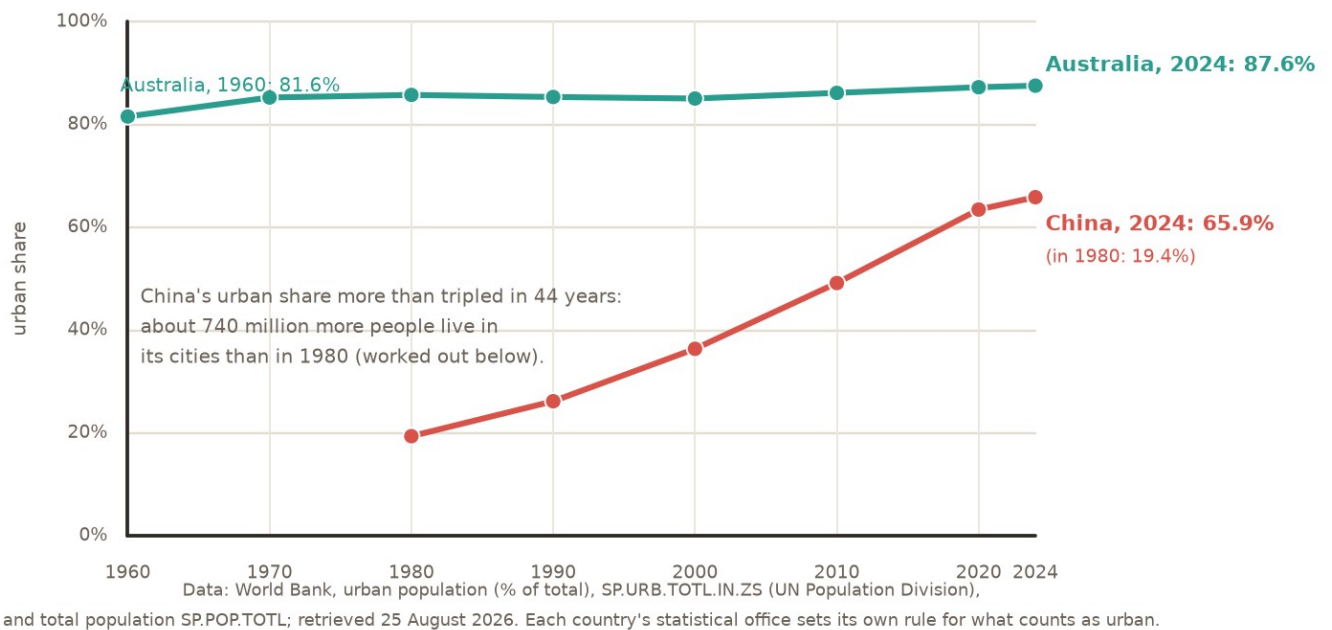
The same flow of people is two different stories, depending on which end you stand at. Impacts shown are typical, not from one counted source.
Counts for Australia's cities and regions in 2024-25: ABS Regional Population, Australia, 2025.

Flow diagram: people move from the country to the city, changing two places at once. Left panel, a small country town: fewer young workers and fewer families, less custom for shops and local services, an older population on average, money sent home can support families, less pressure on housing and services. Right panel, a big city (for example Melbourne): more workers, students and new ideas, more customers for shops and businesses, new food, languages and festivals, more demand for homes, roads and schools, more crowding and traffic if building lags

Figure 4E.7 — Rural–urban migration changes two places at once [E02]. Impacts shown are typical, not from one counted source; the counts behind Australia's side are Figure 4E.6's (ABS Regional Population, Australia, 2025).

Figure 4E.7 is the interconnection lens applied to internal migration [E02]. One flow of people is two stories: the place people leave loses young workers and shop custom and grows older on average, and the place they move to gains workers and ideas and gains pressure on homes and services. The same logic ran through 4B's China study, at a scale hard to picture: China's urban share went from 19.4% of its people in 1980 to 65.9% in 2024, which means hundreds of millions of village-to-city moves, each one changing a village and a city at the same time. Interconnection is why no place in the urbanisation story can be understood on its own.

People living in urban areas, Australia and China



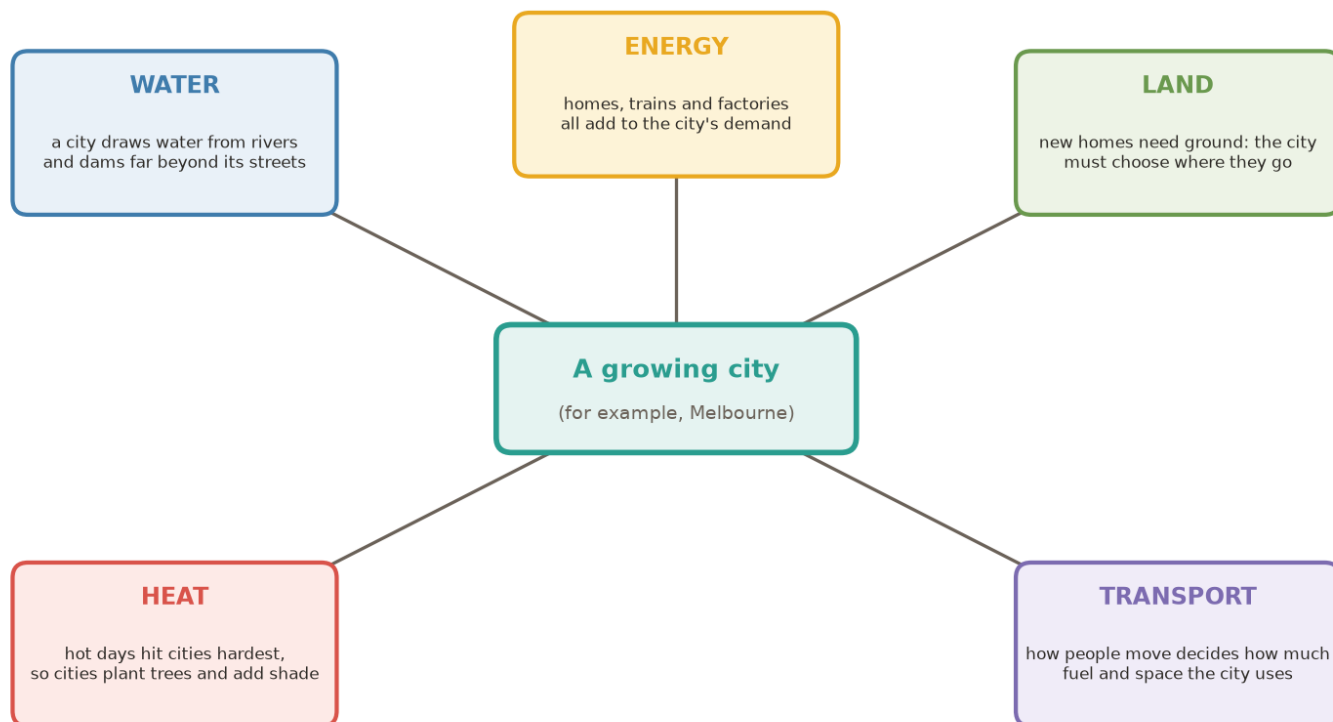
Line chart of the share of people living in urban areas, 1960 to 2024: Australia roughly flat from 81.6% in 1960 to 87.6% in 2024; China rising from 19.4% in 1980 to 65.9% in 2024; a note that China's urban share more than tripled in 44 years, about 740 million more people living in its cities than in 1980

Figure 4E.8 — People living in urban areas, Australia and China (World Bank, SP.URB.TOTL.IN.ZS, collected and smoothed by the UN Population Division; retrieved 25 August 2026).

The change lens compares not just where places end up but how quickly they get there. Australia's line is nearly flat because Australia was already highly urban in 1960 — its urbanisation happened early, in the 1800s and early 1900s, before this chart begins. China's line is steep because its urbanisation is happening now: 19.4% to 65.9% in 44 years.

The change lens also counts. In 1980, 19.4% of China's 981 million people was about 190 million urban people. In 2024, 65.9% of 1 409 million is about 929 million. The difference — about 740 million more urban people — is larger than most countries' entire populations. Change of that size in one human lifetime is the fastest big urbanisation in history, and it is the background to everything 4B said about China.

A city and its sustainability links



Sustainability asks whether every one of these links can keep working as the city grows (VC2HG8K22.E01).

Web diagram with a growing city (for example Melbourne) at the centre, linked to five nodes: water (a city draws water from rivers and dams far beyond its streets), energy (homes, trains and factories all add to the city's demand), land (new homes need ground: the city must choose where they go), heat (hot days hit cities hardest, so cities plant trees and add shade), and transport (how people move decides how much fuel and space the city uses)

Figure 4E.9 — A city's sustainability links (model diagram; the climate-adaptation link follows VC2HG8K22.E01).

The sustainability lens asks whether every link in Figure 4E.9 keeps working as the city grows — for the people living there now and the ones who come after [E01]. Water is drawn from rivers and dams far beyond the city's streets; energy demand grows with every new home; new homes need land, so the city must choose where they go (4D's urban growth boundary is that choice); transport decides how much fuel and space moving takes; and heat is the climate link.

The climate link is where sustainability and change meet. Figure 4E.5 showed Melbourne already logs ten days a year at 35 °C or more; a warmer climate adds to that, and the urban heat island adds more again on top. So Australian cities are adapting: 4D's responses — street trees and shade, water-wise gardens, plans that put homes near trains instead of in new car-dependent edges — are sustainability work in the exact sense of .E01: the link between sustainability and city settlement, and making sure that settlement adapts to a changing climate.

Remember the definition note: sustainability is contested. A city plan that weighs jobs and cheaper housing first is using a different frame from one that weighs water and heat first. This section's frame is the one stated in "Words we define" — and the test of your work is not which frame you prefer but whether you state yours and apply it honestly.

One question, two strong cases

Should Australia try to spread its urban population more evenly, away from the biggest cities?

The strongest case FOR spreading

- jobs and services are packed into a few cities
- big cities face crowding, housing pressure and heat
- country towns could share the load on land and water
- Canberra shows a planned city can work

The strongest case FOR letting cities grow

- cities put jobs, hospitals and trains close together
- closer living can mean less land and fuel per person
- new cities cost a great deal to build from nothing
- people should be free to choose where they live

What evidence could decide between them?

house prices, travel times, jobs in country centres (ABS), and the cost of new roads, pipes and railways.

Both cases are stated in their strongest form. Marks are given for the reasons, not for the side you land on.

Debate map. Question: should Australia try to spread its urban population more evenly, away from the biggest cities? Left panel, the strongest case for spreading: jobs and services are packed into a few cities; big cities face crowding, housing pressure and heat; country towns could share the load on land and water; Canberra shows a planned city can work. Right panel, the strongest case for letting cities grow: cities put jobs, hospitals and trains close together; closer living can mean less land and fuel per person; new cities cost a great deal to build from nothing; people should be free to choose where they live. Bottom strip: what evidence could decide between them — house prices, travel times, jobs in country centres (ABS), and the cost of new roads, pipes and railways

Figure 4E.10 — The chapter question, steelmanned (model diagram; deciding-evidence types after ABS sources used in this chapter).

All five lenses meet in one honest disagreement, and the rules from 4A apply unchanged: state each side in its strongest form (Figure 4E.10), apply the same tests to the side you agree with, and ask what evidence could decide between them. Two students can land on opposite sides of this question and both be right, if both build on defined terms and stated evidence. Marks in this section are for the reasoning, not the side.

A model answer: one sentence through each lens

In 2024-25 Melbourne grew by 105 030 people, the largest growth of any Australian city.	CHANGE
Most of the growth of Australia's capital cities came from overseas migration (+258 100), which ties Melbourne to places all over the world.	INTERCONNECTION
That growth must fit inside Melbourne's urban growth boundary, so the space for new homes has to be planned, not left to chance.	SPACE
Every new arrival changes what Melbourne is like - its suburbs, schools, services and street life.	PLACE
For the city to keep working, its water, energy, transport and shade trees must grow with its people.	SUSTAINABILITY

Numbers: ABS Regional Population, Australia, 2025. Notice how each sentence names one lens and gives it work to do.
This is the shape the extended response task asks for.

Five sentences each keyed to one concept: change — in 2024-25 Melbourne grew by 105 030 people, the largest growth of any Australian city; interconnection — most of the growth of Australia's capital cities came from overseas migration (+258 100), which ties Melbourne to places all over the world; space — that growth must fit inside Melbourne's urban growth boundary, so the space for new homes has to be planned, not left to chance; place — every new arrival changes what Melbourne is like, its suburbs, schools, services and street life; sustainability — for the city to keep working, its water, energy, transport and shade trees must grow with its people

Figure 4E.11 — One paragraph, five lenses: a model of the move this section teaches (numbers: ABS Regional Population, Australia, 2025; retrieved 25 August 2026).

Figure 4E.11 is what the finished move looks like: each sentence names one lens and gives it real work to do with a number or a named plan. No sentence is decoration. That is the shape the extended task asks you to produce.

Worked examples

Example 1 — guided: read one year of Melbourne through three lenses

Using Figures 4E.3, 4E.6 and 4E.11's numbers, apply the lenses of **change**, **interconnection** and **space** to Melbourne's 2024–25.

Working	Comment
Melbourne grew by 105 030 people in 2024–25, the largest growth of any Australian city (ABS).	Change lens: Australian urbanisation is not finished; it is still moving fast, and fastest in the second-biggest city.
Capital cities as a whole gained +258 100 from overseas migration but –29 800 from net internal migration (ABS).	Interconnection lens: most of the growth arrived from overseas, so Melbourne’s growth is tied to decisions made in other countries. At the same time, an internal flow runs from the capitals to regional Australia.
All of it must fit inside Melbourne’s urban growth boundary (4D).	Space lens: growth has a where-question. The space for new homes is chosen by planning, not left to chance.
Conclusion: Melbourne’s year shows urbanisation as a spatial process — flows from overseas and within Australia landing in one bounded, coastal city and changing it.	The conclusion uses the CD’s own idea: the interconnections between the components explain why urbanisation happens where it does (VC2HG8K22 .E01).

Example 2 — guided: two places, one flow [E02]

A country town in regional Australia and Melbourne are tied by the –29 800 internal migration flow in Figure 4E.6. Use Figure 4E.7 to sort four impacts, then compare with China.

Impact	Place left or place moved to?
a. Fewer young workers for the footy team and the local café.	Place left (the country town).
b. More customers for shops, but more pressure on homes and trains.	Place moved to (Melbourne).
c. An older population on average, and quieter school enrolments.	Place left.
d. New ideas, foods and languages arriving with new arrivals.	Place moved to.

Now the China comparison from 4B: China’s urban share rose 19.4% (1980) to 65.9% (2024) — the same rural–urban flow as Australia’s, hundreds of times bigger. The two-places logic is identical at both scales: villages that lost young people and cities that had to build fast. That is the transferable idea in .E02: impacts come in pairs, one at each end of the flow.

Example 3 — on your own [E01]

Pick **one** link from Figure 4E.9 (water, energy, land, heat or transport). In two or three sentences, apply the sustainability lens to it for a growing Australian city, and name one way the city is adapting it to a warmer climate.

Sample (heat link): “Melbourne already has about ten days a year at 35 °C or more (BOM), and the urban heat island adds extra heat on top, so heat will bear down hardest on the city as the climate warms. Planting street trees and adding shade — responses from 4D — are the city adapting its settlement to climate change, which is exactly what .E01 points to.” Any link, correctly defined, with a stated adaptation scores.

Practice questions

Guided

Q1 (Space). From Figure 4E.3: (a) name Australia’s two biggest capital cities and their June 2025 populations; (b) give one reason from 4A or 4C why the big cities sit on or near the coast.

Q2 (Space). From Figure 4E.4: (a) which mainland state keeps the biggest share of its people in one city, and what is that share? (b) which keeps the smallest share? (c) in one sentence, what does that tell you about the space pattern of Australia’s urbanisation?

Q3 (Place). From Figure 4E.5: (a) how many days a year reach 35 °C or more at Melbourne Airport? (b) name the two features of built-up places that create the urban heat island; (c) in one sentence, how does that heat change what Melbourne is like as a place to live?

Q4 (Interconnection). From Figure 4E.6: (a) which flow added the most people to the capital cities in 2024–25? (b) what did net internal migration do, and which two capitals still gained people from inside Australia? (c) in one sentence, why does overseas migration make Australian cities interconnected places?

Q5 (Interconnection) [E02]. Match each impact in Figure 4E.7 to *the place people leave* or *the place people move to*: (a) less custom for local shops; (b) new festivals and languages; (c) an older population on average; (d) more demand for homes and schools.

Q6 (Change). From Figure 4E.8: (a) what share of Australia’s people lived in urban areas in 1960 and in 2024? (b) what share of China’s people did, in 1980 and in 2024? (c) which country’s places changed faster over those years, and how can you tell from the shape of the lines?

Q7 (Change). Using the totals given in Lens 4 (China: 981 million people in 1980; 1 409 million in 2024): (a) show that about 190 million Chinese people lived in urban areas in 1980; (b) show that about 929 million did in 2024; (c) what is the difference, and why does it matter for the places involved?

Q8 (Sustainability) [E01]. Choose two links from Figure 4E.9. For each, write one sentence saying what a growing city must keep working, and why failing to would cost the people who come after us.

On your own

Q9. Choose any capital city from Figure 4E.3. Write one short sentence through each of the five lenses about that city, using at least one number from this section’s figures. (Model: Figure 4E.11.)

Q10 [E02]. Using 4B’s China material and Figure 4E.7, write three or four sentences on the impacts of China’s rural–urban migration on (a) a village people left and (b) a city they moved to. One impact pair per place, minimum.

Q11. Complete a steelman map (shaped like Figure 4E.10) for the question: *should Melbourne keep growing bigger?* Two strongest-form points per side, then two pieces of evidence that could decide between the sides.

Q12 [E01]. Pick one link from Figure 4E.9 and explain, in three or four sentences, how an Australian city is adapting it to a warmer climate. Use one number from Figure 4E.5 or a named response from 4D.

Extended response task

Q13. Write 150–200 words answering: *what does Australia’s urbanisation look like, and what is one impact it has on places?* Your response must:

- use at least **three** of the five concepts by name, each doing real work;
- carry at least **two** numbers, each with its source named (ABS, World Bank or BOM as in this section);
- end with either one limit of your evidence or one opposing view you have weighed.

How Q13 is marked. Marks are given for the reasoning steps, not the conclusion reached: (1) the question is answered in plain sentences; (2) three concepts are used correctly, each attached to evidence; (3) two numbers are carried with sources named; (4) a limit or a weighed opposing view is stated. Two students may describe different impacts — housing pressure, heat, country towns losing young people — and both score full marks, if both build on defined terms and stated evidence.

Answers and sample responses

Q1. (a) Sydney, 5.64 million; Melbourne, 5.44 million (ABS, ERP 30 June 2025). (b) Sample: ports made the first cities and trade and jobs kept them growing, so the big cities sit on the coast (4A/4C). **Q2.** (a) Western Australia, 80.6% in Perth. (b) Queensland, 50.0% in Brisbane (Tasmania is lower at 44.3% but is not a mainland state). (c) Sample: Australia's urban life is packed into one capital per state, especially in the south and west. **Q3.** (a) 10.0 days a year. (b) Roads, roofs and walls soak up the sun, and there are fewer trees to give shade. (c) Any sentence linking the heat to living experience scores, e.g. more hot nights and more need for shade and cool spaces. **Q4.** (a) Overseas migration, +258 100. (b) It was negative (−29 800): more people left the capitals for regional Australia than arrived; Brisbane and Perth still gained from internal migration. (c) Sample: because most city growth arrives from overseas, the cities are tied to families and decisions in many other countries. **Q5.** (a) leave; (b) move to; (c) leave; (d) move to. **Q6.** (a) 81.6% and 87.6%. (b) 19.4% and 65.9%. (c) China: its line climbs fast while Australia's is nearly flat, so China's places changed faster. **Q7.** (a) 19.4% of 981 million $\approx$ 190 million. (b) 65.9% of 1 409 million $\approx$ 929 million. (c) About 740 million more urban people — a shift bigger than most countries' whole populations, in one human lifetime; villages and cities both had to change fast (World Bank, SP.URB.TOTL.IN.ZS and SP.POP.TOTL). **Q8.** Sample (water): "A growing city draws water from rivers and dams far beyond its streets; if it uses more than refills, the people who come after inherit a shorter river." Sample (transport): "If a city builds car-dependent edges, the next generation inherits the fuel bill and the roads to fix." **Q9.** Answers vary; check one sentence per lens, at least one number, no lens left as decoration. **Q10.** Sample: "Villages lost young workers to the cities, so some villages aged and quietened, while cities like Shenzhen and Guangzhou gained hundreds of millions of workers and had to build homes, schools and pipes at speed. The flow changed both ends at once — the same pair of impacts as Australia's −29 800, at a much bigger scale." **Q11.** Sample strongest-form points — for: housing pressure and heat concentrate in one city; country centres could take growth and already have some services. Against: closeness puts jobs, hospitals and trains together; building new cities from nothing costs enormously. Deciding evidence: house prices and travel times in each option (ABS), jobs in country centres, and the cost of new roads, pipes and railways. **Q12.** Sample (heat): "Melbourne logs about ten days a year at 35 °C or more (BOM), and a warmer climate will add to that, so the city is planting street trees and adding shade (4D) so the place keeps working through hotter summers." **Q13.** Marking guide above the fold; a sample response is Figure 4E.11's paragraph extended with a limit sentence, e.g. "These numbers count people, not wellbeing, so a city can grow and still need work on liveability."

Coverage map (for teachers)

Code	Where it is taught and practised
VC2HG8K22	the whole section: every lens part applies one named concept to the chapter's urbanisation evidence; Examples 1–3, Q1–Q12 and Q13 combine them
VC2HG8K22.E01	Lens 3 (flows as the components that make urbanisation spatial), Lens 5 (sustainability links and climate adaptation, Figure 4E.9), Example 3, Q8, Q12
VC2HG8K22.E02	Lens 3 (Figure 4E.7, the two-places model for Australia and China), Example 2, Q5, Q10
The five lenses themselves — space (Lens 1), place (Lens 2), interconnection (Lens 3), change (Lens 4), sustainability (Lens 5) — carry the CD text; the achievement standard's sentence on explaining urbanisation's processes and patterns, the sustainability issues facing Australia's cities, and climate-change impacts is practised in Lenses 4–5 and assessed in Q13.	

Sources, retrieved 25 August 2026 unless stated: Australian Bureau of Statistics, Regional Population, Australia, 2025 (cat. no. 3218.0, released 31 March 2026) — estimated resident populations at 30 June 2025 for the eight capital cities and Australia, and components of capital-city and regional growth for the 2024–25 financial year. World Bank, World Development Indicators — urban population (% of total), indicator SP.URB.TOTL.IN.ZS (collected and smoothed by the United Nations Population Division), and total population, indicator SP.POP.TOTL; China and Australia values as plotted in Figure 4E.8. Bureau of Meteorology, monthly climate statistics, station

086282 Melbourne Airport (records 1970–2026), retrieved 19 August 2026. World Commission on Environment and Development, Our Common Future (1987) — framing for the contested term sustainability only. All figures are original diagrams computed from these values.